

**National Aeronautics and Space Administration
Ames Research Center
Moffett Field, California 94035-1000**

Justification for Other than Full and Open Competition
[FAR 6.303-2(a)(1)]

Summary Information:

Initiating Office: NASA Ames Research Center (ARC)
Aeronautics Research Mission Directorate (Code A)

Purchase Request No.: 4200546548

Procurement Title: Aeronautics and Exploration Mission Modeling and Simulation
(AEMMS)

Total Estimated Value: **FOIA Ex. 5**

Extended Period of Performance: August 1, 2015 through January 31, 2016

Statutory Authority: 10 USC 2304(c)(1), *Only One Responsible Source and No Other
[FAR 6.303-2(a)(4)] Supplies or Services Will Satisfy Agency Requirements*

This Justification for Other than Full and Open Competition (JOFOC) has been prepared in accordance with the requirements of Federal Acquisition Regulation (FAR) 6.303 and NASA FAR Supplement (NFS) 1806.303.

Detailed Information:

A. Nature and/or description of the action being approved. [FAR 6.303-2(a)(2)]

NASA ARC proposes to negotiate a sole source contract modification with Science and Technology Corporation (STC) to extend the period of performance and increase the value of Contract NNA10DF26C, Aeronautics and Exploration Mission Modeling and Simulation (AEMMS), for up to six months pending completion of the follow-on procurement for a new AEMMS contract. This potential six (6) month extension will consist of one (1) month base period, and five (5) one month option periods. This proposed extension would extend the current period of performance from August 1, 2015 to no later than January 31, 2016, if ARC exercises all options.

ARC awarded the current AEMMS contract on July 29, 2010 with a performance period of August 1, 2010 through July 31, 2015 (after exercising all of the options). Procurement efforts for the follow-on AEMMS procurement began in January 2014. The follow-on AEMMS procurement schedule has been impacted by delays associated with the appointment of the Source Evaluation Committee (SEC) Chair, the assignment of SEC voting members, and the receipt of the technical documents required to finalize the solicitation. The requested period of performance extension and the increase in contract value will enable the continuity of research and development support services under the current contract while the follow-on procurement, currently in progress, is competed and awarded.

B. Description of the supplies or services required to meet the agency's needs (including estimated value). [FAR 6.303-2(a)(3)]

The purpose of this JOFOC is to extend the current AEMMS contract for a period of up to six (6) months, pending completion of the follow-on procurement. The current contract provides support services for the development and application of technologies for the design, analysis, and test of aerospace vehicles and systems; large-scale numerical simulations in support of NASA and Army mission critical engineering applications; and fundamental advances in numerical methodologies, algorithms, physical models, and application code development. The required services support the Office of the Director of Aeronautics (Code A), the U.S. Army Aeroflightdynamics Directorate (AFDD), the NASA Advanced Supercomputing (NAS) Division (Code TN), the Atmosphere Science Branch (Code SGG), and the Emerging Space Offices of the Partnerships Directorate (Code BP). The services involve modeling, simulation, and analysis of systems relevant to the NASA aeronautics, exploration, space operations, and science missions. The extension will ensure continuation of the AEMMS mission through the acquisition cycle of the follow-on procurement, which necessitates the extension of the period of performance and an increase in the contract value of the current contract.

The current contract is an Indefinite Delivery Indefinite Quantity (IDIQ) Cost-Plus-Fixed-Fee (CPFF) contract with a current maximum value of **FOIA Ex. 5**. Based on the Independent Government Cost Estimate (IGCE), the estimated value of the services for this potential six (6) month extension is approximately **FOIA Ex. 5**. The IGCE was based on a technical review of the actual AEMMS research and development requirements projected for the remaining period of performance. Therefore, the maximum value will have to be increased, by **FOIA Ex. 5**, from the current maximum value of **FOIA Ex. 5** to a new maximum value of **FOIA Ex. 5**.

C. An identification of the statutory authority permitting other than full and open competition. [FAR 6.303-2(a)(4)]

The statutory authority is 10 USC 2304(c)(1), *Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements*.

D. Demonstration of the proposed Contractor's unique qualification or the nature of the acquisition requires use of the authority cited. [FAR 6.303-2(a)(5)]

In accordance with FAR 6.302-1(a)(2)(iii), for DoD, NASA, and the Coast Guard, services may be deemed to be available only from the original source in the case of follow-on contracts for the continued provision of highly specialized services when it is likely that award to any other source would result in substantial duplication of cost to the Government, that it could not expect to recover through competition, or unacceptable delays in fulfilling the agency's requirements.

The potential six (6) month extension and the increase to the contract maximum value provided for herein are necessary for the comprehensive continuation of highly specialized AEMMS services pending completion of the follow-on procurement. If these highly-specialized services were acquired via a separate competition for a separate six (6) month contract, rather than via the extension provided for herein, the result would be a substantial duplication of costs to the Government that would not be recovered. This duplication of costs would include not only those costs associated with competing a separate procurement for the extension period, but also the costs associated with phase-in activities for the separate six (6) month contract, which would be necessary to ensure that the new, possibly different, contractor has proper knowledge of work

requirements necessary to support the critical, highly specialized AEMMS requirements. Again, these would be duplicative costs that already need to be incurred as part of the follow-on procurement, which is anticipated for award in the first quarter of Fiscal Year 2016. Hence, a potential six (6) month extension, rather than a new procurement for a six (6) month contract, is the only cost-effective and reasonable approach for NASA ARC to take in the present situation.

Further, the potential six (6) month extension to the current contract is necessary to avoid unacceptable delays to NASA's critical requirements. If the extension is not approved, schedules for multiple projects and programs critical to NASA's mission will be irreparably delayed or disrupted. In addition, Aeronautics and Space Exploration programs at NASA ARC as well as Army programs would be impacted. Programs from the Aeronautics Research Mission Directorate (ARMD), the Space Technology Mission Directorate (STMD), the Human Exploration and Operations Mission Directorate (HEOMD) and the Science Mission Directorate (SMD), as well as programs from external sources through Space Act Agreements, would all be halted without the extension provided for herein. Specifically, ongoing work on the Space Launch System (SLS), Commercial Crew program, Orion, Environmentally Responsible Avionics (ERA), Airborne Tropical Tropopause Experiment (ATTREX), and HiArms/Create would all be affected. This work is performed across several organizations at ARC including the Aeronautics, Exploration Technology, Science, Partnerships, and Army Flight Dynamics Directorates.

In short, if the extension provided for herein is not approved, support for the highly specialized AEMMS requirements will be unacceptably delayed and result in a substantial duplication of cost. A separate competition and award to, potentially, a different contractor for a six (6) month period would neither be feasible nor reasonable given the current and on-going AEMMS procurement.

STC is highly qualified to continue performance of the current AEMMS contract at NASA ARC through the proposed performance period extension. The contractor's staff has demonstrated that it possesses the specialized knowledge necessary to perform the scientific, engineering, technical, and documentation support requirements for the various areas in exploration technology.

E. Description of efforts made to ensure that offers are solicited from as many potential sources as is practicable, including whether a notice was or will be publicized as required by FAR Subpart 5.2 and, if not, which exception under 5.202 applies. [FAR 6.303-2(a)(6)]

On March 23, 2015, ARC posted a synopsis on the NASA Acquisition Internet System (NAIS) and the Federal Business Opportunities Portal (FedBizOpps), which informed the public of the intent to extend Contract NNA10DF26C with STC in order to continue performance through January 31, 2016. The synopsis provided instructions for interested organizations to submit capabilities and qualifications to perform the effort no later than April 2, 2015 to the Contract Specialist. The Contract Specialist did not receive any capability statements in response to the synopsis.

F. A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable. [FAR 6.303-2(a)(7)]

The Contracting Officer's signature on this document indicates that the Contracting Officer has determined that the anticipated cost to the Government will be fair and reasonable. Prior to execution of new task orders under the contract, a proposal analysis will be performed in accordance with FAR 15.404. The proposal analysis will include cost and price evaluation techniques to ensure that the final agreed-to price for any task orders issued during the extension period are fair and reasonable. Pre-negotiation objectives will be prepared prior to the initiation of negotiations and will be approved in accordance with FAR 15.406 prior to the conduct of negotiations.

G. Description of the market research conducted and the results or a statement of the reason market research was not conducted. [FAR 6.303-2(a)(8)]

ARC posted a synopsis on the NAIS and FedBizOpps portals as stated in paragraph E above, and no interested parties responded.

H. Any other facts supporting the use of other than full and open competition.
[FAR 6.303-2(a)(9)]

The Contracting Officer and the Contracting Officer's Representative, with input from Code A, Code T, Code S, Code Y (AFDD) and Code BP, have determined that STC is highly qualified to continue performance of the AEMMS contract at NASA ARC through January 2016, pending award of the follow-on contract. Task performance—in terms of safety, milestones, scheduled metrics, and deliverables—has been well organized, prioritized, and safely completed on time and within budget. Since the award of the current contract, STC has received performance ratings of "Very Good" to "Excellent."

I. Listing of the sources, if any, that expressed, in writing, an interest in the acquisition. [FAR 6.303-2(a)(10)]

No other source expressed interest in providing the additional work required by this extension and this increase in contract value.

J. Statement of the actions, if any, the agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required. [FAR 6.303-2(a)(11)]

There are currently no actions the agency needs to take to remove or overcome any barriers to competition before any subsequent acquisition for these services.

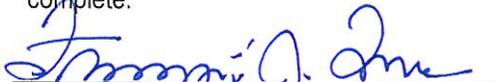
ARC is currently in the process of completing a competitive procurement (as a small business set-aside) for Aeronautics and Exploration Mission Modeling and Simulation. This sole source award of a potential six (6) month extension to the AEMMS contract is necessary to provide additional time for the completion of the AEMMS follow-on procurement.

For the foregoing reasons, and pursuant to FAR 6.302-1(a)(2)(iii), Science and Technology Corporation is the only responsible source to perform the Aeronautics and Exploration Mission Modeling and Simulation requirement from August 1, 2015 through January 31, 2016.

Signature Page

Requirement Initiator:
Francisco Torres

I certify that the facts presented in this justification are accurate and complete.


Signature

6/9/15
Date

Contracting Officer:
Veronica L. Gutierrez

I hereby determine that the anticipated cost to the Government will be fair and reasonable and certify that this justification is accurate and complete to the best of my knowledge and belief. [FAR 6.303-2(a)(12)]


Signature

5/21/2015
Date

CONCURRENCE:

Directorate Manager:
Huy K. Tran
Director of Aeronautics (Acting)


Signature

6/11/15
Date

Procurement Officer:
Kelly G. Kaplan


Signature

6/11/15
Date

APPROVAL:

Center Competition Advocate:
Dr. Thomas A. Edwards
ARC Deputy Center Director


Signature

6/17/15
Date

cc (after approval):
JAB/241-1