

Justification and Approval  
For Other Than Full and Open Competition

Program/Equipment: Parachutist Oxygen Mask

Authority: 6.302-1: Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements

Amount: \$610,246

Prepared by:

Typed Name:

DSN:

Title: Mechanical Engineer

Date: 22 March 2010

Contracting Officer:

Typed Name: Gail Pitts

DSN: 256-5921

Date Reviewed:

Technical Representative:

Typed Name:

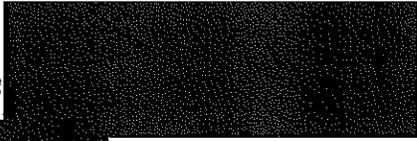
DSN:

Date:

22 March 2010

J&A POM Test Stands - Mar 10

Requirements Representative:



Typed Name:



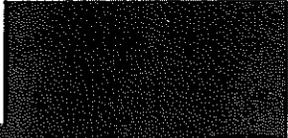
DSN:



Date Reviewed: 25 Mar 10

Reviews: I have reviewed this justification and find it adequate to support other than full and open competition.

Legal Counsel:



Typed Name:



DSN:



Date Reviewed: 3/25/10

Program Manager:



Typed Name:



DSN:



Date Reviewed: 26 Mar 10

**Justification and Approval  
For Other than Full and Open Competition**

1. Contracting Agency – RDECOM, Natick Contracting Division, Bldg 1, Kansas Street, Natick, MA 01760.

2. Description of Action – Approval is requested to obtain 14 Test Stands in support of the Product Manager – Soldier Clothing and Individual Equipment (PM SCIE) Parachutist Oxygen Mask (POM) effort on the basis of other than full and open competition. The test stands will be added as a Line Item to Contract No. W58P05-08-D-0010, Parachutist Oxygen Mask, a 5 year Firm Fixed Price Indefinite contract that was awarded to Carleton after full and open competition. FY10 Other Procurement, Army (OPA) funds will be used to purchase the test stands during the Third Ordering Period of this contract, and OPA funds used for the Fourth and Fifth Ordering Periods.

3. Description of Supplies/Services – PM SCIE has a requirement to provide each user unit which is receiving POMs with a test stand to perform periodic testing of the unit’s masks, oxygen consoles and bailout bottles. Seven units are being fielded POMs in FY10, and need test stands; two test stands have already been purchased under the existing contract. The requirement for the remaining 14 test stands will be met by the optional Ordering Periods of the existing contract.

Nomenclature	Part No.	NSN	QTY	Unit Price
Phantom Automated Test Stand	Carleton B474631	N/A	14	

No services or spare parts are required in the proposed contract.

4. Authority Cited - 10 USC 2304(c)(1), as implemented by FAR 6.302-1, Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements.

5. Reason for Authority Cited – In accordance with FAR 6.302-1(a)(2)(ii)(A) and (B), supplies are deemed to be available only from the original source, in the case of a follow-on contract for the continued development or production of a major system or highly specialized equipment, including major components thereof, and it is likely that award to any other source would result in substantial duplication of cost to the Government that is not expected to be recovered through competition, as further described below.

The proposed contractor, Carleton, is uniquely qualified to fulfill the requirement for these test stands because they developed the test stands in-house to test their commercially available Parachutist Oxygen Mask and associated parachutist oxygen equipment, and own the rights to it. Carleton and other manufacturers submitted proposals to PM SCIE as a result of a competitive solicitation with specific requirements for parachutist oxygen masks and the test stands to support them. The POM mask

and test stand were used during the Operational Test (OT) phase, which ensures that the subject equipment is effective and suitable when employed by users in an operational environment. This test phase, which lasted from Sep 08 to Feb 09, consisted of 232 high altitude live parachute jumps at Fort Bragg, NC, and cost PM SCIE over \$110K. The Carleton test stand was used throughout the testing as a diagnostic tool verifying performance of the POM mask. The test stand performed well, meeting or exceeding all requirements. Since then, PM SCIE has used the test stand for troubleshooting and to perform regularly scheduled maintenance checks on the masks being used for training and testing of related Military Free Fall equipment, which has built up further reliability numbers and increased PM SCIE confidence in this item.

If the PM were to purchase test stands from a different vendor, it would result in significant duplication of cost. An estimate of the cost to the Government that would be duplicated if a new design of test stand was to be purchased is as follows:

<i>Duplicate Costs (How estimate was derived)</i>	
<i>OT phase of 232 high altitude live parachute jumps (derived: Test Agency cost of POM OT)</i>	
<i>PM SCIE Labor for 0.5 man-year (derived: cost of PM labor during Request For Proposal (RFP), Evaluation, Contract Award, and Test phase of POM)</i>	
<i>PM SCIE Travel in support of Contract and OT phases (derived: POM program)</i>	
<i>Contracting Labor for 0.25 man-year (derived: cost of Contracting support during Contracting phase of POM program)</i>	
<i>Contracting Travel (derived: POM program)</i>	
<i>Army Test &amp; Evaluation Command (derived: cost of POM Program Evaluation)</i>	
<i>Replace 2 test stands already purchased to maintain single configuration (derived: cost of existing stands)</i>	
<b>Total estimated duplicate cost</b>	<b>\$397,178</b>

Fielding of the POM must begin in Apr 2010 and test stands must be available to the units for the first scheduled maintenance check 120 days following fielding. Below is an estimated schedule if a new Test Stand procurement were to start on 1 Apr 10, to bring the POM effort back up to its present status.

Test Stand Schedule	
Preparation and Release of RFP - 3 Months	1 Jul 10
Evaluation of Proposals, Contract Award - 3 Months	1 Oct 10
Receive Initial Prototype - 2 Months	1 Dec 10
Testing and Design Refinement - 3 months	1 Mar 11
OT of 232 high altitude live parachute jumps - 4 months	1 Jul 11
Place Contract and DO - 3 months	1 Oct 11
Receive first two test stands - 3 month delivery time	1 Jan 12
<b>Total Delay to Project Schedule</b>	<b>21 Months</b>

The delay in delivery would be completely unacceptable to the user, who needs the test stands not only for the scheduled maintenance checks, but for trouble shooting if any issues are identified with mask performance. One of the chief advantages of the POM is that it is repairable at unit level; without the test

stand, the masks would have to be sent back to Carleton for maintenance and diagnostics, at considerable expense and more importantly, loss of unit readiness.

6. **Efforts to Obtain Competition** - Reference paragraph 8 below for market research in the form of a Request for Information (RFI) that was conducted to obtain competition by identifying manufacturers who could provide an alternative test stand meeting technical and schedule requirements. However, any competitive alternative would have to undergo Government test and evaluation whose duplication of cost to the Government would be unlikely to be recovered by the savings achieved through competition. Additionally, such test and evaluation would result in unacceptable delays in fulfilling the Army's requirements, as discussed in paragraph 5. Only one source, Carleton, has been identified that can meet the Government's requirement.

7. **Actions to Increase Competition** - There is a limited requirement for the test stands (16 total) that corresponds to the purchase of the POMs, and which purchase under this Line Item will fulfill. Once these test stands are purchased, there is no foreseeable future requirement. The test stands have an indefinite service life and will not require replacement in the foreseeable future.

8. **Market Research** - An RFI for Automated Test Stands was published in Federal Business Opportunities on 5 Nov 09 to assess the ability of industry to provide a test stand equal to or superior to the one purchased from Carleton, that would meet cost, schedule and performance requirements. Written responses with company information was received from three companies on or before 4 Dec 09. [REDACTED] Mechanical Engineer and PM SCIE POM Program Lead, reviewed the information, conducted the evaluation and summarized the results. One company was Carleton, the POM manufacturer; the other two companies had one or more of the following weaknesses.

- **Outdated technology.** The proposed technology was comparable with the Army's current test stand. It had analog gauges and was operated manually using switches and dials. In comparison, the Carleton test stand has state of the art digital readouts, interface with the operator is intuitive, and it requires minimal training.
- **No capability to test bailout bottles and oxygen console.** The ability of the test stand to test the oxygen console and parachutist's bottles is a key performance requirement.
- **Development effort proposed.** A custom-designed solution to meet the requirements was not PM SCIE's intent.

Based on the above weaknesses, the other companies could not provide the required test stands without substantial duplication of cost to the government and/or delays in fulfilling PM SCIE requirements.

9. **Interested Sources** - To date, no other sources have contacted PM SCIE or Natick Contracting to express an interest in the POM test stands. The notices required by FAR 5.201 shall be published, and any bids or proposals received shall be considered.

10. **Other Facts** -

Date	Contract Number	Quantity	Price/Unit
• 29 Aug 09	W911QY-09-C-0165	2	[REDACTED]
• 16 Sep 09	FA4890-09-P-0037	10	[REDACTED]
• 30 Sep 09	FA8629-07-A-2368 0083	1	[REDACTED]
• 30 Sep 09	FA8629-07-A-2368 0085	1	[REDACTED]

- b. The POM is a COTS item. Design and manufacturing data for the POM and the associated test stand are proprietary to Carleton.
- c. All test stands in the field must be of a single configuration. If two units receive the Carleton test stands which have already been purchased, and other units are fielded test stands made by a different manufacturer which are of a different configuration, this will cause problems with training and operation. The parachutist oxygen system is life support equipment, and the PMS cannot afford to compromise safety in this manner. All test stands must be consistent in design and operation.

11. Technical Certification - I certify that the supporting data under my cognizance that is included in the justification is accurate and complete to the best of my knowledge and belief.

Typed Name: [REDACTED]  
 Title: Project Lead - Parachutist Oxygen Mask

Date: [REDACTED]  
 Signature: [Handwritten Signature]

12. Requirements Certification - I certify that the supporting data under my cognizance that is included in the justification is accurate and complete to the best of my knowledge and belief.

Typed Name: [REDACTED]  
 Title: APM - Personnel Airflow Systems

Date: 25 Mar 10  
 Signature: [REDACTED]

13. I hereby determine that the anticipated cost to the Government for this contract action will be fair and reasonable. Techniques to be used to determine "fair and reasonable" include price analysis and cost analysis if applicable.

Typed Name: GAIL PITTS  
 Title: Contracting Officer

Date: 31 Mar 10  
 Signature: [Handwritten Signature]

14. I certify that this justification is accurate and complete to the best of my knowledge and belief.

Typed Name: GAIL PITTS  
 Title: Contracting Officer

Date: 31 Mar 10  
 Signature: [Handwritten Signature]

**APPROVAL**

Based on the foregoing justification, I hereby approve the procurement of Test Stands for the Parachutist Oxygen Mask on an other than full and open competition basis pursuant to the authority of 10 USC 2304(c)(1) as implemented by FAR 6.302-1

Approval is granted subject to the availability of funds and provided that the services and/or property herein described have otherwise been authorized for acquisition.

Name: CHERYL A. DELUCA

Date: 13 Apr 2010

Title: Special Competition Advocate  
Natek Contracting Division  
USA RDECOMCC

Signature: 