

JUSTIFICATION FOR SOLE SOURCE ACQUISITION
VALUES \$3,001 - \$100,000

RECOMMENDATION AND DETERMINATION TO SOLICIT FROM ONE
SOURCE – PR 420044266

NASA, John F. Kennedy Space Center, will negotiate with Flight Works Inc. (FW) for a Modified Prototype Pump. ~~The total estimated cost of this effort is \$80,517.00 and~~ the estimated turnaround time is 13-14 weeks ARO.

Pursuant to FAR 13.106-1(b) and 13.106-3(b)(3)(i), the acquisition of referenced Modified Prototype Pump are determined to be available from only one source.

Competition is impractical for the following reasons:

1. Continuation of previous government low TRL development effort – this contract improves on the design of a prototype pump previously delivered to KSC for NTO testing. This phased approach leverages upon existing progress and FW IP rights utilizing a proven proof of concept design and excess parts and hardware available from original contract, and will replace several wear parts to enhance performance life of these units with goal to meet flight hardware operational requirement durations. This leveraged spiral development approach saves the government both time and cost to determine acceptable component materials required to be incorporated into the final flight pump configuration, and is projected to ultimately reduce future flight hardware design and development costs.
2. Urgency – Completion of prototype 2nd generation design/ testing of this pump is required prior to long lead flight hardware award that will need to be obligated in FY 13 to meet overall mission support schedule. This modified prototype unit with enhanced material wear components is required to be manufactured to quantify pre and post NTO testing wear by measurement, as it will relate to the flight hardware total cycle and run time requirements. To reduce program risk, FY12 testing is required to validate enhanced material performance as it will relate to material selection for final design. Initially FW was the only supplier contacted from multiple magnetic drive gear manufacturers, including chemical industry suppliers, that stated they would be interested to modify a unique gear design magnetic drive pump meeting Restore program requirements for flow rates, pressures, size and weight). Since the design details of the internals, material types, gear geometry, machining and assembly processes, etc. are the IP rights of FW, the government would be required to start from ground zero with any other pump manufacturer at this point, creating a potential one year gap or greater with major cost / schedule impacts to overall program if this spiral development approach is not implemented.

- Pursuant to NFS 1805.207 and 1804.570, this proposed contract action will be published on the NASA Acquisition Internet Service (NAIS) and pursuant to FAR 5.201 this proposed contract action will be synopsisized in the Federal Business Opportunities. The results received in writing will be added to this document by addendum.

No market survey was conducted for this acquisition; this is a follow up to the previous procurement from the same manufacturer

Based upon the above, I hereby determine that the circumstances of the contract action deem only one source reasonably available for this acquisition. I certify that the supporting data presented in this justification are accurate and complete.

4. NAIS  7-13-2012
Tom Aranyos Date
Technical Officer

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

 7/14/12
Joyce J. McDowell Date
Contracting Officer