

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
LYNDON B. JOHNSON SPACE CENTER**

**JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION  
PURSUANT TO 10 U.S.C. 2304(c)(1) and  
FEDERAL ACQUISITION REGULATION 6.302-1**

- 1. This document is a justification for other than full and open competition prepared by the NASA Lyndon B. Johnson Space Center (JSC).**

- 2. The nature and/or description of the action being approved:**

This justification provides the rationale for contracting by other than full and open competition for acquisition of a development fan assembly designed for the Orion Multi-Purpose Crew Vehicle (MPCV) air revitalization subsystem (ARS) for use in the Orion Environmental Control and Life Support System (ECLSS)-to-suit system integrated test bed in JSC Building 7.

- 3. Description of the supplies or services required, include an estimated value:**

This procurement will include fabrication, assembly, test and delivery of one (1) Orion MPCV ARS development fan assembly. The estimated value for this acquisition is approximately \$303,000.

- 4. Statutory authority permitting other than full and open competition:**

The statutory authority permitting other than full and open competition for this action falls within Federal Acquisition Regulation (FAR) 6.302-1 (a)(2)(iii)(B), "Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements," pursuant to 10 U.S.C. 2304(d)(1)(B), services may be deemed to be available from only one source for the continued provision of highly-specialized services when it is likely that award to any other source would result in unacceptable delays in fulfilling the Agency's requirements.

- 5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:**

Hamilton Sundstrand is specifically qualified to perform this work through their experience with design, analysis and development of the ECLSS for the Orion vehicle. The development of each of these systems requires considerable experience in oxygen safety, materials compatibility, and the many requirements to integrate with the Orion ECLSS. Hamilton Sundstrand developed the ARS fan under contract NNJ06TA25C.

- 6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable:**

*The sample was based on the NARS capability and performance requirements to meet the agency's needs to provide capabilities. The manufacturer's capabilities are not known or available.*

**7. Description of the market survey conducted, and the results, or a statement of the reasons a market survey was not conducted:**

For this acquisition, no survey was conducted. The fan being purchased is a specific design developed by Hamilton Sundstrand to meet multiple operational points that are unique to the Orion ECLSS/suit system.

**8. Other facts supporting the use of other than full and open competition:**

Any course of action other than awarding to Hamilton Sundstrand would not fulfill the Agency's requirements, and therefore, is not in the best interest to the Government.

**9. Sources, if any, that expressed an interest in writing the acquisition:**

TBD after synopsis

**10. 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:**

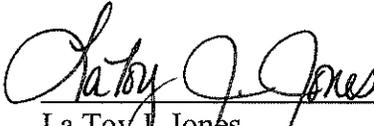
The Agency will continue to remove or overcome any barriers to competition before any subsequent acquisition for these services are required. To do so, the procurement offices will coordinate with the technical officer to ensure any needs for publicizing formal RFIs and sources sought synopses are met. These postings will enable the COTR and technical community to gather crucial information regarding the options and available sources for the future testing needs of the Agency. The technical offices and COTR will continue to monitor industry capabilities by attending related seminars and industry forums. The COTR will also continue to review relevant technical journals, Government and commercial databases, and Internet resources for relevant information. Additionally, Agency investment in Small Business Innovative Research (SBIR) programs has worked to develop competitive alternatives to this technology for future systems, which will continue to be matured.

Technical Officer: I certify that the supporting data presented in this justification are accurate and complete.

  
Richard Barido  
Orion MPCV Subsystem Manager

4/10/2012  
Date

Contracting Officer: 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.

  
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La Toy J. Jones  
Contracting Officer

7/11/12  
Date