Supplies or Services/Prices

1852.216-78 Firm Fixed Price. (DEC 1988)

The total firm fixed price of this contract is $[*Insert the appropriate amount*].

(End of clause)

SUPPLIES AND/OR SERVICES TO BE PROVIDED

The Contractor shall provide all resources (except as may be expressly stated in the contract as furnished by the Government) necessary to deliver and/or perform the items below in accordance with the Phase 1 proposal # _____ entitled "_____

Invoice	Schedule	Amount
1	Immediately after award	$
2	Three (3) months following contract effective date	$
3	Final Report, NTR and/or NTSR), & Recertification	$

(C) Required Certification: As a condition for payment under this contract, the Contractor shall submit the following certification with each invoice. The final invoice shall include a signed re-certification in accordance with clause 1852.219-85.

Certification
During performance of this contract, I certify --
1. Essentially equivalent work performed under this contract has not been proposed for funding to another Federal agency.
2. No other Federal funding award has been received for essentially equivalent work performed under this contract.
3. Deliverables submitted under this contract have not been submitted as deliverables under another Federal funding award.
4. I understand that the willful provision of false information or concealing a material fact in this representation is a criminal offense under Title 18 USC, Section 1001, False Statements, as well as Title 18 USC, Section 287, False Claims.

(D) With the exception of the first and second invoice, payments are based upon successful performance which is defined by acceptance of each deliverable by the Technical Monitor. Payment will be made within thirty (30) days of approval of said deliverables or receipt of a proper invoice whichever is later. Any payment may be withheld if the required deliverables have not been submitted or accepted by the Technical Monitor. All reports shall be submitted by uploading one (1) copy into the Electronic Handbook at the following URL: https://ehb8.gsfc.nasa.gov/contracts/public/firmHome.do

(End of clause)

Special Contract Requirements

SBIR PHASE I ADDITIONAL REPORTS OF WORK

(A) Interim Technical Progress Reports:

(1) At the end of month three (3) of contract performance the Contractor shall submit an interim progress report of all work accomplished. The report shall be in narrative form, be brief, and informal. This report shall include:
(I) A quantitative description of work performed during the period;
(II) An indication of any current problems which may impede performance or impact program schedule or cost, and proposed corrective action;
(III) A discussion of the work to be performed during the next reporting period;
(IV) A description of any changes to the planned use of subcontractors since contract award; and
(V) Estimated percentage of physical completion of the contract.

This report shall be submitted via the NASA SBIR Contract Administration Electronic Handbook. Instructions for the electronic submission process are available on the NASA SBIR Home Page at http://sbir.gsfc.nasa.gov/SBIR/SBIR.html

(2) Interim Technical Progress Report is to be submitted within ten (10) days following the period to be reported, except for the Final Report which shall be submitted no later than the final day of the contract performance period.

DRAFT

(B) Final Report & Project Summary Document: The Contractor shall submit a Final Report within six (6) months from the effective date of this contract. The report shall be in narrative form documenting and summarizing the results of the entire contract work. The following instructions apply to the final report and are in addition to the requirements of clause 1852.235-73, Final Scientific and Technical Reports, of this contract.

(1) The Final Report shall include a single-page project summary as the first page, identifying the purpose of the research, a brief description of the research carried out, the research findings or results (including the degree to which the Phase I objectives were achieved), and whether the results justify Phase II continuation. The project summary is to be submitted without restriction for NASA publication. This document should not contain any proprietary data and should be submitted without any restrictive markings. Instructions for the electronic submission of the project summary are posted on the NASA SBIR/STTR Awardee Firm Electronic Handbooks at https://ehb8.gsfc.nasa.gov/contracts/public/firmHome.do.

(2) The project summary shall be submitted with each copy of the final report and as a separate electronic submission via the NASA SBIR/STTR Awardee Firm Electronic Handbooks at https://ehb8.gsfc.nasa.gov/contracts/public/firmHome.do

(3) The balance of the report should indicate in detail the project objectives, work carried out, results obtained, and assessment of technical merit and feasibility. The potential applications of the project results in Phase III both for NASA purposes and for commercial purposes shall also be included. Rights to both interim and final report data (except for the project summary) shall be in accordance with clause 52.227-20, Rights in Data -- SBIR Program, of this contract. The Contractor shall mark all pages of reports (except the project summary) with the SBIR Rights notice set forth in clause 52.227-20.

(C) Report Documentation Page: In accordance with 1852.235-73, the last page of the final report shall be a completed Standard Form (SF) 298.

(D) Reports Distribution: With the exception of New Technology reporting, which shall be handled in accordance with **1852.227-11 Patent Rights--Retention by the Contractor (Short Form)** clause of this contract, interim and final reports shall be distributed electronically via the NASA SBIR/STTR Awardee Firm Electronic Handbooks at https://ehb8.gsfc.nasa.gov/contracts/public/firmHome.do

(End of clause)

REQUEST FOR PROPOSAL FOR PHASE II FOLLOW-ON CONTRACT

(a) This Phase I contract serves as a request for proposal for an SBIR Phase II follow-on contract except: (i) when NASA notifies the contractor that the area or topic of research is no longer suitably high enough within the Agency's research priorities; or (ii) when NASA notifies the contractor that the Phase I research results are not worthy of continuation. Submission of a Phase II proposal is strictly voluntary and NASA assumes no responsibility for proposal preparation costs. Phase II proposals are due at the end of the Phase I contract. NOTE THAT PHASE II PROPOSALS MUST BE RECEIVED BY THE GOVERNMENT NO LATER THAN 5:00 pm EDT ON THE LAST DAY OF THE PHASE I CONTRACT PERIOD_____ . LATE PROPOSALS MAY BE ELIMINATED FROM FURTHER CONSIDERATION FOR PHASE II AWARDS.

(b) See attachment three of the contract for proposal instructions and evaluation criteria.

(End of text)

Contract Clauses

52.204-7 Central Contractor Registration. (APR 2008)

DRAFT

52.213-4 Terms and Conditions - Simplified Acquisitions (Other Than Commercial Items). (AUG 2011)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses that are incorporated by reference:

(1) The clauses listed below implement provisions of law or Executive order:

(i) 52.222-3, Convict Labor (JUN 2003) (E.O. 11755).

(ii) 52.222-21, Prohibition of Segregated Facilities (FEB 1999) (E.O. 11246).

(iii) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(iv) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

(v) 52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

(vi) 52.233-3, Protest After Award (AUG 1996)(31 U.S.C. 3553).

(vii) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(2) Listed below are additional clauses that apply:

(i) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (JUL 2010)(Pub. L. 109-282)(31 U.S.C. 6101 note).

(ii) 52.232-1, Payments (APR 1984).

(iii) 52.232-8, Discounts for Prompt Payment (FEB 2002).

(iv) 52.232-11, Extras (APR 1984).

(v) 52.232-25, Prompt Payment (OCT 2008).

(vi) 52.233-1, Disputes (JUL 2002).

(vii) 52.244-6, Subcontracts for Commercial Items (JAN 2011).

(viii) 52.253-1, Computer Generated Forms (JAN 1991).

(b) The Contractor shall comply with the following FAR clauses, incorporated by reference, unless the circumstances do not apply:

(1) The clauses listed below implement provisions of law or Executive order:

(i) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (JUL 2010) (E.O. 13126).

(ii) 52.222-20, Walsh-Healey Public Contracts Act (OCT 2010) (41 U.S.C. 35-45)

DRAFT

(Applies to supply contracts over $15,000 in the United States, Puerto Rico, or the U.S. Virgin Islands).

(iii) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212) (Applies to contracts of $100,000 or more).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793). (Applies to contracts over $15,000, unless the work is to be performed outside the United States by employees recruited outside the United States.) (For purposes of this clause, United States includes the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.)

(v) 52.222-37, Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212) (Applies to contracts of $100,000 or more).

(vi) 52.222-41, Service Contract Act of 1965 (NOV 2007) (41 U.S.C. 351), *et seq*.) (Applies to service contracts over $2,500 that are subject to the Service Contract Act and will be performed in the United States, District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, or the outer continental shelf lands.)

(vii) 52.223-5, Pollution Prevention and Right-to-Know Information (May 2011) (E.O. 13423) (Applies to services performed on Federal facilities).

(viii) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b) (Unless exempt pursuant to 23.204, applies to contracts when energy-consuming products listed in the ENERGY STAR Program or Federal Energy Management Program (FEMP) will be -

(A) Delivered;

(B) Acquired by the Contractor for use in performing services at a Federally-controlled facility;

(C) Furnished by the Contractor for use by the Government; or

(D) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.)

(ix) 52.225-1, Buy American Act - Supplies (FEB 2009) (41 U.S.C. 10a-10d) (Applies to contracts for supplies, and to contracts for services involving the furnishing of supplies, for use in the United States or its outlying areas, if the value of the supply contract or supply portion of a service contract exceeds the micro-purchase threshold and the acquisition -

(A) Is set aside for small business concerns; or

(B) Cannot be set aside for small business concerns (see 19.502-2), and does not exceed $25,000).

(x) 52.232-33, Payment by Electronic Funds Transfer - Central Contractor Registration

DRAFT

(OCT 2003). (Applies when the payment will be made by electronic funds transfer (EFT) and the payment office uses the Central Contractor Registration (CCR) database as its source of EFT information.)

(xi) 52.232-34, Payment by Electronic Funds Transfer - Other than Central Contractor Registration (MAY 1999). (Applies when the payment will be made by EFT and the payment office does not use the CCR database as its source of EFT information.)

(xii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241). (Applies to supplies transported by ocean vessels (except for the types of subcontracts listed at 47.504(d).)

(2) Listed below are additional clauses that may apply:

(i) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (Dec 2010) (Applies to contracts over $30,000).

(ii) 52.211-17, Delivery of Excess Quantities (SEP 1989) (Applies to fixed-price supplies).

(iii) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247) (Applies to contracts greater than $25,000 that provide for the provision, the service, or the sale of food in the United States.)

(iv) 52.247-29, F.o.b. Origin (FEB 2006) (Applies to supplies if delivery is f.o.b. origin).

(v) 52.247-34, F.o.b. Destination (NOV 1991) (Applies to supplies if delivery is f.o.b. destination).

(c) *FAR 52.252-2, Clauses Incorporated by Reference (FEB 1998*). This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: https://www.acquisition.gov/far/index.html

(d) *Inspection/Acceptance*. The Contractor shall tender for acceptance only those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its postacceptance rights -

(1) Within a reasonable period of time after the defect was discovered or should have been discovered; and

(2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(e) *Excusable delays*. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence, such as acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible

DRAFT

after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(f) *Termination for the Government's convenience*. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges that the Contractor can demonstrate to the satisfaction of the Government, using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred that reasonably could have been avoided.

(g) *Termination for cause*. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(h) *Warranty*. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(End of clause)

52.219-6 Notice of Total Small Business Set-Aside. (NOV 2011)

52.223-18 Encouraging Contractor Policies to Ban Text Messaging While Driving. (AUG 2011)

(a) Definitions. As used in this clause -

"Driving" - (1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

"Text messaging" means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.

DRAFT

(c) The Contractor is encouraged to -

(1) Adopt and enforce policies that ban text messaging while driving -

(i) Company-owned or rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as -

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

(End of clause)

52.225-13 Restrictions on Certain Foreign Purchases. (JUN 2008)

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at http://www.treas.gov/offices/enforcement/ofac/sdn. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's Web site at http://www.treas.gov/offices/enforcement/ofac.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.227-1 Authorization and Consent. (DEC 2007)

52.227-1 Authorization and Consent. (DEC 2007) -- Alternate I (APR 1984)

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are expected to exceed the simplified acquisition threshold. However, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not

DRAFT

affect this authorization and consent.

(End of Clause)

52.227-11 Patent Rights--Ownership by the Contractor. (DEC 2007)

(a) As used in this clause--

"Invention" means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.)

"Made" means--

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

"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 (26 U.S.C. 501(a)), or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

"Practical application" 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.

"Subject invention" means any invention of the Contractor made in the performance of work under this contract.

(b) Contractor's rights. (1) Ownership. The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) License. (i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor's license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)(2) and 27.304-1(f).

(c) Contractor's obligations. (1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel

DRAFT

responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (i.e., sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) Government's rights--(1) Ownership. The Contractor shall assign to the agency, on written request, title to any subject invention--

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

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

(iii) In any country in which the Contractor 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.

(2) License. If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

DRAFT

(e) Contractor action to protect the Government's interest. (1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to--

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall 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 the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to 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 Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, 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 or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) Reporting on utilization of subject inventions. The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) Preference for United States industry. Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the 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 an agreement may be waived by the agency upon a showing by the Contractor 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.

DRAFT

(h) March-in rights. The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall--

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern 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 concerns; provided, that the Contractor is also satisfied that the small business concern 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 Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) Communications. See Contract Distribution List

(k) Subcontracts. (1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the

DRAFT

mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (h) of this clause.

(End of clause)

52.227-20 Rights in Data--SBIR Program. (DEC 2007)

52.232-2 Payments under Fixed-Price Research and Development Contracts. (APR 1984)

52.232-23 Assignment of Claims. (JAN 1986)

52.242-15 Stop-Work Order. (AUG 1989)

52.243-1 Changes - Fixed-Price. (AUG 1987)

52.243-1 Changes - Fixed-Price. (AUG 1987) - Alternate V (APR 1984)

52.244-2 Subcontracts. (OCT 2010)

(a) *Definitions*. As used in this clause -

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that -

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds -

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

DRAFT

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: [ ]

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c) or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting -

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c) or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a

DRAFT

determination -

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: N/A

(End of clause)

52.246-23 Limitation of Liability. (FEB 1997)

52.252-6 Authorized Deviations in Clauses. (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any [*insert regulation name*] (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

1852.204-76 Security requirements for unclassified information technology resources. (JAN 2011)

As prescribed in 1804.470-4(a), insert the following clause:

SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (JAN 2011)

(a) The contractor shall protect the confidentiality, integrity, and availability of NASA Electronic Information and IT resources and protect NASA Electronic Information from unauthorized disclosure.

(b) This clause is applicable to all NASA contractors and sub-contractors that process, manage, access, or store unclassified electronic information, to include Sensitive But Unclassified (SBU) information, for NASA in support of NASA's missions, programs, projects and/or institutional requirements. Applicable requirements, regulations, policies, and guidelines are identified in the Applicable Documents List (ADL) provided as an attachment to the

DRAFT

contract. The documents listed in the ADL can be found at: http://www.nasa.gov/offices/ocio/itsecurity/index.html. For policy information considered sensitive, the documents will be identified as such in the ADL and made available through the Contracting Officer.

(c) Definitions.

(1) IT resources means any hardware or software or interconnected system or subsystem of equipment, that is used to process, manage, access, or store electronic information.

(2) NASA Electronic Information is any data (as defined in the Rights in Data clause of this contract) or information (including information incidental to contract administration, such as financial, administrative, cost or pricing, or management information) that is processed, managed, accessed or stored on an IT system(s) in the performance of a NASA contract.

(3) IT Security Management 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 contract. Unlike the IT security plan, which addresses the IT system, the IT Security Management Plan addresses how the contractor will manage personnel and processes associated with IT Security on the instant contract.

(4) IT Security Plan--this is a FISMA requirement; see the ADL for applicable requirements. The IT Security Plan is specific to the IT System and not the contract. Within 30 days after award, the contractor shall develop and deliver an IT Security Management Plan to the Contracting Officer; the approval authority will be included in the ADL. All contractor personnel requiring physical or logical access to NASA IT resources must complete NASA's annual IT Security Awareness training. Refer to the IT Training policy located in the IT Security Web site at https://itsecurity.nasa.gov/policies/index.html.

(d) The contractor shall afford Government access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out a program of IT inspection (to include vulnerability testing), investigation and audit to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA Electronic Information or to the function of IT systems operated on behalf of NASA, and to preserve evidence of computer crime.

(e) At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract in accordance with retention documentation available in the ADL. The contractor shall provide a listing of all NASA Electronic information and IT resources generated in performance of the contract. At that time, the contractor shall request disposition instructions from the Contracting Officer. The Contracting Officer will provide disposition instructions within 30 calendar days of the contractor's request. Parts of the clause and referenced ADL may be waived by the contracting officer, if the contractor's ongoing IT security program meets or exceeds the requirements of NASA Procedural Requirements (NPR) 2810.1 in effect at time of award. The current version of NPR 2810.1 is referenced in the ADL. The contractor shall submit a written waiver request to the Contracting Officer within 30 days of award. The waiver request will be reviewed by the Center IT Security Manager. If approved, the Contractor Officer will notify the contractor, by contract modification, which parts of the clause or provisions of the ADL are waived.

(f) The contractor shall insert this clause, including this paragraph in all subcontracts that process, manage, access or store NASA Electronic Information in support of the mission of the Agency.

(End of clause)

1852.215-84 Ombudsman. (OCT 2003)

DRAFT

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, The current list of Center Ombudsmen is available at http://prod.nais.nasa.gov/pub/pub_library/Omb.html. Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, **Ronald A. Poussard** at **202-358-0445**, facsimile 202-358-3082, e-mail **ronald.a.poussard@nasa.gov**. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(End of clause)

1852.219-80 Limitation on Subcontracting - SBIR Phase I Program. (OCT 2006)

The Contractor shall perform a minimum of two-thirds of the research and/or analytical effort (total contract price less profit) conducted under this contract. Any deviation from this requirement must be approved in advance and in writing by the Contracting Officer.

(End of clause)

1852.219-83 Limitation of the Principal Investigator - SBIR Program. (OCT 2006)

The primary employment of the principal investigator (PI) shall be with the small business concern (SBC)/Contractor during the conduct of this contract. Primary employment means that more than one-half of the principal investigator's time is spent in the employ of the SBC/Contractor. This precludes full-time employment with another organization. Deviations from these requirements must be approved in advance and in writing by the Contracting Officer and are not subject to a change in the firm-fixed price of the contract. The PI for this contract is listed on Attachment 1: Contract Distribution List.

(End of clause)

1852.219-85 Conditions for Final Payment - SBIR and STTR Contracts. (OCT 2006)

As a condition for final payment under this contract, the Contractor shall provide the following certifications as part of its final payment invoice request:

During performance of this contract -

1. Essentially equivalent work performed under this contract has not been proposed for funding to another Federal agency;

2. No other Federal funding award has been received for essentially equivalent work performed under this contract;

3. Deliverable items submitted under this contract have not been submitted as deliverable items under another

DRAFT

Federal funding award;

4. For SBIR contracts: The subcontracting limitation set forth in this contract was not exceeded except as approved in writing by the Contracting Officer on (insert date of approval or modification number.);

5. For STTR contracts: The subcontracting limitation set forth in this contract was not exceeded;

6. For SBIR contracts: The primary employment of the principal investigator (PI) identified in this SBIR contract was with the Contractor, except as approved in writing by the Contracting Officer on (insert date of approval or modification number.); and

7. For STTR contracts: The primary employment of the principal investigator (PI) identified in this STTR contract was the SBC/Contractor or the research institution (RI). The PI identified in the STTR contract was considered key in the performance of this contract. The SBC/Contractor whether or not the employer of the PI, did exercise primary management direction and control over the PI and was overall responsible for the PI's performance under this contract. Any substitutions of this individual were approved in writing by the Contracting Officer on (insert date of approval or modification number.).

I understand that the willful provision of false information or concealing a material fact in this representation is a criminal offense under Title 18 USC, Section 1001, False Statements, as well as Title 18 USC, Section 287, False Claims.

(End of clause)

1852.223-72 Safety and Health (Short Form). (APR 2002)

1852.225-70 Export Licenses. (FEB 2000)

(a) The Contractor 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 contract. In the absence of available license exemptions/exceptions, the Contractor 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 Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any NASA installation, where the foreign person will have access to export-controlled technical data or software.

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

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

(End of clause)

1852.225-71 Restriction on Funding Activity with China.

(a) 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.

DRAFT

(b) Public Laws 112-10, Section 1340(a) and 112-55, Section 539, restrict NASA from contracting to participate, collaborate, coordinate bilaterally in any way with China or a Chinese-owned company using funds appropriated on or after April 25, 2011. Contracts for commercial and non developmental items are exempted from the prohibition because they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) This contract may use restricted funding that was appropriated on or after April 25, 2011. The contractor shall not contract with China or Chinese-owned companies for any effort related to this contract except for acquisition of commercial and non-developmental items. If the contractor anticipates making an award to China or Chinese-owned companies, the contractor must contact the contracting officer to determine if funding on this contract can be used for that purpose.

(d) Subcontracts - The contractor shall include the substance of this clause in all subcontracts made hereunder.

(End of clause)

1852.227-11 Patent Rights - Retention by the Contractor (Short Form).

As prescribed at 1827.303-70(a), modify the clause at FAR 52.227-11 by adding the following subparagraph (5) to paragraph (c) of the basic clause; adding the following subparagraph (5) to paragraph (f); and using the following subparagraph (2) in lieu of subparagraph (g) (2) of the basic clause:

> (c) (5) The Contractor may use whatever format is convenient to disclose subject inventions required in subparagraph (c) (1). NASA prefers that the contractor use either the electronic or paper version of NASA Form 1679, Disclosure of Invention and New Technology (Including Software) to disclose subject inventions. Both the electronic and paper versions of NASA Form 1679 may be accessed at the electronic New Technology Reporting Web site http://invention.nasa.gov.

(End of addition)

> (f) (5) The Contractor shall provide the Contracting Officer the following:
>
> > (i) A listing every 12 months (or such longer period as the Contracting Officer may specify) from the date of the contract, of all subject inventions required to be disclosed during the period.
> >
> > (ii) A final report prior to closeout of the contract 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 contractor 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.

(End of addition)

> (g) (2) The Contractor shall include the clause in the NASA FAR Supplement at 1852.227-70, New Technology, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, research, design, or engineering work to be performed by other than a small business firm or nonprofit organization.

DRAFT

(End of substitution)

1852.227-72 Designation of New Technology Representative and Patent Representative. (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights - Retention by the Contractor (Short Form)," whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

See Attachment 1: Contract Distribution List

(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 New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights - Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

1852.235-70 Center for AeroSpace Information. (DEC 2006)

1852.235-71 Key Personnel and Facilities. (MAR 1989)

(a) The personnel and/or facilities listed below (or specified in the contract Schedule) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities (shown below or as specified in the contract Schedule) may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

See Attachment 1: Contract Distribution List and the above referenced proposal which is incorporated into this contract.

(End of clause)

1852.235-73 Final Scientific and Technical Reports. (DEC 2006)

(a) The Contractor shall submit to the Contracting Officer a final report that summarizes the results of the entire contract, including recommendations and conclusions based on the experience and results obtained. The final report should include tables, graphs, diagrams, curves, sketches, photographs, and drawings in sufficient detail to explain comprehensively the results achieved under the contract.

DRAFT

(b) The final report shall be of a quality suitable for publication and shall follow the formatting and stylistic guidelines contained in NPR 2200.2A, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information. Electronic formats for submission of reports should be used to the maximum extent practical. Before electronically submitting reports containing scientific and technical information (STI) that is export-controlled or limited or restricted, contact the Contracting Officer to determine the requirements to electronically transmit these forms of STI. If appropriate electronic safeguards are not available at the time of submission, a paper copy or a CD-ROM of the report shall be required. Information regarding appropriate electronic formats for final reports is available at http://www.sti.nasa.gov under "Publish STI - Electronic File Formats."

(c) The last page of the final report shall be a completed Standard Form (SF) 298, Report Documentation Page.

(d) In addition to the final report submitted to the Contracting Officer, the Contractor shall concurrently provide to the Center STI/Publication Manager and the NASA Center for AeroSpace Information (CASI) a copy of the letter transmitting the final report to the Contracting Officer. The copy of the letter shall be submitted to CASI at the address listed at http://www.sti.nasa.gov under the "Get Help" link.

(e) In accordance with paragraph (d) of the Rights in Data - General clause (52.227-14) of this contract, the Contractor may publish, or otherwise disseminate, data produced during the performance of this contract, including data contained in the final report, and any additional reports required by 1852.235-74 when included in the contract, without prior review by NASA. The Contractor is responsible for reviewing publication or dissemination of the data for conformance with laws and regulations governing its distribution, including intellectual property rights, export control, national security and other requirements, and to the extent the contractor receives or is given access to data necessary for the performance of the contract which contain restrictive markings, for complying with such restrictive markings. Should the Contractor seek to publish or otherwise disseminate the final report, or any additional reports required by 1852.235-74 if applicable, as delivered to NASA under this contract, the Contractor may do so once NASA has completed its document availability authorization review, and availability of the report has been determined.

(End of clause)

1852.237-72 Access to Sensitive Information. (JUN 2005)

(a) As used in this clause, ``sensitive information'' refers to information that a contractor has developed at private expense, or that the Government has generated that qualifies for an exception to the Freedom of Information Act, which is not currently in the public domain, and which may embody trade secrets or commercial or financial information, and which may be sensitive or privileged.

(b) To assist NASA in accomplishing management activities and administrative functions, the Contractor shall provide the services specified elsewhere in this contract.

(c) If performing this contract entails access to sensitive information, as defined above, the Contractor agrees to--

(1) Utilize any sensitive information coming into its possession only for the purposes of performing the services specified in this contract, and not to improve its own competitive position in another procurement.

(2) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

DRAFT

(3) Allow access to sensitive information only to those employees that need it to perform services under this contract.

(4) Preclude access and disclosure of sensitive information to persons and entities outside of the Contractor's organization.

(5) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in this contract and to safeguard it from unauthorized use and disclosure.

(6) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(7) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(d) The Contractor will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this contract incorporates as a compliance document.

(e) The nature of the work on this contract may subject the Contractor and its employees to a variety of laws and regulations relating to ethics, conflicts of interest, corruption, and other criminal or civil matters relating to the award and administration of government contracts. Recognizing that this contract establishes a high standard of accountability and trust, the Government will carefully review the Contractor's performance in relation to the mandates and restrictions found in these laws and regulations. Unauthorized uses or disclosures of sensitive information may result in termination of this contract for default, or in debarment of the Contractor for serious misconduct affecting present responsibility as a government contractor.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), suitably modified to reflect the relationship of the parties, in all subcontracts that may involve access to sensitive information

(End of clause)

1852.237-73 Release of Sensitive Information. (JUN 2005)

(a) As used in this clause, "Sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.

(b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor under this contract. By submitting this proposal or performing this contract, the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c) (1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition

DRAFT

to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages [*insert page numbers or other identification of pages*]. Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall consider the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

DRAFT

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

1852.235-73 Final Scientific and Technical Reports. (DEC 2006) -- Alternate III (JAN 2005)

(a) The Contractor shall submit to the Contracting Officer a final report that summarizes the results of the entire contract, including recommendations and conclusions based on the experience and results obtained. The final report should include tables, graphs, diagrams, curves, sketches, photographs, and drawings in sufficient detail to explain comprehensively the results achieved under the contract.

(b) The final report shall be of a quality suitable for publication and shall follow the formatting and stylistic guidelines contained in NPR 2200.2A, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information. Electronic formats for submission of reports should be used to the maximum extent practical. Before electronically submitting reports containing scientific and technical information (STI) that is export-controlled or limited or restricted, contact the Contracting Officer to determine the requirements to electronically transmit these forms of STI. If appropriate electronic safeguards are not available at the time of submission, a paper copy or a CD-ROM of the report shall be required. Information regarding appropriate electronic formats for final reports is available at http://www.sti.nasa.gov under "Publish STI - Electronic File Formats."

(c) The last page of the final report shall be a completed Standard Form (SF) 298, Report Documentation Page.

(d) In addition to the final report submitted to the Contracting Officer, the Contractor shall concurrently provide to the Center STI/Publication Manager and the NASA Center for AeroSpace Information (CASI) a copy of the letter transmitting the final report to the Contracting Officer. The copy of the letter shall be submitted to CASI at the address listed at http://www.sti.nasa.gov under the "Get Help" link.

(e) The Contractor's rights in data are defined in FAR 52.227-20, Rights In Data - SBIR Program. The Contractor may publish, or otherwise disseminate, such data without prior review by NASA. The Contractor is responsible for reviewing publication or dissemination of the data for conformance with laws and regulations governing its distribution, including intellectual property rights, export control, national

DRAFT

security and other requirements, and to the extent the Contractor receives or is given access to data necessary for the performance of the contract which contain restrictive markings, for complying with such restrictive markings. In the event the Contractor has established its claim to copyright data produced under this contract and has affixed a copyright notice and acknowledgement of Government sponsorship, or has affixed the SBIR Rights Notice contained in paragraph (d) of FAR 52.227-20, the Government shall comply with such Notices.

(End of clause)

52.232-12 ALT IV and ALT V ADVANCE PAYMENTS WITHOUT SPECIAL ACCOUNT (MAY 2001)

(a) Requirements for payment. Advance payments will be made under this contract (1) upon submission of properly certified invoices or vouchers by the contractor, and approval by the administering office, NASA Shared Services Center (NSSA), or (2) under a letter of credit. The amount of the invoice or voucher submitted plus all advance payments previously approved shall not exceed $[*Insert dollar amount*]. If a letter of credit is used, the Contractor shall withdraw cash only when needed for disbursements acceptable under this contract and report cash disbursements and balances as required by the administering office. The Contractor shall apply terms similar to this clause to any advance payments to subcontractors.
(b) Use of funds. The Contractor may use advance payment funds only to pay for properly allocable, allowable, and reasonable costs for direct materials, direct labor, and indirect costs. Determinations of whether costs are properly allocable, allowable, and reasonable shall be in accordance with generally accepted accounting principles, subject to any applicable subparts of Part 31 of the Federal Acquisition Regulation.
(c) Repayment to the Government. At any time, the Contractor may repay all or any part of the funds advanced by the Government. Whenever requested in writing to do so by the administering office, the Contractor shall repay to the Government any part of unliquidated advance payments considered by the administering office to exceed the Contractor's current requirements or the amount specified in paragraph (a) of this clause.
(d) Maximum payment. When the sum of all unliquidated advance payments, unpaid interest charges, and other payments exceed 66.67% of the contract price, the Government shall withhold further payments to the Contractor. On completion or termination of the contract, the Government shall deduct from the amount due to the Contractor all unliquidated advance payments and all interest charges payable. If previous payments to the Contractor exceed the amount due, the excess amount shall be paid to the Government on demand. For purposes of this paragraph, the contract price shall be considered to be the stated contract price of the contract value as stipulated on OF 347, block 17(f), less any subsequent price reductions under the contract, plus (1) any price increases resulting from any terms of this contract for price redetermination or escalation, and (2) any other price increases that do not, in the aggregate, exceed the contract value as stipulated on OF 347, block 17(f). Any payments withheld under this paragraph shall be applied to reduce the unliquidated advance payments. If full liquidation has been made, payments under the contract shall resume.
(e) Interest. No interest shall be charged to the prime Contractor for advance payments except for interest charged during a period of default. The terms of this paragraph concerning interest charges for advance payments shall not apply to the prime Contractor. (1) The Contractor shall pay interest to the Government on the daily unliquidated advance payments at the daily rate in paragraph (e)(3) of this clause. Interest shall be computed at the end of each calendar month for the actual number of days involved. For the purpose of computing the interest charge--
(i) Advance payments shall be considered as increasing the unliquidated balance as of the date of the advance payment check;
(ii) Repayments by Contractor check shall be considered as decreasing the unliquidated balance as of the date on which the check is received by the Government authority designated by the Contracting Officer; and
(iii) Liquidations by deductions from Government payments to the Contractor shall be considered as decreasing the unliquidated balance as of the date of the check for the reduced payment.
(2) Interest charges resulting from the monthly computation shall be deducted from payments, other than advance payments, due the Contractor. If the accrued interest exceeds the payment due, any excess interest shall be carried forward and deducted from subsequent payments. Interest carried forward shall not be compounded. Interest on advance payments shall cease to accrue upon satisfactory completion or termination of the contract for the

convenience of the Government. The Contractor shall charge interest on advance payments to subcontractors in the manner described above and credit the interest to the Government. Interest need not be charged on advance payments to nonprofit educational or research subcontractors, for experimental, developmental, or research work.
(3) If interest is required under the contract, the Contracting Officer shall determine a daily interest rate based on the rate established by the Secretary of the Treasury under Pub. L. 92-41 (50 U.S.C. App., 1215(b)(2)). The Contracting Officer shall revise the daily interest rate during the contract period in keeping with any changes in the cited interest rate.
(4) If the full amount of interest charged under this paragraph has not been paid by deduction or otherwise upon completion or termination of this contract, the Contractor shall pay the remaining interest to the Government on demand.
(f) Lien on property under contract. (1) All advance payments under this contract, together with interest charges, shall be secured, when made, by a lien in favor of the Government, paramount to all other liens, on the supplies or other things covered by this contract and on all material and other property acquired for or allocated to the performance of this contract, except to the extent that the Government by virtue of any other terms of this contract, or otherwise, shall have valid title to the supplies, materials, or other property as against other creditors of the Contractor.
(2) The Contractor shall identify, by marking or segregation, all property that is subject to a lien in favor of the Government by virtue of any terms of this contract in such a way as to indicate that it is subject to a lien and that it has been acquired for or allocated to performing this contract. If, for any reason, the supplies, materials, or other property are not identified by marking or segregation, the Government shall be considered to have a lien to the extent of the Government's interest under this contract on any mass of property with which the supplies, materials, or other property are commingled. The Contractor shall maintain adequate accounting control over the property on its books and records.
(3) If, at any time during the progress of the work on the contract, it becomes necessary to deliver to a third person any items or materials on which the Government has a lien, the Contractor shall notify the third person of the lien and shall obtain from the third person a receipt in duplicate acknowledging the existence of the lien. The Contractor shall provide a copy of each receipt to the Contracting Officer.
(4) If, under the termination clause, the Contracting Officer authorizes the contractor to sell or retain termination inventory, the approval shall constitute a release of the Government's lien to the extent that--
(i) The termination inventory is sold or retained; and
(ii) The sale proceeds or retention credits are applied to reduce any outstanding advance payments.
(g) Insurance. (1) The Contractor shall maintain with responsible insurance carriers--
(i) Insurance on plant and equipment against fire and other hazards, to the extent that similar properties are usually insured by others operating plants and properties of similar character in the same general locality;
(ii) Adequate insurance against liability on account of damage to persons or property; and
(iii) Adequate insurance under all applicable workers' compensation laws.
(2) Until work under this contract has been completed and all advance payments made under the contract have been liquidated, the Contractor shall--
(i) Maintain this insurance;
(ii) Maintain adequate insurance on any materials, parts, assemblies, subassemblies, supplies, equipment, and other property acquired for or allocable to this contract and subject to the Government lien under paragraph (f) of this clause; and
(iii) Furnish any evidence with respect to its insurance that the administering office may require.
(h) Default. (1) If any of the following events occur, the Government may, by written notice to the Contractor, withhold further payments on this contract:
(i) Termination of this contract for a fault of the Contractor.
(ii) A finding by the administering office that the Contractor has failed to--
(A) Observe any of the conditions of the advance payment terms;
(B) Comply with any material term of this contract;
(C) Make progress or maintain a financial condition adequate for performance of this contract;
(D) Limit inventory allocated to this contract to reasonable requirements; or
(E) Avoid delinquency in payment of taxes or of the costs of performing this contract in the ordinary course of

business.
(iii) The appointment of a trustee, receiver, or liquidator for all or a substantial part of the Contractor's property, or the institution of proceedings by or against the Contractor for bankruptcy, reorganization, arrangement, or liquidation.
(iv) The commission of an act of bankruptcy.
(2) If any of the events described in paragraph (h)(1) of this clause continue for 30 days after the written notice to the Contractor, the Government may take any of the following additional actions:
(i) Charge interest, in the manner prescribed in paragraph (e) of this clause, on outstanding advance payments during the period of any event described in paragraph (h)(1) of this clause.
(ii) Demand immediate repayment by the Contractor of the unliquidated balance of advance payments.
(iii) Take possession of and, with or without advertisement, sell at public or private sale all or any part of the property on which the Government has a lien under this contract and, after deducting any expenses incident to the sale, apply the net proceeds of the sale to reduce the unliquidated balance of advance payments or other Government claims against the Contractor.
(3) The Government may take any of the actions described in paragraphs (h)(1) and (h)(2) of this clause it considers appropriate at its discretion and without limiting any other rights of the Government.
(i) Prohibition against assignment. Notwithstanding any other terms of this contract, the Contractor shall not assign this contract, any interest therein, or any claim under the contract to any party.
(j) Information and access to records. The Contractor shall furnish to the administering office (1) monthly or at other intervals as required, signed or certified balance sheets and profit and loss statements, and, (2) if requested, other information concerning the operation of the contractor's business. The Contractor shall provide the authorized Government representatives proper facilities for inspection of the Contractor's books, records, and accounts.
(k) Other security. The terms of this contract are considered to provide adequate security to the Government for advance payments; however, if the administering office considers the security inadequate, the Contractor shall furnish additional security satisfactory to the administering office, to the extent that the security is available.
(l) Representations. The Contractor represents the following:
(1) The balance sheet, the profit and loss statement, and any other supporting financial statements furnished to the administering office fairly reflect the financial condition of the Contractor at the date shown or the period covered, and there has been no subsequent materially adverse change in the financial condition of the Contractor.
(2) No litigation or proceedings are presently pending or threatened against the Contractor, except as shown in the financial statements.
(3) The Contractor has disclosed all contingent liabilities, except for liability resulting from the renegotiation of defense production contracts, in the financial statements furnished to the administering office.
(4) None of the terms in this clause conflict with the authority under which the Contractor is doing business or with the provision of any existing indenture or agreement of the Contractor.
(5) The Contractor has the power to enter into this contract and accept advance payments, and has taken all necessary action to authorize the acceptance under the terms of this contract.
(6) The assets of the Contractor are not subject to any lien or encumbrance of any character except for current taxes not delinquent, and except as shown in the financial statements furnished by the Contractor. There is no current assignment of claims under any contract affected by these advance payment provisions.
(7) All information furnished by the Contractor to the administering office in connection with each request for advance payments is true and correct.
(8) These representations shall be continuing and shall be considered to have been repeated by the submission of each invoice for advance payments.
(m) Covenants. To the extent the Government considers it necessary while any advance payments made under this contract remain outstanding, the Contractor, without the prior written consent of the administering office, shall not--
(1) Mortgage, pledge, or otherwise encumber or allow to be encumbered, any of the assets of the Contractor now owned or subsequently acquired, or permit any preexisting mortgages, liens, or other encumbrances to remain on or attach to any assets of the Contractor which are allocated to performing this contract and with respect to which the Government has a lien under this contract;
(2) Sell, assign, transfer, or otherwise dispose of accounts receivable, notes, or claims for money due or to become due;

(3) Declare or pay any dividends, except dividends payable in stock of the corporation, or make any other distribution on account of any shares of its capital stock, or purchase, redeem, or otherwise acquire for value any of its stock, except as required by sinking fund or redemption arrangements reported to the administering office incident to the establishment of these advance payment provisions;
(4) Sell, convey, or lease all or a substantial part of its assets;
(5) Acquire for value the stock or other securities of any corporation, municipality, or Governmental authority, except direct obligations of the United States;
(6) Make any advance or loan or incur any liability as guarantor, surety, or accommodation endorser for any party;
(7) Permit a writ of attachment or any similar process to be issued against its property without getting a release or bonding the property within 30 days after the entry of the writ of attachment or other process;
(8) Pay any remuneration in any form to its directors, officers, or key employees higher than rates provided in existing agreements of which notice has been given to the administering office, accrue excess remuneration without first obtaining an agreement subordinating it to all claims of the Government, or employ any person at a rate of compensation over $[N/A] a year;
(9) Change substantially the management, ownership, or control of the corporation;
(10) Merge or consolidate with any other firm or corporation, change the type of business, or engage in any transaction outside the ordinary course of the Contractor's business as presently conducted;
(11) Deposit any of its funds except in a bank or trust company insured by the Federal Deposit Insurance Corporation or a credit union insured by the National Credit Union Administration;
(12) Create or incur indebtedness for advances, other than advances to be made under the terms of this contract, or for borrowings;
(13) Make or covenant for capital expenditures exceeding $[N/A] in total;
(14) Permit its net current assets, computed in accordance with generally accepted accounting principles, to become less than N/A; or
(15) Make any payments on account of the obligations listed below, except in the manner and to the extent provided in this contract: N/A

1852.232-70 NASA MODIFICATION OF FAR 52.232-12 (MAR 1998) (DEVIATION)

(a) Basic Clause. (1) In paragraph (e), Maximum Payment, in the sentence that begins "When the sum of," change the word "When" to lower case and insert before it: "Unliquidated advance payments shall not exceed $..... at any time outstanding. In addition . . . "

(2) In paragraph (m)(1), delete "in the form prescribed by the administering office" and substitute "and Standard Form 425, Federal Financial Report."

(b) Alternate II (if incorporated in the contract). In paragraph (e), Maximum Payment, in the sentence that begins "When the sum of," change the word "When" to lower case and insert before it: "Unliquidated advance payments shall not exceed $..... at any time outstanding. In addition . . . "

(c) Alternate V (if incorporated in the contract). (1) Substitute the following for paragraph (b): "(b) Use of funds. The Contractor may use advance payment funds only to pay for properly allocable, allowable, and reasonable costs for direct materials, direct labor, indirect costs, or such other costs approved in writing by the administering contracting office. Payments are subject to any restrictions in other clauses of this contract. Determinations of whether costs are properly allocable, allowable, and reasonable shall be in accordance with generally accepted accounting principles, subject to any applicable subparts of Part 31 of the Federal Acquisition Regulation, other applicable regulations referenced in Part 31, or Subpart 1831.2."

(2) In paragraph (d), Maximum Payment, in the sentence that begins "When the sum of," change the word "When" to lower case and insert before it: "Unliquidated advance payments shall not exceed $..... at any time outstanding. In addition . . . "

(3) In paragraph (j)(1), insert between "statements," and "and" "together with Standard Form 425, Federal Financial Report"

(4) If this is a Phase I contract awarded under the SBIR or STTR programs, delete paragraph (a) and substitute the following: "(a) Requirements for payment. Advance payments will be made under this contract upon receipt of invoices from the Contractor. Invoices should be clearly marked "Small Business Innovation Research

Contract" or "Small Business Technology Transfer Contract," as appropriate, to expedite payment processing. One-third of the total contract price will be available to be advanced to the contractor immediately after award, another one-third will be advanced three months after award, and the final one-third will be paid upon acceptance by NASA of the Contractor's final report. By law, full payment must be made no later than 12 months after the date that contract requirements are completed. The Contractor shall flow down the terms of this clause to any subcontractor requiring advance payments."
(End of clause)

List of Documents, Exhibits and Other Attachments

LIST OF ATTACHMENTS

The following documents are attached hereto and made a part of this contract:

Attachment 1: Contract Distribution List
Attachment 2: Applicable Document List - IT Security Management Plan Template
Attachment 3: Phase II Proposal Instructions and Evaluation Criteria

(End of Clause)

DRAFT

Attachment 1: Contract Distribution List

	ADDRESS:	CONTACT INFORMATION:
Contractor		
Principal Investigator	Adam Lee	
Technical Monitor/ COTR		
Contracting Officer	NASA Shared Services Center (NSSC) SBIR/STTR Contracting Officer	NSSC-SBIR-STTR@nasa.gov Phone: 1-877-677-2123
Financial Management Office	NASA Shared Services Center (NSSC) Financial Management Division (FMD) – Accounts Payable	Phone: 1-877-677-2123
New Technology Representative Patent Counsel		
Export Administrator		
Receiving Office		

DRAFT

Attachment 2: Applicable Document List - IT Security Management Plan Template

Applicable Documents List

a. FIPS 140, Security Requirements for Cryptographic Modules.

b. FIPS 201, Personal Identity Verification (PIV) of Federal Employees and Contractors.

c. HSPD-12, Policies for a Common Identification Standard for Federal Employees and Contractors, August 2004.

d. HSPD-20, National Continuity Policy.

e. NIST SP 800-30, Risk Management Guide for Information Technology Systems.

f. NIST SP 800-34, Contingency Planning Guide for Information Technology Systems.

g. NIST SP 800-37, Guide for Applying the Risk Management Framework to Federal Information Systems.

h. NIST SP 800-46, Guide to Enterprise Telework and Remote Access

i. NIST SP 800-53, Recommended Security Controls for Federal Information Systems and Organizations.

j. NIST SP 800-61, Computer Security Incident Handling Guide.

k. NIST SP 800-63, Electronic Authentication Guideline.

l. NIST SP 800-83, Guide to Malware Incident Prevention and Handling.

m. NIST SP 800-88, Guidelines for Media Sanitization.

n. NIST SP 800-97, Establishing Wireless Robust Security Networks: A Guide to IEEE 802.11i.

o. X.509 Certificate Policy for the U.S. Federal PKI Common Policy Framework.

p. NPD 1600.2, NASA Security Policy.

q. NPD 1600.3, Policy on Prevention of and Response to Workplace Violence.

r. NPD 2540.1, Personal Use of Government Office Equipment Including Information Technology.

s. NPD 2810.1, NASA Information Security Policy.

t. NPR 1040.1, NASA Continuity of Operations Planning (COOP) Procedural Requirements.

u. NPR 1382.1, NASA Privacy Procedural Requirements.

v. NPR 1441.1, NASA Records and Retention Schedule.

w. NPR 1600.1, NASA Security Program Procedural Requirements.

x. NPR 1620.2, Physical Security Vulnerability Risk Assessments.

y. NPR 1620.3, Physical Security Requirements for NASA Facilities and Property.

z. NPR 2800.1, Managing Information Technology.

aa. NPR 2841.1, Identity, Credential, and Access Management Services.

bb. NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements.

cc. NPR 8000.4, Agency Risk Management Procedural Requirements.

dd. NPR 8820, Facility Project Requirements.

ee. NPR 8831.2, Facilities Maintenance and Operations Management.

DRAFT

ff. ITS-HBK-2841.001, Identity, Credential, and Access Management (ICAM) Services Handbook.

gg. ITS-HBK-2810.02, Security Assessment and Authorization.

hh. ITS-HBK-2810.03, Planning.

ii. ITS-HBK-2810.04, Risk Assessment.

jj. ITS-HBK-2810.05, System and Services Acquisition.

kk. ITS-HBK-2810.06, Security Awareness and Training.

ll. ITS-HBK-2810.07, Configuration Management.

mm. ITS-HBK-2810.08, Contingency Planning.

nn. ITS-HBK-2810.09, Incident Response and Management.

oo. ITS-HBK-2810.10, Maintenance.

pp. ITS-HBK-2810.11, Media Protection.

qq. ITS-HBK-2810.12, Physical and Environmental Protection.

rr. ITS-HBK-2810.13, Personnel Security.

ss. ITS-HBK-2810.14, System and Information Integrity.

tt. ITS-HBK-2810.15, Access Control.

uu. ITS-HBK-2810.16, Audit and Accountability.

vv. ITS-HBK-2810.17, Identification and Authentication.

ww. ITS-HBK-2810.18, System and Communication.

DRAFT

National Aeronautics and Space Administration

SMALL BUSINESS INNOVATION RESEARCH (SBIR) & SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)

Part 2: General Phase II Proposal Instructions and Evaluation Criteria

DRAFT

The electronic version of this document is at: http://sbir.nasa.gov

1. Phase II Program Description 35
1.1 Introduction 35
1.2 Phase II Description 35
1.3 Phase II Contract Options 35
1.4 Eligibility Requirements 37
1.5 NASA SBIR/STTR Technology Available (TAV) 38

2. Proposal Preparation Instructions and Requirements 40
2.1 Fundamental Considerations 40
2.2 Phase II Proposal Requirements 40

3. Method of Selection and Evaluation Criteria 51
3.1 Phase II Proposals 51
3.2 Debriefing of Offerors 53

4. Considerations 54
4.1 Awards 54
4.2 Phase II Reporting 55
4.3 Release of Proposal Information 55
4.4 Access to Proprietary Data by Non-NASA Personnel 55
4.5 Proprietary Information in the Proposal Submission 55
4.6 Cost Sharing 56
4.7 Profit or Fee 56
4.8 Joint Ventures and Limited Partnerships 56
4.9 Addition Information 56
4.10 Required Registrations and Submissions 56
4.11 False Statements 58

5. Submission of Proposals 59
5.1 Submission Requirements 59
5.2 Submission Process 59
5.3 Deadline for Phase II Proposal Receipt 60
5.4 Acknowledgment of Proposal Receipt 61
5.5 Withdrawal of Proposals 61
5.6 Service of Protests 62

6. Submission Forms and Certifications 3

DRAFT

2012 NASA SBIR/STTR Program Solicitations

1. Phase II Program Description

1.1 Introduction

This document provides a general description of the NASA SBIR/STTR Phase II Program and proposal submission requirements. All small business concerns (SBCs) that are awarded and have successfully completed their Phase I contracts are invited to submit Phase II proposals. Receipt of Phase II proposals are due on the last day of performance under SBIR/STTR Phase I contracts, the submission period will be available approximately 6 weeks prior to the contract completion date.

Proposals must be submitted online via the Proposal Submissions Electronic Handbook at http://sbir.nasa.gov and include all relevant documentation.

1.2 Phase II Description

Phase II
The purpose of Phase II is the development, demonstration and delivery of the innovation. Only SBCs awarded a Phase I contract are eligible to submit a proposal for a Phase II funding agreement. Phase II projects are chosen as a result of competitive evaluations and based on selection criteria provided in the Phase II Proposal Instructions and Evaluation Criteria.

Maximum value and period of performance for Phase II contracts:

Phase II Contracts	SBIR	STTR
Maximum Contract Value	$ 750,000	$ 750,000
Period of Performance	24 months	24 months

1.3 Phase II Contract Options

Phase II Enhancement (Phase II-E)
The purpose of the Phase II-E Option is to further encourage the advancement of innovations developed under Phase II contracts via an extension of R/R&D efforts to the current Phase II contract. Eligible firms must secure a third-party investor to partner and invest in enhancing their technology for further research, infusion, and commercialization. Under this option, the NASA SBIR/STTR Program will match, on a dollar-to-dollar basis, up to $125,000 of non-NASA-SBIR/non-NASA-STTR investments to extend a project from 6-to-12 months. There is a minimum funding requirement for Phase II-E, as eligible firms must secure at least $25,000 in third party investments. These non-NASA-SBIR/non-NASA-STTR third party investments can come from a NASA project, NASA contractor, or any commercial investor. The total cumulative award for the Phase II contract plus the Phase II-E match is not expected to exceed $875,000 of SBIR/STTR funding. The non-SBIR/non-STTR contribution is not limited since it is regulated under the guidelines for Phase III awards.

For a nominal 24-month Phase II period of performance the Phase II-E application may be submitted anytime during the 17th month of performance of the Phase II contract. Contracts with a shortened period of performance, specific due dates will be in the Phase II contract. Also, any additional information regarding the submission of a Phase II-E proposal will be included in the Phase II contracts. Firms interested in executing a Phase II-E option are requested to notify the NASA SBIR/STTR Program of its intent to propose in writing, by the end of the 14th month of performance of the Phase II contract. This written notification will be non-binding.

Maximum value and period of performance for the Phase II-E contract option:

Phase II Enhancement	**Minimum non-SBIR/STTR Funding Required for Eligibility for Matching in Phase II-E**	**Corresponding SBIR/STTR Program Contribution**	**Anticipated Period of Additional Performance**
	$25,000	$25,000	6-12 Months
	Maximum non-SBIR/STTR Funding to be Matched by SBIR/STTR Program in Phase II-E	**Corresponding SBIR/STTR Program Contribution**	**Anticipated Period of Additional Performance**
	$125,000	$125,000	6-12 Months

The nominal Phase II period of performance for a Phase II is 24 months. Phase II contracts with a period of performance less than 18 months, will not be eligible for a Phase II-E. The number of Phase II- E options to be exercised is subject to the availability of funds and will be selected based on criteria provided in the Phase II contract.

Phase II eXpanded (Phase II-X)

The purpose of the Phase II-X Option is to establish a strong and direct partnership between the NASA SBIR/STTR Program and other NASA projects undertaking the development of new technologies of innovations for future use. Under a Phase II-X option, innovations developed in Phase II are to be advanced via an extension of R/R&D efforts to the current Phase II contract. There are two specific requirements to be met for firms to be eligible for a Phase II-X option. First, eligible firms must secure a NASA program or project (other than the NASA SBIR/STTR Program) as a partner to invest in enhancing their technology for further research or infusion. Second, there is a minimum funding requirement for Phase II-X, as eligible firms must secure at least $75,000 in NASA program or project funding. Under this option, the NASA SBIR/STTR Program will match, on a 2-for-1 basis, up to $250,000 of NASA program or project funding, thus enabling a maximum of $500,000 of SBIR/STTR award funds to be added from the NASA SBIR/STTR Program. Note: A firm may acquire additional, non-NASA, third-party investments as part of a Phase II-X option, but those funds will not be counted in the NASA SBIR/STTR Program's matching calculation. Executing a Phase II-X option is anticipated to extend a Phase II from 12-to-24 months after the completion of Phase II. The total cumulative award for the Phase II contract plus the Phase II-X match is not expected to exceed $1,250,000 of SBIR/STTR funding. The NASA contribution is not limited since it is regulated under the guidelines for Phase III awards.

For a nominal 24-month Phase II period of performance the Phase II-X application may be submitted anytime during the 17th month of performance of the Phase II contract. Contracts with a shortened period of performance, specific due dates will be in the Phase II contract. Also, any additional information regarding the submission of a Phase II-X proposal will be included in the Phase II contracts. Firms interested in executing a Phase II-X option are requested to notify the NASA SBIR/STTR Program of its intent to propose in writing, by the end of the 14th month of performance of the Phase II contract. This written notification will be non-binding.

Maximum value and period of performance for Phase II-X contract options:

Phase II eXpanded	**Minimum Funding Required from non-SBIR/STTR NASA Source for Eligibility for Matching in Phase II-X**	**Corresponding SBIR/STTR Program Contribution**	**Anticipated Period of Additional Performance**
	$75,000	$150,000	12-24 Months
	Maximum Funding Amount from non-SBIR/STTR NASA Source to be Matched in Phase II-X	**Corresponding SBIR/STTR Program Contribution**	**Anticipated Period of Additional Performance**
	$250,000	$500,000	12-24 Months

The nominal Phase II period of performance for a Phase II is 24 months. Phase II contracts with a period of performance less than 18 months, will not be eligible for a Phase II-X. The number of Phase II-X options to be exercised is subject to the availability of funds and will be selected based on criteria provided in the Phase II contract.

Proposing to the Phase II-E or Phase II-X Option
Note: The SBIR/STTR Program will allow firms with a Phase II contract that follows a Phase I contract from this solicitation to submit a proposal for either a Phase II-E contract option, or a Phase II-X contract option. Firms are not permitted to submit a proposal for both options. If a firm submits a proposal for both options only the Phase II-E proposal will be considered. The number of Phase II- E and Phase II-X options to be exercised may be limited by availability of funds and will be selected based on criteria provided in the Phase II contract.

1.4 Eligibility Requirements

1.4.1 Small Business Concern

Only firms qualifying as SBCs are eligible to participate in these programs. Socially and economically disadvantaged and women-owned SBCs are particularly encouraged to propose.

1.4.2 Place of Performance

R/R&D must be performed in the United States. However, based on a rare and unique circumstance (for example, if a supply or material or other item or project requirement is not available in the United States), NASA may allow a particular portion of the research or R&D work to be performed or obtained in a country outside of the United States. Proposals must clearly indicate if any work will be performed outside the United States. Prior to award, approval by the Contracting Officer for such specific condition(s) must be in writing.

Note: Offerors are responsible for ensuring that all employees who will work on this contract are eligible under export control and International Traffic in Arms (ITAR) regulations. Any employee who is not a U.S. citizen or a permanent resident may be restricted from working on this contract if the technology is restricted under export control and ITAR regulations unless the prior approval of the Department of State or the Department of Commerce is obtained via a technical assistance agreement or an export license. Violations of these regulations can result in criminal or civil penalties.

1.4.3 Principal Investigator (PI) Employment Requirement

The primary employment of the Principal Investigator (PI) shall be with the SBC under the SBIR Program, while under the STTR Program, either the SBC or RI shall employ the PI. Primary employment means that more than 50% of the PI's total employed time (including all concurrent employers, consulting, and self-employed time) is spent with the SBC or RI at time of award and during the entire period of performance. Primary employment with a small business concern precludes full-time employment at another organization. If the PI does not currently meet these primary employment requirements, then the offeror must explain how these requirements will be met if the proposal is selected for contract negotiations that may lead to an award. Co-Principle Investigators are not allowed.

Note: NASA considers a fulltime workweek to be nominally 40 hours and we consider 19.9-hour or more workweek elsewhere to be in conflict with this rule. In rare occasions, minor deviations from this requirement may be necessary; however, any minor deviation must be approved in writing by the Contracting Officer after consultation with the NASA SBIR/STTR Program Manager/Business Manager.

REQUIREMENTS	SBIR	STTR
Primary Employment	PI must be with the SBC	PI must be employed with the RI or SBC
Employment Certification	The offeror must certify in the proposal that the primary employment of the PI will be with the SBC at the time of award and during the conduct of the project.	The offeror must certify in the proposal that the primary employment of the PI will be with the SBC or the RI at the time of award and during the conduct of the project.
Co-PIs	Not Allowed	Not Allowed
Misrepresentation of Qualifications	Shall result in rejection of the proposal or termination of the contract	Shall result in rejection of the proposal or termination of the contract
Substitution of PIs	Shall receive advanced written approval from NASA	Shall receive advanced written approval from NASA

1.5 NASA SBIR/STTR Technology Available (TAV)

All subtopics have the option of using Technology Available (TAV) with NASA IP (defined below), which may also include NASA non-patented software technology requiring a Software Usage Agreement (SUA) or similar permission for use by others. All subtopics address the objective of increasing the commercial application of innovations derived from Federal R&D. While NASA scientists and engineers conduct breakthrough research that leads to innovations, the range of NASA's effort does not extend to commercial product development in any of its intramural research areas. Additional work is often necessary to exploit these NASA technologies for either infusion or commercial viability and likely requires innovation on behalf of the private sector. NASA provides these technologies "as is" and makes no representation or guarantee that additional effort will result in infusion or commercial viability.

The NASA technologies identified in a subtopic or via the IP search tool (http://technology.nasa.gov): (1) are protected by NASA-owned patents (NASA Patents), (2) are non-patented NASA-owned or controlled software (NASA software), or (3) are otherwise available for use by the public. In the event offeror requests to use NASA owned or controlled technologies, which are not NASA patents or NASA software, NASA shall consider such request and permit such uses as NASA, in its sole discretion, deems appropriate and permissible. If a proposer elects to use a NASA patent, a non-exclusive, royalty-free research license will be required to use the NASA IP during the SBIR/STTR performance period.

Similarly, if a proposer wishes to use NASA software, the parties will be required to enter into a Software Usage Agreement on a non-exclusive, royalty-free basis in order to use such NASA software for government purposes and "Government-Furnished Computer Software and Related Technical Data" will apply to the contract. As used herein, "NASA IP" refers collectively to NASA patents and NASA software disclaimer: All subtopics include an opportunity to license or otherwise use NASA IP on a non-exclusive, royalty-free basis, for research use under the contract. Use of the NASA IP is strictly voluntary. Whether or not a firm uses NASA IP within their proposed effort will not in any way be a factor in the selection for award. NASA software release is governed by NPR 2210.1C.

Use of NASA Patent

All offerors submitting proposals citing a NASA patent must submit a non-exclusive, royalty-free license application if the use of a NASA patent is desired. The NASA license application is available on the NASA SBIR/STTR website: http://sbir.gsfc.nasa.gov/SBIR/research_license_app.doc. NASA only will grant research licenses to those SBIR/STTR offerors who submitted a license application and whose proposal resulted in an SBIR/STTR award under this solicitation. Such grant of non-exclusive research license will be set forth in the successful offeror's SBIR/STTR contract. License applications will be treated in accordance with Federal patent licensing regulations as provided in 37 CFR Part 404.

SBIR/STTR offerors are notified that no exclusive or non-exclusive commercialization license to make, use or sell products or services incorporating the NASA patent will be granted unless an SBIR/STTR offeror applies for and receives such a license in accordance with the Federal patent licensing regulations at 37 CFR Part 404. Awardees with contracts that identify a specific NASA patent will be given the opportunity to negotiate a non-exclusive commercialization license or, if available, an exclusive commercialization license to the NASA patent.

An SBIR/STTR awardee that has been granted a non-exclusive, royalty-free research license to use a NASA patent under the SBIR/STTR award may, if available and on a non-interference basis, also have access to NASA personnel knowledgeable about the NASA patent. The NASA Intellectual Property Manager (IPM) located at the appropriate NASA Center will be available to assist awardees requesting information about a patent that was identified in the SBIR/STTR contract and, if available and on a non-interference basis, provide access to the inventor or surrogate for the purpose of knowledge transfer.

Note: Access to the inventor for the purpose of knowledge transfer, will require the requestor to enter into a Non-Disclosure Agreement (NDA), the awardee "may" be required to reimburse NASA for knowledge transfer activities.

Use of NASA Software

Software identified and requested under a SBIR/STTR contract shall be treated as Government Purpose Rights. Government purpose releases includes releases to other NASA Centers, Federal government agencies, and recipients who have a government contract. The software may be used for "government purposes" only. The recipients of such software releases are typically U.S. citizens. Non U.S. citizens will not be allowed access to NASA software under the SBIR/STTR contract.

A Software Usage Agreement (SUA) shall be requested after contract award from the appropriate NASA Center Software Release Authority (SRA). The SUA request shall include the NASA software title, version number, requesting firm contract info including recipient name, and SBIR/STTR contract award info. The SUA will expire when the contract ends.

2. Proposal Preparation Instructions and Requirements

2.1 Fundamental Considerations

The object of Phase II is to continue the R/R&D effort from the completed Phase I.

Contract Deliverables
Phase II contracts shall require the delivery of reports that present (1) the work and results accomplished, (2) the scientific, technical and commercial merit and feasibility of the proposed innovation and Phase II results, (3) its relevance and significance to one or more NASA needs, and (4) the progress towards transitioning the proposed innovation and Phase II results into follow-on investment, development, testing and utilization for NASA mission programs and other potential customers. The delivery of a prototype unit, software package, or a complete product or service, for NASA testing and utilization is desirable and, if proposed, must be described and listed as a deliverable in the proposal.

2.2 Phase II Proposal Requirements

2.2.1 General Requirements

The Phase I contract will serve as a request for proposal (RFP) for the Phase II follow-on project. Phase II proposals are more comprehensive than those required for Phase I. Submission of a Phase II proposal is in accordance with Phase I contract requirements and is voluntary. NASA assumes no responsibility for any proposal preparation expenses.

A competitive Phase II proposal will clearly and concisely (1) describe the proposed innovation relative to the state of the art and the market, (2) address Phase I results relative to the scientific, technical merit and feasibility of the proposed innovation and its relevance and significance to the NASA needs, and (3) provide the planning for a focused project that builds upon Phase I results and encompasses technical, market, financial and business factors relating to the development and demonstration of the proposed innovation, and its transition into products and services for NASA mission programs and other potential customers.

2.2.2 Format Requirements

Proposals that do not follow the formatting requirement are subject to rejection during administrative screening.

Page Limitations and Margins
Any page(s) going over the required page limited will be deleted and omitted from the proposal review. A Phase II proposal shall not exceed a total of 50 standard 8 1/2 x 11 inch (21.6 x 27.9 cm) pages. Forms A, B, and C count as one page each regardless of whether the completed forms print as more than one page. Each page shall be numbered consecutively at the bottom. Margins shall be 1.0 inch (2.5 cm). All required items of information must be covered in the proposal and will be included in the page total. The space allocated to each part of the technical content will depend on the project and the offeror's approach.

Each proposal submitted must contain the following items in the order presented:

(1) Cover Sheet (Form A), electronically endorsed, counts as 1 page towards the 50-page limit.
(2) Proposal Summary (Form B), counts as 1 page towards the 50-page limit (and must not contain proprietary data).
(3) Budget Summary (Form C), counts as 1 page towards the 50-page limit.
(4) Technical Content (11 Parts in order as specified in section 2.2.4, **not to exceed 47 pages for SBIR and 46 pages for STTR**), including all graphics, and starting with a table of contents.

(5) R/R&D Agreement between the SBC and RI **(STTR only)**, counts as 1 page towards the 50-page limit.
(6) Capital Commitments Addendum Supporting Phase II and Phase III.
(7) Briefing Chart (Not included in the 50-page limit and must not contain proprietary data).
(8) NASA Research License Application is not included in the 23-page limit (only if TAV is being proposed).

Note: Letters of general endorsement are not required or desired and will not be considered during the review process. However, if submitted, such letter(s) will count against the page limit.

In addition to the above items, each offeror must submit the following firm level forms, which must be filled out once during each submission period and are applicable to all firm proposals submissions:

(9) Firm Level Certifications, are not included in the 50-page limit.
(10) Audit Information, is not included in the 50-page limit.
(11) Prior Awards Addendum, is not included in the 50-page limit.
(12) Commercial Metrics Survey, is not included in the 50-page limit.

Type Size
No type size smaller than 10 point shall be used for text or tables, except as legends on reduced drawings. Proposals prepared with smaller font sizes will be rejected without consideration.

Header/Footer Requirements
Header must include firm name, proposal number, and project title. Footer must include the page number and proprietary markings if applicable. Margins can be used for header/footer information.

Classified Information
NASA does not accept proposals that contain classified information.

2.2.3 Forms

All form submissions shall be done electronically, with each form counting as 1 page towards the 50-page limit and accounting for pages 1-3 of the proposal regardless of the length.

2.2.3.1 Cover Sheet (Form A)

A sample Cover Sheet (Form A) is provided in section 6. The offeror shall provide complete information for each item and submit the form, as required in section 5. The proposal project title shall be concise and descriptive of the proposed effort. The title should not use acronyms or words like "Development of" or "Study of." The NASA research topic title must not be used as the proposal title. Form A counts as one page towards the 50-page limit.

2.2.3.2 Proposal Summary (Form B)

A sample Proposal Summary (Form B) is provided in section 6. The offeror shall provide complete information for each item and submit Form B as required in section 5. Form B counts as one page towards the 50-page limit.

Note: Proposal Summary (Form B), including the Technical Abstract, is public information and may be disclosed. Do not include proprietary information on Form B.

2.2.3.3. Budget Summary (Form C)

A sample of the Budget Summary (Form C) is provided in section 6. The offeror shall complete the Budget Summary following the instructions provided with the sample form. The total requested funding for the Phase II effort shall not exceed $750,000. A text box is provided on the electronic budget form for additional explanation. Information shall be submitted to explain the offeror's plans for use of the requested funds to enable NASA to determine whether the proposed price is fair and reasonable. Form C counts as one page towards the 50-page limit.

Note: The Government is not responsible for any monies expended by the firm before award of any contract.

2.2.4 Technical Proposal

This part of the submission should not contain any budget data and must consist of all eleven (11) parts listed below in the given order. **All eleven parts of the technical proposal must be numbered and titled. Parts that are not applicable must be included and marked "Not Applicable." A proposal omitting any part will be considered non-responsive to this Solicitation and will be rejected during administrative screening. The required table of contents is provided below:**

Phase II Table of Contents

Part 1: Table of Contents……Page 4
Part 2: Identification and Significance of the Innovation and Results of the Phase I Proposal
Part 3: Technical Objectives
Part 4: Work Plan
Part 5: Related R/R&D
Part 6: Key Personnel
Part 7: Phase III Efforts, Commercialization and Business Planning
Part 8: Facilities/Equipment
Part 9: Subcontracts and Consultants
Part 10: Potential Post Applications
Part 11: Essentially Equivalent and Duplicate Proposals and Awards

Part 1: Table of Contents
The technical proposal shall begin with a brief table of contents indicating the page numbers of each of the parts of the proposal and should start on page 4 because Forms A, B, and C account for pages 1-3.

Part 2: Identification and Significance of the Innovation and Results of the Phase I Proposal
Drawing upon Phase I results, succinctly describe:

(1) The proposed innovation;
(2) the relevance and significance of the proposed innovation to a need or needs, within the subtopic;
(3) the proposed innovation relative to the state of the market, the state of the art, and its feasibility; and
(4) the capability of the offeror to conduct the proposed R/R&D and to fulfill the commercialization of the proposed innovation.

Part 3: Technical Objectives
Define the specific objectives of the Phase II research and technical approach.

TAV Note: All offerors submitting proposals who are planning to use NASA IP must describe their planned developments with the IP. The NASA Research License Application should be added as an attachment at the end of the proposal and will not count towards the 50-page limit (See paragraph 1.5).

Part 4: Work Plan
Include a detailed description of the Phase II R/R&D plan to meet the technical objectives. The plan should indicate what will be done, where it will be done, and how the R/R&D will be carried out. Discuss in detail the methods planned to achieve each task or objective. Task descriptions, schedules, resource allocations, estimated task hours for each key personnel and planned accomplishments including project milestones shall be included.

STTR: In addition, the work plan will specifically address the percentage and type of work to be performed by the SBC and the RI. The plan will provide evidence that the SBC will exercise management direction and control of the performance of the STTR effort, including situations in which the PI may be an employee of the RI.

Part 5: Related R/R&D
Describe significant current and/or previous R/R&D that is directly related to the proposal including any conducted by the PI or by the offeror. Describe how it relates to the proposed effort and any planned coordination with outside sources. The offeror must persuade reviewers of his or her awareness of key recent R/R&D conducted by others in the specific subject area. As an option, the offer may use this section to include bibliographic references.

Part 6: Key Personnel and Bibliography of Directly Related Work
Identify all key personnel involved in Phase II activities whose expertise and functions are essential to the success of the project. Provide bibliographic information including directly related education and experience.

The PI is considered key to the success of the effort and must make a substantial commitment to the project. The following requirements are applicable:

Functions: The functions of the PI are: planning and directing the project; leading it technically and making substantial personal contributions during its implementation; serving as the primary contact with NASA on the project; and ensuring that the work proceeds according to contract agreements. Competent management of PI functions is essential to project success. The Phase II proposal shall describe the nature of the PI's activities and the amount of time that the PI will personally apply to the project. The amount of time the PI proposes to spend on the project must be acceptable to the Contracting Officer.

Qualifications: The qualifications and capabilities of the proposed PI and the basis for PI selection are to be clearly presented in the proposal. NASA has the sole right to accept or reject a PI based on factors such as education, experience, demonstrated ability and competence, and any other evidence related to the specific assignment.

Eligibility: This part shall also establish and confirm the eligibility of the PI, and indicate the extent to which other proposals recently submitted or planned for submission in the year and existing projects commit the time of the PI concurrently with this proposed activity. Any attempt to circumvent the restriction on PIs working more than half time for an academic or a nonprofit organization by substituting an ineligible PI will result in rejection of the proposal. However, for an STTR the PI can be primarily employed by either the SBC or the RI. Please see section 1.4.3 for further explanation.

Note: If the Phase II PI is different than that proposed under the Phase I, please provide rational for the change.

Part 7: Phase III Efforts, Commercialization and Business Planning
Present a plan for commercialization (Phase III) of the proposed innovation. Commercialization encompasses the transition of technology into products and services for NASA mission programs, other Government agencies and non-Government markets. The commercialization plan, at a minimum, shall address the following areas:

(1) Market Feasibility and Competition: Describe (a) the target market(s) of the innovation and the associated product or service; (b) the competitive advantage(s) of the product or service; (c) key potential customers, including NASA mission programs and prime contractors; (d) projected market size (NASA, other Government and/or non-Government); (e) the projected time to market and estimated market share within five years from market-entry; and (f) anticipated competition from alternative technologies, products and services and/or competing domestic or foreign entities.

(2) Commercialization Strategy and Relevance to the Offeror: Present the commercialization strategy for the innovation and associated product or service and its relationship to the SBC's business plans for the next five years. Infusion into NASA missions and projects is an option for commercialization strategy.

(3) Key Management, Technical Personnel and Organizational Structure: Describe: (a) the skills and experiences of key management and technical personnel in technology commercialization; (b) current organizational structure; and (c) plans and timelines for obtaining expertise and personnel necessary for commercialization.

(4) Production and Operations: Describe product development to date as well as milestones and plans for reaching production level, including plans for obtaining necessary physical resources.

(5) Financial Planning: Delineate private financial resources committed to the development and transition of the innovation into market-ready product or service. Describe the projected financial requirements and the expected or committed capital and funding sources necessary to support the planned commercialization of the innovation. Provide evidence of current financial condition (e.g., standard financial statements including a current cash flow statement).

(6) Intellectual Property: Describe plans and current status of efforts to secure intellectual property rights (e.g., patents, copyrights, trade secrets) necessary to obtain investment, attain at least a temporal competitive advantage, and achieve planned commercialization.

Part 8: Facilities/Equipment
General: Describe available equipment and physical facilities (this should include physical location [where the work is to be preformed], square footage, and major equipment) necessary to carry out the proposed Phase II and projected Phase III efforts. Items of equipment or facilities to be purchased (as detailed in the cost proposal) shall be justified under this section.

Use of Federal facilities or equipment: In accordance with the Federal Acquisition Regulations (FAR) Part 45, it is NASA's policy not to provide facilities (capital equipment, tooling, test and computer facilities, etc.) for the performance of work under SBIR/STTR contracts. Generally an SBC will furnish its own facilities to perform the proposed work on the contract. Government-wide SBIR/STTR policies restrict the use of any SBIR/STTR funds for the use of Federal equipment and facilities (except for those facilities designated as a Federal laboratory). This does not preclude an SBC from utilizing a Federal facility or Federal equipment, but any charges for such use may not be paid for with SBIR/STTR funds. In rare and unique circumstances, SBA may issue a case-by-case waiver to this provision after review of an agency's written justification. Federal facilities designated as Federal laboratories are exempt from this waiver requirement (see 15 U.S.C. § 3710a(d) and the SBA SBIR/STTR Policy Directive). Any NASA facility generally would be considered a Federal laboratory; however, requests for things such as office space would be deemed to be a Federal facility

requiring a waiver. Additionally, NASA may not and cannot fund the use of the Federal facility (including Federal laboratories) or personnel for the SBIR/STTR project with NASA program or project money.

When a proposed project or product demonstration requires the use of a unique Federal facility that is not designated as a Federal laboratory to be funded by the SBIR/STTR Program, then the offeror must provide a) a letter from the SBC Official explaining why the SBIR/STTR research project requires the use of the Federal facility or personnel, including data that verifies the absence of non-Federal facilities or personnel capable of supporting the research effort, and b) a statement, signed by the appropriate Government official at the facility, verifying that it will be available for the required effort. Proposals requiring waivers must explain why the waiver is appropriate. NASA will provide this explanation to SBA during the Agency waiver process. NASA cannot guarantee that a waiver from this policy can be obtained from SBA. These letters should be uploaded in Form C of your proposal. **Failure to provide this explanation and the site manager's written availability of use may invalidate any proposal selection.**

When a proposed project or product demonstration requires the use of a Federal laboratory then the offeror must provide a letter justifying the use of a Federal laboratory from the SBC official, as well as, a letter from the Government agency that verifies the availability. These letters should be uploaded in Form C of your proposal. **Failure to provide the site manager's written availability of use of the Federal laboratory and the letter of justification from the SBC may invalidate any proposal selection.**

Additionally, any proposer requiring the use of Federal laboratory, property, or facilities must, within ten (10) business days of notification of selection for negotiations, provide to the NASA Shared Services Center Contracting Officer all required documentation, to include, an agreement by and between the Contractor and the appropriate Federal facility, executed by the Government official authorized to approve such use. The Agreement must delineate the terms of use, associated costs, property and facility responsibilities and liabilities.

Part 9: Subcontracts and Consultants

Subject to the restrictions set forth below, the SBC may establish business arrangements with other entities or individuals to participate in performance of the proposed R/R&D effort. The offeror must describe all subcontracting or other business arrangements, and identify the relevant organizations and/or individuals with whom arrangements are planned. The expertise to be provided by the entities must be described in detail, as well as the functions, services, number of hours and labor rates. Offerors are responsible for ensuring that all organizations and individuals proposed to be utilized are actually available for the time periods required. Subcontract costs should be documented in the subcontractor/consultant budget section in Form C and supporting documentation should be uploaded for each (appropriate documentation is specified in Form C).
Subcontractors' and consultants' work has the same place of performance restrictions as stated in section 1.4.2.
The following restrictions apply to the use of subcontracts/consultants:

SBIR Phase II	STTR Phase II
The proposed subcontracted business arrangements must not exceed 50 percent of the research and/or analytical work (as determined by the total cost of the proposed subcontracting effort (to include the appropriate OH and G&A) in comparison to the total effort (total contract price including cost sharing, if any, less profit if any).	A minimum of 40 percent of the research or analytical work must be performed by the proposing SBC and minimum of 30 percent must be performed by the RI. Any subcontracted business effort other than that performed by the RI, shall not exceed 30 percent of the research and/or analytical work (as determined by the total cost of the subcontracting effort (to include the appropriate OH and G&A) in comparison to the total effort (total contract price including cost sharing, if any, less profit if any).

Example: Total price to include profit - $725,000
Profit - $21,750
Total price less profit - $725,000 - $21,750 = $703,250
Subcontractor cost - $250,000
G&A - 5%
G&A on subcontractor cost - $250,000 x 5% = $12,500
Subcontractor cost plus G&A - $250,000 + $12,500 = $262,500
Percentage of subcontracting effort – subcontractor cost plus G&A / total price less profit - $262,500/$703,250 = 37.3%

For an SBIR Phase II this is acceptable since it is below the limitation of 50%.
For an STTR Phase II this is unacceptable since it is above 30% limitation.

Part 10: Potential Post Applications (Commercialization)
Building upon section 2.2.4, part 7; further specify the potential NASA and commercial applications of the innovation and the associated potential customers; such as NASA mission programs and projects, within target markets. Potential NASA applications include the projected utilization of proposed contract deliverables (e.g., prototypes, test units, software) and resulting products and services by NASA organizations and contractors.

Part 11a: Essentially Equivalent and Duplicate Proposals and Awards
WARNING – While it is permissible with proposal notification to submit identical proposals or proposals containing a significant amount of essentially equivalent work for consideration under numerous Federal program solicitations, it is unlawful to enter into funding agreements requiring essentially equivalent work. Offerors are at risk for submitting essentially equivalent proposals and therefore, are strongly encouraged to disclose these issues to the soliciting agency to resolve the matter prior to award. See Part 11b.

If an applicant elects to submit identical proposals or proposals containing a significant amount of essentially equivalent work under other Federal program solicitations, a statement must be included in each such proposal indicating:

1) The name and address of the agencies to which proposals were submitted or from which awards were received.
2) Date of proposal submission or date of award.
3) Title, number, and date of solicitations under which proposals were submitted or awards received.
4) The specific applicable research topics for each proposal submitted for award received.
5) Titles of research projects.
6) Name and title of principal investigator or project manager for each proposal submitted or award received.

A summary of essentially equivalent work information is also required on Form A.

Part 11b: Related Research and Development Proposals and Awards
All federal agencies have a mandate to reduce waste, fraud, and abuse in federally funded programs. The submission of essentially equivalent work and the acceptance of multiple awards for essentially equivalent work in the SBIR/STTR Program have been identified as an area of abuse and possibly fraud. SBIR/STTR funding agencies and the Office of the Inspector General are actively evaluating proposals and awards to eliminate this problem. Related research and development includes proposals and awards that do not meet the definition of "Essentially Equivalent Work", but are related to the technology innovation in the proposal being submitted. Related research and development could be interpreted as essentially equivalent work by outside reviewers without additional information. Therefore, if you are submitting closely related proposals or your firm has closely related research and development that is currently or previously funded by NASA or other Federal agencies, it is to your advantage to describe the relationships between this proposal and related efforts clearly delineating why this should not be considered an essentially equivalent work effort. These explanations should not be longer than one page, will not be included in the page count, and will not be part of the technical evaluation of the proposal.

2.2.5 Research Agreement (Applicable for STTR proposals only)

The Research Agreement (different from the Allocation of Rights Agreement) is a single-page document electronically submitted and endorsed by the SBC and Research Institution (RI). A model agreement is provided, or firms can create their own custom agreement. The Research Agreement should be submitted as required in section 5. This agreement counts as one page toward the 50-page limit.

2.2.6 Capital Commitments Addendum Supporting Phase II and Phase III

Describe and document capital commitments from non-SBIR/STTR sources or from internal SBC funds for pursuit of Phase II and Phase III efforts. Offerors for Phase II contracts are strongly urged to obtain non-SBIR/STTR funding support commitments for follow-on Phase III activities and additional support of the Phase II from parties other than the proposing firm. Funding support commitments must show that a specific and substantial amount will be made available to the firm to pursue the stated Phase II and/or Phase III objectives. They must indicate the source, date, and conditions or contingencies under which the funds will be made available. Alternatively, self-commitments of the same type and magnitude that are required from outside sources can be considered. If a Phase III will be funded internally, offerors should describe their financial position.

Evidence of funding support commitments from outside parties must be provided in writing and should accompany the Phase II proposal. Letters of commitment should specify available funding commitments, other resources to be provided, and any contingent conditions. Expressions of technical interest by such parties in the Phase II research or of potential future financial support are insufficient and will not be accepted as support commitments by NASA. Letters of commitment should be added as an addendum to the Phase II proposal. This addendum will not be counted against the 50-page limitation.

2.2.7 Briefing Chart

A one-page briefing chart is required to assist in the ranking and advocacy of proposals prior to selection. Submission of the briefing chart is not counted against the 50-page limit, and *must not* contain any proprietary data or ITAR restricted data. An example chart is provided in Appendix A. An electronic form will be provided during the submissions process.

2.2.8 Firm Level Certifications

Firm level certifications that are applicable across all proposal submissions submitted to this solicitation must be completed via the "Certifications" section of the Proposal Submission Electronic Handbook. The offeror must answer Yes or No as applicable. An example of the certification can be found in section 6.

Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update the certifications.

2.2.9 Audit Information

The SBC shall complete the questions regarding the firm's rates and upload the Federal agency audit report or related information that is available from the last audit. If your firm has never been audited by a federal agency, then answer "No" to the first question and you do not need to complete the remainder of the form. The "Audit Information" will be used to assist the contracting officer with negotiations if the proposal is selected for award. If the audit provided is not acceptable, they will be advised by the Contracting Officer on what is required to determine reasonable cost and/or rates. There is a separate "Audit Information" section in Forms C that must also be completed. The audit information is not included in the 50-page limit. An electronic form will be provided during the submissions process.

Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update the audit information.

2.2.10 Prior Awards Addendum

If the SBC has received more than 15 Phase II awards in the prior 5 fiscal years, submit name of awarding agency, date of award, funding agreement number, amount, topic or subtopic title, follow-on agreement amount, source, and date of commitment and current commercialization status for each Phase II. If your firm has received any SBIR or STTR Phase II awards, even if it has received fewer than 15 in the last 5 years, it is still recommended that you complete this form for those Phase II awards your firm did receive. This information will be useful when completing the Commercialization Metrics Survey, and in tracking the overall success of the SBIR and STTR programs. Any NASA Phase II awards your firm has received will be automatically populated in the electronic form, as are any Phase II awards previously entered by the SBC during prior submissions (you may update the information for these awards). The addendum is not included in the 50-page limit. An electronic form will be provided during the submissions process.

Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update the addendum information.

2.2.11 Commercial Metrics Survey

NASA has instituted a comprehensive commercialization survey/data gathering process for firms with prior NASA SBIR/STTR awards. If the SBC has received any Phase III awards resulting from work on any NASA SBIR or STTR awards, provide the related Phase I or Phase II contract number, name of Phase III awarding agency, date of award, funding agreement number, amount, project title, and period of performance. The survey will also ask for firm sales and ownership information, as well as any commercialization success the firm has had as a result of Phase II SBIR or STTR awards. This information will allow firms to demonstrate their ability to carry SBIR/STTR research through to achieve commercial success, and allow agencies to track the overall commercialization success of their SBIR and STTR programs. The survey is not included in the 50-page limit and content should be limited to information requested above. An electronic form will be provided during the submissions process.

Note: Information received from SBIR/STTR awardees completing the survey is kept confidential, and will not be made public except in broad aggregate, with no firm-specific attribution. The Commercialization Metrics Survey is a required part of the proposal submissions process and must be completed via the Proposal Submission Electronic Handbook

2.2.12 Contractor Responsibility Information

No later then 10 business days after the notification of selection for negotiations the offeror shall provide a signed statement from your financial institution(s), on its letterhead, stating whether or not your firm is in good standing and how long you have been with the institution.

2.2.13 Allocation of Rights Agreement (STTR awards only)

No more than 10 business days after the notification of selection for negotiation, the offeror should provide to the Contracting Officer, a completed **Allocation of Rights Agreement (ARA),** which has been signed by authorized representatives of the SBC, RI and subcontractors and consultants, as applicable. The ARA shall state the allocation of intellectual property rights with respect to the proposed STTR activity and planned follow-on research, development and/or commercialization. A sample ARA is available in section 6 of this Solicitation.

If the ARA form is completed and available at the time of submission, offers should upload it in Form C, which will help to expedite contract negotiations.

3. Method of Selection and Evaluation Criteria

3.1 Phase II Proposals

All Phase II proposals will be evaluated and ranked on a competitive basis. Proposals will be initially screened to determine responsiveness. Proposals determined to be responsive to the administrative requirements of this solicitation and having a reasonable potential of meeting a NASA need, as evidenced by the technical abstract included in the Proposal Summary (Form B), will be technically evaluated by NASA personnel to determine the most promising technical and scientific approaches. Each proposal will be reviewed on its own merit. NASA is under no obligation to fund any proposal or any specific number of proposals in a given topic. It also may elect to fund several or none of the proposed approaches to the same topic or subtopic.

3.1.1 Evaluation Process

The Phase II evaluation process is similar to the Phase I process. Each proposal will be reviewed by NASA scientists and engineers and by qualified experts outside of NASA as needed. In addition, those proposals with high technical merit will be reviewed for commercial merit. NASA may use a peer review panel to evaluate commercial merit. Panel membership may include non-NASA personnel with expertise in business development and technology commercialization.

3.1.2 Phase II Evaluation Criteria

NASA intends to select for award those proposals that best meet the Government's need(s). Note: Past performance will not be a separate evaluation factor but will be evaluated under factors 1 and 4 below. The evaluation of Phase II proposals will apply the following factors described below:

Factor 1: Scientific/Technical Merit and Feasibility
The proposed R/R&D effort will be evaluated on its originality, the feasibility of the innovation, and potential technical value. In addition, past performance of Phase I will be evaluated to determine the degree to which Phase I objectives were met, and whether the Phase I results indicate a Phase II project is appropriate.

Factor 2: Experience, Qualifications and Facilities
The technical capabilities and experience of the PI or project manager, key personnel, staff, consultants and subcontractors, if any, are evaluated for consistency with the research effort and their degree of commitment and availability. The necessary instrumentation or facilities required must show to be adequate and any reliance on external sources, such as Government furnished equipment or facilities, addressed (section 2.2.4, part 8).

Factor 3: Effectiveness of the Proposed Work Plan
The work plan will be reviewed for its comprehensiveness, effective use of available resources, labor distribution, and the proposed schedule for meeting the Phase II objectives. The methods planned to achieve each objective or task should be discussed in detail. The proposed path beyond Phase II for further development and infusion into a NASA mission or program will also be reviewed. Please see Factor 5 for price evaluation criteria.

STTR: The clear delineation of responsibilities of the SBC and RI for the success of the proposed cooperative R/R&D effort will be evaluated. The offeror must demonstrate the ability to organize for effective conversion of intellectual property into products and services of value to NASA and the commercial marketplace.

Factor 4: Commercial Potential and Feasibility

The proposal will be evaluated for the commercial potential and feasibility of the proposed innovation and associated products and services. The offeror's experience and record in technology commercialization, current funding commitments from private or non-SBIR funding sources, existing and projected commitments for Phase III funding, investment, sales, licensing, and other indicators of commercial potential and feasibility will be considered along with the commercialization plan for the innovation. Evaluation of the commercialization plan and the overall proposal will include consideration of the following areas:

(1) Commercial Potential and Feasibility of the Innovation: This includes assessment of (a) the transition of the innovation into a well-defined product or service; (b) a realistic target market niche; (c) a product or service that has strong potential for meeting a well-defined need within the target market; and (d) a commitment of necessary financial, physical, and/or personnel resources.

(2) Intent and Commitment of the Offeror: This includes assessing the commercialization of the innovation for (a) importance to the offeror's current business and strategic planning; (b) reliance on (or lack thereof) Government markets; and (c) adequacy of funding sources necessary to bring technology to identified market.

(3) Capability of the Offeror to Realize Commercialization: This includes assessment of (a) the offeror's past performance, experience, and success in technology commercialization; (b) the likelihood that the offeror will be able to obtain the remaining necessary financial, technical, and personnel-related resources; and (c) the current strength and continued financial viability of the offeror.

Commercialization encompasses the infusion of innovative technology into products and services for NASA mission programs, other Government agencies and non-Government markets.

Factor 5: Price Reasonableness

The offeror's cost proposal will be evaluated for price reasonableness based on the information provided in (Form C). NASA will comply with the FAR and NASA FAR Supplement (NFS) to evaluate the proposed price/cost to be fair and reasonable.

After completion of evaluation for price reasonableness and determination of responsibility the Contracting Officer shall submit a recommendation for award to the Source Selection Official.

Scoring of Factors and Weighting

Factors 1, 2, and 3 will be scored numerically with Factor 1 worth 50 percent and Factors 2 and 3 each worth 25 percent. The sum of the scores for Factors 1, 2, and 3 will comprise the Technical Merit score. Proposals receiving acceptable numerical scores will be evaluated and rated for their commercial potential. The evaluation for Factor 4, Commercial Potential and Feasibility, will be in the form of an adjectival rating (Excellent, Very Good, Average, Below Average, Poor). For Phase II proposals, commercial merit is a critical factor. Factors 1 - 4 will be evaluated and used in the selection of proposals for negotiation. Factor 5 will be evaluated and used in the selection for award.

3.1.3 Selection

Proposals recommended for negotiations will be forwarded to the Program Management Office for analysis and presented to the Source Selection Official and Mission Directorate Representatives. Final selection decisions will consider the recommendations, overall NASA priorities, program balance and available funding, as well as any other evaluations or assessments (particularly pertaining to commercial potential). The Source Selection Official has the final authority for choosing the specific proposals for contract negotiation. Each proposal selected for negotiation will be evaluated for cost/price reasonableness. After completion of evaluation for cost/price reasonableness and a determination of responsibility the Contracting Officer will submit a recommendation for award to the Source Selection Official.

The list of proposals selected for negotiation will be posted on the NASA SBIR/STTR website (http://sbir.nasa.gov). All firms will receive a formal notification letter. A Contracting Officer will negotiate an appropriate contract to be signed by both parties before work begins.

3.2 Debriefing of Offerors

After selection for negotiations have been announced, debriefings for proposals will be available to the offeror's corporate official or designee via e-mail. Telephone requests for debriefings will not be accepted. Debriefings are not opportunities to reopen selection decisions. They are intended to acquaint the offeror with perceived strengths and weaknesses of the proposal in order to help offerors identify constructive future action by the offeror. Debriefings will not disclose the identity of the proposal evaluators, proposal scores, the content of, or comparisons with other proposals.

To request debriefings on proposals, offerors must request via e-mail to the SBIR/STTR Program Support Office at sbir@reisystems.com within 60 days after the announcement of selection for negotiation. Late requests will not be honored.

4. Considerations

4.1 Awards

4.1.1 Availability of Funds

All Phase II awards are subject to availability of funds. NASA has no obligation to make any specific number of awards, and may elect to make several or no awards in any specific technical topic or subtopic.

SBIR

- NASA anticipates that approximately 35-40 percent of the successfully completed Phase I projects from the SBIR 2012 Solicitation will be selected for Phase II. Phase II agreements will be firm-fixed-price contracts with performance periods not exceeding 24 months and funding not exceeding $750,000.

STTR

- NASA anticipates that approximately 35-40 percent of the successfully completed Phase I projects from the STTR 2012 Solicitation will be selected for Phase II. Phase II agreements will be firm-fixed-price contracts with performance periods not exceeding 24 months and funding not exceeding $750,000.

4.1.2 Contracting

To simplify contract award and reduce processing time, all contractors selected for Phase II contracts should ensure that:

(1) All information in your proposal is current, e.g., your address has not changed, the proposed PI is the same, etc… If changes have occurred since submittal of your proposal, notify Contracting Officer immediately.
(2) Your firm is registered in CCR and all information is current. NASA uses the CCR to populate its contract and payment systems; if the information in the CCR is not current your award and payments will be delayed. If updates have been made, notify contracting officer immediately.
(3) The representations and certifications in ORCA (Online Representations and Certifications Application) are current.
(4) The VETS 100 report submitted by your firm to the Department of Labor is current and submitted to the Contracting Officer within 10 business days of the notification of selection for negotiation.
(5) Your firm HAS NOT proposed a Co-Principal Investigator.
(6) STTR selectees should execute their Allocation of Rights Agreement within 10 business days of the notification of selection for negotiation.
(7) Your firm has a timely response to all communications from the NSSC Contracting Officer.

From the time of proposal notification of selection for negotiation, until the award of a contract, all communications shall be submitted electronically to NSSC-SBIR-STTR@nasa.gov.

Note: Costs incurred prior to and in anticipation of award of a contract are entirely the risk of the contractor in the event that a contract is not subsequently awarded. A notification of selection for negotiation is not to be misconstrued as an award notification to commence work.

Phase II Model Contract
An example of the Phase II contracts can be found in the in the NASA SBIR/STTR Firm Library: https://sbir.gsfc.nasa.gov/sbir/firm_library/index.html. **Note: Model contracts are subject to change.**

4.2 Phase II Reporting

The technical reports are required as described in the contract and are to be provided to NASA. All required reports shall be submitted electronically via the EHB.

4.3 Release of Proposal Information

In submitting a proposal, the offeror agrees to permit the Government to disclose publicly the information contained on the Proposal Summary (Form B). Other proposal data is considered to be the property of the offeror, and NASA will protect it from public disclosure to the extent permitted by law including the Freedom of Information Act (FOIA).

4.4 Access to Proprietary Data by Non-NASA Personnel

4.4.1 Non-NASA Reviewers

In addition to Government personnel, NASA, at its discretion and in accordance with 1815.207-71 of the NASA FAR Supplement, may utilize qualified individuals from outside the Government in the proposal review process. Any decision to obtain an outside evaluation shall take into consideration requirements for the avoidance of organizational or personal conflicts of interest and the competitive relationship, if any, between the prospective contractor or subcontractor(s) and the prospective outside evaluator. Any such evaluation will be under agreement with the evaluator that the information (data) contained in the proposal will be used only for evaluation purposes and will not be further disclosed.

4.4.2 Non-NASA Access to Confidential Business Information

In the conduct of proposal processing and potential contract administration, the Agency may find it necessary to provide proposal access to other NASA contractor and subcontractor personnel. NASA will provide access to such data only under contracts that contain an appropriate NFS 1852.237-72 Access to Sensitive Information clause that requires the contractors to fully protect the information from unauthorized use or disclosure.

4.5 Proprietary Information in the Proposal Submission

If proprietary information is provided by an applicant in a proposal, which constitutes a trade secret, proprietary commercial or financial information, confidential personal information or data affecting the national security, it will be treated in confidence to the extent permitted by law. This information must be clearly marked by the applicant as confidential proprietary information. NASA will treat in confidence pages listed as proprietary in the following legend that appears on the Cover Sheet (Form A) of the proposal:

"This data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, provided that a funding agreement is awarded to the offeror as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages ____ of this proposal."

Note: Do not label the entire proposal proprietary. The Proposal Summary (Form B), and the Briefing Chart should not contain proprietary information**;** and any page numbers that would correspond to these must not be designated proprietary in Form B.

Information contained in unsuccessful proposals will remain the property of the applicant. The Government will, however, retain copies of all proposals.

4.6 Cost Sharing

Cost sharing occurs when a contractor proposes to bear some of the burden of reasonable, allocable and allowable contract costs. Cost sharing is permitted, but not required for proposals under this Solicitation. Cost sharing is not an evaluation factor in consideration of your proposal. Cost sharing, if included, should be shown in the budget summary. No profit will be paid on the cost-sharing portion of the contract.

4.7 Profit or Fee

Phase II contracts may include a reasonable profit. The reasonableness of proposed profit is determined by the Contracting Officer during contract negotiations. Reference FAR 15.404-4.

4.8 Joint Ventures and Limited Partnerships

Both joint ventures and limited partnerships are permitted, provided the entity created qualifies as an SBC. A statement of how the workload will be distributed, managed, and charged should be included in the proposal. A copy or comprehensive summary of the joint venture agreement or partnership agreement should be appended to the proposal. This will not count as part of the page limit for the Phase II proposal.

4.9 Addition Information

4.9.1 Evidence of Contractor Responsibility

In addition to the information required to be submitted in section 2.2.12, before award of an SBIR or STTR contract, the Government may request the offeror to submit certain organizational, management, personnel, and financial information to establish responsibility of the offeror. Contractor responsibility includes all resources required for contractor performance, i.e., financial capability, work force, and facilities.

4.10 Required Registrations and Submissions

4.10.1 Central Contractor Registration

Offerors should be aware of the requirement to register in the Central Contractor Registration (CCR) database prior to contract award. **To avoid a potential delay in contract award, offerors are required to register prior to submitting a proposal. Additionally, firms must certify the NAICS code of 541712.**

The CCR database is the primary repository for contractor information required for the conduct of business with NASA. It is maintained by the Department of Defense. To be registered in the CCR database, all mandatory information, which includes the DUNS or DUNS+4 number, and a CAGE code, must be validated in the CCR system. The DUNS number or Data Universal Number System is a 9-digit number assigned by Dun and Bradstreet Information Services (http://www.dnb.com) to identify unique business entities. The DUNS+4 is similar, but includes a 4-digit suffix that may be assigned by a parent (controlling) business concern. The CAGE code or Commercial Government and Entity Code is assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity. If an SBC does not have a CAGE code, one will be assigned during the CCR registration process.

The DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation. Offerors and contractors may obtain information on CCR registration and annual confirmation requirements via the Internet at http://www.ccr.gov or by calling 888-CCR-2423 (888-227-2423).

4.10.2 52.204-8 Annual Representations and Certifications

Offerors should be aware of the requirement that the Representation and Certifications required from Government contractors must be completed through the Online Representations and Certifications Application (ORCA) website https://orca.bpn.gov/login.aspx. FAC 01-26 implements the final rule for this directive and requires that all offerors provide representations and certifications electronically via the BPN website; to update the representations and certifications as necessary, but at least annually, to keep them current, accurate and complete. NASA will not enter into any contract wherein the Contractor is not compliant with the requirements stipulated herein.

4.10.3 52.222-37 Employment Reports on Special Disabled Veterans, Veterans of the Vietnam-Era, and Other Eligible Veterans

In accordance with Title 38, United States Code, Section 4212(d), the U.S. Department of Labor (DOL), Veterans' Employment and Training Service (VETS) collects and compiles data on the Federal Contractor Program Veterans' Employment Report (VETS-100 Report) from Federal contractors and subcontractors who receive Federal contracts that meet the threshold amount of $100,000. The VETS-100 reporting cycle begins annually on August 1 and ends September 30. Any federal contractor or prospective contractor that has been awarded or will be awarded a federal contract with a value of $100,000 or greater must have a current VETS 100 report on file. Please visit the DOL VETS 100 website at http://www.dol.gov/vets/programs/fcp/main.htm. NASA will not enter into any contract wherein the firm is not compliant with the requirements stipulated herein.

4.10.4 Software Development Standards

Offerors proposing projects involving the development of software should comply with the requirements of NASA Procedural Requirements (NPR) 7150.2, "NASA Software Engineering Requirements" are available online at http://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=7150&s=2.

4.10.5 Human and/or Animal Subject

Offerors should be aware of the requirement that an approved protocol by a NASA Review Board is required if the proposed work include human or animal subject. An approved protocol shall be provided to the Contracting Officer prior to the initiation of any human and/or animal subject research. Offerors shall identify the use of human or animal subject on Form A. For additional information, contact the NASA SBIR/STTR Program Management Office at ARC-SBIR-PMO@mail.nasa.gov. Reference 14 CFR 1230 and 1232.

4.10.6 HSPD-12

Firms that require access to federally controlled facilities for six consecutive months or more must adhere to the following:

PIV Card Issuance Procedures in accordance with FAR clause 52.204-9 Personal Identity Verification of Contractor Personnel

Purpose: To establish procedures to ensure that recipients of contracts are subject to essentially the same credentialing requirements as Federal Employees when performance requires physical access to a Federally-controlled facility or access to a Federal information system **for six consecutive months or more**. (Federally - controlled facilities and Federal information system are defined in FAR 2.101(b)(2)).

Background: Homeland Security Presidential Directive 12 (HSPD-12), "Policy for a Common Identification Standard for Federal Employees and Contractors", and Federal Information Processing Standards Publication (FIPS PUB) Number 201, "Personal Identity Verification (PIV) of Federal Employees and Contractors" require agencies to establish and implement procedures to create and use a Government-wide secure and reliable form of identification NLT October 27, 2005. See: http://csrc.nist.gov/publications/fips/fips201-1/FIPS-201-1-chng1.pdf. In accordance with the FAR clause 52.204-9 Personal Identity Verification of Contractor Personnel which states in parts contractor shall comply with the requirements of this clause and shall ensure that individuals needing such access shall provide the personal background and biographical information requested by NASA.

If applicable, detailed procedures for the issuance of a PIV credential can be found at the following URL: http://itcd.hq.nasa.gov/PIV.html.

4.11 False Statements

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 U.S.C. Sec 1001), punishable by a fine of up to $10,000, up to five years in prison, or both. The Office of the Inspector General has full access to all proposals submitted to NASA.

5. Submission of Proposals

5.1 Submission Requirements

NASA uses electronically supported business processes for the SBIR/STTR programs. An offeror must have Internet access and an e-mail address. Paper submissions are not accepted.

The Electronic Handbook (EHB) for submitting proposals is located at http://sbir.nasa.gov. The Proposal Submission EHB will guide the firms through the steps for submitting an SBIR/STTR proposal. All EHB submissions are through a secure connection. Communication between NASA's SBIR/STTR programs and the firm is primarily through a combination of EHBs and e-mail.

5.2 Submission Process

SBCs must register in the EHB to begin the submission process. Firms are encouraged to start the proposal process early, to allow for sufficient time to complete the submissions process. It is recommended that the Business Official, or an authorized representative designated by the Business Official, be the first person to register for the SBC. The SBC's Employer Identification Number (EIN)/Taxpayer Identification Number is required during registration.

Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update and change the firm level forms (see section 5.2.1 (5)).

For successful proposal submission, SBCs must complete all forms online, upload their technical proposal in an acceptable format, and have the Business Official and Principle Investigator electronically endorse the proposal. Electronic endorsement of the proposal is handled online with no additional software requirements. The term "technical proposal" refers to the part of the submission as described in section 2.2.4.

STTR: The Research Institution is required to electronically endorse the Agreement prior to the SBC endorsement of the completed proposal submission.

5.2.1 What Needs to Be Submitted

The entire proposal including Forms A, B, C, the briefing chart, and other firm level forms must be submitted/completed out via the Submissions EHB located on the NASA SBIR/STTR website. (Note: Other forms of submissions such as postal, paper, fax, diskette, or e-mail attachments are not acceptable).

(1) Forms A, B, and C are to be completed online.
(2) The technical proposal is uploaded from your computer via the Internet utilizing secure communication protocol.
(3) STTR proposers must submit the Research Agreement between the SBC and RI **(STTR only)**.
(4) Firms must submit a briefing chart online, which is not included in the page count (see sections 2.2.7).
(5) NASA Research License Application (only if the use of TAV is proposed).
(6) The certifications, audit information, prior awards addendum, commercialization metrics survey are required and to be completed online. These are not included in the page count.

5.2.2 Technical Proposal Submissions

NASA converts all technical proposal files to PDF format for evaluation. Therefore, NASA requests that technical proposals be submitted in PDF format or MS Word. Note: Embedded animation or video will not be considered for evaluation.

Virus Check
The offeror is responsible for performing a virus check on each submitted technical proposal. As a standard part of entering the proposal into the processing system, NASA will scan each submitted electronic technical proposal for viruses. **The detection, by NASA, of a virus on any electronically submitted technical proposal, may cause rejection of the proposal.**

5.2.3 Technical Proposal Uploads

Firms will upload their proposals using the Submissions EHB. Directions will be provided to assist users. All transactions via the EHB are encrypted for security. Firms cannot submit security/password protected technical proposal and/or briefing chart files, as reviewers may not be able to open and read the files. An e-mail will be sent acknowledging each successful upload. Please verify the file name and file size in the confirmation email to ensure the correct proposal was uploaded. An example is provided below:

Sample E-mail for Successful Upload of Technical Proposal

Subject: Successful Upload of Technical Proposal

Upload of Technical Document for your NASA SBIR/STTR Proposal No. _____

This message is to confirm the successful upload of your technical proposal document for:

Proposal No. _____
(Uploaded File Name/Size/Date)

Please note that any previous uploads are no longer considered as part of your submission.

This e-mail is NOT A RECEIPT OF SUBMISSION of your entire proposal

IMPORTANT! The Business Official or an authorized representative must electronically endorse the proposal in the Electronic Handbook using the "Endorse Proposal" step. Upon endorsement, you will receive an e-mail that will be your official receipt of proposal submission.

Thank you for your participation in NASA's SBIR/STTR Program.

NASA SBIR/STTR Program Support Office

You may upload the technical proposal multiple times, with each new upload replacing the previous version, but only the final uploaded and electronically endorsed version will be considered for review.

5.3 Deadline for Phase II Proposal Receipt

All Phase II proposal submissions must be received no later than the last day of the Phase I contract, via the NASA SBIR/STTR website (http://sbir.nasa.gov). The EHB will be available for Internet submissions approximately 6 weeks prior to completion date of Phase I contracts. Receipt of Phase II proposals are due on the last day of performance under SBIR/STTR Phase I contracts. The EHB will not be available for Internet submissions after this deadline, so firms are also advised to print all forms prior to the deadline since the EHB will not be available. Any proposal received after that date and time shall be considered late and handled according to NASA FAR Supplement 1815.208.

5.4 Acknowledgment of Proposal Receipt

The final proposal submission includes successful completion of Form A (electronically endorsed by the SBC Official), Form B, Form C, the uploaded technical proposal, and the briefing chart. NASA will acknowledge receipt of electronically submitted proposals upon endorsement by the SBC Official to the SBC Official's e-mail address as provided on the proposal cover sheet. If a proposal acknowledgment is not received, the offeror should call NASA SBIR/STTR Program Support Office at 301-937-0888. An example is provided below:

Sample E-mail for Official Confirmation of Receipt of Full Proposal:

Subject: Official Receipt of your NASA SBIR/STTR Proposal No. _____

Confirmation No. _____

This message is to acknowledge electronic receipt of your NASA SBIR/STTR Proposal No. _____. Your proposal, including the forms and the technical document, has been received at the NASA SBIR/STTR Support Office.

SBIR/STTR 2012 Phase II xx.xx-xxxx (Title)
Form A completed on:
Form B completed on:
Form C completed on:
Technical Proposal Uploaded on:
File Name:
File Type:
File Size:
Briefing Chart completed on:
Proposal endorsed electronically by:

This is your official confirmation of receipt. Please save this email for your records, as no other receipt will be provided. The SBIR notification and announcement for negotiation is currently scheduled for January 2014 or June 2014 for STTR, and will be posted via the SBIR/STTR website (http://sbir.nasa.gov).

Thank you for your participation in the NASA SBIR/STTR Program.

NASA SBIR/STTR Program Support Office

5.5 Withdrawal of Proposals

Prior to the close of submissions, proposals may be withdrawn via the Proposal Submission Electronic Handbook hosted on the NASA SBIR/STTR website (http://sbir.nasa.gov). In order to withdraw a proposal after the deadline, the designated SBC Official must send written notification via email to sbir@reisystems.com.

5.6 Service of Protests

Protests, as defined in Section 33.101 of the FAR, that are filed directly with an agency and copies of any protests that are filed with the General Accounting Office (GAO) shall be served on the Contracting Officer by obtaining written and dated acknowledgement of receipt from the NASA SBIR/STTR Program contact listed below:

Cassandra Williams
NASA Shared Services Center
Building 1111, C Road
Stennis Space Center, MS 39529
Cassandra.Williams-1@nasa.gov

The copy of any protest shall be received within one calendar day of filing a protest with the GAO.

6. Submission Forms and Certifications

Firm Certifications **4**
Guidelines for Completing Firm Certifications **4**
Form A – SBIR Cover Sheet **6**
Guidelines for Completing SBIR Cover Sheet **10**
Form B – SBIR Proposal Summary **13**
Guidelines for Completing SBIR Proposal Summary **14**
Form C – SBIR Budget Summary **15**
Guidelines for Preparing SBIR Budget Summary **18**
SBIR Check List **21**
Form A – STTR Cover Sheet **22**
Guidelines for Completing STTR Cover Sheet **26**
Form B – STTR Proposal Summary **30**
Guidelines for Completing STTR Proposal Summary **31**
Form C – STTR Budget Summary **32**
Guidelines for Preparing STTR Budget Summary **36**
Model Research Agreement **39**
Small Business Technology Transfer (STTR) Program Model Allocation of Rights Agreement **40**
STTR Check List **45**

Firm Certifications

a. The offeror qualifies as a Small Business Concern (SBC)	Yes	No
b. It has no more than 500 employees, including the employees of its affiliates	Yes	No
Number of employees: _____		
i) Has SBA issued a size determination currently in effect finding that this Small Business Concern exceeds the 500 employee size standard?	Yes	No
c. The firm is owned and operated in the United States	Yes	No
i) The birth certificates, naturalization papers, or passports show that any individuals it relies upon to meet the eligibility requirements are U.S. citizens or permanent resident aliens in the United States	Yes	No
If No, explain why: _____		
d. The firm is owned by a faculty member or a student of an institution of higher education as defined in 20 U.S.C. § 1001)	Yes	No
The offeror qualifies as a:		
e. Socially and Economically Disadvantaged SBC	Yes	No
f. Woman-owned SBC	Yes	No
i) Economically Disadvantaged Women-owned SBC	Yes	No
g. HUBZone-owned SBC	Yes	No
h. Veteran-owned SBC	Yes	No
i) Service Disabled Veteran-owned SBC	Yes	No
In accordance with NFS 1852.209-73, the offeror certifies:		
i. It is not the Association of Community Organizations for Reform Now (ACORN) or a subsidiary thereof.	Yes	No
In accordance with NFS 1852.209-75, the offeror certifies that:		
j. It is not a corporation that has had any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability	Yes	No
k. It is not a corporation that was convicted, or had an officer or agent acting on behalf of the corporation convicted, of a felony criminal violation under a Federal law within the preceding 24 months	Yes	No

I understand that providing false information is a criminal offense under Title 18 US Code, Section 1001, False Statements, as well as Title 18 US Code, Section 287, False Claims.

Guidelines for Completing Firm Certifications

Certifications: Firm level certifications that are applicable across all proposal submissions submitted to this solicitation must be completed via the "Certifications" section of the Proposal Submission Electronic Handbook. The offeror must answer Yes or No to certifications (a) through (k) as applicable.

Form A – SBIR Cover Sheet

	Subtopic No.	System generated 4-digits
Proposal Number:	__ __ . __ __	- __ __ __ __
Topic Title:		
Subtopic Title:		
Proposal Title:		

Firm Name:
Mailing Address:
City:
State/Zip:
Phone:
Fax:
EIN/Tax ID:

ACN (Authorized Contract Negotiator) Name:
ACN E-mail:
ACN Phone: Extension:
DUNS + 4:
Cage Code:
Amount Requested: $_____ (auto-populated upon completion of Budge Form C)
Duration: ____ months

Please read carefully the following certification statements. The Federal government relies on the information to determine whether the business is eligible for a Small Business Innovation Research (SBIR) Program award. A similar certification will be used to ensure continued compliance with specific program requirements during the life of the funding agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, SBA regulations (13 C.F.R. Part 121), the SBIR Policy Directive and also any statutory and regulatory provisions referenced in those authorities.

If the funding agreement officer believes that the business may not meet certain eligibility requirements at the time of award, they are required to file a size protest with the U.S. Small Business Administration (SBA), who will determine eligibility. At that time, SBA will request further clarification and supporting documentation in order to assist in the verification of any of the information provided as part of a protest. If the funding agreement officer believes, after award, that the business is not meeting certain funding agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal government, any action taken with respect to this certification does not affect the Government's right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

THE OFFEROR HAS REVIEWED, VERIFIED AND CERTIFIES THAT:

a. During the performance of the contract, the Principal Investigator will spend more than one half of his/her time as an employee of the awardee (based on a 40 hour workweek). If no, the offeror must request a written deviation from this requirement from the funding agreement officer. Note: The Principal Investigator's tasks cannot be split between two people. Co-PIs are not acceptable. Refer to section 1.4.3. Yes No

b. Gender of the Principal Investigator Male Female

c. Is the Principal Investigator a socially and economically disadvantaged individual? Yes No

d. All, essentially equivalent work, or a portion of the work proposed under this project (check the applicable line):

__ Has not been submitted for funding by another Federal agency.

__ Has been submitted for funding by another Federal agency but has not been funded under any other Federal grant, contract, subcontract or other transaction. (Complete section i below)

__ A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal. Before award, this must be approved in writing by the funding agreement officer. (Complete section ii below)

__ Has received funding for essentially equivalent work under this project by any other Federal grant, contract, or subcontract.

i) If submitted for other Federal funding, provide information on essentially equivalent proposal submissions below:

Proposal No.	Proposal Title	Date of Submission	Soliciting Agency	(Anticipated) Selection Announcement Date

ii) If a portion has been Federally funded by another grant, contract, or contract, provide information on essentially equivalent proposal submissions below:

Contract/ Grant No.	Proposal Title	Date of Submission	Awarding Agency	Date of Award

e. During the performance of the contract, the SBC will perform at least half (50 %) of the applicable percentage of work* Yes No

f. During the performance of the contract, the research/research and development will be performed in the United States* Yes No

* In rare occasions, minor deviations from this requirement may be necessary; however, any minor deviation must be approved in writing by the contracting officer after consultation with the agency SBIR Program Manager/Business Manager.

g. During the performance of the contract, the research/research and development will be performed at the offeror's facilities by the offeror's employees except as otherwise indicated in the SBIR technical proposal — Yes No

As described in section 2 of this solicitation, the offeror meets the following requirements completely:

h. All 11 parts of the technical proposal are included in part order and the page limitation is met — Yes No

i. Subcontracts/consultants proposed? — Yes No

i) If yes, does the proposal comply with the subcontractor/consultant limitation? (section 2.2.4, part 9) — Yes No N/A

j. Federal facilities, laboratories, or equipment required? — Yes No

i) If yes, is justification for the use uploaded in Form C? — Yes No N/A

ii) If yes, is a signed statement of availability uploaded in Form C? — Yes No N/A

In accordance with ITAR, 22 CFR 120-130, as applicable:

k. The offeror understands and shall comply with export control regulations — Yes No

In accordance with 14 CFR 1230 and 1232 as applicable, indicate if any of the following will be used (must comply with federal regulations):

l. Human Subject — Yes No

m. Animal Subject — Yes No

In accordance with FAR 52.223-13, FAR 52.223-3, 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313 as applicable, indicate if the following will be used (must comply with federal regulations):

n. Toxic Chemicals — Yes No

o. Hazardous Materials — Yes No

Indicate if the R&D to be performed is related to:

p. Renewable Energy — Yes No

q. Manufacturing — Yes No

Disclosure permission:

r. Will you permit the Government to disclose your name, address, and telephone number of the Business Official of your concern, if your proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting you for further information? — Yes No

As a representative of the offeror, I certify the following:

__ The offeror will notify the Federal agency immediately if all or a portion of the work proposed is subsequently funded by another Federal agency.

__ I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

__ I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern that the information provided in this certification, the application, and all

other information submitted in connection with this application, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and non-procurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

ENDORSEMENTS:

Principal Investigator:

Name: Title:
Phone: E-mail:

Endorsed by: Date:

Corporate/Business Official:

Name: Title:
Phone: E-mail:

Endorsed by: Date:

PROPRIETARY NOTICE (If applicable, see sections 4.4, 4.5)

NOTICE: This data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, provided that a funding agreement is awarded to the offeror as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages _____ of this proposal.

Note: Do not mark the entire proposal as proprietary. Form B (page 2 of your proposal submission) cannot contain proprietary data. (See section 2.2.3 of the 2012 Solicitation)

Guidelines for Completing SBIR Cover Sheet

Complete Cover Sheet Form A electronically via the Proposal Submission Electronic Handbook.

Proposal Number: This number does not change. The proposal number consists of the four-digit subtopic number and four-digit system-generated number.

Topic Title: Select the topic that this proposal will address. Refer to the Phase I topic descriptions.

Subtopic Title: Select the subtopic that this proposal will address. Refer to the Phase I for subtopic descriptions.

Proposal Title: Enter a brief, descriptive title using no more than 80 keystrokes (characters and spaces). Do not use the subtopic title. Avoid words like "development" and "study."

Firm Name: Enter the full name of the firm submitting the proposal. If a joint venture, list the firm chosen to negotiate and receive contracts. If the name exceeds 40 keystrokes, please abbreviate.

Mailing Address: Must match CCR address and should be the address where mail is received.
City, State, Zip: City, 2-letter State designation (i.e. TX for Texas), 9-digit Zip code (i.e. 20705-3106)
Phone, Fax: Number including area code
EIN/Tax ID: Employer Identification Number/Taxpayer ID

ACN Name: Enter the name of the Authorized Contract Negotiator from your firm
ACN E-mail: Email address
ACN Phone, Ext.: Number including area code and extension (if applicable)

DUNS + 4: 9-digit Data Universal Number System; a 4-digit suffix is also required if owned by a parent concern. For information on obtaining a DUNS number go to http://www.dnb.com.

CAGE Code: Commercial Government and Entity Code that is issued by the Central Contractor Registration (CCR). For information on obtaining a CAGE Code, go to http://www.ccr.gov.

Amount Requested: Proposal amount auto-populated from Budget Summary. The amount requested should not exceed $750,000 (see sections 1.2, 4.1.1).

Duration: Proposed duration in months. The requested duration should not exceed 24 months (see sections 1.2, 4.1.1).

Certifications: Answer Yes or No as applicable for certifications a – r (see the referenced sections for definitions). Where applicable, SBCs should make sure that their certifications on Form A agree with the content of their technical proposal.

a. The Principal Investigator is required to be "primarily employed" by the organization as defined in section 1.4.3 of the Solicitation.

b. As required by the SBIR/STTR Policy Directive, the offeror should indicate the gender of the Principal Investigator. This data is collected for statistical purposes only.

c. As required by the SBIR/STTR Policy Directive, the offeror should indicate if the Principal Investigator is a socially and economically disadvantaged individual as defined in 13 C.F.R. § 124.103 and 124.104. This data is collected for statistical purposes only.

d. The firm must disclose if any essentially equivalent work as been submitted for funding or funded by another Federal agency. While it is permissible to submit essentially equivalent proposals, it is unlawful to enter into funding agreements requiring essentially equivalent work. If essentially equivalent work under this project has been submitted to other Federal Agencies/programs for funding, then the SBC must provide the proposal number, proposal title, date of submission, soliciting agency, and the (anticipated) selection announcement date is subsection i. If a portion of the work has been funded by another grant, contract, or subcontract, then the SBC must provide the contract/grant number, proposal title, date of submission,

awarding agency, date of award in subsection ii.

e. The SBC is required to perform at least half (50%) of the work. Refer to section 2.2.4, part 9.

f. R/R&D must be performed in the United States (see section 1.4.2 of this Solicitation) except in rare and unique circumstances which require approval by the Contracting Officer prior to award.

g. The offeror must certify that during the performance of the contract the R/R&D will be performed at the offeror's facilities by the offeror's employees unless otherwise indicated in the SBIR application.

h. As stated in section 2.2 of the Solicitation, the entire proposal must not exceed the 50-page limitation and must consist of all eleven (11) required parts.

i. By answering "Yes", the SBC certifies that subcontracts/consultants have been proposed and arrangements have been made to perform on the contract, if awarded.

   i) Proposed subcontractor/consultant business arrangements must not exceed 50 percent of the research and/or analytical work (as determined by the total cost of the proposed subcontracting effort (to include the appropriate OH and G&A) in comparison to the total effort (total contract price including cost sharing, if any, less profit if any). Refer to section 2.2.4, part 9 of the Solicitation.

j. By answering "Yes", the SBC certifies that Federal furnished facilities, laboratories, or equipment are required to perform the proposed activities. By answering "No", the SBC certifies that no such Federal furnished facilities, laboratories, or equipment is required to perform the proposed activities. See section 2.2.4 part 8 of the Solicitation.

   i) If proposing to use Federal facilities, laboratories, or equipment a justification statement from the SBC must be uploaded in Form C. Proposals requiring waivers must explain why the waiver is appropriate. Facilities designated as a Federal laboratory are exempt from the waiver requirement.

   ii) If proposing to use Federal furnished facilities, laboratories, or equipment, a signed statement of availability must be uploaded in Form C that describes the uniqueness of the facility and its availability to the offeror at specified times, signed by the appropriate Government official.

k. Offerors are responsible for ensuring compliance with export control and International Traffic in Arms (ITAR) regulations. All employees who will work on this contract must be eligible under these regulations or the offeror must have in place a valid export license or technical assistance agreement. Violations of these regulations can result in criminal or civil penalties. For further information on ITAR visit http://www.pmddtc.state.gov/regulations_laws/itar.html. For additional assistance, contact the ARC export control administrator, Mary Williams, at mary.p.williams@nasa.gov.

l-m. Offeror must indicate by answering "Yes" or "No" as applicable if human and/or animal subjects will be used. SBCs must be in compliance with federal regulations. Offerors should be aware of the requirement that an approved protocol by a NASA Review Board is required if the proposed work include human or animal subject. An approved protocol shall be provided to the Contracting Officer before an award can be made. Offerors shall identify the use of human or animal subject on Form A. For additional information, contact the NASA SBIR/STTR Program Management Office at ARC-SBIR-PMO@mail.nasa.gov. Reference 14 CFR 1230 and 1232. (See section 4.10.5)

n-o. Offeror must indicate by answering "Yes" or "No" as applicable if toxic chemicals and/or hazardous materials will be used. SBCs must be in compliance with federal regulations. Reference FAR 52.223-13 Certification of Toxic Chemical Release Reporting and FAR 52.223-3 Hazardous Material identification and Material Safety Identification.

Offerors must list any hazardous material to be delivered under this contract. The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered non-responsible and ineligible for award.

p. Answer "Yes"if this proposal has a connection to energy efficiency or alternative and renewable energy. This should also be indicated in part 5 (Related R/R&D) of the proposal with a brief explanation of how it is related to energy efficiency or alternative and renewable energy.

q. Answer "Yes"if this proposal has a connection to manufacturing. This should also be indicated in part 5 (Related R/R&D) of the proposal with a brief explanation of how it is related to manufacturing.

r. The offeror must indicate if they permit the Government to disclose the name, address, and telephone number of the Business Official of your concern, if the proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting the Business Official for further information.

Electronic Endorsement:

Electronic endorsement is performed by the Principal Investigator and the authorized Business Official from the "Endorsement" link located on the Activity Worksheet for each proposal. Electronic endorsement by the Business Official is the final step in the proposal submission process and can only be performed when all required sections of the proposal submission are complete and the Principal Investigator has performed his/her separate electronic endorsement. Once endorsed, the name and date of endorsement will populate under the "Endorsement" section of this form. If any changes are made to the submission after endorsement by the Principal Investigator and/or Business Official, the proposal must be re-endorsed to be considered complete and submitted.

Endorsement of the proposal by the Business Official certifies that all information submitted in connection with this application is true and correct as of the date of submission. Any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and non-procurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

Form B – SBIR Proposal Summary

Subtopic No. System generated 4-digits

Proposal Number: _ _ . _ _ - _ _ _ _
Subtopic Title:
Proposal Title:

Small Business Concern:
Name:
Address:
City/State/Zip:
Phone:

Principal Investigator/Project Manager:
Name:
Address:
City/State/Zip:
Phone: Extension:
E-mail:

Business Official:
Name:
Address:
City/State/Zip:
Phone: Extension:
E-mail:

Estimated Technology Readiness Level (TRL) at beginning and end of contract:
Begin: _____
End: _____

Technology Available (TAV):

All subtopics listed in this solicitation have Technology Available (TAV) with NASA Intellectual Property. The use of the NASA IP is strictly voluntary. Refer to section 1.5 of the Solicitation for additional information.

Do you plan to use NASA Intellectual Property (IP) under the award? Yes No

If yes, click here to access the NASA Research License Application that must be completed and appended to your technical proposal.

Technical Abstract: (Limit 2,000 characters, approximately 200 words)

Potential NASA Application(s): (Limit 1,500 characters, approximately 150 words)

Potential Non-NASA Application(s): (Limit 1,500 characters, approximately 150 words)

Technology Taxonomy: (Select only the technologies relevant to this specific proposal)
NASA's technology taxonomy has been developed by the SBIR/STTR Program to disseminate awareness of proposed and awarded R/R&D in the agency. It is a listing of over 100 technologies, sorted into broad categories, of interest to NASA.

Guidelines for Completing SBIR Proposal Summary

Complete Proposal Summary Form B electronically via the Proposal Submission Electronic Handbook.

Proposal Number: Auto-populated with proposal number as shown on Cover Sheet.

Subtopic Title: Auto-populated with subtopic title as shown on Cover Sheet.

Proposal Title: Auto-populated with proposal title as shown on Cover Sheet.

Small Business Concern: Auto-populated with firm information as shown on Cover Sheet.

Principal Investigator/Project Manager: Enter the full name of the PI/PM and include all required contact information.

Business Official: Auto-populated with Business Official contact information as shown on Cover Sheet.

Technology Readiness Level (TRL): Provide the estimated Technology Readiness Level (TRL) at the beginning and end of the contract. See Appendix B for TRL definitions.

Technology Available (TAV): All subtopics listed in this solicitation have Technology Available (TAV) with NASA Intellectual Property. Refer to section 1.5 of the Solicitation for more information. The offeror shall answer "Yes" if planning to use NASA IP under the award, and must complete the NASA Research License Application and append it to the technical proposal.

Technical Abstract: Summary of the offeror's proposed project is limited to 2,000 characters, approximately 200 words, and shall summarize the implications of the approach and the anticipated results of the Phase II. NASA will reject a proposal if the technical abstract is determined to be non-responsive to the subtopic. **The abstract must not contain proprietary information and must describe the NASA need addressed by the proposed R/R&D effort.**

Potential NASA Application(s): Summary of the direct or indirect NASA applications of the innovation, assuming the goals of the proposed R/R&D are achieved. The response is limited to 1,500 characters, approximately 150 words.

Potential Non-NASA Application(s): Summary of the direct or indirect NASA applications of the innovation, assuming the goals of the proposed R/R&D are achieved. The response is limited to 1,500 characters, approximately 150 words.

Technology Taxonomy: Selections for the technology taxonomy are limited to technologies supported or relevant to the specific proposal. The listing of technologies for the taxonomy is provided in Appendix C.

Form C – SBIR Budget Summary

PROPOSAL NUMBER:
SMALL BUSINESS CONCERN:

---

(1) DIRECT LABOR:

Category	Description	Education	Years of Experience	Hours	Rate	Fringe Rate % (if applicable)	Total
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Document uploaded for labor rate documentation: (file name)

TOTAL DIRECT LABOR:
(1) $ _____

(2) OVERHEAD COST;

_____% of Total Direct Labor or $ _____

Comments:

Overhead Cost Sources:
_____
_____
_____

OVERHEAD COST:
(2) $ _____

(3) OTHER DIRECT COSTS (ODCs):

Materials:
Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Consumable? Yes No
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Supplies:
Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Consumable? Yes No
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Equipment:
Description: _____
Vendor: _____

Quantity: _____ Cost: _____
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Other:

Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Travel:

Location From: _____ Location To: _____
Number of People: _____ Number of Days: _____
Purpose of Trip: _____
Airfare: _____ Car Rental: _____
Per Diem: _____ Other Costs: _____
Total Costs: _____
Sources of Estimates: _____
Explanation/Justification: _____

Explanation of ODCs:
Provide any additional information on the Other Direct Costs listed above, including the basis used for estimating the costs.

Subcontractor/Consultants:	Total Cost:
_____	_____
_____	_____
_____	_____

Supporting Documents: (file name)

(Note: Separate Budget Summaries completed for all proposed Subcontractors/Consultants via the Subcontractors/Consultants section of Form C)

TOTAL OTHER DIRECT COSTS:
(3) $ _____

(1)+(2)+(3)=(4)

SUBTOTAL:
(4) $ _____

(5) GENERAL & ADMINISTRATIVE (G&A) COSTS
_____% of Subtotal or $ _____

G&A COSTS:
(5) $ _____

Comments:

G&A Cost Elements:
_____
_____
_____

(4)+(5)=(6)

TOTAL COSTS
(6) $ _____

(7) ADD PROFIT or SUBTRACT COST SHARING
(As applicable)

PROFIT/COST SHARING:
(7) $ _____

Comments:

(6)+(7)=(8)

AMOUNT REQUESTED:
(8) $ _____

PHASE II DELIVERABLES:
SBCs will be required to submit mandatory deliverables such as progress reports, final report and New Technology Report as per their contract. If your firm is proposing any additional deliverables, list them below:

Deliverable	Quantity	Project Deliverable Milestone
_____	_____	_____
_____	_____	_____
_____	_____	_____

FEDERAL FACILITIES, LABORATORIES, OR EQUIPMENT:

If you require the use of a Federal facility, laboratory, or equipment, identify it below as well as in part 8 of your technical proposal and upload a signed statement of availability from the Government agency. In addition, a letter of justification should be uploaded. (See certification j on Form A and section 2.2.4, part 8).

AUDIT AGENCY:

If your firm's accounting system has been audited, are the rates from that audit agreement used for this proposal?

__ The rates listed in the negotiated rate agreement were used to prepare the budget summary
__ Other rates were used to prepare the budget summary
__ My firm’s accounting system has not been audited

If the listed rates are not being used to prepare the budget summary, please provide an explanation:

Guidelines for Preparing SBIR Budget Summary

Complete Budget Summary Form C electronically.

The offeror shall electronically submit a price proposal of estimated costs with detailed information for each cost element, consistent with the offeror's cost accounting and estimating system.

This summary does not eliminate the need to fully document and justify the amounts requested in each category. Such documentation should be contained, as appropriate, in the text boxes or via uploads as indicated in the electronic form.

Offerors with questions about the appropriate classification of costs are advised to consult with an experienced accountant that has experience in government contracting and cost accounting principals. Information provided by the Defense Contract Audit Administration in their publication "Information for Contractors" may also be useful. This publication can be found via the following site under publications: http://www.dcaa.mil/

Firm: Same as Cover Sheet.

Proposal Number: Same as Cover Sheet.

Direct Labor: Select the appropriate labor category for each person who will be working directly on the proposed research effort and provide the labor description, level of education, years of experience, total number of hours, labor rate, and fringe rate percentage (if applicable). Detail the labor hours used for each year of the proposed research effort separately.

Labor rate documentation should include costs that are included in the fringe rate percentage (if applicable). Provide the breakout rate such as the labor hour rate, health benefits, life insurance etc. Some examples of direct labor include Principal Investigator, Engineer, Scientist, Analyst or Research Assistant/Laboratory Assistant. All listed categories shall be directly related to proposed work to be performed under contract with NASA. Any contributions from non-technical personnel proposed under direct labor shall be explicitly explained. Labor rates that do not compare favorably to comparable state average rates at http://www.bls.gov require additional documentation, supporting the proposed rate or salary.

Note: Costs associated with firm executives, accountants or administrative support are typically included in a firm's general and administrative costs. If these costs are being proposed as direct labor then provide the details of how the proposed hours were allocated to this effort and verify that these costs are not also covered in your overhead or G&A rate.

Overhead Cost: Specify current rate and base. Use current rate(s) negotiated with your firm's cognizant Federal-auditing agency, if available. A rate that has not been audited requires a detailed explanation of the cost base used to develop the rate and if possible, historical actual overhead rates for the past three years.

Specify the cost elements of the firm's overhead costs in the text boxes provided. Possible overhead cost elements include insurance, sick leave, and vacation.

Note: If no labor overhead rate is proposed and the proposed direct labor includes all fringe benefits, you may enter "0" for the overhead cost line.

Other Direct Costs (ODCs): Refer to FAR 31.205 – Selected Costs for determination of cost allowability.

Materials and Supplies: Under the Materials and Supplies sections, indicate type, vendor, quantity required, and cost. Identify whether each item is consumable, which year it will be purchased, if it was competitively sourced, and if it will be used exclusively for this contract. Your proposed cost shall be justified and supporting documents should be uploaded. General materials or supplies without adequate explanation of the components, quantity and use of said items are not an acceptable breakdown. In the supporting comments block, provide the basis for the proposed price

(vendor quotes, competitive quotes, catalog price, estimate etc…). The Contracting Officer will make the final determination.

Special Tooling, Testing, and Test Equipment: The need for these items, if proposed, will be carefully reviewed. Equipment must be made in the USA to the maximum extent practical. The offeror should provide competitive quotes to support the proposed costs or should justify why only one source is available. Competitive quotes may be signed quotes from vendors or copies of catalogue pages. Normally the costs of any equipment should be quoted on a purchase basis, unless the offeror can demonstrate that lease or rent of the equipment is clearly advantageous to the government. The Contracting Officer will make the final determination. Upload supporting documentation as necessary. In the supporting comments block provide the basis for the proposed price (vendor quote, competitive quotes, catalog price, estimate etc.). The Contracting Officer will make the final determination.

Travel: All proposed travel must be necessary for the success of the research. Include a detailed accounting of all proposed expenses to include the purpose of proposed trips, number of trips, travelers per trip, as well as meals, hotel, and rental car estimated costs. Sources of estimate should be identified when travel is proposed along with a justification for each trip. Proposed travel costs shall be in accordance with the Federal Travel Regulation http://www.gsa.gov/federaltravelregulation.

Subcontracts/Consultants: Subcontracts/Consultants costs are included in the Other Direct Costs total. A separate budget summary must be completed for each subcontract/consultant proposed. Further instructions are provided in the Subcontracts/Consultants section below.

Note: Do not add subcontractors or consultants as a line item under the ODCs section of Form C. It will automatically be added to the ODCs upon completion of the separate Subcontractor/Consultant budget summary form.

Other: List all other direct costs that are not otherwise included in the categories described above such as rental of facilities, etc.

Note: The purchase of equipment, instrumentation, or facilities under SBIR/STTR must be justified by the offeror and approved by the Government during contract negotiations. Firms should be prepared to justify all material, supplies, and equipment costs during negotiations. See section 2.2.4, part 8 for further guidance.

Explanation of ODCs: Provide any additional information for the proposed ODCs, including basis for cost estimation, in the text box provided.

Subcontracts/Consultants: List consultants by name and specify, for each, the number of hours and hourly costs. Detailed quotes from subcontractors should be provided in the same format. Note that a subcontract entered into for performance of research or research and development differs from an arrangement with a vendor to provide a service such as machining, analysis with test equipment or use of computer time. The costs of such arrangements with vendors should be covered under Special Tooling, Testing, Test Equipment and Material or under Other Direct Costs. Upon request of the contracting officer, the subcontractor's cost proposals may be sealed or mailed directly for government eyes only.

A letter of commitment shall be uploaded for each proposed subcontractor/consultant from the Subcontractor/Consultant Letter of Commitment section of the subcontractor/consultant budget summary form. If a commitment letter is not available, you must upload alternate documentation that sufficiently substantiates that the subcontractor/consultant is available to perform the proposed work during the proposed timeframe. Note that not providing the information now may delay contract negotiations and award.

General and Administrative (G&A) Costs: Specify a current rate and base to which G&A costs will be applied. If available, use the current rate recommendations from the cognizant Federal-auditing agency. If an audit rate is not available, provide a detailed explanation of the cost base used to develop the rate and if possible, a historical actual G&A rate for the past three years.

Specify the elements of the firm's G&A costs in the text boxes provided. Possible G&A cost elements include rent,

utilities, and management.

Profit/Cost Sharing: See sections 4.6 and 4.7. Profit is to be added to total cost, while shared costs are to be subtracted from total cost, as applicable.

Amount Requested: The amount requested is equal to the sum of the Direct Labor, Overhead, ODCs, G&A and any profit, less any cost sharing. The amount requested cannot exceed $750,000 for Phase II.

Federal Facilities, Laboratories, and Equipment: If you require the use of Government facilities, laboratories, or equipment, identify the Federal facilities, laboratories or equipment in the text box provided, as well as in Part 8 of your technical proposal, and upload a signed statement of availability from the Government agency. Please note that this section SHALL be completed if you certified in Form A that you will require the use of Federal facilities. Leave this section BLANK if you DO NOT require the use of Federal facilities, laboratories, or equipment.

Audit Information: Complete the Audit Information section of Form C to indicate if your firm's accounting system has been audited and if the rates from that audit agreement are used for this proposal.

Note: There is a separate "Audit Information" section linked from your Activity Worksheet that must also be completed.

SBIR Check List

For assistance in completing your Phase II proposal, use the following checklist to ensure your submission is complete.

1. **The entire proposal including any supplemental material shall not exceed a total of 50 8.5 x 11 inch pages and the format requirements (section 2.2.2).**
2. The proposal and innovation is submitted for one subtopic only.
3. The entire proposal is submitted consistent with the requirements and in the order outlined in section 2.2.
4. The technical proposal contains all eleven parts in order (section 2.2.4).
5. The 1-page briefing chart does not include any proprietary data (section 2.2.7).
6. Certifications in Form A are completed, and agree with the content of the technical proposal.
7. Proposed funding does not exceed $750,000 (sections 1.2, 4.1.1).
8. Proposed project duration does not exceed 24 months (sections 1.2, 4.1.1).
9. Entire proposal including Forms A, B, and C submitted via the Internet.
10. Form A electronically endorsed by the SBC Official and the PI.
11. **Phase II proposal submissions will be due after the last day of the Phase I contract (section 5.3).**

Form A – STTR Cover Sheet

	Subtopic No.	System generated 4-digits
Proposal Number:	__ __ . __ __	- __ __ __ __
Topic Title:		
Subtopic Title:		
Proposal Title:		

Firm Name:	Research Institution Name:
Mailing Address:	Mailing Address:
City:	City:
State/Zip:	State/Zip:
Phone:	Phone:
Fax:	Fax:
EIN/Tax ID:	EIN/Tax ID:

ACN (Authorized Contract Negotiator) Name:
ACN E-mail:
ACN Phone: Extension:
DUNS + 4:
Cage Code:
Amount Requested: $_____ (auto-populated upon completion of Budge Form C)
Duration: ____ months

Please read carefully the following certification statements. The Federal government relies on the information to determine whether the business is eligible for a Small Business Technology Transfer (STTR) Program award. A similar certification will be used to ensure continued compliance with specific program requirements during the life of the funding agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, SBA regulations (13 C.F.R. Part 121), the STTR Policy Directive and also any statutory and regulatory provisions referenced in those authorities.

If the funding agreement officer believes that the business may not meet certain eligibility requirements at the time of award, they are required to file a size protest with the U.S. Small Business Administration (SBA), who will determine eligibility. At that time, SBA will request further clarification and supporting documentation in order to assist in the verification of any of the information provided as part of a protest. If the funding agreement officer believes, after award, that the business is not meeting certain funding agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal government, any action taken with respect to this certification does not affect the Government's right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

THE OFFEROR HAS REVIEWED, VERIFIED AND CERTIFIES THAT:

a. During the performance of the contract, the Principal Investigator will spend more than one half of his/her time as an employee of the awardee or the Research Institution (based on a 40 hour workweek). If no, the offeror must request a written deviation from this requirement from the funding agreement officer. Note: The Principal Investigator's tasks cannot be split between two people. Co-PIs are not acceptable. Refer to section 1.4.3. Yes No

b. Gender of the Principal Investigator Male Female

c. Is the Principal Investigator a socially and economically disadvantaged individual? Yes No

d. All, essentially equivalent work, or a portion of the work proposed under this project (check the applicable line):

__ Has not been submitted for funding by another Federal agency.
__ Has been submitted for funding by another Federal agency but has not been funded under any other Federal grant, contract, subcontract or other transaction. (Complete section i below)
__ A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal. Before award, this must be approved in writing by the funding agreement officer. (Complete section ii below)
__ Has received funding for essentially equivalent work under this project by any other Federal grant, contract, or subcontract.

i) If submitted for other Federal funding, provide information on essentially equivalent proposal submissions below:

Proposal No.	Proposal Title	Date of Submission	Soliciting Agency	(Anticipated) Selection Announcement Date
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

ii) If a portion has been Federally funded by another grant, contract, or contract, provide information on essentially equivalent proposal submissions below:

Contract/ Grant No.	Proposal Title	Date of Submission	Awarding Agency	Date of Award
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	

e. During the performance of the contract, the SBC will perform at least 40% of the applicable percentage of work and the RI will perform at least 30% of the applicable percentage of work* Yes No

f. During the performance of the contract, the research/research and development will be performed in the United States* Yes No

* In rare occasions, minor deviations from this requirement may be necessary; however, any minor deviation must be approved in writing by the Contracting Officer after consultation with the agency STTR Program Manager/Business Manager.

g.	During the performance of the contract, the research/research and development will be performed at the offeror's facilities by the offeror's employees except as otherwise indicated in the STTR technical proposal	Yes	No	

The partnering Research Institution qualifies as a:

h.	FFRDC	Yes	No	
i.	Nonprofit Research Institution	Yes	No	
j.	Nonprofit College or University	Yes	No	

As described in section 2 of this solicitation, the offeror meets the following requirements completely:

k.	Research Agreement electronically endorsed by the SBC and RI	Yes	No	
l.	A Signed Allocation of Rights Agreement will be available for the Contracting Officer no more than 10 business days from time of notification of selection for negotiations	Yes	No	
m.	All 11 parts of the technical proposal are included in part order and the page limitation is met	Yes	No	
n.	Subcontracts/consultants proposed?	Yes	No	
	i) If yes, does the proposal comply with the subcontractor/consultant limitation? (Section 2.2.4, part 9)	Yes	No	N/A
o.	Federal facilities, laboratories, or equipment required?	Yes	No	
	i) If yes, is justification for the use uploaded in Form C?	Yes	No	N/A
	ii) If yes, is a signed statement of availability uploaded in Form C?	Yes	No	N/A

In accordance with ITAR, 22 CFR 120-130, as applicable:

p.	The offeror understands and shall comply with export control regulations	Yes	No	

In accordance with 14 CFR 1230 and 1232 as applicable, indicate if any of the following will be used (must comply with federal regulations):

q.	Human Subject	Yes	No	
r.	Animal Subject	Yes	No	

In accordance with FAR 52.223-13, FAR 52.223-3, 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313 as applicable, indicate if the following will be used (must comply with federal regulations):

s.	Toxic Chemicals	Yes	No	
t.	Hazardous Materials	Yes	No	

Indicate if the R&D to be performed is related to:

u.	Renewable Energy	Yes	No	
v.	Manufacturing	Yes	No	

Disclosure permission:

w.	Will you permit the Government to disclose your name, address, and telephone	Yes	No	

number of the Business Official of your concern, if your proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting you for further information?

As a representative of the offeror, I certify the following:

__ The offeror will notify the Federal agency immediately if all or a portion of the work proposed is subsequently funded by another Federal agency.

__ I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

__ I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern that the information provided in this certification, the application, and all other information submitted in connection with this application, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and non-procurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

ENDORSEMENTS:

Corporate/Business Official:

Name: Title:
Phone: E-mail:

Endorsed by: Date:

Principal Investigator:

Name: Title:
Phone: E-mail:

Endorsed by: Date:

PROPRIETARY NOTICE (If applicable, see sections 4.4, 4.5)

NOTICE: This data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, provided that a funding agreement is awarded to the offeror as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages _____ of this proposal.

Note: Do not mark the entire proposal as proprietary. Form B (page 2 of your proposal submission) cannot contain proprietary data. (See section 2.2.3 of the 2012 Solicitation)

Guidelines for Completing STTR Cover Sheet

Complete Cover Sheet Form A electronically via the Proposal Submission Electronic Handbook.

Proposal Number: This number does not change. The proposal number consists of the four-digit subtopic number and four-digit system-generated number.

Topic Title: Select the topic that this proposal will address. Refer to the Phase I for topic descriptions.

Subtopic Title: Select the subtopic that this proposal will address. Refer to the Phase I for subtopic descriptions.

Proposal Title: Enter a brief, descriptive title using no more than 80 keystrokes (characters and spaces). Do not use the subtopic title. Avoid words like "development" and "study."

Firm Name: Enter the full name of the firm submitting the proposal. If a joint venture, list the firm chosen to negotiate and receive contracts. If the name exceeds 40 keystrokes, please abbreviate.

Research Institution Name: Enter the full name of the partnering Research Institution.

Mailing Address: Must match CCR address and should be the address where mail is received.
City, State, Zip: City, 2-letter State designation (i.e. TX for Texas), 9-digit Zip code (i.e. 20705-3106)
Phone, Fax: Number including area code
EIN/Tax ID: Employer Identification Number/Taxpayer ID

ACN Name: Enter the name of the Authorized Contract Negotiator from your firm
ACN E-mail: Email address
ACN Phone, Ext.: Number including area code and extension (if applicable)

DUNS + 4: 9-digit Data Universal Number System; a 4-digit suffix is also required if owned by a parent concern. For information on obtaining a DUNS number go to http://www.dnb.com.

CAGE Code: Commercial Government and Entity Code that is issued by the Central Contractor Registration (CCR). For information on obtaining a CAGE Code, go to http://www.ccr.gov.

Amount Requested: Proposal amount auto-populated from Budget Summary. The amount requested should not exceed $750,000 (see sections 1.2, 4.1.1).

Duration: Proposed duration in months. The requested duration should not exceed 24 months (see sections 1.2, 4.1.1).

Certifications: Answer Yes or No as applicable for certifications a – w (see the referenced sections for definitions). Where applicable, SBCs should make sure that their certifications on Form A agree with the content of their technical proposal.

a. The Principal Investigator is required to be "primarily employed" by the organization or the Research Institution as defined in section 1.4.3 of the Solicitation.
b. As required by the SBIR/STTR Policy Directive, the offeror should indicate the gender of the Principal Investigator. This data is collected for statistical purposes only.
c. As required by the SBIR/STTR Policy Directive, the offeror should indicate if the Principal Investigator is a socially and economically disadvantaged individual as defined in 13 C.F.R. § 124.103 and 124.104. This data is collected for statistical purposes only.
d. The firm must disclose if any essentially equivalent work has been submitted for funding or funded by another Federal agency. While it is permissible to submit essentially equivalent proposals, it is unlawful to enter into funding agreements requiring essentially equivalent work. If essentially equivalent work under this project has been submitted to other Federal agencies/programs for funding, then the SBC must provide the proposal number, proposal title, date of submission, soliciting agency, and the (anticipated) selection announcement date is subsection i. If a portion of the work has been funded by another grant, contract, or subcontract, then the SBC must provide the contract/grant number, proposal title, date of submission,

awarding agency, date of award in subsection ii.

e. The SBC is required to perform at least 40% of the work and the RI is required to perform at least 30% of the work. Refer to section 2.2.4, part 9.

f. R/R&D must be performed in the United States (see section 1.2.2 of this Solicitation) except in rare and unique circumstances which require approval by the Contracting Officer prior to award.

g. The offeror must certify that during the performance of the contract the R/R&D will be performed at the offeror's facilities by the offeror's employees unless otherwise indicated in the STTR proposal.

h-j. Indicate whether the Research Institution (RI) qualifies as a FFRDC, Nonprofit Research Institution, or a Nonprofit College/University. (Only one of these should be marked as "Yes").

k. The Research Agreement must be electronically endorsed by the authorized SBC Official and RI Official. Refer to section 2.2.5 of the Solicitation. Note: Endorsement is performed via the "Endorsement" link located in the Activity Worksheet for each proposal.

l. Within 10 business days of the notification of selection for negotiation, the offeror must provide to the Contracting Officer a completed Allocation of Rights Agreement (ARA). The ARA shall state the allocation of intellectual property rights with respect to the proposed STTR activity and planned follow-on research, development and/or commercialization. See section 2.2.13 of the Solicitation.

m. As stated in section 2.2 of the Solicitation, the entire proposal must not exceed the 50-page limitation and must consist of all eleven (11) required parts.

n. By answering "Yes", the SBC certifies that subcontracts/consultants (other than the Research Institution) have been proposed and arrangements have been made to perform on the contract, if awarded.

i) Proposed subcontractor/consultant business arrangements must not exceed 30 percent of the research and/or analytical work (as determined by the total cost of the proposed subcontracting effort (to include the appropriate OH and G&A) in comparison to the total effort (total contract price including cost sharing, if any, less profit if any). Refer to Section 2.2.4, part 9 of the Solicitation.

o. By answering "Yes", the SBC certifies that Federal furnished facilities, laboratories, or equipment are required to perform the proposed activities. By answering "No", the SBC certifies that no such Federal furnished facilities, laboratories, or equipment is required to perform the proposed activities. See section 2.2.4, part 8 of the Solicitation.

i) If proposing to use Federal facilities, laboratories, or equipment a justification statement from the SBC

must be uploaded in Form C. Proposals requiring waivers must explain why the waiver is appropriate. Facilities designated as a Federal laboratory are exempt from the waiver requirement.

ii) If proposing to use Federal furnished facilities, laboratories, or equipment, a signed statement of availability must be uploaded in Form C that describes the uniqueness of the facility and its availability to the offeror at specified times, signed by the appropriate Government official.

p. Offerors are responsible for ensuring compliance with export control and International Traffic in Arms (ITAR) regulations. All employees who will work on this contract must be eligible under these regulations or the offeror must have in place a valid export license or technical assistance agreement. Violations of these regulations can result in criminal or civil penalties. For further information on ITAR visit http://www.pmddtc.state.gov/regulations_laws/itar.html. For additional assistance, contact the ARC export control administrator, Mary Williams, at mary.p.williams@nasa.gov.

q-r. Offeror must indicate by answering "Yes" or "No" as applicable if human and/or animal subjects will be used. SBCs must be in compliance with federal regulations. Offerors should be aware of the requirement that an approved protocol by a NASA Review Board is required if the proposed work include human or animal subject. An approved protocol shall be provided to the Contracting Officer before an award can be made. Offerors shall identify the use of human or animal subject on Form A. For additional information, contact the NASA SBIR/STTR Program Management Office at ARC-SBIR-PMO@mail.nasa.gov. Reference 14 CFR 1230 and 1232. (See section 4.10.5)

s-t. Offeror must indicate by answering "Yes" or "No" as applicable if toxic chemicals and/or hazardous materials will be used. SBCs must be in compliance with federal regulations. Reference FAR 52.223-13 Certification of Toxic Chemical Release Reporting and FAR 52.223-3 Hazardous Material identification and Material Safety Identification.

Offerors must list any hazardous material to be delivered under this contract. The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered non-responsible and ineligible for award.

u. Answer "Yes" if this proposal has a connection to energy efficiency or alternative and renewable energy. This should also be indicated in part 5 (Related R/R&D) of the proposal with a brief explanation of how it is related to energy efficiency or alternative and renewable energy.

v. Answer "Yes" if this proposal has a connection to manufacturing. This should also be indicated in part 5 (Related R/R&D) of the proposal with a brief explanation of how it is related to manufacturing.

w. The offeror must indicate if they permit the Government to disclose the name, address, and telephone number of the Business Official of your concern, if the proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting the Business Official for further information.

<u>Electronic Endorsement</u>:

Electronic endorsement is performed by the Principal Investigator and the authorized Business Official from the "Endorsement" link located on the Activity Worksheet for each proposal. Electronic endorsement by the Business Official is the final step in the proposal submission process and can only be performed when all required sections of the proposal submission are complete and the Principal Investigator and Research Insitution Official have performed their separate electronic endorsements. Once endorsed, the name and date of endorsement will populate under the Endorsement section of this form. If any changes are made to the submission after endorsement by the Principal Investigator and/or Business Official, the proposal must be re-endorsed to be considered complete and submitted.

Endorsement of the proposal by the Business Official certifies that all information submitted in connection with this application is true and correct as of the date of submission. Any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal

procurement and non-procurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

Form B – STTR Proposal Summary

Subtopic No. System generated 4-digits

Proposal Number: _ _ . _ _ - _ _ _ _
Subtopic Title:
Proposal Title:

Small Business Concern:
Name:
Address:
City/State/Zip:
Phone:

Research Institution:
Name:
Address:
City/State/Zip:
Phone:

Principal Investigator/Project Manager:
Name:
Address:
City/State/Zip:
Phone: Extension:
E-mail:

Business Official:
Name:
Address:
City/State/Zip:
Phone: Extension:
E-mail:

Estimated Technology Readiness Level (TRL) at beginning and end of contract:
Begin: _____
End: _____

Technology Available (TAV):

All subtopics listed in this solicitation have Technology Available (TAV) with NASA Intellectual Property. The use of the NASA IP is strictly voluntary. Refer to section 1.5 of the Solicitation for additional information.

Do you plan to use NASA Intellectual Property (IP) under the award? Yes No

If yes, click here to access the NASA Research License Application that must be completed and appended to your technical proposal.

Technical Abstract: (Limit 2,000 characters, approximately 200 words)

Potential NASA Application(s): (Limit 1,500 characters, approximately 150 words)

Potential Non-NASA Application(s): (Limit 1,500 characters, approximately 150 words)

Technology Taxonomy: (Select only the technologies relevant to this specific proposal)
NASA's technology taxonomy has been developed by the SBIR/STTR program to disseminate awareness of proposed and awarded R/R&D in the agency. It is a listing of over 100 technologies, sorted into broad categories, of interest to NASA.

Guidelines for Completing STTR Proposal Summary

Complete Proposal Summary Form B electronically via the Proposal Submission Electronic Handbook.

Proposal Number: Auto-populated with proposal number as shown on Cover Sheet.

Subtopic Title: Auto-populated with subtopic title as shown on Cover Sheet.

Proposal Title: Auto-populated with proposal title as shown on Cover Sheet.

Small Business Concern: Auto-populated with firm information as shown on Cover Sheet.

Research Institution: Auto-populated with RI information as shown on Cover Sheet.

Principal Investigator/Project Manager: Enter the full name of the PI/PM and include all required contact information.

Technology Readiness Level (TRL): Provide the estimated Technology Readiness Level (TRL) at the beginning and end of the contract. See Appendix B for TRL definitions.

Technical Abstract: Summary of the offeror's proposed project is limited to 2,000 characters, approximately 200 words, and shall summarize the implications of the approach and the anticipated results of the Phase II. NASA will reject a proposal if the technical abstract is determined to be non-responsive to the subtopic. **The abstract must not contain proprietary information and must describe the NASA need addressed by the proposed R/R&D effort.**

Potential NASA Application(s): Summary of the direct or indirect NASA applications of the innovation, assuming the goals of the proposed R/R&D are achieved. The response is limited to 1,500 characters, approximately 150 words.

Potential Non-NASA Application(s): Summary of the direct or indirect NASA applications of the innovation, assuming the goals of the proposed R/R&D are achieved. The response is limited to 1,500 characters, approximately 150 words.

Technology Taxonomy: Selections for the technology taxonomy are limited to technologies supported or relevant to the specific proposal. The listing of technologies for the taxonomy is provided in Appendix C.

Form C – STTR Budget Summary

PROPOSAL NUMBER:
SMALL BUSINESS CONCERN:

---

(1) DIRECT LABOR:

Category	Description	Education	Years of Experience	Hours	Rate	Fringe Rate % (if applicable)	Total
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Document uploaded for labor rate documentation: (file name)

TOTAL DIRECT LABOR:
(1) $ _____

(2) OVERHEAD COST;

_____% of Total Direct Labor or $ _____

Comments:

Overhead Cost Sources:
_____
_____
_____

OVERHEAD COST:
(2) $ _____

(3) OTHER DIRECT COSTS (ODCs):

Materials:
Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Consumable? Yes No
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Supplies:
Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Consumable? Yes No
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Equipment:
Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Competitively Sourced? Yes No

Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Other:

Description: _____
Vendor: _____
Quantity: _____ Cost: _____
Competitively Sourced? Yes No
Used Exclusively for this Contract? Yes No
Supporting Comments: _____
Supporting Documents: (file name)

Travel:

Location From: _____ Location To: _____
Number of People: _____ Number of Days: _____
Purpose of Trip: _____
Airfare: _____ Car Rental: _____
Per Diem: _____ Other Costs: _____
Total Costs: _____
Sources of Estimates: _____
Explanation/Justification: _____

Explanation of ODCs:
Provide any additional information on the Other Direct Costs listed above, including the basis used for estimating the costs.

Subcontractor/Consultants: Total Cost:
_____ _____
_____ _____
_____ _____

Supporting Documents: (file name)

(Note: Separate Budget Summaries completed for all proposed Subcontractors/Consultants via the Subcontractors/Consultants section of Form C)

Research Institution: Total Cost:
_____ _____

(Note: Separate Budget Summary completed for the Research Institution via the Research Institution section of Form C)

TOTAL OTHER DIRECT COSTS:
(3) $ _____

(1)+(2)+(3)=(4) SUBTOTAL:
(4) $ _____

(5) GENERAL & ADMINISTRATIVE (G&A) COSTS
_____% of Subtotal or $ _____ G&A COSTS:
(5) $ _____

Comments:
If an audit rate is not available, provide a detailed explanation of the cost base used to develop the G&A rate and if possible, a historical actual G&A rate for the past three years.

G&A Cost Elements:

_____
_____
_____

(4)+(5)=(6)	TOTAL COSTS (6)	$ _____
(7) ADD PROFIT or SUBTRACT COST SHARING (As applicable)	PROFIT/COST SHARING: (7)	$ _____

Comments:

(6)+(7)=(8)	AMOUNT REQUESTED: (8)	$ _____

PHASE II DELIVERABLES:
SBCs will be required to submit mandatory deliverables such as progress reports, final report and New Technology Report as per their contract. If your firm is proposing any additional deliverables, list them below:

Deliverable	Quantity	Project Deliverable Milestone
_____	_____	_____
_____	_____	_____
_____	_____	_____

FEDERAL FACILITIES, LABORATORIES, OR EQUIPMENT:

If you require the use of a Federal facility, laboratory or equipment, identify it below as well as in part 8 of your technical proposal and upload a signed statement of availability from the Government agency. In addition, a letter of justification should be uploaded. (See certification j on Form A and section 2.2.4, part 8).

AUDIT AGENCY:

If your firm's accounting system has been audited, are the rates from that audit agreement used for this proposal?

__ The rates listed in the negotiated rate agreement were used to prepare the budget summary
__ Other rates were used to prepare the budget summary
__ My firm’s accounting system has not been audited

If the listed rates are not being used to prepare the budget summary, please provide an explanation:

Guidelines for Preparing STTR Budget Summary

Complete Budget Summary Form C electronically.

The offeror shall electronically submit a price proposal of estimated costs with detailed information for each cost element, consistent with the offeror's cost accounting and estimating system.

This summary does not eliminate the need to fully document and justify the amounts requested in each category. Such documentation should be contained, as appropriate, in the text boxes or via uploads as indicated in the electronic form.

Offerors with questions about the appropriate classification of costs are advised to consult with an experienced accountant that has experience in government contracting and cost accounting principles. Information provided by the Defense Contract Audit Administration in their publication "Information for Contractors" may also be useful. This publication can be found via the following site under publications: http://www.dcaa.mil/

Firm: Same as Cover Sheet.

Proposal Number: Same as Cover Sheet.

Direct Labor: Select the appropriate labor category for each person who will be working directly on the proposed research effort and provide the labor description, level of education, years of experience, total number of hours, labor rate, and fringe rate percentage (if applicable). Detail the labor hours used for each year of the proposed research effort separately.

Labor rate documentation should include costs that are included in the fringe rate percentage (if applicable). Provide the breakout rate such as the labor hour rate, health benefits, life insurance etc. Some examples of direct labor include Principal Investigator, Engineer, Scientist, Analyst or Research Assistant/Laboratory Assistant. All listed categories shall be directly related to proposed work to be performed under contract with NASA. Any contributions from non-technical personnel proposed under direct labor shall be explicitly explained. Labor rates that do not compare favorably to comparable state average rates at http://www.bls.gov require additional documentation, supporting the proposed rate or salary.

Note: Costs associated with firm executives, accountants or administrative support is typically included in a firm's general and administrative costs. If these costs are being proposed as direct labor then provide the details of how the proposed hours were allocated to this effort and verify that these costs are not also covered in your overhead or G&A rate.

Overhead Cost: Specify current rate and base. Use current rate(s) negotiated with your firm's cognizant Federal-auditing agency, if available. A rate that has not been audited requires a detailed explanation of the cost base used to develop the rate and if possible, historical actual overhead rates for the past three years.

Specify the cost elements of the firm's overhead costs in the text boxes provided. Possible overhead cost elements include insurance, sick leave, and vacation.

Note: If no labor overhead rate is proposed and the proposed direct labor includes all fringe benefits, you may enter "0" for the overhead cost line.

Other Direct Costs (ODCs): Refer to FAR 31.205 – Selected Costs for determination of cost allowability.

Materials and Supplies: Under the Materials and Supplies sections, indicate type, vendor, quantity required, and cost. Identify whether each item is consumable, which year it will be purchased, if it was competitively sourced, and if it will be used exclusively for this contract. Your proposed cost shall be justified and supporting documents should be uploaded. General materials or supplies without adequate explanation of the components, quantity and use of said items are not an acceptable breakdown. In the supporting comments block, provide the basis for the proposed price (vendor quote, competitive quotes, catalog price, estimate, etc.). The Contracting Officer will make the final

determination.

Special Tooling, Testing, and Test Equipment: The need for these items, if proposed, will be carefully reviewed. Equipment must be made in the USA to the maximum extent practical. The offeror should provide competitive quotes to support the proposed costs or should justify why only one source is available. Competitive quotes may be signed quotes from vendors or copies of catalogue pages. Normally the costs of any equipment should be quoted on a purchase basis, unless the offeror can demonstrate that lease or rent of the equipment is clearly advantageous to the government. The Contracting Officer will make the final determination. Upload supporting documentation as necessary. In the supporting comments block provide the basis for the proposed price (vendor quote, competitive quotes, catalog price, estimate, etc.). The Contracting Officer will make the final determination.

Travel: All proposed travel must be necessary for the success of the research. Include a detailed accounting of all proposed expenses to include the purpose of proposed trips, number of trips, travelers per trip, as well as meals, hotel, and rental car estimated costs. Sources of estimate should be identified when travel is proposed along with a justification for each trip. Proposed travel costs shall be in accordance with the Federal Travel Regulation http://www.gsa.gov/federaltravelregulation.

Subcontracts/Consultants: Subcontracts/Consultants costs are included in the Other Direct Costs total. A separate budget summary must be completed for each subcontract/consultant proposed. Further instructions are provided in the Subcontracts/Consultants section below.

Note: Do not add subcontractors or consultants as a line item under the ODCs section of Form C. It will automatically be added to the ODCs upon completion of the separate Subcontractor/Consultant budget summary form.

Research Institution: Research Institution costs are included in the Other Direct Costs total. A separate budget summary must be completed for the Research Institution. Further instructions are provided in the Research Institution section below.

Note: Do not add the Research Institution as a line item under the ODCs section of Form C. It will automatically be added to the ODCs upon completion of the separate Research Institution budget summary form.

Other: List all other direct costs that are not otherwise included in the categories described above such as rental of facilities, etc.

Note: The purchase of equipment, instrumentation, or facilities under SBIR/STTR must be justified by the offeror and approved by the government during contract negotiations. Firms should be prepared to justify all material, supplies, and equipment costs during negotiations. See section 2.2.4, part 8 for further guidance.

Explanation of ODCs: Provide any additional information for the proposed ODCs, including basis for cost estimation, in the text box provided.

Subcontracts/Consultants: List consultants by name and specify, for each, the number of hours and hourly costs. Detailed quotes from subcontractors should be provided in the same format. Note that a subcontract entered into for performance of research or research and development differs from an arrangement with a vendor to provide a service such as machining, analysis with test equipment or use of computer time. The costs of such arrangements with vendors should be covered under Special Tooling, Testing, Test Equipment and Material or under Other Direct Costs. Upon request of the contracting officer, the subcontractor's cost proposals may be sealed or mailed directly for government eyes only.

A letter of commitment shall be uploaded for each proposed subcontractor/consultant from the Subcontractor/Consultant Letter of Commitment section of the subcontractor/consultant budget summary form. If a commitment letter is not available, you must upload alternate documentation that sufficiently substantiates that the subcontractor/consultant is available to perform the proposed work during the proposed timeframe. Note that not providing the information now may delay contract negotiations and award.

Research Institution: Provide detailed budget information for the costs associated with the Research Institution.

General and Administrative (G&A) Costs: Specify a current rate and base to which G&A costs will be applied. If available, use the current rate recommendations from the cognizant Federal-auditing agency. If an audit rate is not available, provide a detailed explanation of the cost base used to develop the rate and if possible, a historical actual G&A rate for the past three years.

Specify the elements of the firm's G&A costs in the text boxes provided. Possible G&A cost elements include rent, utilities, and management.

Profit/Cost Sharing: See sections 4.6 and 4.7. Profit is to be added to total cost, while shared costs are to be subtracted from total cost, as applicable.

Amount Requested: The amount requested is equal to the sum of the Direct Labor, Overhead, ODCs, G&A and any profit, less any cost sharing. The amount requested cannot exceed $750,000 for Phase II.

Federal Facilities, Laboratories, and Equipment: If you require the use of Federal facilities, laboratories, or equipment, identify the Federal facilities, laboratories or equipment in the text box provided, as well as in part 8 of your technical proposal, and upload a signed statement of availability from the Government agency. Please note that this section SHALL be completed if you certified in Form A that you will require the use of Federal facilities. Leave this section BLANK if you DO NOT require the use of Federal facilities, laboratories, or equipment.

Audit Information: Complete the Audit Information section of Form C to indicate if your firm's accounting system has been audited and if the rates from that audit agreement are used for this proposal.

Note: There is a separate "Audit Information" section linked from your Activity Worksheet that must also be completed.

Model Research Agreement

By virtue of the signatures of our authorized representatives, _____(Small Business Concern)_____, and _____(Research Institution)_____ have agreed to cooperate on the _____(Proposal Title)_____ Project, in accordance with the proposal being submitted with this agreement.

This agreement shall be binding until the completion of all Phase II activities, at a minimum. If the_____ _____(Proposal Title)_____ Project is selected to continue into Phase II, the agreement may also be binding in Phase II activities that are funded by NASA, then this agreement shall be binding until those activities are completed. The agreement may also be binding in Phase III activities that are funded by NASA.

After notification of Phase II selection and prior to contract release, we shall prepare and submit, if requested by NASA, an **Allocation of Rights Agreement**, which shall state our rights to the intellectual property and technology to be developed and commercialized by the _____(Proposal Title)_____ Project. We understand that our contract cannot be approved and project activities may not commence until the **Allocation of Rights Agreement** has been signed and certified to NASA.

Please direct all questions and comments to _____(Small Business Concern representative) at (Phone Number)_____.

_____Signature_____

_____Name/title_____

_____Small Business Concern_____

_____Signature_____

_____Name/title_____

_____Research Institution_____

Small Business Technology Transfer (STTR) Program Model Allocation of Rights Agreement

This Agreement between _____, a small business concern organized as a _____ under the laws of _____ and having a principal place of business at _____ _____, ("SBC") and _____, a research institution having a principal place of business at _____ _____,("RI") is entered into for the purpose of allocating between the parties certain rights relating to an STTR project to be carried out by SBC and RI (hereinafter referred to as the "PARTIES") under an STTR funding agreement that may be awarded by ____NASA_____ to SBC to fund a proposal entitled "_____ _____" submitted, or to be submitted, to by SBC on or about _____, 20___.

1. Applicability of this Agreement.

(a) This Agreement shall be applicable only to matters relating to the STTR project referred to in the preamble above.

(b) If a funding agreement for STTR project is awarded to SBC based upon the STTR proposal referred to in the preamble above, SBC will promptly provide a copy of such funding agreement to RI, and SBC will make a sub-award to RI in accordance with the funding agreement, the proposal, and this Agreement. If the terms of such funding agreement appear to be inconsistent with the provisions of this Agreement, the Parties will attempt in good faith to resolve any such inconsistencies.

However, if such resolution is not achieved within a reasonable period, SBC shall not be obligated to award nor RI to accept the sub-award. If a sub-award is made by SBC and accepted by RI, this Agreement shall not be applicable to contradict the terms of such sub-award or of the funding agreement awarded by NASA to SBC except on the grounds of fraud, misrepresentation, or mistake, but shall be considered to resolve ambiguities in the terms of the sub-award.

(c) The provisions of this Agreement shall apply to any and all consultants, subcontractors, independent contractors, or other individuals employed by SBC or RI for the purposes of this STTR project.

2. Background Intellectual Property.

(a) "Background Intellectual Property" means property and the legal right therein of either or both parties developed before or independent of this Agreement including inventions, patent applications, patents, copyrights, trademarks, mask works, trade secrets and any information embodying proprietary data such as technical data and computer software.

(b) This Agreement shall not be construed as implying that either party hereto shall have the right to use Background Intellectual Property of the other in connection with this STTR project except as otherwise provided hereunder.

(1) The following Background Intellectual Property of SBC may be used nonexclusively and except as noted, without compensation by RI in connection with research or development activities for this STTR project (if "none" so state): _____ _____ _____;

(2) The following Background Intellectual Property of RI may be used nonexclusively and, except as noted, without compensation by SBC in connection with research or development activities for this STTR project (if "none" so state): _____ _____ _____;

(3) The following Background Intellectual Property of RI may be used by SBC nonexclusively in connection with commercialization of the results of this STTR project, to the extent that such use is reasonably necessary for practical, efficient and competitive commercialization of such results but not for commercialization independent of the commercialization of such results, subject to any rights of the Government therein and upon the condition that SBC pay to RI, in addition to any other royalty including any royalty specified in the following list, a royalty of _____% of net sales or leases made by or under the authority of SBC of any product or service that embodies, or the manufacture or normal use of which entails the use of, all or any part of such Background Intellectual Property (if "none" so state): _____
_____
_____.

3. Project Intellectual Property.

(a) "Project Intellectual Property" means the legal rights relating to inventions (including Subject Inventions as defined in 37 CFR § 401), patent applications, patents, copyrights, trademarks, mask works, trade secrets and any other legally protectable information, including computer software, first made or generated during the performance of this STTR Agreement.

(b) Except as otherwise provided herein, ownership of Project Intellectual Property shall vest in the party whose personnel conceived the subject matter and such party may perfect legal protection in its own name and at its own expense. Jointly made or generated Project Intellectual Property shall be jointly owned by the Parties unless otherwise agreed in writing. The SBC shall have the first option to perfect the rights in jointly made or generated Project Intellectual Property unless otherwise agreed in writing.

(1) The rights to any revenues and profits, resulting from any product, process, or other innovation or invention based on the cooperative shall be allocated between the SBC and the RI as follows:

SBC Percent: _____ RI Percent: _____

(2) Expenses and other liabilities associated with the development and marketing of any product, process, or other innovation or invention shall be allocated as follows: the SBC will be responsible for _____ percent and the RI will be responsible for _____ percent.

(c) The Parties agree to disclose to each other, in writing, each and every Subject Invention, which may be patentable or otherwise protectable under the United States patent laws in Title 35, United States Code. The Parties acknowledge that they will disclose Subject Inventions to each other and the Agency within two months after their respective inventor(s) first disclose the invention in writing to the person(s) responsible for patent matters of the disclosing Party. All written disclosures of such inventions shall contain sufficient detail of the invention, identification of any statutory bars, and shall be marked confidential, in accordance with 35 U.S.C. § 205.

(d) Each party hereto may use Project Intellectual Property of the other nonexclusively and without compensation in connection with research or development activities for this STTR project, including inclusion in STTR project reports to the AGENCY and proposals to the AGENCY for continued funding of this STTR project through additional phases.

(e) In addition to the Government's rights under the Patent Rights clause of 37 CFR § 401.14, the Parties agree that the Government shall have an irrevocable, royalty free, nonexclusive license for any Governmental purpose in any Project Intellectual Property.

(f) SBC will have an option to commercialize the Project Intellectual Property of RI, <u>subject to any rights of the Government therein</u>, as follows—

(1) Where Project Intellectual Property of RI is a potentially patentable invention, SBC will have

an exclusive option for a license to such invention, for an initial option period of _____ months after such invention has been reported to SBC. SBC may, at its election and subject to the patent expense reimbursement provisions of this section, extend such option for an additional _____ months by giving written notice of such election to RI prior to the expiration of the initial option period. During the period of such option following notice by SBC of election to extend, RI will pursue and maintain any patent protection for the invention requested in writing by SBC and, except with the written consent of SBC or upon the failure of SBC to reimburse patenting expenses as required under this section, will not voluntarily discontinue the pursuit and maintenance of any United States patent protection for the invention initiated by RI or of any patent protection requested by SBC. For any invention for which SBC gives notice of its election to extend the option, SBC will, within _____ days after invoice, reimburse RI for the expenses incurred by RI prior to expiration or termination of the option period in pursuing and maintaining (i) any United States patent protection initiated by RI and (ii) any patent protection requested by SBC. SBC may terminate such option at will by giving written notice to RI, in which case further accrual of reimbursable patenting expenses hereunder, other than prior commitments not practically revocable, will cease upon RI's receipt of such notice. At any time prior to the expiration or termination of an option, SBC may exercise such option by giving written notice to RI, whereupon the parties will promptly and in good faith enter into negotiations for a license under RI's patent rights in the invention for SBC to make, use and/or sell products and/or services that embody, or the development, manufacture and/or use of which involves employment of, the invention. The terms of such license will include: (i) payment of reasonable royalties to RI on sales of products or services which embody, or the development, manufacture or use of which involves employment of, the invention; (ii) reimbursement by SBC of expenses incurred by RI in seeking and maintaining patent protection for the invention in countries covered by the license (which reimbursement, as well as any such patent expenses incurred directly by SBC with RI's authorization, insofar as deriving from RI's interest in such invention, may be offset in full against up to _____ of accrued royalties in excess of any minimum royalties due RI); and, in the case of an exclusive license, (3) reasonable commercialization milestones and/or minimum royalties.

(2) Where Project Intellectual Property of RI is other than a potentially patentable invention, SBC will have an exclusive option for a license, for an option period extending until _____ months following completion of RI's performance of that phase of this STTR project in which such Project Intellectual Property of RI was developed by RI. SBC may exercise such option by giving written notice to RI, whereupon the parties will promptly and in good faith enter into negotiations for a license under RI's interest in the subject matter for SBC to make, use and/or sell products or services which embody, or the development, manufacture and/or use of which involve employment of, such Project Intellectual Property of RI. The terms of such license will include: (i) payment of reasonable royalties to RI on sales of products or services that embody, or the development, manufacture or use of which involves employment of, the Project Intellectual Property of RI and, in the case of an exclusive license, (ii) reasonable commercialization milestones and/or minimum royalties.

(3) Where more than one royalty might otherwise be due in respect of any unit of product or service under a license pursuant to this Agreement, the parties shall in good faith negotiate to ameliorate any effect thereof that would threaten the commercial viability of the affected products or services by providing in such license(s) for a reasonable discount or cap on total royalties due in respect of any such unit.

4. Follow-on Research or Development.

All follow-on work, including any licenses, contracts, subcontracts, sublicenses or arrangements of any type, shall contain appropriate provisions to implement the Project Intellectual Property rights provisions of this agreement and insure that the Parties and the Government obtain and retain such rights granted herein in all future resulting research, development, or commercialization work.

5. Confidentiality/Publication.

(a) Background Intellectual Property and Project Intellectual Property of a party, as well as other proprietary or confidential information of a party, disclosed by that party to the other in connection with this STTR project shall be received and held in confidence by the receiving party and, except with the consent of the disclosing party or as permitted under this Agreement, neither used by the receiving party nor disclosed by the receiving party to others, provided that the receiving party has notice that such information is regarded by the disclosing party as proprietary or confidential. However, these confidentiality obligations shall not apply to use or disclosure by the receiving party after such information is or becomes known to the public without breach of this provision or is or becomes known to the receiving party from a source reasonably believed to be independent of the disclosing party or is developed by or for the receiving party independently of its disclosure by the disclosing party.

(b) Subject to the terms of paragraph (a) above, either party may publish its results from this STTR project. However, the publishing party will give a right of refusal to the other party with respect to a proposed publication, as well as a _____ day period in which to review proposed publications and submit comments, which will be given full consideration before publication. Furthermore, upon request of the reviewing party, publication will be deferred for up to _____ additional days for preparation and filing of a patent application which the reviewing party has the right to file or to have filed at its request by the publishing party.

6. Liability.

(a) Each party disclaims all warranties running to the other or through the other to third parties, whether express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and freedom from infringement, as to any information, result, design, prototype, product or process deriving directly or indirectly and in whole or part from such party in connection with this STTR project.

(b) SBC will indemnify and hold harmless RI with regard to any claims arising in connection with commercialization of the results of this STTR project by or under the authority of SBC. The PARTIES will indemnify and hold harmless the Government with regard to any claims arising in connection with commercialization of the results of this STTR project.

7. Termination.

(a) This agreement may be terminated by either Party upon __ days written notice to the other Party. This agreement may also be terminated by either Party in the event of the failure of the other Party to comply with the terms of this agreement.

(b) In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination. The confidentiality, use, and/or nondisclosure obligations of this agreement shall survive any termination of this agreement.

AGREED TO AND ACCEPTED--

Small Business Concern

By:_____ Date:_____
Print Name:_____
Title:_____

Research Institution

By:_____ Date:_____
Print Name:_____

Title:_____

STTR Check List

For assistance in completing your Phase II proposal, use the following checklist to ensure your submission is complete.

1. **The entire proposal including any supplemental material shall not exceed a total of 25 8.5 x 11 inch pages, including the Research Agreement, and follow the format requirements (sections 2.2.2, 2.2.5).**

2. The proposal and innovation is submitted for one subtopic only.

3. The entire proposal is submitted consistent with the requirements and in the order outlined in section 2.2.

4. The technical proposal contains all eleven parts in order (section 2.2.4).

5. The 1-page briefing chart does not include any proprietary data (section 2.2.7).

6. Certifications in Form A are completed, and agree with the content of the technical proposal.

7. Proposed funding does not exceed $750,000 (section 1.2, 4.1.1).

8. Proposed project duration does not exceed 24 months (section 1.2, 4.1.1).

9. Research Agreement has been electronically endorsed by both the SBC Official and the RI (sections 2.2.5, 5.2).

10. Entire proposal including Forms A, B, C, and Research Agreement submitted via the Internet

11. Form A electronically endorsed by the SBC Official and the PI.

12. **Phase II proposal submissions will be due after the last day of the Phase I contract (section 5.3).**

13. Signed Allocation of Rights Agreement, available for the Contracting Officer at the time of selection.