# UNITED STATES SPECIAL OPERATIONS COMMAND (USSOCOM) SPECIAL OPERATIONS RESEARCH, DEVELOPMENT, & ACQUISITION CENTER

## DIRECTORATE OF SCIENCE AND TECHNOLOGY BROAD AGENCY ANNOUNCEMENT (BAA)

**FOR** 

LONG RANGE SNIPER BALLISTIC SOLUTION SYSTEMS
H92222-11-SNIPER BAA
FY 2011 – FY 2012

**Issued By: USSOCOM** 

**SORDAC Directorate of Procurement (SORDAC-KR)** 

7701 Tampa Point Blvd, MacDill AFB, FL 33621 Attn: Dorothy Lewis, Contracting Officer lewisd@socom.mil 813-826-3005

Traci Dandeneau, Contracting Specialist traci.dandeneau@socom.mil 813-826-7517

June 2011

I. Introduction: READ THIS DOCUMENT THOROUGHLY AND FOLLOW ALL INSTRUCTIONS CAREFULLY. NON-CONFORMING OFFERS WILL BE REJECTED WITHOUT CONSIDERATION. This publication constitutes a broad agency announcement (BAA) as contemplated in Federal Acquisition Regulations (FAR) part 6.102(d)(2) and 35.016. Awards made under this BAA will be considered for research and development efforts that include experiments and tests, feasibility studies, technology evaluations, integrated technology evaluations, prototypes, operability, modeling, computational analysis, engineering and manufacturing development, simulations and military utility assessments. This includes evaluation of innovative or unique configurations, uses of commercial items and processes, or concepts that are offered for further investigation for DoD applications. This BAA will remain open through 30 September 2011 unless superseded, amended, or cancelled. Proposals may be submitted any time during this period subject to the proposal submission process described in this BAA.

#### II. General Information:

- a. Agency United States Special Operations Command (USSOCOM)
- **b. Center** Special Operations Research, Development, and Acquisition Center (SORDAC)
- c. Program Office Directorate of Science and Technology
- **d. BAA Title** Broad Agency Announcement (BAA) for Long Range Sniper Ballistic Solution Systems
  - e. Solicitation Number BAA Number H92222-11-SNIPERBAA
  - f. Closing Date -September 30, 2011
- g. Contracting Officer/Contracting Specialist Dorothy Lewis; email <a href="mailto:lewisd@socom.mil/">lewisd@socom.mil/</a> Traci Dandeneau; email <a href="mailtraci.dandeneau@socom.mil">traci.dandeneau@socom.mil</a>. Proposal information will be sent to USSOCOM SORDAC-ST, Howard Strahan; email howard.strahan@socom.mil
- h. Technology Areas of Interest Areas of Scientific/Technical Importance and Interest are identified in Section VIII.
- **i. Instrument Types** Awards may take the form of contracts, cooperative agreements, and/or other transactions as appropriate and at the discretion of the Government.
- **j. Award Information** The award and period of performance of each selected proposal will vary depending on the research area and the technical approach to be pursued by the selected offeror. The evaluation and inclusion of options in any contract award will not obligate the Government to exercise the options at any time during contract performance.
  - k. Classified Proposals -Only unclassified proposals will be accepted
- **I. Business Size Standards** The North American Industry Classification System (NAICS) code for this announcement is 541712 with a small business size standard of 500 employees.

- m. Eligibility Information This solicitation is unrestricted. All responsible sources from industry and academia will be considered. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals. However, no portion of this BAA is set-aside for small business, small disadvantaged businesses, or HBCU or MI participation. Foreign or foreign-owned offerors are advised that their participation, while not precluded, is subject to foreign disclosure review procedures.
- n. Proposal Consideration All responsible offerors may submit a quad chart and white paper in response to this solicitation which will be considered. In order to be considered for award, contractors must be registered in the Contractor Central Registration (CCR), complete Online Representations and Certifications via ORCA at the <a href="https://www.bpn.gov">www.bpn.gov</a>, must be considered responsible within the meaning of FAR 9.1, have a satisfactory performance record and otherwise be eligible for award based on federal law and regulation.
- III. Disclaimers/Notifications: This announcement does not include technical, engineering, and other types of support services. USSOCOM SORDAC-ST reserves the right to award segments of a proposal or all of a proposal or none of the proposals received in response to this announcement throughout its term. All awards are subject to the availability of funds which includes proposal affordability considerations, funding constraints, and program funding priorities. Offerors will not be reimbursed for proposal development costs. Technical and cost proposals, or any other material submitted for evaluation purposes under this BAA will not be returned. In general terms, proposals will be most heavily evaluated based on technical merit and demonstrated potential toward advancing and/or improving the scientific research and technical interests of USSOCOM SORDAC Program Executive Offices (PEOs) through a peer or scientific review. This review may include one or more individuals and possibly collaboration with other USSOCOM PEOs, commands and defense and intelligence agencies where opportunities for mutual benefit may exist. Other considerations that may either preclude or enhance award consideration may include, but are not limited to: 1) changes in program office and command priorities or realignment of programs, 2) competing program priorities, 3) proposal prioritization process, 4) proposal cost realism, 5) proposal funding provided by other organizations, 6) other technical constraints/considerations, and 7) changes in mission requirements or objectives. Notification is hereby provided that contractor support personnel may be used to facilitate the proposal review and technical evaluation process.
- **IV. Proposal Disclosures/Data Rights:** It is the policy of USSOCOM to treat proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation. The contractor shall mark each page of its proposal that contains proprietary information. An offeror may provide with its proposal assertions to restrict use, release or disclosure of data and/or computer software that will be provided in the course of contract performance which must be readily identified within the proposal. The rules governing these assertions are prescribed in the Department of Defense FAR Supplement clauses 252.227-7013, 7014 and 7017 and may be accessed at <a href="http://farsite.hill.af.mil/VFDFARA.HTM">http://farsite.hill.af.mil/VFDFARA.HTM</a>.
- V. Research Opportunity Description: SORDAC is interested in receiving proposals which offer potential for improvement in advancing operations and interests in support of SORDAC mission requirements as further described in Section VIII herein.

#### VI. Proposal Coordination and Submission Process:

a. A Quad Chart and White Paper is intended to gain a preliminary assessment of the Government's interest prior to incurring the additional expense associated with a full proposal

submission. Those Quad Charts and White Papers found to be consistent with the intent of this BAA may be invited to submit a full technical and cost proposal. This does not obligate the Government to award a contract. Based on the initial assessment, offerors may be instructed to prepare a full proposal or may be informed that the prospective science or technology is not in alignment with current program interests. This is intended to reduce unnecessary handling of proposals and proposal preparation costs. All responsible organizations may submit a white paper which shall be considered.

- b. Prototype Demonstration. Offerors who have prototypes will be able to demonstrate their capabilities to support the claims in the white paper, establish the technology readiness level, and receive SOF sniper feedback during the range firing. The offeror will demonstrate the capability and when adequate safety certification can be established, offerors will be given the opportunity to have SOF snipers operate their system. The prototype demonstration opportunity will be after review of initial submissions. The specific range date and location will be determined after the closing of the BAA.
- c. Proposals Proposals submitted under this BAA will be unclassified. All proposal submissions will be protected from unauthorized disclosure in accordance with applicable federal law and DOD/USSOCOM regulations. *Note offerors are notified that only full proposals will be subjected to a complete proposal technical evaluation based on the criteria stated herein.*
- d. Proposal Content and Formats See below. Note that requests for alternative proposal formats may be appropriate and should be coordinated with the SORDAC program office technical point of contact USSOCOM SORDAC-ST; Howard Strahan; phone 813-826-1267; email howard.strahan@socom.mil.

#### i. Quad Chart

Number of pages – 1

Font – Times New Roman, 12 Point

Upper left quad – Pictorial data or representation

Upper right quad – Description of effort and perceived benefits

Lower left quad – Summary cost data; labor, materials, subcontracting, travel, profit

Lower right quad – Project schedule and milestones

ii. White Papers

Number of pages – 5 pages excluding cover page. Pages should be numbered.

Cover Page – Labeled "WHITE PAPER" and shall include: 1) BAA number, 2) proposal title, 3) designated SORDAC program office, and 4) company information to include address, phone, fax and technical contact with email address.

Technical Concept/Narrative – The narrative must include a description of the effort and applicability to the identified SORDAC program area mission and the objectives/benefits to be

#### **FOUO**

derived as a result of the effort. This should include: 1) technical approach, 2) effort's perceived benefit, 3) technical risk areas, 4) performance period, 5) pricing ROM, and 6) any other technical data/information to be conveyed for consideration.

Paper Size - 8.5 x 11 inch paper

Margins – 1"

Spacing – Single or double

Font – Times New Roman, 12 Point

Microsoft Windows or .PDF format

Submission – Electronic submission to contracting officer.

iii. Proposals

Volume I – Technical. Number of pages – Not-To-Exceed 20 pages excluding cover page. Pages should be numbered.

Volume II - Cost Proposal. No page limit.

Technical Proposal Content – Cover Page labeled "VOLUME I - TECHNICAL PROPOSAL" and shall include: 1) BAA number, 2) proposal title, and 3) company information to include address, phone, fax, technical and administrative points of contact with email addresses. The proposal content should provide a complete description of the effort and applicability to the identified SORDAC program area mission and the objectives/benefits to be derived as a result of the effort. This should include: 1) table of contents, 2) technical approach and management approach, 3) statement of work, 4) complete listing of data and other deliverables, 5) resume/bios of key technical personnel, 6) complete list of subcontractors and rationale for use, 7) effort's perceived benefit, 8) technical risk areas, 9) technical payoff, 10) performance period, 11) differentiation between proposed primary effort and options, 12) Government Furnished Information or Equipment requirements (should be minimal), 13) project schedule and milestones, and 14) description of relative facilities and certifications (e.g., ISO 9000), core corporate competencies, experience, and availability of resources.

Cost Proposal Content - Cover Page labeled "VOLUME II – COST PROPOSAL" and shall include: 1) BAA number, 2) proposal title, 3) designated SORDAC program office, and 4) company information to include address, phone, fax, technical and administrative points of contact with email addresses. A detailed cost breakdown (i.e., engineering or bottoms-up estimate) correlating to the work effort that includes: 1) direct labor categories, rates, hours and extended costs, 2) identification and application of indirect rates (i.e., OH, G&A, Fringe, COM), 3) consolidated Materials List, 4) detailed travel breakdown, 5) subcontracting costs, 6) Other Direct Cost to include equipment or facilities, and 7) Fee/Profit mark-up rate and application base.

**VII.** Evaluation Criteria – White papers and proposals will be evaluated against the criteria stated below. Proposals are not evaluated against each other since there is no common performance work statement; however, funding constraints (i.e., funds availability) may require

#### **FOUO**

an award prioritization process and affordability considerations may enhance or preclude award. Award decisions will be based on application of the evaluation criteria within each program area based on sniper peer and technical or scientific review. White papers and proposals may be evaluated by one or more than one individual possessing necessary qualifications and experience in the research area, which may include evaluation by contractor support personnel possessing specialized expertise. White papers and proposals submitted under this BAA are protected from unauthorized disclosure. All personnel evaluating white papers and proposals are required to sign a non-disclosure agreement prior to proposal receipt or review. All proposals are subject to negotiation to include technical, schedule and cost considerations.

- a. Relative Order of Importance: The Technical area (Volume 1) is significantly more important than the Cost area (Volume 2). Technical Factors 1 and 2 are of equal importance. Factors 1 and 2 are significantly more important than factors 3, 4, and 5 which are all of equal importance.
  - 1) TECHNICAL MERIT: Overall scientific and/or technical merit of the proposal.
  - 2) RELEVANCE/IMPORTANCE: Potential contribution toward advancing Command/Program Office mission objectives and interests.
  - 3) CAPABILITY: The offeror's capabilities, capacity, related experience, facilities, techniques, or unique combination of these which are an integral factor for achieving proposal objectives.
  - 4) PERSONNEL QUALIFICATIONS: The qualifications, capabilities and experience of key personnel; i.e., Principal Investigator (PI), Subject Matter Experts, Scientists, Engineers, etc., who are critical in achieving the proposal objectives.
  - 5) RISK: Technical (Technology Readiness Level (TRL-3) or greater) and schedule risk assessment and/or mitigation measures in relationship to potential payoff.

#### VIII. Identification of Technology Areas:

### LONG RANGE SNIPER BALLISTIC SOLUTION SYSTEMS (SORDAC) AREAS OF TECHNOLOGICAL AND SCIENTIFIC IMPORTANCE

Long Range Sniper Ballistic Solution Sensors and Computers: USSOCOM warfighters require technologies that provide the capability to measure continuously or sample winds at multiple ranges, from multiple directions and at varying speeds all the way from muzzle to target. A discrete vs. continuous sampling (average) of the wind vector is acceptable. The measure of effectiveness being the increase in first round hits at extended ranges. Technologies that measure or receive input from other devices for range, angle of fire, cant, temperature, humidity, air density, angular rate of moving targets. The technology must rapidly and accurately integrate the sensor data and compute a ballistic solution based on individual weapon and ammunition resulting in hits on stationary personnel size targets at 1500m and moving targets to 1000m. The technology must interface with issued ballistic tools to give a range and wind correction in mils or minutes of angle (MOA) that can be applied on the shooters weapon though hold or dial on data. This capability is specifically aimed at improving sniper first round target hits on stationary personnel sized targets out to 1500m Threshold and 2000m Objective.

<u>Sniper/Designated Marksman Affordable Ballistic Solutions</u>: Technologies that provide affordable ballistic solution enhancements to meet the objectives of current SOF sniper rifles and assist the sniper in operating more effectively without the support of a spotter. The technology must be light, affordable, provide accurate hold offs compatible with current weapons and optics, and be easily trained and rapidly employed. This capability is specifically aimed at maintaining and improving sniper first round target hits out to 1000m Threshold and 2000m Objective.

<u>Enhanced Target Detection and Identification:</u> Technologies that provide enhancements for snipers to detect camouflage, gunfire, and threat optics, recognize weapons/uniforms, facial features, and visually augmented day/night vision, at extend the ranges to 1500m Threshold 2000m Objective. This capability is specifically aimed at improving the snipers ability to locate and identify targets commensurate with the rules of engagement.

<u>Enhanced Ergonomics</u>: Technologies that would significantly reduce the size, weight, and power consumption of the snipers mission equipment. Technologies that enhance the man/machine interface with the weapons system making easier, quicker and more intuitive in operation, and/or simplifying training requirements.

<u>Virtual Training</u>: Technologies to provide "virtual" training that adapts to the individual's knowledge level, reticle patterns, and scope adjustments in mils and minutes of angle while accurately modeling the effects of wind, atmospheric conditions, altitude, range, angle of fire, etc., in varying terrain and include target detection / identification. This capability is specifically aimed at maintaining and improving sniper first round target hits out to 1500m Threshold and 2000m Objective while reducing training resource requirements.