DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE
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J&A Number: 25-0021

JUSTIFICATION AND APPROVAL FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

1. Contracting Activity.

Naval Air Warfare Center Weapons Division (NAWCWD) China Lake, CA

2. Description of the Action Being Approved.

This justification and approval authorizes and approves on a sole source basis a contract to Advanced Cooling Technologies, 1046 New Holland Ave, Lancaster, PA 17601, Cage Code 3DTH3, for the procurement of Wing and Base Heat Pipe subassemblies [Redacted]

3. Description of Supplies/Services.

This procurement is for the fabrication, testing, documentation and delivery of 11 Wing and Base Heat Pipe subassemblies for [Redacted]These specific Wing and Base Heat Pipe subassemblies are a machined copper and tellurium heat pipe dissipating technology and have a delivery lead time of 24 weeks respectively, after receipt of contract.

Estimated Dollar Value

[Redacted] FY24-25 $.44M

4. Statutory Authority Permitting Other Than Full and Open Competition.

10 U.S.C. 3204(a)(1), Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Rationale Justifying Use of Cited Statutory Authority.

Advanced Cooling Technologies is the original designer, developer and manufacturer of the Wing and Base Heat Pipe subassemblies and is the only source with the requisite knowledge, experience and technical expertise to continue production of the Wing and Base Heat Pipe subassemblies to the technical requirements required. To produce the Wing and Base Heat Pipe, Advanced Cooling Technologies was required to develop proprietary manufacturing processes to achieve required specifications and precise fitment. This heat pipe design is proprietary to Advanced Cooling Technologies due to the unique design essential to the form-fit-function requirements of [Redacted] in the larger system. Seeking a new source would delay the deployment of submarines to the fleet as the slip ring is presently integrated and functional in the fleet.

These Wing and Base Heat Pipe subassemblies are deemed only available from Advanced Cooling Technologies, as award to any other source would result in unacceptable delays in fulfilling the Government's requirement. Delaying the procurement to establish another source would significantly impact the US Navy operating capabilities. Redesign of the Wing and Base Heat Pipe to establish and develop another source would force the redesign of [Redacted] as a whole. First, a new contract would have to be developed which would take approximately 1 year. After the new contract is awarded, it is estimated that a redesign would take two years by a minimum team of five engineers, as estimated by a Government technical Subject Matter Expert (SME). First article testing would then be required of the new manufactured Wing and Base Heat Pipe to verify it meets all specifications. If the first article testing were to fail, this would add additional delay and further impact the Navy's operating capabilities. In addition to the unacceptable delay and the impact it would have on the Navy's operating capabilities, a redesign of these Wing and Base Heat Pipe would result in a duplication of cost that is not expected to be recovered through competition. The contract to redesign the slip rings would cost approximately $1.5M as estimated by the Government technical SME. The Government would then have to pay for the production of the new Wing and Base Heat Pipe which may or may not be less costly per unit than the current Wing and Base Heat Pipes.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

In accordance with DFARS PGI 206.302-1(d), a Sources Sought announcement was posted to Contract Opportunities in SAM.gov on October 08, 2024, and closed on October 23, 2024. No responses were received. In accordance with FAR 5.201(b)(1), the proposed contract was synopsized in SAM.gov on October 24, 2024, and only Advanced Cooling Technologies expressed an interest in this requirement. No additional market research was conducted because it is not practicable, for the reasons discussed in paragraph 5 above, for any company other than Advanced Cooling Technologies to provide the required supplies and services.

7. Determination of Fair and Reasonable Cost.

The Contracting Officer has determined the anticipated cost to the Government of the supplies/services covered by this J&A will be fair and reasonable.

8. Actions to Remove Barriers to Future Competition.

For the reasons set forth in Paragraph 5, NAWC-WD China Lake, CA has no plans at this time to compete future contracts for the types of supplies/services covered by this document. If another potential source emerges, NAWC WD China Lake will assess whether competition for future requirements is feasible.