

National Aeronautics and
Space Administration

John H. Glenn Research Center
Lewis Field
Cleveland, OH 44135-3191



March 9, 2012

TO: Prospective Offerors

FROM: NASA Glenn Research Center, Research and Space Operations Branch

SUBJECT: Request for Proposals (RFP) – NNC12425931R, Stitching and Weaving of Ceramic Materials

An invitation is extended to your firm to submit a proposal for the subject Request for Proposal (RFP). The information required to submit a proposal is contained in the attached RFP.

ABSTRACT

This solicitation presents a statement of work for quilting, seaming and stitching layers of dissimilar refractory textile and insulator materials prior to thermal testing in support research and flight project efforts being conducted by NASA at the NASA Glenn Research Center (GRC) and the NASA Langley Research Center (LaRC). Specifications and quantities for requested samples are outlined in a line item format to allow incremental purchasing as permitted by available funding and research needs. There also is a experimental/developmental aspect to allow the vendor to experiment with process development needed to address the NASA manufacturing requirements and to improve thermal layer performance. It is anticipated that materials and services will be purchased in a phased approach over a two-year period as research needs arise and funding becomes available. All purchases will be made under the three broad areas of stitching, experimental development efforts and weaving.

This procurement is utilizing Simplified Acquisition Procedures as described in FAR (Federal Acquisition Regulation) Part 13. Any contract awarded as a result of this Solicitation is expected to contain both a Base and Option effort consisting of multiple work orders. All work will be conducted using firm-fixed prices.

BACKGROUND

Hypersonic flight and planetary entry decent and landing require the development of high temperature thermal protection systems. Many of the proposed concepts utilize ceramic fiber textiles, non-woven ceramic fibrous insulation, textile perform systems, and quilting, seaming, and stitching of layered materials using ceramic fiber yarns. While

some of these utilize existing state-of-the-art methods, it is anticipated that other configurations will require some method and/or process development in order to work effectively with fragile nature of ceramic fibers.

ADDITIONAL INFORMATION

Your attention is directed to the following sections:

- **SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**
- **SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS.**

Enclosed are instructions for proper completion of proposals.

- **SECTION M – EVALUATION FACTORS FOR AWARD.**

Enclosed are the evaluation factors that will be used in the award of any contract resulting from this solicitation.

The deadline for submission of written questions is 4:30 pm local GRC time, March 16, 2012. Questions may be **E-MAILED** to the following email address:
Jeffrey.D.Hoyt@nasa.gov.

Please note proposals must be received by 4:30 pm local GRC time, March 26, 2012. Proposals shall be signed by an official authorized to bind your company to a Government Contract. Mailed paper copies are acceptable, however electronically mailed copies are preferred if practical.

Inquiries concerning this RFP should be directed to the undersigned at
Jeffrey.D.Hoyt@nasa.gov.

Thank you for your interest in this requirement.

Jeffrey Hoyt
Contracting Officer

PART I – THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES

B.1. 1852.216-78 Firm Fixed Price. (DEC 1988)

The total firm fixed price of the Base Effort is: **TBD**

The total firm fixed price of the Option Period is: **TBD**

The total firm fixed price of the Base Effort and the Option Period combined will not be for more than **\$150,000**. It is anticipated that the Base effort will consist of 3 – 5 work orders. It is anticipated that the option, if exercised, will consist of 2 -4 work orders. The Government will provide a minimum total-order amount guarantee of at least **\$30,000**.

(End of clause)

B.2. 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 Description/Specifications/Statement of Work incorporated in Section C.

(End of clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.1. SPECIFICATION/STATEMENT OF WORK

The Contractor shall provide the item or services specified in Section B in accordance with the following:

SPECIFICATIONS

Area 1 - Stitching Samples:

Multi-layered samples shall be stitched through the thickness to hold layers together. Materials to be stitched will be supplied by NASA. Ceramic yarn for stitching shall be supplied by the Contractor. It is anticipated that constituent layers may include materials from the following categories: silicon carbide and oxide ceramic fiber textiles, aerogel-impregnated ceramic textiles, polyimide aerogel films, alumina paper insulators, Saffil™, Pyrogel™, Kapton™, and Kevlar reinforced Kapton laminates. Some manufacturing development may be required for this option. Anticipated sample sizes are:

- 1) 30.48 x 30.48 cm (cruciform with approximately 15.24 x 15.24 cm square center)
- 2) 76.2 x 76.2 cm (square) samples with integrated quilts, seams, and stitching
- 3) 30.48 x 30.48 cm (square) samples with integrated quilting, seams, and edge-lock seams (attachment points for tensioning sample surfaces).

Specifications for materials systems, quilt patterns, seam types, stitch configurations layout dimensions and overall geometry will be directed by NASA upon issuance of specific work orders.

Area 2 - Experimental development efforts

Recent materials testing performed by NASA in wind tunnel and arc-jet facilities has revealed a number of emerging thermal protection material technologies (textiles, felts, papers, and films) which can benefit cutting edge, enabling advanced Entry Decent and Landing flight systems. In order to be of maximum benefit to NASA, these thermal protection materials must be quilted, seamed, and stitched using ceramic fiber yarns of various types.

Work covered under this area will investigate robust manufacturing methods for quilting, seaming, and stitching with silicon carbide and alumina oxide based ceramic yarns, including, but not limited to, materials such as:

- Nicalon CG
- Hi-Nicalon
- Nextel 312
- Nextel 440

In most cases, there has been little or no attempt to tailor textile softgood manufacturing

processes to accommodate the fragile nature of high-performance ceramic yarns. As a result, end-use products have varied significantly, and in some cases, failed to reach expected optimum performance levels. This effort would further evaluate and document handling and fabrication capabilities and requirements for ceramic yarns and textiles in conjunction with felt, paper, and batt type ceramic insulators, and polyimide films.

This work requires a working knowledge of existing industry standards and practices for handling and manufacturing ceramic fiber and yarn softgoods together with a demonstrated knowledge and capability to extend or modify such standards and practices as required to establish a robust manufacturing capability for emergent textile thermal protection systems. Demonstrated industry knowledge anchored with previous experience working with and fabricating softgoods using high-performance ceramic fibers and textiles, including silicon carbide based systems, is a requirement.

Area 3 - Cloth Weaving

The offeror shall supply woven fabric in quantities of 1-10 meters of each weave type based on weave architectures listed in Table 1 below. Anticipated ceramic fiber types to be woven include CG Nicalon™, Hi-Nicalon™, Nextel 312™, and Nextel 440™. It is anticipated that pricing will vary with fiber type.

All fiber is to be furnished to the contractor by NASA. All weaving is to be accomplished on a “best effort” basis.

Table 1 Weave Architectures

Pattern Description	Warp epi	Fill ppi
5HS (standard)	26	26
5HS (standard)	24	24

(End of text)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION D - PACKAGING AND MARKING

D.1. Packaging Instructions (SEP 2006)

All deliverables under this contract shall be packaged in accordance with: (1) best commercial practice that will afford protection against physical damage, degradation, and/or deterioration during direct shipment and (2) the regulations of the carriers for the mode of transportation employed.

(End of text)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION E - INSPECTION AND ACCEPTANCE

E.1. 52.246-2 Inspection of Supplies—Fixed-Price. (Aug 1996)

E.2. 52.246-4 Inspection of Services—Fixed-Price. (Aug 1996)

E.3. 52.246-16 Responsibility for Supplies. (APR 1984)

E.4. GRC 52.246-92 INSPECTION AND ACCEPTANCE. (JAN 1987)

Final inspection and acceptance of all work performed under this contract, including all deliverable items will be performed at destination.

(End of text)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION F - DELIVERIES OR PERFORMANCE

F.1. 52.242-15 Stop-Work Order. (AUG 1989)

F.2. 52.242-17 Government Delay of Work. (APR 1984)

F.3. 52.247-34 F.o.b. Destination. (NOV 1991)

F.4. DELIVERY AND/OR COMPLETION SCHEDULE

The Contractor shall deliver and/or complete performance of the items required under this contract as follows: TBD. However, it is anticipated the period of performance will be twenty-four (24) months from the effective date of contract signature.

(End of clause)

F.5. DELIVERY INSTRUCTIONS

(a) The Technical POC for this contract is TBD. Contact information is as follows:

TBD

(b) The Contractor shall ship the items required under this contract to: To be determined at time of individual task.

(c) Unless otherwise authorized in advance by the Contracting Officer, deliveries under this contract shall be made between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, excluding Federal holidays.

(d) Additional delivery instructions: None

(e) Additional marking instructions: None

(End of clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION G - CONTRACT ADMINISTRATION DATA

G.1. 1852.245–72 Liability for Government Property Furnished for Repair or Other Services. (JANUARY 2011)

G.2. 1852.245-74 Identification and marking of Government equipment. (JAN 2011)

G.3. OPTION TO EXTEND

In accordance with FAR clause 52.217-9, "Option to Extend the Term of the Contract" of this contract, the contracting officer may exercise the following option(s) by issuance of a unilateral contract modification. Options exercised shall be in accordance with the following:

- 1) If the Option is exercised, this will give the Government the ability to issue an estimated additional 2 – 4 work orders under this contract.
- 2) The exercise of said Option does not obligate the Government to issue said work orders. It merely gives the Government the option to do so if contract performance is satisfactory, funding is available and NASA research goals warrant additional work orders.

(End of clause)

[END OF SECTION]

PART I – THE SCHEDULE

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1. 1852.223-72 Safety and Health (Short Form). (APR 2002)

a) Safety is the freedom from those conditions that can cause death, injury, occupational illness; damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.

(b) The Contractor shall take all reasonable safety and occupational health measures consistent with standard industry practice in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

(c) The Contractor shall take, or cause to be taken, any other safety, and occupational health measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the Changes clause of this contract; provided, that no adjustment shall be made under this Safety and Health clause for any change for which an equitable adjustment is expressly provided under any other clause of the contract.

(d) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. In situations where the Contracting Officer becomes aware of noncompliance that may pose a serious or imminent danger to safety and health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value mission critical equipment or property, the Contracting Officer shall notify the Contractor orally, with written confirmation. The Contractor shall promptly take and report any necessary corrective action. The Government may pursue appropriate remedies in the event the Contractor fails to promptly take the necessary corrective action.

(e) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (e) and any applicable Schedule provisions, with appropriate changes of designations of the parties, in subcontracts of every tier that exceed the micro-purchase threshold.

H.2. 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 [*insert name of 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)

H.3. Issuance of Work Orders and Payments under Contract

1. Work Order Requests

Once the Task Manager (TM) compiles a Statement of Work (SOW) and other pertinent information for an individual order, the TM will send that SOW to the contractor and will CC the Contracting Officer (CO) on that email. NASA will provide the following information in this email as needed:

- (1) A functional description of the work identifying the objectives or results desired from the contemplated work order.
- (2) Proposed performance standards to be used as criteria for determining whether the work requirements have been met.
- (3) A request for a work plan from the Contractor to include the technical approach, period of performance, appropriate cost information, and any other information required to determine the reasonableness of the Contractor's proposal.

Depending on the complexity of the specific work order, more or less information will be conveyed.

2. Submittal of Work Order

Seven calendar days after receipt of the CO's request, the Contractor shall submit a

work plan conforming to the request. This document should be addressed to the TM, and the CO must be CC'd on this document.

For both steps 1 and 2 above, it is not anticipated that these steps will consist of a very long document, report, etc. This will mostly consist of information such as quotes that derive from the contract pricing, period of performance, and any other information the contractor feels is necessary for the successful completion of the work at hand.

3. Issuance of Work Order

After review and any necessary discussions, the CO may issue a work order to the Contractor containing essentially the following:

- a. Date of the order.
- b. Contract number and order number.
- c. Functional description of the work identifying the objectives or results desired from the work order, including special instructions or other information necessary for performance of the work.
- d. Firm fixed price of the work order.
- e. Any other resources (travel, materials, equipment, facilities, etc.) authorized.
- f. Delivery/performance schedule including start and end dates.

The actual issuance of the work order will consist of the following: Once the contractor returns the Work Plan, The CO will coordinate with the TM that all the information is acceptable. The CO will then modify the contract. This modification will incorporate the work order date, work order number, price, and period of performance. The authorized representative of the contractor and the CO will sign the document.

4. Payment

After the contractor completes a work order, they will be authorized to invoice for the previously agreed-upon amount. The TM will submit a C-198 form "Supplies or Service Receipt", signifying that all services under that order are complete, thus allowing for payment to proceed. Once the CO receives the invoice and positive confirmation from the TM that the task has been completed, the CO will then approve the invoice.

(End of Text)

[END OF SECTION]

PART II – CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

- I.1. 52.202-1 Definitions. (JAN 2012)**
- I.2. 52.203-5 Covenant Against Contingent Fees. (APR 1984)**
- I.3. 52.203-6 Restrictions on Subcontractor Sales to the Government. (SEP 2006)**
- I.4. 52.203-7 Anti-Kickback Procedures. (OCT 2010)**
- I.5. 52.204-7 Central Contractor Registration. (APR 2008)**
- I.6. 52.204-10 Reporting Executive Compensation and First-Tier Subcontract Awards. (JUL 2010)**
- I.7. 52.209-6 Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (DEC 2010)**
- I.8. 52.209-10 Prohibition on Contracting with Inverted Domestic Corporations. (May 2011)**
- I.9. 52.211-5 Material Requirements. (AUG 2000)**
- I.10. 52.215-8 Order of Precedence - Uniform Contract Format. (OCT 1997)**
- I.11. 52.215-17 Waiver of Facilities Capital Cost of Money. (OCT 1997)**
- I.12. 52.217-2 Cancellation Under Multi-year Contracts. (Oct 1997)**
- I.13. 52.217-6 Option for Increased Quantity. (MAR 1989)**

The Government may increase the quantity of supplies called for in the Schedule at the unit price specified. The Contracting Officer may exercise the option by written notice to the Contractor within any date during the contract period off performance. Delivery of the added items shall continue at the same rate as the like items called for under the contract, unless the parties otherwise agree.

(End of clause)

- I.14. 52.219-6 Notice of Total Small Business Set-Aside. (NOV 2011)**
- I.15. 52.219-14 Limitations on Subcontracting. (Nov 2011)**

- I.16. 52.219-28 Post-Award Small Business Program Rerepresentation. (APR 2009)**
- I.17. 52.222-3 Convict Labor. (JUN 2003)**
- I.18. 52.222-19 Child Labor—Cooperation with Authorities and Remedies. (Jul 2010)**
- I.19. 52.222-21 Prohibition of Segregated Facilities. (FEB 1999)**
- I.20. 52.222-26 Equal Opportunity. (MAR 2007)**
- I.21. 52.222-35 Equal Opportunity for Veterans. (SEP 2010)**
- I.22. 52.222-36 Affirmative Action for Workers with Disabilities. (OCT 2010)**
- I.23. 52.222-37 Employment Reports on Veterans. (SEP 2010)**
- I.24. 52.222-50 Combating Trafficking in Persons. (Feb 2009)**
- I.25. 52.223-18 Encouraging Contractor Policies to Ban Text Messaging While Driving. (AUG 2011)**
- I.26. 52.225-1 Buy American Act - Supplies. (FEB 2009)**
- I.27. 52.225-13 Restrictions on Certain Foreign Purchases. (JUN 2008)**
- I.28. 52.225-25 Prohibition on Contracting with Entities Engaging in Sanctioned Activities Relating to Iran--Representation and Certification. (NOV 2011)**
- I.29. 52.227-11 Patent Rights--Ownership by the Contractor. (DEC 2007) -- Alternate I (JUN 1989)**
- I.30. 52.227-14 Rights in Data--General. (DEC 2007)**
- I.31. 52.227-23 Rights to Proposal Data (Technical). (JUN 1987)**

Except for data contained on pages ____, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated ____, upon which this contract is based.

(End of clause)

- I.32. 52.232-1 Payments. (APR 1984)**

- I.33. 52.232-8 Discounts for Prompt Payment. (FEB 2002)**
- I.34. 52.232-11 Extras. (APR 1984)**
- I.35. 52.232-23 Assignment of Claims. (JAN 1986)**
- I.36. 52.232-25 Prompt payment. (OCT 2008)**
- I.37. 52.232-33 Payment by Electronic Funds Transfer - Central Contractor Registration. (OCT 2003)**
- I.38. 52.233-1 Disputes. (JUL 2002) - Alternate I (DEC 1991)**
- I.39. 52.233-3 Protest after Award. (AUG 1996)**
- I.40. 52.233-4 Applicable Law for Breach of Contract Claim. (OCT 2004)**
- I.41. 52.243-1 Changes - Fixed-Price. (AUG 1987)**
- I.42. 52.244-6 Subcontracts for Commercial Items. (DEC 2010)**
- I.43. 52.246-23 Limitation of Liability. (FEB 1997)**
- I.44. 52.249-1 Termination for Convenience of the Government (Fixed-Price) (Short Form). (APR 1984)**
- I.45. 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/these address(es):

For Federal Acquisition Regulation (FAR) clauses, see <http://www.acqnet.gov/far/>

For NASA FAR Supplement (NFS) clauses, see
<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

(End of clause)

- I.46. 52.253-1 Computer Generated Forms. (JAN 1991)**
- I.47. 1852.215-84 Ombudsman. (NOV 2011)**

(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, whose name, address, telephone number, facsimile number, and email address may be found 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 Agency ombudsman identified at the above URL. 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)

I.48. 1852.219-76 NASA 8 Percent Goal. (JUL 1997)

(a) Definitions.

"Historically Black Colleges or University," as used in this clause, means an institution determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institutions," as used in this clause, means an institution of higher education meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which for the purposes of this clause includes a Hispanic-serving institution of higher education as defined in section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

"Small disadvantaged business concern," as used in this clause, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically

disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124.

“Women-owned small business concern,” as used in this clause, means a small business concern (1) which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.

(b) The NASA Administrator is required by statute to establish annually a goal to make available to small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns, at least 8 percent of NASA’s procurement dollars under prime contracts or subcontracts awarded in support of authorized programs, including the space station by the time operational status is obtained.

(c) The contractor hereby agrees to assist NASA in achieving this goal by using its best efforts to award subcontracts to such entities to the fullest extent consistent with efficient contract performance.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns.

(End of clause)

I.49. 1852.227-14 Rights In Data - General.

I.50. 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 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.

(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)

[END OF SECTION]

PART III – LIST OF DUCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

J.1 LIST OF ATTACHMENTS

The following documents are attached hereto and made a part of this contract: None

(End of text)

[END OF SECTION]

PART IV – REPRESENTATIONS AND INSTRUCTIONS

SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

K.1. 52.204-8 Annual Representations and Certifications. (Feb 2012)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 314999.

(2) The small business size standard is 500 employees.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the clause at [52.204-7](#), Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the clause at [52.204-7](#) is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(i) Paragraph (d) applies.

(ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) [52.203-2](#), Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in [Part 13](#);

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) [52.203-11](#), Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) [52.204-3](#), Taxpayer Identification. This provision applies to solicitations that do not include the clause at [52.204-7](#), Central Contractor Registration.

(iv) [52.204-5](#), Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

- (A) Are not set aside for small business concerns;
- (B) Exceed the simplified acquisition threshold; and
- (C) Are for contracts that will be performed in the United States or its outlying areas.

(v) [52.209-2](#), Prohibition on Contracting with Inverted Domestic Corporations—Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, or 2010.

(vi) [52.209-5](#), Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) [52.214-14](#), Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(viii) [52.215-6](#), Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(ix) [52.219-1](#), Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(x) [52.219-2](#), Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xi) [52.222-22](#), Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at [52.222-26](#), Equal Opportunity.

(xii) [52.222-25](#), Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at [52.222-26](#), Equal Opportunity.

(xiii) [52.222-38](#), Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) [52.223-1](#), Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or

include the clause at [52.223-2](#), Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) [52.223-4](#), Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xvi) [52.225-2](#), Buy American Act Certificate. This provision applies to solicitations containing the clause at [52.225-1](#).

(xvii) [52.225-4](#), Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at [52.225-3](#).

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$67,826, the provision with its Alternate II applies.

(xviii) [52.225-6](#), Trade Agreements Certificate. This provision applies to solicitations containing the clause at [52.225-5](#).

(xix) [52.225-20](#), Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.

(xx) [52.225-25](#), Prohibition on Contracting with Entities Engaging in Sanctioned Activities Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxi) [52.226-2](#), Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at [52.219-23](#), Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

___ (i) [52.219-22](#), Small Disadvantaged Business Status.

___ (A) Basic.

___ (B) Alternate I.

___ (ii) [52.222-18](#), Certification Regarding Knowledge of Child Labor for Listed End Products.

___ (iii) [52.222-48](#), Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

__ (iv) [52.222-52](#), Exemption from Application of the Service Contract Act to Contracts for Certain Services–Certification.

__ (v) [52.223-9](#), with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA–Designated Products (Alternate I only).

__ (vi) [52.227-6](#), Royalty Information.

__ (A) Basic.

__ (B) Alternate I.

__ (vii) [52.227-15](#), Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website accessed through <https://www.acquisition.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR [4.1201](#)); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

<i>FAR CLAUSE #</i>	<i>TITLE</i>	<i>DATE</i>	<i>CHANGE</i>
_____	_____	_____	_____

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of provision)

K.2 1852.225-72 Restriction on funding Activity with China – Representation.

- (a) Definition - “China” or “Chinese-owned” 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.
- (b) Public Laws 112-10, Section 1340(a) and 112-55, Section 536, restrict NASA from contracting to participate, collaborate, or coordinate bilaterally in any way with China or a Chinese-owned company with funds appropriated on or after April 25, 2011. Contracts for commercial and non-developmental items are excepted from the prohibition as they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) Representation. By submission of its offer, the offeror represents that the offeror is not China or a Chinese-owned company.

(End of provision)

[END OF SECTION]

PART IV – REPRESENTATIONS AND INSTRUCTIONS

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

L.1. 52.215-1 Instructions to Offerors—Competitive Acquisition. (Jan 2004)

L.2 52.216-1 Type of Contract. (APR 1984)

The Government contemplates award of a Firm-Fixed Price contract. This contract will exhibit features of an Indefinite Delivery, Indefinite Quantity (IDIQ) contract in that NASA will issue firm-fixed price work orders under the overall firm-fixed price contract resulting from this solicitation.

(End of provision)

L.3. 52.252-1 Solicitation Provisions Incorporated by Reference. (FEB 1998)

This solicitation incorporates one or more solicitation provisions 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. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es): <http://www.acqnet.gov/far/>

(End of provision)

L.4. 1852.233-70 Protests to NASA. (OCT 2002)

Potential bidders or offerors may submit a protest under 48 CFR Part 33 (FAR Part 33) directly to the Contracting Officer. As an alternative to the Contracting Officer's consideration of a protest, a potential bidder or offeror may submit the protest to the Assistant Administrator for Procurement, who will serve as or designate the official responsible for conducting an independent review. Protests requesting an independent review shall be addressed to Assistant Administrator for Procurement, NASA Code H, Washington, DC 20546-0001.

(End of provision)

L.5 Communications regarding this Solicitation

(a) Questions or comments regarding this solicitation must be submitted in writing, cite the solicitation number, and be directed to the following Government representative:

Name: Jeffrey Hoyt

FAX: 216-433-2480

Email: Jeffrey.D.Hoyt@nasa.gov

Address: NASA Glenn Research Center
21000 Brookpark Road
M/S 60-1
Cleveland, OH
44135

Oral questions will not be answered due to the possibility of misunderstanding or misinterpretation.

(b) Questions or comments should be submitted no later than March 16, 2102 to allow for analysis and dissemination of responses in advance of the proposal due date. Late questions or comments are not guaranteed a response prior to the proposal due date.

(c) Questions or comments shall not be directed to the technical activity personnel.

(End of provision)

L.6 GENERAL INFORMATION:

- A. The Government intends to award a firm fixed price contract that will exhibit some features of an IDIQ task order contract. The Government plans to issue this contract with a firm-fixed price amount and at later times during the anticipated 2-year effort will issue work orders against the obligated firm-fixed price amount. While subsequent orders will involve their own respective Statement of Works at that future time, this solicitation deals only with the three areas in general (stitching, weaving and developmental efforts). Interested parties should quote each specific work area as outlined herein in order to be considered for possible award. It is anticipated that orders will be issued under a phased approach over a two-year period as research needs arise and funding becomes available.
- B. The Government anticipates the award of a Base effort followed by the potential award of an Option effort. It is anticipated the Option would be exercised if prior Contractor experience is at least satisfactory, funding permits and NASA research needs warrant it. It is anticipated that the award of the Base effort will contain sufficient funding for 3 - 5 tasks. It is also anticipated that, if the Option is

- exercised, enough funding will exist to cover 2 - 4 more tasks above and beyond the Base. It is also anticipated that total funding, for both the Base effort and the Option period, will not exceed the Simplified Acquisition Threshold of \$150,000.
- C. This procurement is a 100% Small Business set aside, and offers submitted from other than small businesses shall be considered nonresponsive and shall be rejected in accordance with FAR 19.502-4(b).
- D. E-mail submission of proposals is encouraged.
- E. Documents submitted in response to this RFP must be fully responsive to and consistent with the following:
1. Requirements of the RFP (CLINS & SOW) and government standards and regulations pertaining to the SOW.
 2. Format for the proposal shall be as follows:
 - i. Proposals will be formatted as an 8 1/2" x 11" document except for fold-outs used for charts, tables or diagrams.
 - ii. Elaborate formats, bindings or color presentations are not desired or required.
- F. Proposals shall be sent to the following address:
Jeffrey.D.Hoyt@nasa.gov
- G. To ensure timely and equitable evaluation of proposals, offerors must follow the instructions contained herein. Offerors are required to meet all solicitation requirements, including terms and conditions, representations and certifications, and technical requirements, in addition to those identified as evaluation factors. Failure to meet a requirement may result in an offer being ineligible for award. The proposal should not simply rephrase or restate the Government's requirements. **Offerors shall assume that the Government has no prior knowledge of their facilities and experience, and will base its evaluation on the information present in the offeror's proposal.**

The Contracting Officer (CO) is the sole point of contact for this acquisition. Address any questions or concerns you may have to the CO. If an offeror believes that the requirements in these instructions contain an error, omission, or are otherwise unsound, the offeror shall immediately notify the CO in writing with supporting rationale. The offeror is reminded that the Government reserves the right to award this effort based on the initial proposal, as received, without discussion.

The contracting officer has determined there is a high probability of adequate price competition in this acquisition. Upon examination of the initial offers, the

contracting officer will review this determination and if, in the contracting officer's opinion, adequate price competition exists no additional cost information will be requested and certification under FAR 15.406-2 not be required. However, if at any time during this competition the contracting officer determines that adequate price competition no longer exists; offerors may be required to submit information to the extent necessary for the contracting officer to determine the reasonableness and affordability of the price.

TECHNICAL EXPERIENCE INFORMATION

- A. At a minimum, you are expected to include the information described below in the Technical Volume of your Proposal.
1. Provide a list of facilities to be used for work under this proposed procurement and a brief summary of their capabilities. Any significant facilities at any subcontractors shall also be included in the list. **Proof of access to suitable equipment required to provide the woven, quilted, seamed and stitched softgoods is essential for contract award.**
 2. Any specific exceptions to the proposed technical requirements shall be included with your proposal with supporting justification. Changes shall be specifically identified as "EXCEPTIONS TO THE TECHNICAL REQUIREMENTS".

PAST PERFORMANCE INFORMATION

The Offeror should submit the information set forth below for the proposed prime Contractor and any major subcontractor/team member(s) (a major subcontractor/team member is defined as performing 10% or more of the total contract effort).

- A. **A statement of relevant past performance and demonstrated ability to fabricate high temperature textile components similar to Section C of this solicitation (including history of working with materials of interest).** This statement will include:
1. A list of current or past contracts of a similar nature. This information should include contract number (if a Government contract) and general description of work completed on these contracts.

PRICE PROPOSAL - *Submit as part of the proposal.*

- A. **Complete blocks 11, 13, 15, 21 – 22, and 27 of the SF 1447. In doing so, the offeror agrees to the contract terms and conditions as written in the RFP.**

B. Review CCR and ORCA data to ensure that the data is accurate and current. The internet addresses for these two systems are www.ccr.gov and <https://orca.bpn.gov/>.

C. The proposal acceptance period shall be 18 calendar days.

D. Provide quotes for the 3 areas in section C in the following fashion:

Area 1 - Stitching

Provide 1 quote for each sample size listed in Area 1 of the SOW on a per sample basis.

Area 2 – Experimental Development Efforts

As Area 2 is planned to be incorporated within subsequent work orders, no specific quote is necessary. However, if the offeror feels any unique pricing information should be included above and beyond set-up costs that will correlate with the experimental efforts (i.e., the offeror plans to add these costs to potential work orders in any fashion), these prices should be listed.

Area 3 – Cloth Weaving

Provide 1 quote for each pattern description on a per-meter basis for each warp epi, fill ppi, and anticipated ceramic type combination as listed in Area 3 of the SOW. Also provide essential set-up cost quotes.

In addition to the prices listed above, your proposal shall list any and all other costs including, but not limited to, set up costs and shipping fees. Costs not explained in an offeror's proposal will not be acceptable costs on any potential work orders. The Offerors are reminded that this contract, and all work falling under it herein, will be firm-fixed price.

(End of Text)

L.7 Additional Instructions to Offerors – Simplified Purchases, Technically Acceptable with Relevant Past Performance

In addition to the proposal submission requirements of FAR 52.215-1, Instructions to Offerors - Competitive Acquisition, the offeror shall include the following information in the proposal:

(a) The pages from the RFP with the required offeror fill-ins. The balance of the RFP need not be returned unless the offeror has made changes to other pages that will constitute part of the contract. Any such changes must be separately identified as exceptions.

[END OF SECTION]

PART IV – REPRESENTATIONS AND INSTRUCTIONS

SECTION M - EVALUATION FACTORS FOR AWARD

M.1. Evaluation Factors – Simplified Purchases, Technically Acceptable with Relevant Past Performance

(a) Proposals will be evaluated in accordance with FAR 13.106-2 “Evaluation of quotations or offers”, and NFS 1815.305-70, "Identification of unacceptable proposals".

(b) The following factors will be used to evaluate proposals:

- (1) Technical experience (consisting of a demonstrated ability to fabricate high temperature textile components similar to those mentioned in Section C, and having proof of access to suitable equipment required to provide the woven, quilted, seamed and stitched softgoods).
- (2) Relevant Past Performance (including a history of working with materials of interest).
- (3) Price

M.2. SOURCE SELECTION PROCEDURE

The Government will rank companies from most capable to least capable and select the company that represents the best value by comparing the Offerors to each other on the basis of the evaluation factors described above. If, in any comparison, one company has both the better capability and the lower cost/price, then we will consider that company to be the best value. If the company with the better capability has the higher cost/price, then we will decide whether the lower risk associated with the better capability is worth the higher cost/price. If it is, then we will consider the more capable, higher cost/price company to be the better value. If it is not, then we will consider the less capable, lower cost/price company to be the better value. We will continue to make comparisons this way until we have identified the company that represents the best value.

These instructions are intended to explain the rationale and precise criteria by which proposals will be assessed by the evaluation team. Offerors are to prepare proposals with these criteria in mind (i.e., in terms of both content and organization), in order to assist the team in determining the relative merit of proposals in relation to the requirements as defined in the Statement of Work.

Consistent with provision 52.215-1, the Government intends to award a contract based on the initial offers received, without discussion of such offers. Accordingly, each offeror should submit its initial proposal to the Government using the most favorable terms from a cost and technical standpoint.

Proposals will be evaluated in accordance with the requirements of FAR 13.106-2 "Evaluation of quotations or offers" and NFS 1815.305-70, "Identification of unacceptable proposals". Offerors should recognize that the initial evaluation of proposals will be made upon a review of the proposals only, plus some independent investigations that may be made with regard to Past Performance.

Discussions will be held only if award on the basis of initial offers is determined not to be in the Government's best interest. If written or oral discussions are conducted, the Government will make a competitive range determination and conduct discussions with the offerors within the competitive range.

At the conclusion of discussions (if applicable), as stipulated in FAR 15.307, a Final Proposal Revision (FPR) would be requested from all offerors still within the competitive range. The FPR shall be submitted in the form of a contractual document (including revisions to the original proposal) that has been executed by an individual with the authority to bind the offeror. Selection will be made in accordance with the evaluation criteria set forth below. Contract award would then be made without further discussions.

By submission of its offer, the offeror agrees to all solicitation requirements, including terms and conditions, representations and certifications, and technical requirements, in addition to those identified as evaluation factors. Failure to meet a requirement may result in an offer being determined unacceptable. Offerors must clearly identify any exception to the solicitation terms and conditions and provide complete accompanying rationale. The evaluation process shall proceed as follows:

A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. The government intends to award a contract without discussions with respective offerors. The government, however, reserves the right to conduct discussions if deemed in its best interest.

Importance of Evaluation Factors

Selection for award will be to the company that represents the best value to the Government considering the three factors of technical experience, relevant past performance and price.

[END OF SECTION]