



January 21, 2010

Reply to Attn of: 118

TO: 106/Director

FROM: 118/Deputy Director, Strategic Planning, Strategic Relationships Office

SUBJECT: Justification for Other than Full and Open Competition (JOFOC) for an Increase in the Value of Contract NNL08AA00B with the National Institute of Aerospace Associates, Inc.(NIAA) during the Current Contract Period of Performance

## 1.0 Recommendation

I recommend that NASA Langley Research Center (LaRC) negotiate only with the National Institute of Aerospace Associates, Inc. (NIAA) for an increase to the maximum value of Indefinite Delivery/Indefinite Quantity (IDIQ) contract NNL08AA00B. The maximum value of the contract will be increased from \$36M to \$64M for the five-year original period of performance of the contract, which ends March 31, 2013.

## 2.0 Nature of Action

Langley Research Center proposes to increase the value of the existing cost-plus-fixed-fee, IDIQ contract with the NIAA for leading edge research in emerging fields, for education in science and engineering, and for dissemination (including promotion and outreach) of the results of the research and technology developed within the Institute. The increase will permit NASA to continue to obtain these services from the NIAA for NASA's own direct use or benefit within the original scope and period of performance of the existing contract.

## 3.0 Background

### 3.1 General

NASA LaRC established an Institute on September 26, 2002, with the simultaneous award of a cooperative agreement and an IDIQ task order contract to the National Institute of Aerospace Associates, Inc. (NIAA). Consistent with the HQ Acquisition Strategy Meeting (ASM) guidance, the period of performance of the cooperative agreement that fostered the Institute, including all options, is twenty years. LaRC assesses the Institute's performance on an annual basis to ensure continued alignment with the strategic objectives of LaRC and the mission of the Agency. A recent independent Headquarters Institutes Study conducted by the Office of Program Analysis and Evaluation noted that NIAA mapped into almost every NASA

strategic goal. The period of performance of the initial contract, NAS1-02117, was five years. The contract expired on March 25, 2008. The current contract NNL08AA00B was effective April 1, 2008 and expires March 31, 2013.

NIAA, Inc. is a consortium of leading research universities as well as a non-profit organization. The full members of the consortium are: Georgia Institute of Technology, University of Maryland, North Carolina A&T State University, North Carolina State University, University of Virginia, Virginia Polytechnic Institute and State University, Hampton University, and the American Institute of Aeronautics and Astronautics (AIAA) Foundation. Other affiliated members are Old Dominion University and the College of William and Mary. In addition to the consortium members, NIAA has established active relationships with many other colleges, universities, government agencies, and commercial companies across the nation and the world.

### 3.2 Rationale for Increase in Contract Maximum Value

Unforeseen changes to the Center's mission and unexpected budget increases resulted in the shortfall in estimating the maximum value of the current contract. The maximum value was developed by the Strategic Relationships Office through consultation with existing and prospective Center customers and based on the Center's projected budget prior to award of the contract. As of December 2009, task orders were placed against the contract for a cumulative value of \$31M, which represents 86% of the current \$36M five-year contract value. Some of these task orders have periods of performance that extend through March 31, 2013, the end of the period of performance. The total value of these multi-year task orders represent 58% of the \$31M cumulative value issued to date. Without an increase to the contract value, NASA would have to duplicate the NIA contract and administer redundant contracts during the same period of performance. This would entail conducting a competition or establishing a new source between now and the end of the current contract and then doing the same again in anticipation of the expiration of the current contract. Instead, NASA plans to maintain the efficiency of a single source for the original duration of the existing contract and prepare for a follow-on acquisition as originally anticipated.

At the time when the estimate for the existing contract was developed, the Center's estimated budget was expected to remain at \$464M for FY07 through FY11. Instead, the Center's actual budget was \$732M for FY08 and \$845M for FY09. The budget for FY10 is estimated to be approximately \$650M. Thus, Center budgets were significantly more than originally anticipated in FY07 when the estimate for the existing contract was developed.

Additionally, requirements are now projected to support the new Administration's commitment to advancing our nation's scientific, educational, economic and security interests. LaRC anticipates playing a major role in the areas of Environmentally Responsible Aviation, Exploration Technology Development, the proposed Innovation and Technology Initiative, and continued support for research and analysis for Earth Science. Since the contract scope covers leading edge research within these types of areas, LaRC expects to utilize the existing contract to support these projects.

The Strategic Relationships Office recently developed an estimate of projected requirements for the remaining contract period of performance. This estimate was based on an analysis of the usage of the current contract and on the customer forecasts of future use. Tasks were issued for the LaRC Aeronautics Directorate which totaled \$20M in the first year and one-half of the contract. This exceeded their five-year contract estimate by \$7M. This increased level of usage is anticipated to result in approximately \$17M of work in excess of their original estimate by the end of the contract period of performance. In addition, the LaRC Science Directorate work is anticipated to increase \$3M over their original estimate. An additional \$8M has been added to the estimate to cover anticipated work based on the Agency strategy to reinvigorate research and technology development through the proposed Innovation and Technology Initiative. Therefore, based on historical information and customers' current forecasts, an increase of \$28M is estimated.

#### **4.0 Statutory Authority**

The statutory authority for award of the existing contract was 10 U.S.C. 2304 (c)(3) which provides that full and open competition need not be provided for when it is necessary to award the contract to a particular source or sources in order to "establish or maintain an essential engineering, research, or development capability to be provided by an educational or other nonprofit institution or a federally funded research and development center." This authority is used pursuant to Federal Acquisition Regulation (FAR) 6.302-3(b)(2)(i), (ii), and (iii) when it is necessary to "establish or maintain an essential capability for theoretical analyses, exploratory studies, or experiments in any field of science or technology", and "establish or maintain an essential capability for engineering or developmental work calling for the practical application of investigative findings and theories of a scientific or technical nature", or "Contract for supplies or services as are necessary incident to paragraphs (b)(2)(i) or (ii)". Since the NIAA was the source selected for establishment of the unique capabilities that are available under the existing contract, it is the only responsible source and no other services will satisfy LaRC's requirements for increased services that are within the technical scope of the contract and its original performance period. Therefore the authority at 10 U.S.C. 2304(c)(1), as implemented by FAR 6.302-1, Only One Responsible Source, also applies to this requirement to increase the value of the existing IDIQ contract. The NIAA is also the only source that can provide LaRC access to the Institute's unique educational and research services. It is also the only source in a position to provide technology development and leading edge research tasks that are continuations of efforts initiated under the cooperative agreement.

#### **5.0 Basis for Restrictions on Competition**

Under the currently existing contract, NIAA provides (1) education for NASA employees; (2) basic, formative, leading edge research and revolutionary technologies in areas of interest to NASA; and (3) creation and dissemination of national level outreach programs for students, teachers, and the public at large. In order for NASA to continue to take advantage of the contractor's unique capabilities during the current contract period of performance, an increase in the maximum value of the contract is necessary.

Under the cooperative agreement, NASA fostered and NIAA established, through its member universities, a truly unique academic program focused on NASA's research needs. This program is based on innovative educational curricula in the latest new fields of science and engineering, especially in emerging cross-disciplinary fields such as: (i) advanced systems analysis, vehicle concepts development, and mission architecture design and campaign studies for space exploration; (ii) entry, descent and landing for space exploration; (iii) advanced materials and sensors; and (iv) controls technology. This academic program combines an innovative educational curriculum with hands-on focused research in these technical areas.

The contract allows NASA to purchase for its direct use and benefit unique seminars, colloquia, workshops and short courses for NASA's existing workforce, which are complementary and synergistic with the contractor's unique graduate education program. Therefore, NIAA is exceptionally positioned to provide this education to LaRC civil servants under the contract. Since 2003, NIAA has presented approximately 200 workshops, short courses, seminars and colloquia through the contract. An example of one of these offerings is a highly successful short course (*A Short Course on Structures and Materials for Hypersonic Vehicles*). A continuing need exists for these educational services during the remaining period of performance.

NIAA has established the following "Research Centers" in emerging areas of interest to NASA that support vital research capabilities while providing a relevant educational program: Center for Aerospace Systems Engineering; Center for Adaptive Aerospace Vehicle Technology; and Center for Planetary Atmospheric and Flight Sciences. Through the subject contract, NASA takes advantage of NIAA's essential engineering, research, and development capabilities in a number of critical technology areas. These areas include: Systems Analysis and Advanced Concepts; Instrumentation and Sensor Technology; Controls Technology; Structures and Materials; Entry, Descent, and Landing (EDL) Technology for Space Exploration; Atmospheric Sciences, and Theoretical, Computational, and Experimental Methods. The proposed increase to the contract's maximum value within the original scope and period of performance of the contract will permit NASA to continue to purchase services for its direct use or benefit which take advantage of the contractor's unique capabilities in these areas. The Center can also avoid the duplication of costs and efforts associated with establishing a second source during the existing contract's period of performance.

## **6.0 Efforts to Solicit Other Sources**

As explained herein, this action is to increase the maximum IDIQ value of subject contract so that NASA can continue to obtain the unique services offered by NIAA that are within the original scope and period of performance of the contract. It would be impractical, costly and ineffective for NASA to solicit and award another contract for these services during the existing period of performance of the subject contract. In addition, because of the lead time involved in awarding a contract, if NASA pursued another contract, it would be awarded about the time that a procurement strategy would be developed for any follow-on to the subject contract. Prior to expiration of the existing contract, NASA will review its requirements to determine if alternate procurement strategies can be developed to satisfy any portion of the requirements contained in this contract.

## 7.0 Market Research

Market research was not conducted because it is not practical to solicit other sources for an increase to the maximum value of the existing contract during its original period of performance.

The proposed modification will be publicized as required by FAR Subpart 5.2. In addition, any follow-on to the existing contract will also be publicized.

## 8.0 Determination of Fair and Reasonable Costs

By signature on this document, the Contracting Officer determines that the anticipated cost to the Government will be fair and reasonable. The cost of individual task orders to be issued under the contract will be negotiated between NASA and NIAA. The Contracting Officer and the Contracting Officer's Technical Representative will monitor NIAA's performance.

## 9.0 Technical Certification

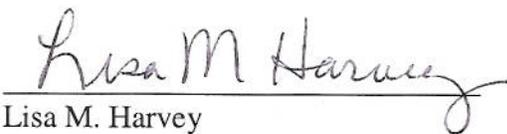
I hereby certify that to the best of my knowledge and belief, the data furnished above is complete and accurate.



Stephen J. Craft  
Deputy Director, Strategic Relationships Office

### Contracting Officer's Certification

I hereby certify that the above justification is accurate and complete, to the best of my knowledge and belief, and the anticipated cost to the Government will be fair and reasonable.



Lisa M. Harvey  
Contracting Officer

1-22-10  
Date

Concurrence:



William T. McMurry, Jr.  
Office of Chief Counsel

1/22/10  
Date

Concurrence:

Rosemary C Froehlich

Rosemary C. Froehlich  
Head, Research and Projects Contracting  
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Virginia C. Wycoff

Virginia C. Wycoff  
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Stephen G. Jurczyk

Stephen G. Jurczyk  
Competition Advocate

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Date

Approval:

Les B. Roe

Les B. Roe  
Director

2/12/2010

Date