

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

RECOMMENDATION AND DETERMINATION TO SOLICIT FROM ONE
SOURCE – PR 4200483750

NASA, John F. Kennedy Space Center, will negotiate with PaR Systems inc, for support to develop a unique and novel method of 3 Dimensional (3D) Additive Construction using planetary regolith simulant and robotics. The total estimated cost of this effort is \$85,000.00 and the estimated turnaround time is 6 months ARO.

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

Competition is impractical for the following reasons:

The Kennedy Space Center (KSC) Research and Technology Management Board (RTMB) has awarded a Center Innovation Fund (CIF) project to the KSC Surface Systems Office (NE-S) in order to develop and demonstrate: **“3D Additive Construction with In-Situ Resources for Surface Systems”**.

In order to meet the goals and requirements of the this project, it is necessary to have a robotic platform installed and operating at the KSC Granular Mechanics & Regolith Operations lab within 3 months of the contract award. The very tight schedule and current fiscal year funding constraints dictate using a vendor that can provide this robotic positioning system very rapidly.

Description of the market survey conducted and the results, or a statement of the reasons a market survey was not conducted:

A market survey was conducted, capabilities were examined and discussions were subsequently held with two identified and qualified companies: Wolf Robotics, Fort Collins, Co (<http://www.wolfrobotics.com/>) and Par Systems inc, Shore View, Minnesota (<http://www.par.com/robotic-integration>). Only PaR Systems was able to identify a suitable robotic system and provide a custom support structure. PaR Systems is willing to meet the desired schedule of installing the support structure and robot within 3 months and completing the programming within 6 months. In addition PaR systems is providing a suitable robot system with custom programmed tool paths suitable for 3D printing large regolith structures, which has never been done before, and which has unique requirements.

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.

Robert P. Mueller

8/28/2013

Robert P. Mueller, Technical Officer

August 28, 2013

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

Julie McDevitt
Contracting Officer

8/28/13
Date