Solicitation Number: DARPA-SN-10-58 Notice Type: Special Notice Synopsis: DARPA-SN-10-58 Proposer's Day Workshop Announcement Persistent Close Air Support (PCAS) Tactical Technology Office Defense Advanced Research Projects Agency

The Defense Advanced Research Projects Agency (DARPA) will host an unclassified Proposers' Day Workshop in support of a planned Broad Agency Announcement (BAA) for the Persistent Close Air Support (PCAS) program. The workshop will occur at 0700-1500 EST on July 23, 2010, at the Westin Arlington Gateway, 801 North Glebe Road, Arlington, VA 22203.

This Special Notice is issued solely for information and program planning purposes. The Proposers' Day Workshop is intended to introduce to the research community the PCAS program vision, goals and objectives, and opportunities associated with the development of interdisciplinary teams to respond to an anticipated Broad Agency Announcement (BAA). The workshop does not constitute a formal solicitation for proposals or proposal abstracts. Attendance at the workshop is voluntary and is not required to propose to any potential related Broad Agency Announcements or potential research solicitations on this topic. DARPA will not provide reimbursement for any costs incurred to participate in this workshop.

The Persistent Close Air Support (PCAS) program will demonstrate dramatic capability improvements in the Close Air Support (CAS) mission. The program goal is to provide Joint Terminal Attack Controllers (JTAC) the ability to visualize, select and employ weapons at the time of their choosing from an optionally manned/unmanned A-10 demonstration aircraft. This technical capability will revolutionize how a JTAC is able to request and control near-instantaneous airborne fire support.

The current method of performing the CAS mission is limited by the following issues:

- The majority of CAS is coordinated by voice over the radio
- CAS platform talk-ons can be lengthy and full of errors
- Due to pilot talk-on complexity only one target set can be handled at a time
- Mission completion times can be lengthy (30-60 minutes)

- Supporting aircraft have limited loiter times due to human restrictions
- JTAC equipment is a limited integration assembly of independent purpose equipment
- Estimating collateral damage can be difficult

Within the PCAS program, DARPA seeks to: 1) Develop autonomous flight controls for an optionally manned/unmanned A-10 demonstration aircraft that will employ weapons based on a JTAC's direct request 2) Identify and mature the critical enabling technologies necessary to enable JTAC interfaces at the tactical level to be able to accurately visualize and employ weapons on target from the A-10 aircraft, and 3) Conclude the program with a live-fire demonstration in which the JTAC commands weapons release from an optionally manned/unmanned A-10 demonstration platform.

To facilitate maximum participation DARPA will host a PCAS Proposers' Day Workshop. The workshop will: (a) Introduce the research community (industry, academia, and Government) to the PCAS program vision and objectives; (b) Explain the mechanics of a DARPA program and the milestones and metrics of this potential effort; and (c) Promote tearning arrangements among organizations having relevant expertise, facilities, and capabilities to execute an interdisciplinary research program responsive to the PCAS program goals. The workshop will include overview presentations by Government personnel and a poster session to facilitate interaction and team building among the session participants. Potential participants should note that formation of teams with sufficient expertise to address all technical areas is critical. Workshop participants are strongly encouraged to prepare posters describing areas of capabilities in order to facilitate discussions during the poster session.

There is no fee to attend the PCAS Proposers' Day Workshop. Registration for the workshop is limited by the venue capacity. To maximize the number of organizations participating, there is a limit of three persons per organization. Early registration is strongly recommended. The poster session will be limited to 1 poster per organization with a cut-off of 100 posters total. The registration cutoff date is 4:00PM ET, July 19, 2010.

The PCAS Proposers' Day Workshop will be unclassified but restricted in attendance to U.S. citizens and permanent residents representing U.S. entities due to the inclusion of information controlled under the International Traffic in Arms Regulations (ITAR). Workshop attendees must check-in at the registration desk located outside the conference room area at the Westin Arlington Gateway on the second floor of the hotel. Workshop attendees will not be admitted to the Workshop without proper proof of U.S. citizenship or permanent residency. Also, workshop attendees will not be admitted unless they have registered prior on the workshop website listed below.

Workshop details including registration, poster session, meeting location, and lodging are provided on the registration website.

Workshop Details: Time: July 23, 2010, 7:00am-3:00pm Location: Westin Arlington Gateway 801 North Glebe Road Arlington, VA 22203 (703) 717-6200 (Hotel Operator) Registration Website: <u>http://www.sa-meetings.com/PCAS</u>

For any questions related to this workshop please e-mail DARPA-SN-10-58@darpa.mil.