

7:00 am Conference Registration & Continental Breakfast

Preliminary Session: Opportunities for Collaboration

In this session we will present the Fiscal Year 2007 President's Budget Request for the DoD S&T program. We will also highlight specific programs that will provide conference attendees opportunities to engage in collaborative efforts with the DoD and international S&T community. Presentations will provide information on technology areas of high interest to the DoD, time lines, and points of contact for the submission of proposals. Opportunities for both industry and academia will be covered. A wide range of programs, from the larger technology demonstrations funded by the Advanced Concept Technology Demonstration program, that lead to the evaluation of military utility of advanced technology by a Combatant Commander; to the more focused technology development efforts that are funded by the Test & Evaluation/Science & Technology (T&E/S&T) program will be covered. Opportunities for proposing commercial off-the-shelf technology to meet current military needs will be addressed by the Quick Reaction Fund/Rapid Reaction Fund program presentation. Specific scientific research areas having high interest to the DoD will be highlighted along with information on the process universities should use to submit proposals. The session will be rounded out with a presentation on opportunities for collaborative international research and technology development.

Preliminary Session Chairman - Mr. Robert W. Baker, Deputy Director, Plans & Programs, DDR&E

- 8:15 am **FY 2007 President's Budget Request for DoD S&T Program**
Mr. Robert W. Baker, Deputy Director, Plans & Programs, DDR&E
- 8:45 am **Advanced Concept Technology Demonstration (ACTD) Program**
Mr. Mark Peterson, Head, Program Resources & Integration, ODUSD (Advanced Systems & Concepts)
- 9:15 am **T&E/S&T Program**
Mr. Mark Brown, Principal Scientist, Defense Test Resource Management Center, Test & Evaluation/Science & Technology Program
- 9:45 am BREAK
- 10:30 am **Quick Reaction Fund/Rapid Reaction Fund**
Mr. Ben Riley, Director, Rapid Reaction Technology Office/Chairman Combating Terrorism Technology Task Force
- 11:00 am **DoD Basic Research Program with a Focus on Academia**
Dr. William Berry, Acting Deputy Under Secretary of Defense for Laboratories and Basic Sciences
- 11:30 am **International Collaboration**
Dr. Tony Sinden, Counselor for Defence Science & Technology at the British Embassy
- 12:00 pm LUNCHEON & EXHIBITS OPEN

CONFERENCE OPENING

- 1:00 pm **Call to Order** - Dr. A. Louis Medin, Chairman, NDIA S&ET Division
NDIA Welcome - Major General Barry D. Bates, USA (Ret), Vice President, Operations, NDIA
- 1:15 pm **Keynote Address**
Admiral Edmund P. Giambastiani, Jr., USN, Vice Chairman, Joint Chiefs of Staff

Session I: Navy Future S&T Challenges

This session will address the Department of the Navy's S&T Investment Strategies with specific focus on upcoming BAAs and opportunities for alternative solutions from industry and academia. Following an overview of the Navy's S&T program, speakers will address key S&T areas, including basic research that will support the development and transition of technologies to enable the Navy to meet the uncertain and dynamic global security environment. Discussions will include overviews of the Navy's S&T efforts related to FORCEnet, the Navy's vision of Network Centric Operations, with specific emphasis on Maritime Domain Awareness and a related ACTD, and an overview of the Advanced Capability Electric Systems Program. University and DARPA involvement in these S&T initiatives will be highlighted by the speakers.

Co-Chairs: Dr. Kenneth A. Potocki, APL LWS Program Manager, Space Department, John Hopkins University
Mr. E. Terrence Dailey, Deputy Director, Program Integration, Software Engineering Institute
Ms. Cathy Nodgaard, Associate Director, SBIR, ONR

- 2:00 pm **Naval Future S&T Challenges Overview: S&T Program Influences, Priorities and Program Rationale**
Dr. Joseph Lawrence, Director of Transition, Office of Naval Research
- 2:30 pm **Future Naval Capability: FORCEnet**
Dr. Bobby Junker, IPT Lead, C4ISR Department Head, Office of Naval Research
- 3:00 pm BREAK
- 3:45 pm **Maritime Defense Awareness: Overview**
Dr. Gary Toth, Maritime Domain Awareness Program Officer, Office of Naval Research
- 4:15 pm **Comprehensive Maritime Awareness ACTD**
Dr. Chris Dwyer, Maritime Domain Awareness Program Manager, Naval Research Laboratory
- 4:45 pm **Advanced Capability Electric Systems**
Mr. Scott Littlefield, PEO Ships Science & Technology Director, Office of Naval Research
- 5:30 pm -
7:30 pm RECEPTION in Exhibit Hall

Wednesday, April 19, 2006

- 7:30 am Conference Registration & Continental Breakfast

Session II: Air Force Future S&T Challenges

The Air Force is developing capabilities that are key components of DoD's joint capabilities. The Air Force future is focused on achieving persistent C4ISR, global mobility, and rapid strike. The Air Force Research Laboratory (AFRL) is the single organization within the Air Force that focuses on science and technology (S&T) to help the Air Force realize this future. The AFRL is "leading the discovery, development, and integration of affordable war fighting technologies for our air and responsive space force." This session provides a perspective on the key S&T investments the Air Force is counting on to meet the current and future mission challenges. This perspective is followed by more detailed presentations on key areas of AFRL's S&T investments: Intelligence, Reconnaissance and Surveillance (ISR), directed energy weapons, space and basic research.

Co-Chairs: Dr. James McCormack, Technical Director (Technology Integration & Applications), Northrop Grumman Information Technology
Mr. Edward Palo, Chief Engineer, Center for Air Force C2 Systems, MITRE Corporation
Colonel Mark Stephen, Associate Deputy Assistant Secretary (Science, Technology & Engineering), HQ USAF

- 8:30 am **AF Future S&T Challenges Overview**
AF S&T Program Influences, Priorities, and Program Rationale
Mr. Les McFawn, Executive Director, Air Force Research Laboratory (AFRL)
- 9:00 am **AF S&T Challenges for ISR**
Dr. Paul McManamon, Chief Scientist, AFRL Sensors Directorate
- 9:30 am **AF S&T Challenges for Directed Energy**
Dr. Bruce Simpson, Director, AFRL Directed Energy Directorate
- 10:00 am BREAK
- 10:45 am **AF S&T Challenges for Responsive Space**
Colonel Mike Leahy, USAF, Director, AFRL Air Vehicles Directorate
- 11:15 am **AF Opportunities for Basic Research**
Colonel Jeffrey Turcotte, USAF, Deputy Director and Commander, Air Force Office of Scientific Research
- 12:00 pm LUNCHEON/EXHIBITS
Luncheon Speaker:
Dr. Fred Ambrose, Intelligence Technology Innovation Center
- 1:30 pm **A DoD Perspective on S&T Areas of Emphasis**
Honorable John Young, Director, Defense Research & Engineering

Session III: Army Future S&T Challenges

Our Army is at war... it is engaged in a Global War on Terrorism against an enemy unlike any previously faced. Success requires the enhancement of our current forces while continuing to transform the Army. The Army's Science and Technology program strategy is to develop the technology options that will ensure that the Army is relevant and ready today and remains relevant tomorrow. In this portion of the conference, an overview will be provided of the Army S&T Program challenge to develop technologies that will enhance the Current Force while concurrently enabling the Future Force. Battle Command capabilities are paramount in order to enable the Future Force. In addition, the session emphasizes the importance of networked systems, force protection and unmanned systems. In these discussions the speakers will emphasize their work with DARPA to provide the best technology to meet our soldier's needs. The final important area to be discussed is the role of the Army's basic research program... expanding and stimulating the human imagination to extend the boundaries of the possible. Creating future Army technological advances will be discussed and the role of academia and industry will be emphasized.

- Co-Chairs:** Dr. A. Michael Andrews II, VP & CTO, L-3 Communications
Brigadier General R. Mark Brown, RDECOM DCG, SOSI
Dr. John P. Solomond, Program Manager C4ISR, Booz Allen Hamilton
- 2:00 pm **Army S&T Challenges for Current and Future Forces**
Ms. Mary Miller, Director for Technology, Office of Assistant Secretary of the Army Futures S&T Challenges Overview
- 2:30 pm **Network Enabled Capabilities**
Mr. Gary Martin, Director, CERDEC, RDECOM
- 3:00 pm BREAK / LAST CHANCE TO VIEW EXHIBITS
- 3:45 pm **Force Protection**
Dr. Marilyn Freeman, Executive Director for Research and Technical Director, TARDEC
- 4:15 pm **Unmanned Systems with Net Centric Operations**
Colonel Cindy Bedell, USA, Director Technology Integration Assessment and Futures, Army RDECOM
- 4:45 pm **Next Generation Capabilities: Army Basic Research**
Dr. John Parmentola, Director for Research, OASA (ALT)

Thursday, April 20, 2006

Session IV: Transitioning Disruptive Technologies

In this session, representatives from the scientific and engineering communities will provide their perspectives on which technologies possess the greatest potential to produce significant increases in military capability. However, transitioning these technologies into advanced war fighting capabilities continues to be a challenge and has long been a concern in both the DoD and industry. Technology transition is a complex undertaking with competing pressures on the system developer and government program manager to control program cost and schedule, while meeting system performance objectives that often depend upon successful application of the latest technologies. The incentives to transition the latest technology have become more intense because of rapid growth and globalization of technology developments. Potential adversaries may have access to these technologies to achieve their own disruptive capabilities. This session will also examine how the DoD and industry can work together to improve the technology transition process.

- Co-Chairs:** Dr. James McCormack, Technical Director (Technology Integration and Applications), Northrop Grumman Information Technology
Mr. Herb Finkelstein, Industry/Government Research Liaison Officer, Arizona State University
Mr. Robert Baker, Deputy Director, Plans & Programs, DDR&E
- 8:15 am **Army Approach to Disruptive Technologies and Transition**
Mr. Dennis Schmidt, Director, Science & Technology Integration,
Office of the Assistant Secretary of the Army for Research and Technology
- 8:45 am **Navy Approach to Disruptive Technologies and Transition**
Mr. Quentin Saulter, Directed Energy Project Officer, Office of Naval Research (Invited)
- 9:15 am **Air Force Approach to Disruptive Technologies and Transition**
Colonel Mark Stephen, Associate Deputy Assistant Secretary (Science, Technology & Engineering), HQ USAF
- 9:45 am BREAK
- 10:30 am **A New Paradigm for Technology Transfer**
Dr. Greg Raupp, Director, Center for Flexible Displays, Arizona State University
- 11:00 am **Overall DoD Perspective on Disruptive Technologies**
Mr. Alan Shaffer, Director, Plans & Programs, Office of the Director, Defense Research and Engineering
- 11:30 am **Technology Transition from an Industry Program Manager's Perspective**
Dr. Malcom R. O'Neill, former Vice President & Chief Technical Officer, Lockheed Martin
- Wrap Up & Adjourn** Dr. Raj K. Aggarwal, Vice President, Global Technology and Special Projects, Rockwell Collins
Dr. A. Louis Medin, Chairman, NDIA S&ET Division
- 12:00 pm **BUFFET LUNCHEON**