

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GLENN RESEARCH CENTER (GRC)
CLEVELAND, OHIO

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

PR 4200430581

I. Description of Requirement

I recommend that GRC negotiate only with Epsilon Systems Solutions, Inc. for a cart mounted self-contained Aircraft Auxiliary Power Unit (APU). This acquisition will be conducted under the authority of the GSA Multiple-Award Schedule Program.

Below is a picture of the desired product as found on the GSA Advantage website:
https://www.gsaadvantage.gov/advantage/catalog/product_detail.do?gsin=11000005280278



This cart will be used to simulate aircraft engine exhaust plumes and a portion of the exhaust from the APU will be discharged into the NASA Glenn Particle Aerosol Laboratory Altitude Simulation Chamber. This chamber is capable of simulating altitude conditions up to approximately 50,000 feet and is used to study what happens to aircraft engine exhaust plumes as they discharge into the atmosphere.

The estimated value of the procurement is: **\$386,018.16 (including shipping)**

II. Statutory Basis for Other Than Full and Open Competition

The statutory authority permitting other than full and open competition is 10 U.S.C. 2304(c)(1), only one responsible source and no other supplies or services will satisfy Agency requirements.

III. Rationale In Support of Statutory Authority

NASA is currently engaged in research relating to effects of alternative fuels from aviation. This includes effects of aircraft engine exhaust plumes on aircraft contrail formation. In order to accomplish this research, a suitable emissions source is required that is representative of continuous combustion systems found in aircraft propulsion systems. A gas turbine engine based aircraft Auxiliary Power Unit is the best choice for this because it has a continuous combustion system; is a gas turbine similar to an aircraft propulsion engine; and is produced in a reasonable size that can be accommodated by the test cell where it will be located. The Epsilon unit described above is the only cart mounted aircraft gas turbine APU that is available. All other cart mounted aircraft support units have diesel engines which are intermittent combustion systems and would not be representative of emissions generated from an aircraft gas turbine propulsion system. The timing is critical for purchase of this unit because the testing that will be performed using this cart mounted APU is needed to assist in planning for NASA flight experiments that are scheduled for early in 2013. The data from the cart mounted APU is required in order to provide appropriate conditions for the flight testing that includes aircraft altitude, alternative fuel effects, and suitable atmospheric conditions. Without this data generated in the laboratory at GRC, the NASA flight testing will not receive needed data to be sure that the flight testing will be performed at the correct altitude and atmospheric conditions.

IV. Description and Results of Market Research

Prior to the Procurement office receiving the PR, the requestor Dan Bulzan completed undocumented market research as part of his ongoing job within the field of study. One of his key specifications states, in part, "The APU engine must be a gas turbine having a continuous operating combustor". He stated that while other companies make similar carts, Epsilon Systems Solutions, Inc. (Epsilon) is the only company he is aware of that creates carts that utilize this type of technology which is essential for his testing, as described above in III, Rationale In Support of Statutory Authority.

Upon receiving the PR, the Contracting Officer utilized the required source list on 4/19/12, checking GSA Advantage for this or similar items. Epsilon was the only company to show up in the searches. Also on 4/19/12, the Contracting Officer completed a Google search for the item. Various search pages on google showed essentially the Epsilon product and various mentions to the Epsilon product by other outside sources.

The Contracting Officer then posted a Request for Information (see Tab 8) on GSA's "eBuy" system to confirm whether Epsilon was the only company that could manufacture the item to NASA specifications, or whether other companies existed on the schedule which could provide the item. On 4/26/12, Fifty-two companies were solicited (whereas NAIS postings go out to all industry, GSA eBuy RFI/RFQs are targeted to companies specifically in the categories that the item or service under consideration falls under) on whether they could comply with the NASA specifications. By the closing date

of 5/3/12, a mixture of "We do not provide this item" and lack of any responses by the solicited companies convinced the Contracting Officer of the findings of past research, and that no other companies could or are willing provide this product.

A description of this requirement will not be posted to the NASA Acquisition Internet Service/FedBizOpps. The following exception under FAR 5.202 applies: FAR 38.101(e) which states that the requirements of FAR Part 5.2 do not apply to orders placed under GSA schedule contracts.

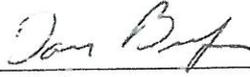
V. Determination of Fair and Reasonable Cost

The prices for the required supplies (or services, as applicable) are lower than negotiated contract prices under the GSA schedule. Therefore, the prices are considered fair and reasonable.

VI. Actions to Remove or Overcome Barriers to Competition

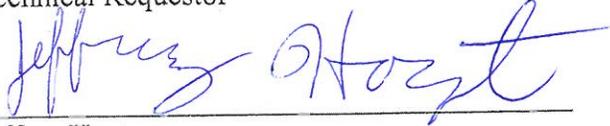
The requiring activity is continuing to monitor the marketplace for any other potential vendors who can work within the confines of his specifications. If any businesses emerge in the future, any future requirements at that time will likely be competitive in nature. Even during this procurement, the Contracting Officer conducted the extensive above-mentioned market research to see if other vendors could provide this product.

Certifications



Dan Bulzan
Technical Requestor

5/10/2012
Date



Jeffrey Hoyt
Contracting Officer

5/10/2012
Date

Review



Karin Huth
CHB Procurement Branch Chief

5/11/2012
Date

Approval



Bradley Baker
Procurement Officer

5/14/2012
Date