

[REDACTED]

Sole Source (Including Brand Name) Justification - Simplified Procedures for Certain Commercial Items

NOTE: If a Justification was approved for the preceding acquisition, a copy of the approved Justification for the predecessor action must be included in the staff package for approval of the instant Justification. This applies to Justification staff packages that are submitted for review and approval at a level above the contracting officer. The predecessor Justification will be used as a reference document by the approving official.

Is this a new or amended J&A Document? ☒ New ☐ Amended (Prior to Award Only!)

Is this a Bridge Action as defined in the [AF Bridge Action Reduction Plan](#)? ☐ Yes ☒ No

Funding level for this acquisition: ☒ >SAT and ≤ \$750K ☐ > \$750K and ≤ \$15M

Contracting Activity: AFTC/PZIA (Arnold)

Purchase Request / Local ID Number: [REDACTED]

Program / Project (and PE, if applicable): High Pressure Transducers

Program Type (PEO or Other Contracting): Other Contracting

Authority: ☒ AFFARS 5313.501 - 10 U.S.C. 3572, Implementation of Simplified Acquisition Procedures (41 U.S.C. 1901)

☐ AFFARS 5313.501 - 10 U.S.C. 3403, Special Emergency Procurement Authority (41 U.S.C. 1903)

Estimated Contract Cost (including options): [REDACTED]

Justification Type: ☐ Class ☒ Individual

COORDINATION ([AFFARS 5306.304\(a\)](#))

[REDACTED]

APPROVAL ([AFFARS 5306.304\(a\)](#))

[REDACTED]

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I. Contracting Activity.

AFTC/PZIA (Arnold) at 100 Kindel Drive, Suite A-332 at Arnold AFB, TN.

II. Nature and/or description of the action being processed.

The new requirement will be a new purchase order contract. It will be solicited as a commercial, firm-fixed price contract sole sourced to Kulite Semiconductor Products, Inc.

III. Description of supplies/services required to meet agency needs.

The new requirement will be a new purchase order contract. It will be solicited as a commercial, firm-fixed price contract sole sourced to Kulite Semiconductor Products, Inc.

716 TS at AEDC White Oak has a new requirement for a quantity of ten high temperature miniature transducers with the B screen variant, a quantity of five high temperature miniature transducers with the A screen variant, a quantity of five high temperature miniature transducers with no screen variant and no RTV variant, and a quantity of five high temperature miniature transducers with no screen variant and includes the RTV variant. The lead time for the transducers is 30 weeks. The estimated value of this acquisition is [REDACTED] This will be funded with 3600 funds.

CLIN	DESCRIPTION	QUANTITY	UNIT OF MEASURE
0001	Miniature High Temperature Transducer - 0.095 inch diameter, 0.375 inch length, aft facing cabling, protective screen "B" - Full Scale Pressure Range: 5 psia - Full Scale Output: 150 mV (nominal) - Compensated Temperature Range: 80°F - 450°F - Apply RTV around sensing element, thin coat on sensor - 12" of shielded cable from sensor to comp module - 24" of shielded cable after comp module	10	Each
0002	Miniature High Temperature Transducer - 0.095 inch diameter, 0.375 inch length, aft facing cabling, protective screen "A" - Full Scale Pressure Range: 5 psia - Full Scale Output: 150 mV (nominal) - Compensated Temperature Range: 80°F - 450°F - Apply RTV around sensing element, thin coat on sensor - 12" of shielded cable from sensor to comp module - 24" of shielded cable after comp module	5	Each
0003	Miniature High Temperature Transducer - 0.095 inch diameter, 0.375 inch length, aft facing cabling, no protective screen - Full Scale Pressure Range: 5 psia - Full Scale Output: 150 mV (nominal) - Compensated Temperature Range: 80°F - 450°F - Trimmed port tip; no RTV fill - 12" of shielded cable from sensor to comp module - 24" of shielded cable after comp module	5	Each
0004	Miniature High Temperature Transducer - 0.095 inch diameter, 0.375 inch length, aft facing cabling, no protective screen - Full Scale Pressure Range: 5 psia	5	Each

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- Full Scale Output: 150 mV (nominal)
- Compensated Temperature Range: 80°F - 450°F
- Apply RTV around sensing element, thin coat on sensor
- 12" of shielded cable from sensor to comp module
- 24" of shielded cable after comp module

IV. Statutory authority permitting other than full and open competition.

FAR 13.106-1(b)(1)

V. Demonstration that the contractor's unique qualifications or nature of the acquisition requires the use of the authority cited above (applicability of authority).

716 TS at AEDC White Oak has a new requirement for various high temperature miniature transducers. The pressure transducers will support the AEDC Hypervelocity Wind Tunnel 9 for wind tunnel testing. Kulite Semiconductor Products, Inc. is the only vendor known to make wind tunnel pressure transducers with the required specifications.

VI. Description of efforts made to ensure that offers are solicited from as many potential sources as practicable.

The requirement cannot be fulfilled by required sources IAW FAR Part 8 or existing contracts. Market research indicates there is one small business vendor that can meet the requirement, Kulite Semiconductor Products, Inc. The Government will solicit this commercially available off-the-shelf (COTS) requirement directly to the manufacturer. Market research indicated there are no resellers for the requirement.

VII. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable.

Price fair and reasonable will be determined using other than certified cost or pricing data by utilizing FAR 13.106-3 procedures prior to awarding the contract. The Government will evaluate technical acceptability on a pass/fail basis. This will ensure the final contract price will be fair and reasonable.

VIII. Description of the market research conducted and the results, or a statement of the reasons market research was not conducted.

Market research shows this requirement is commercial. The mandatory sources cannot be utilized. Only the manufacturer, Kulite Semiconductor Products, Inc., distributes its transducer products. As such, this requirement will be solicited as a sole source requirement. NAICS code 334513 does not have a non-manufacturer waiver; therefore, the non-manufacturer rule (NMR) will apply. Kulite Semiconductor Products, Inc. is registered as a small business on sam.gov.

IX. Any other facts supporting the use of Other Than Full and Open Competition.

Not Applicable.

X. List of any sources that expressed, in writing, an interest in the acquisition.

Kulite Semiconductor Products, Inc. expressed interest in the requirement.

XI. A statement of the actions, if any, the agency may take to remove or overcome any barriers to competition before making subsequent acquisitions for the supplies or services required.

It is unlikely that industry practices will change, allowing more manufacturers to meet the specifications required by

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the Government due to the large volume of patents Kulite Semiconductor Products, Inc. holds related to the transducers and transducer subcomponents. When new high pressure transducers are needed, the Government will conduct market research to determine the most appropriate path to meet the mission.

XII. Certification by the Contracting Officer.

As evidenced by my signature above, I have determined this document to be both accurate and complete to the best of my knowledge and belief.

XIII. Certification by the technical/requirements personnel.

As evidenced by my (our) signature(s) above, I (we) certify that any supporting data contained herein, which is my (our) responsibility, is both accurate and complete.