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<tr>
<th>Notice Type:</th>
<th>Sources Sought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posted Date:</td>
<td>May 24, 2017</td>
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<tr>
<td>Response Date:</td>
<td>Jul 28, 2017 11:59 pm Central</td>
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<tr>
<td>Archive Date:</td>
<td>August 12, 2017</td>
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<td>Classification Code:</td>
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<td>NAICS Code:</td>
<td>541 -- Professional, Scientific, and Technical Services/541712 -- Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)</td>
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</tbody>
</table>

**Synopsis:**

Added: May 24, 2017 5:25 pm

Special Notice of Sources Sought
For


The Army Contracting Command - Redstone Arsenal (ACC-RSA), on behalf of the Department of Defense (DOD), is releasing this special notice to inform interested parties of an interest in establishing a Section 815 Other Transaction Agreement (OTA) with an eligible entity or group of entities to develop and mature guided missile technologies, develop and transition Army aviation and missile manufacturing technologies, and integrate advanced technologies, techniques and processes into future effective weapon systems in support of US Army and DOD weapon systems.

This initiative will support possible needs across government and industry, in alignment with the Office of the Secretary of Defense (OSD); the US Army Aviation and Missile Research, Development and Engineering Center (AMRDEC), Weapons Development and Integration (WDI) Directorate, Missile Development Division mission in all aspects of guided weapon system design, development, improvement and integration of Science
Technology (S&T) products to improve affordability, increase range and precision, and improve the breadth of efforts available to the Army in support of aviation and missile systems; and the US Army AMRDEC, Engineering Directorate (ED), Manufacturing Science and Technology Division, Aviation and Missile Manufacturing Technology (ManTech) program mission of maturation, risk reduction and affordability enhancement of advanced manufacturing technologies and processes in support of aviation and missile commodities.

The purpose of this effort is to identify areas of research, exploratory and advanced development, technology demonstrations, and manufacturing processes pertinent to the life cycle of all weapon systems, thereby enabling enhanced system performance, reduced acquisition and Operation and Sustainment (O&S) cost, and increased system readiness through an increasing agile and responsive industrial base. The Government is seeking to facilitate optimal application of S&T/ Research, Development, Test and Evaluation (RDT&E) funds in developing technologies capable of addressing these areas of emphasis.

Section 815, Amendments to Other Transaction Authority, of the National Defense Authorization Act (NDAA) for Fiscal Year 2016, inserted Section 2371b, Authority of the DOD to carry out prototype projects. Section 2371b (a) authorizes the Secretary of a military department to carry out prototype projects that are directly relevant to (i) enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the DOD, or (ii) improvement of platforms, systems, components, or materials in use by the armed forces. The Government must ensure that, when an agency enters into an OTA for a prototype project under this authority, nontraditional defense contractor(s) participate to a significant extent in the prototype project; or at least one third of the total cost of the prototype project is paid out of funds provided by parties to the transaction other than the Federal Government.

The AMRDEC WDI Directorate, Missile Development Division and the AMRDEC Engineering Directorate Manufacturing Science and Technology Division, ManTech Branch, desires to include industry, academia, and not-for-profit partners in its RDT&E efforts to develop, test and validate advanced weaponry components, systems, manufacturing technologies, techniques, and processes in support of US Army and DOD aviation and guided missile weapon systems, through the establishment of a Section 815 Prototype OTA with a new or existing consortium. The AMRDEC's mission is to deliver collaborative and innovative aviation and missile capabilities for responsive and cost effective research, development and life cycle cost engineering solutions. The WDI Directorate, Missile Development Division, Missile System S&T Enterprise is centered around addressing user needs through focused and financially responsible advancement of missile system technologies in the capability areas of Air Defense, Fire Support, Ground Tactical, and Aviation Missiles, and by sustaining Pervasive & Emerging Technologies with multiple aviation and missile applications. AMRDEC's Engineering Directorate Aviation and Missile ManTech branches are the primary Army organizations whose mission is the maturation, risk reduction and affordability enhancement of advanced manufacturing technologies and processes in support of aviation and missile commodities. Major aviation and missile commodity technology areas undertaken in this OTA would include:

- Aviation - platforms/materials/structures, power systems, engines/propulsion systems, drives/rotors, mission systems, avionics/navigation, sensors, networks, data link and communication, survivability, sustainability, autonomy, manned/unmanned teaming (MUMT), unmanned aerial vehicle (UAV), component cyber security and aviation ground support equipment/systems (AGSE).

- Missile - target detection/acquisition/tracking sensors, missile electronics, seekers to defeat moving targets and air defense threats, guidance/control for improved precision and GPS-denied precisions, lethality mechanisms, warheads, fuzes, payloads, radar, datalink and communication, materials and structures, power systems, aerodynamics, navigation systems, modeling and simulation, energetics, component cyber security, propulsion systems for increased range and decisive effects, missile launchers, and support equipment.
Furthermore, preservation of aviation and missile system overmatch effects in theater will require maturation and implementation of enabling/disruptive technologies and manufacturing processes. These technologies enable step-function and/or evolutionary system performance improvement, while enhancing system affordability and sustainment. As such, example enabling/disruptive technologies to be considered and/or undertaken in such an OTA would include (but are not limited to):

- Innovation enablers, additive manufacturing, high energy creation and storage systems, directed energy, advanced materials/processes, advanced manufacturing techniques, manufacturing cyber security, modeling and simulation, virtual prototyping, robotics, automation, high temperature materials, lightweight & hybrid materials, flexible electronics, reclamation/repair technologies, and open system architectures for enhanced manufacturing productivity (digital manufacturing and Industrial Internet of Things (IIoT)).

Identification, development, maturation and implementation of technology areas as described above is imperative to continued sustainment of aging Army aviation and missile legacy systems, and to meet the National Defense needs for Army missile technologies, aviation technologies, and their integration into state-of-the-art weapon systems. Furthermore, utilization of these technologies will aid in addressing affordability concerns associated with future system development. Lastly, utilization of "smart manufacturing" and "factory of the future" principles will provide the DOD with an agile and responsive industrial base, increasingly immune to the challenges of economic, administrative and political change associated with weapon system manufacturing and production. Original Equipment Manufacturers (OEMs) and the supply base will remain flexible and adaptable to production rates, system configurations and resources, offering increased value to the government. Execution of such an OTA will offer the AMRDEC and the DOD the ability to reach non-traditional technology innovators and small business entities, as well as the potential to leverage governmental and private sector research and development resources to maximize return on investment for defense/military market based products.

Historically, the DOD invests approximately $200M annually to advance guidance weapon systems, and manufacturing technologies, techniques and processes in support of the US Army and Department of Defense (DOD) Weapon Systems. This includes AMRDEC's Missile Development Division investments of $100M annually to enhance the Army's capacity to provide leap ahead guided missile technology to the warfighter, improve current guided missile legacy systems, and determine technology/system vulnerabilities to reduce program risk. Also included in the overall DOD estimate is $80-100M to advance manufacturing technology in support of legacy and future systems. Funded avenues are inclusive of Missile S&T, RDT&E, S&T Budget Activity 2 and 3, Army ManTech, OSD ManTech, Small Business Innovative Research (SBIR), Small Business Technology Transfer (STTR), Foreign Technology (and Science) Assessment (FTAS), Rapid Innovation Fund (RIF), and customer RDT&E funding. These resources focus on process prototyping and pilot demonstration to develop, modify or enhance manufacturing technologies for the Army's aviation and missile systems. Many of these projects have been sole sourced for reasons related to restrictive business arrangements associated with intellectual property, internal investment, and risk. On behalf of the DOD, the AMRDEC desires to attract more non-traditional, technologically innovative suppliers which requires negotiable terms and conditions and a simpler, more expedient acquisition process. It is anticipated that the Government will seek to establish an OTA in the range of $250-500M in support of the RDT&E technology areas and major aviation and missile commodity technology areas outlined above.

It is anticipated that industry members may propose forming a consortium that would seek to work with the Government, through an OTA in the above major aviation and guided missile technology areas, advance manufacturing processes/techniques, and enabling/disruptive technologies areas for military applications. Any company, university, or research organization is eligible to join the consortium. The Government is seeking interested parties that are willing to join and/or establish a consortium with collective expertise in the area of guided weapon system research, design, and development, rapid prototyping, and advanced aviation and
missile manufacturing technologies, techniques, and processes in support of US Army and DOD aviation and missile weapon systems.

The Government anticipates responses from this announcement from interested parties, with an eligible entity or group of entities, to include industry, academic, non-profit, and not-for-profit partners, for RDT&E efforts to support the US Army and DOD. Responses are due 28 July 2017, and must be sent to Ms. LaMeshia Billington, Contracting Officer, via email at lameshia.r.billington.civ@mail.mil. NO TELEPHONE INQUIRIES WILL BE ACCEPTED. Responses should contain the interested parties' experience and capability information. In addition, if any existing consortium wishes to respond as an entity, the response shall include the consortium name, vision, mission statement, goals, membership (indicating traditional and nontraditional defense contractors), success criteria, metrics, management framework, articles of collaboration/by-laws, Consortium Member Agreement (CMA), accounting practices, fee structure, and other information which the respondent considers of assistance in developing successful Government/academia/industrial partnerships. In addition, the interested parties shall provide specific experience in the technology areas listed in this notice along with a description of their capabilities for the categories under which they have experience.

Electronic responses are to be in Adobe PDF or Microsoft Word format using a size 12 font with one inch margins. Adobe PDF format is preferred. Responses should, at a minimum, provide the following:

1. A cover letter

2. A cover page labeled with the heading, "Research, Development, Test and Evaluation (RDT&E) To Advance Guided Weapon Systems, and Aviation and Missile Manufacturing Technologies, Techniques and Processes In Support of US Army and Department of Defense (DOD) Weapon Systems", name of company, name of corporate point of contact (POC), name of technical POC, telephone number for each POC, full mailing address, e-mail addresses for each POC, CAGE Code, and any other pertinent information.

3. No more than twenty (20) pages of technical information including:
   (a) Narrative describing how the specified technical requirements would be addressed and fulfilled
   (b) Corporate competencies and past performance experience with regard to the research, development, maturation, and advance manufacturing processes of the major aviation and missile commodity technology areas listed above in the special notice, including relevant history of ability to develop and integrate similar technologies.
   (c) An indication as to whether the technology is sufficiently mature to build and demonstrate, or whether additional development would be more appropriate prior to a subsequent build.
   (d) Describe any Independent Research and Development (IRAD) programs applicable to this announcement with potential benefit to Government developed, and/or modified commercial systems, for applications such as this.
   (e) Describe experience gained by working on projects that span the three services and the other defense agencies, as well as affiliations, associations, and specific involvement in and with the federal and non-federal research and development, testing and engineering community, sufficient to demonstrate a well-established presence in that community.
   (f) Describe experience in investigation, maturation, and implementation of advanced guided weapon systems and aviation and missile manufacturing techniques and processes, efforts to enhance/bolster deficient industrial base sectors, and efforts to accelerate technology transition.

All pages shall be submitted as a single (.doc or .pdf) file. Proprietary information, if any, should be minimized and MUST BE CLEARLY MARKED. All submissions become Government property and will not be returned.

This Special Notice is for information and planning purposes only, and shall not be construed as an invitation for
bid, request for quotation, request for proposal, or a commitment by the U.S. Government. The U.S. Government does not intend to award a contract on the basis of this announcement. All information is to be submitted at no cost or obligation to the Government. The Government is not obligated to notify respondents of the results of this announcement. The Government reserves the right to reject, in whole or in part, any private sector input, as a result of this announcement. If a formal solicitation is generated at a later date, a separate solicitation notice will be published. Interested parties are responsible for adequately marking proprietary or competition sensitive information contained in their response. No sensitive or classified information will be discussed. Foreign-owned, controlled, or influenced firms are advised that security restrictions may apply that may preclude their participation in these efforts.

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Redstone Arsenal, Alabama 35898-5090
United States

**Primary Point of Contact.:**
LaMeshia R. Billington,
Contracting Officer
lameshia.r.billington.civ@mail.mil
Phone: 2568765674

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**Opportunity History**
- **Original Synopsis**
  
  May 24, 2017
  
  5:25 pm