



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, ATLANTIC
6506 HAMPTON BLVD
NORFOLK, VA 23508-1278

(757) 967-3836
IN REPLY REFER TO:

N62470-12-R-3003
April 20, 2012

JUSTIFICATION AND APPROVAL - NCC 12-001 - FOR OTHER THAN FULL AND OPEN COMPETITION - Solicitation N62470-12-R-3003, ONE 3R13-161N2 Rotek Bearing for YD-251 100 Long Ton Halter Marine Crane, Trident Refit Facility, Kings Bay, GA

1. **Contracting Activity.** The contracting activity is Naval Facilities Engineering Command; the contracting office is the Naval Facilities Engineering Command Atlantic, Navy Crane Center, Portsmouth, Virginia.

2. **Description of the Action Being Approved.** The Contracting Officer, Naval Facilities Engineering Command Atlantic, Navy Crane Center (NAVCRANECEN), proposes to sole source a delivery order for a 3R13-161N2 rotate bearing to Rotek Inc. for a firm fixed price contract solicitation N62470-12-R-3003.

3. **Description of Supplies/Services.** The intent of this contract is to replace the existing 3R13-161N2 Rotek rotate bearing with a new 3R13-161N2 Rotek bearing with the necessary identical replacement bearing being procured from the original bearing designer and supplier.

The Government Estimate for the Rotek Rotating Bearing procurement is [REDACTED] and will be funded with FY 2012, Operations and Maintenance Navy (O&MN), which expire 30 September 2012.

4. **Statutory Authority Permitting Other Than Full and Open Competition.** 10 U.S.C. 2304(c)(1), Only one responsible source and no other supplies or services will satisfy agency requirements as implemented in FAR 6.302-1.

5. **Rationale Justifying Use of Cited Statutory Authority.** The 100T Halter Marine barge crane consists of a crane that was designed and will transmit forces to the barge on which it was mounted. This rotation induces significant forces on the barge through the crane foundation and crane slewing bearing. Each application of this size bearing is typically uniquely designed for the forces that the crane is projected to transfer to the barge crane foundation. Identification of the forces and moments that the crane and the respective loading conditions will exert onto the slewing ring bearing component are necessary to correctly design this unique interface component. A review of the available barge drawing and calculation files reveal that the design loading calculations for the superstructure of the 100T Halter Marine barge crane are not

available. The available installed slewing bearing drawings were also reviewed for the design loading forces however the necessary design information was not recorded in these documents. Based on the lack of engineering data required to design the slewing bearing, the original bearing supplier should be the source of the identical replacement bearing.

One alternative would be to consider backward engineering the structure and anticipated crane forces in an effort to determine the probable loadings induced by the crane to the slewing bearing based on the available resources. This alternative is not considered a reasonable approach because the necessary assumptions utilized in the process would mean excessively higher forces the bearing must transfer would be identified and the process would not necessarily include some unique design considerations documented, but not available. This over engineering means excessive bearing fabrication cost as well as exceeding the physical limitations of the existing available space. Additionally, should the Government reproduce these calculations, the new bearing supplier would be required to pass along their bearing design cost to the Government along with the actual bearing fabrication cost. As the original bearing supplier has an approved bearing design available from the original bearing delivery, the original bearing supplier is anticipated to provide the lowest component cost. As an additional design restraint, the barge and crane are currently designed for a specific mounting arrangement and bearing space allowances as well as a unique component bolting pattern meaning bolt sizes and mounting bolt configuration further restricting the alternate supplier's design. If necessary, modification of the barge and crane to accommodate a potential alternate component is considered cost prohibitive.

One anticipated approach is that a supplier would recommend replicating the bearing by reverse engineering by component disassembly. This approach would not provide the required technical basis and evaluations required for a key component in a vital mission supporting piece of equipment. Technically, this approach would not provide the design background and supporting engineering calculations required for this equipment.

The dimensions of the new bearing are required to be the same as the old bearing dimensions. This will allow the rotate gear contact surfaces to remain similar to the original design. A dimensionally different slewing ring bearing will require drive train changes to the rotate drive system. This work will be costly and time consuming.

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6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable. Market research was performed under the Management and Oversight Process for the Acquisition of Services (MOPAS).

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 pursuant to FAR Part 15.

8. Actions to Remove Barriers to Future Competition. This limiting of competition is only being sought due to the situation as set forth in Paragraph 5. In the absence of voiding the crane warranties, future procurements will be competed.

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CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION

I certify that the facts and representations under my cognizance which are included in this Justification and its supporting acquisition planning documents, except as noted herein, are complete and accurate to the best of my knowledge and belief.

TECHNICAL/REQUIREMENTS COGNIZANCE:

Bryan Barber BRYAN BARBER 757-967-3827 4/24/12
Signature Name Phone No. Date

LEGAL SUFFICIENCY REVIEW:

I have determined this Justification is legally sufficient.

R. Eric Rissling R. ERIC Rissling 757-322-4157 4/25/12
Signature Name Phone No. Date

CONTRACTING OFFICER CERTIFICATION:

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

Jean Maxwell Jean Maxwell 757-322-3818 30 April 12
Signature Name Phone No. Date

APPROVING OFFICIAL (NFAS 6.304):

Upon the basis of the above justification, I hereby approve, the solicitation of the proposed procurement(s) described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304(c)(1).

Jean Maxwell Jean Maxwell 757-322-3818 2 May 12
Signature Name Phone No. Date