

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)
(In accordance with Federal Acquisition Regulation (FAR) 6.3 – Other than Full and Open Competition)

- 1. This document is a justification for other than full and open competition prepared by NASA's Dryden Flight Research Center (NASA DFRC):**

PR 4200346267 / NND10AK68P

- 2. The nature and/or description of the action being approved:**

This procurement is for VxWorks, a real-time operating system (RTOS) that is used in the RAIF Simulation systems. The estimated value is \$175,000 per year for five licenses. A three year contract is requested to lock in the current per license cost at \$35,000 per copy. The total estimated price for 3 years is \$522,000. The manufacturer of VxWorks software is Wind River Systems, Inc., Newport Beach, CA.

- 3. Description of the supplies or services required, including an estimated value:**

Wind River VxWorks Time-Based Floating software is a premier foundation platform that combines a stringent, deterministic real-time operating system with a fully integrated, off-the-shelf development solution. In addition to the RAIF simulation systems, the RTOS has also been used for several on-board systems by the instrumentation and avionics groups. For over 15 years, there is extensive experience with the product and a large code base has already been developed.

- 4. Statutory authority permitting other than full and open competition:**

10 U.S.C. 2304(c)(1) and Federal Acquisition Regulation 6.302-1, Only One responsible source.

- 5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:**

VxWorks is a Name Brand product developed by Wind River Systems. VxWorks is only available from Wind River or through a reseller of Wind River products. Multiple ongoing projects use VxWorks currently, and require a renewed license to continue development and testing.

- 6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable, including whether a notice was or will be publicized as required by Federal Acquisition Regulation (FAR) 5.202:**

The VxWorks software is licensed by Wind River, and available from multiple distributors. A requirement was posted on the Federal Business Opportunities on July 21, 2010, requesting capabilities statements of other software developers or providers of this software. No responses were received from that posting.

- 7. A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable:**

A quote from Wind River was obtained identifying their catalog pricing for this software license. The pricing on this quote was compared to previous purchases for these licenses. Additionally, the annual price for this software license is in line with the Independent Government Estimate. Finally, comparison was made of this software licensing price with other complex software programming, and prices were found to be comparable.

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

Market research has been conducted researching other Real-Time Operating Systems. A switch to these other systems could result in a less expensive purchase price; however, it would result in incompatibility with current work as well as previously performed work. This would require substantial technical rework. Additionally, significant expense would be incurred to train personnel to use an alternative system. The substantial work and expense that would incur as a result of a competitive procurement would far outweigh the savings that could be realized by using the less expensive software.

9. Other facts supporting the use of other than full and open competition:

Other Real-Time Operating Systems that are available do not have the same history and experience with time-critical and safety-critical flight programs. VxWorks is a trusted brand in Real-Time Operating Systems in the automotive industry, mobile platforms, and general embedded computing, as well as in aerospace.

10. Sources, if any, that expressed an interest, in writing, in the acquisition:

No responses were received as a result of a posting on the Federal Business Opportunities seeking capabilities statements from qualified vendors.

11. The actions the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

NASA DFRC will continue to conduct market research to find software that will meet the Government's needs.

JOFOC Signature Page for Action between \$100,000.00 and \$550,000.00

TECHNICAL DIRECTORATE: I certify that the facts presented in this justification are accurate and complete.



Signature

9/17/10

Date

CONTRACTING OFFICER:
(APPROVAL) I certify that this justification is accurate and complete to the best of my knowledge and belief.



Signature

9-17-10

Date