

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)  
LYNDON B. JOHNSON SPACE CENTER (JSC)**

**LIMITED-SOURCES JUSTIFICATION PURSUANT TO  
FEDERAL ACQUISITION REGULATION (FAR) 8.405-6**

**Modified ACES Hardware Procurement**

1. This document is a Limited-Sources Justification prepared by the NASA 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 with David Clark Company, Inc. (DCCI), a small business, under the GSA Contract, GS-10F-0467Y.

The Crew and Thermal Systems Division at JSC is currently designing, developing, and planning to test modified variations of the Advanced Crew Escape Suit (ACES) in the NASA Sonny Carter Facility Neutral Buoyancy Laboratory (NBL). These tests will utilize suits that have been repurposed from the Space Shuttle Program (SSP) and modified to meet NBL test and facilities requirements. The extent of the modifications is such that they require vendor (DCCI) support for alteration of proprietary designs and manufacture of new and unique interfaces to those designs.

As the sole manufacturer of the ACES and related components, David Clark Co, Inc. (DCCI) has unique qualifications to fabricate and modify suit components to supplement the existing ACES inventory. Hardgoods to be manufactured are to be produced by DCCI via wholly owned subsidiary, Airlock, Inc.

This document seeks to obtain approval to acquire hardware from DCCI using the General Services Administration (GSA) contract as described in the Modified ACES (MACES) System Statement of Work. The requested MACES system assemblies are critical for manned testing in support of the Advanced Exploration Systems (AES) Office's Asteroid Recovery Mission (ARM) feasibility assessment.

3. Description of the supplies or services required, including an estimated value

The Crew and Thermal Systems Division's Space Suit and Crew Survival Systems Branch is requesting the manufacture and modification of ACES components including new suit bladders, alterations to suit bladders, adjustments to restraint patterning, fabrication of other new softgoods and hardgoods. Specific deliverables are further detailed in the MACES Statement of Work. Total quantities of hardware are defined in the SOW.

**Estimated Value**

The estimated value of this delivery order is \$300,000.

**4. Authority and supporting rationale and, if applicable, a demonstration of the proposed Contractor's unique qualifications to provide the required supply or service**

The statutory authority permitting other than full and open competition for this action falls within FAR 8.405-6(a)(1)(i)(B), which states that "for orders or BPAs exceeding the micro-purchase threshold not placed or established in accordance with the procedures in 8.405-1, 8.405-2, or 8.405-3," limiting the source is justified if, "only one source is capable of providing the supplies or services required at the level of quality required because the supplies or services are unique or highly specialized."

The ACES and all associated hardware and modifications described are produced solely by David Clark Company, Inc, and their wholly owned subsidiary Airlock, Inc.

**5. Determination by the ordering activity contracting officer that the order represents the best value consistent with 8.404(d)**

FAR 8.404, Use of Federal Supply Schedules, states, "GSA has already determined the prices of supplies and fixed-price services, and rates for services offered at hourly rates, under schedule contracts to be fair and reasonable." Because of this, the anticipated cost represents the best value to meet the Government's needs. Furthermore, the Contractor's unique and proprietary insight into the ACES makes them solely qualified to produce and modify ACES hardware.

**6. Description of the market research conducted among schedule holders and the results or a statement of the reason market research was not conducted**

This procurement will be conducted under FAR 8.4, Federal Supply Schedules.

Pursuant to FAR 8.404(a), NASA's requirement for the order does not require a pre-solicitation synopsis, as it is being procured under the GSA Professional Engineering Services Schedule 871-3 System Design, Engineering, and Integration Schedule.

**7. Any other facts supporting the justification:**

The Contractor has unique and proprietary insight gained through previous NASA and ESCG funded design efforts in development of the MACES, which makes them solely qualified to perform the proposed fabrication and modifications.

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