

## News Release

### A new way of doing research at AFRL

The Air Force Research Laboratory Directed Energy Directorate announces the imminent award of a contract under the Applied Research Regarding Operationally Novel and Unique Technology (ARGONAUT) Broad Agency Announcement (BAA). The ARGONAUT BAA will offer the Directorate maximum flexibility in research while complying with the new Systems Engineering (SE) rigor established in, Department of Defense Instruction (DoDI) 5000.02, Operation of the Defense Acquisition System.

Use of a Broad Agency Announcement is a technique for United States government agencies to contract for basic and applied research and is directed toward advancing the state of the art or increasing knowledge or understanding. Proposals received are evaluated through a peer or scientific review process, rather than the more traditional competitive request for proposal evaluation system.

Future ARGONAUT BAA proposals will be requested in the following technical areas and will allow for open calls:

*Space Situational Awareness (SSA) Programs*, identifying technology gaps future AFRL research could address through better understanding of warfighter needs; developing hardware and software tools for the purpose of integrating SSA capabilities and architectures.

*Battlespace Environment Programs*, developing capabilities to specify, forecast, mitigate, and exploit battlespace environmental impacts on DoD assets to enable next-generation and generation-after-next space systems to include system design for radio frequency, infrared, visible, and ultraviolet propagation to and from space platforms, as well as the propagation of laser light to and from space.

*Active and Passive Satellite Imaging Concepts*, developing, analyzing, and demonstrating active and passive concepts for the imaging of satellites including those in low earth orbit, medium earth orbit, geosynchronous earth orbit, and elliptical orbits.

*Optical Components Engineering Lab and Optical Component Analysis Research and Development*, developing and integrating large optics for High Energy Laser (HEL) applications and innovative optical metrology techniques, including both lightweight aerospace structures and terrestrial optical systems.

*Modeling, Simulation and Analysis*, developing algorithms, interfaces, and computer codes to model the diverse needs of the Directed Energy Directorate.

*Directed Energy (DE) Applications*, conceptualizing, defining requirements, and developing preliminary designs and options for integrated DE concepts; advance concept maturity and demonstrate technology in preparation for transition to the warfighter.

*Directed Energy Technology Demonstrations*, providing concept development, analysis, testing, and execution related to laser and high power microwave weapons and contributing to advances in subsystem technologies such as beam control, prime power, thermal management, and fire control.

*Wargaming*, developing, executing and analyzing the Advanced Concepts Event (ACE), which is the Air Force Research Laboratory's annual conceptual wargame; organizing and coordinating with Air Staff, other DoD agencies and military departments, and military contractors to provide an experimental wargaming environment complete with Red and Blue entities for concept participants.

*Directed Energy Power and Thermal Management*; developing a basic design approach for directed energy systems that optimizes integrated prime power and thermal management concepts.

Calls for proposals will be announced through the Federal Business Opportunity program (<http://www.fbo.gov>). Calls will contain specific descriptions of the research effort to be addressed, anticipated period of performance, information peculiar to the specific research technical area, and the estimated funding profile for the Call. The period of the BAA is five years, fiscal year (FY) 2010 through fiscal year 2014. The first FY2010 proposal awards will occur in July. If you are interested in offering a proposal, consult the Federal Business Opportunity website stated above.

Accomplishing disciplined research in the announced areas will robustly support the Directed Energy Directorate mission of advancing the state of the art in high power microwave technology and laser development. Research will encompass concept development, analysis, testing, and execution, and contribute to advances in subsystem technologies such as beam control, prime power, thermal management, and fire control, while successfully transitioning applicable technologies to end-user customers.

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