



DSB Newsletter

October, 2010



Dr. Paul Kaminski, Chairman

General Lester Lyles, USAF (retired), Vice Chairman

Mr. Brian Hughes, Executive Director

Chairman's Corner

Welcome to the Fall Quarterly Meeting.

The 2010 Summer Study on Enhancing Adaptability of our Military Forces (co-chairs Mr. Al Grasso and Dr. Bill LaPlante) came together very well. After a busy two weeks at the MIT Endicott House in Dedham, Massachusetts, the study findings and recommendations were enthusiastically received by senior leaders in AT&L. Effort on the study now shifts to finalizing the report and briefing the results to a wider audience. The chairs will continue to brief interested senior leadership in the coming months.

Alongside the Summer Study, four task forces all began meeting since the Spring Quarterly: Trends and Implications of Climate Change for National and International Security (Gen Larry Welch, Dr. Bill Howard), the Assessment of Nuclear Treaty Monitoring and Verification Technologies (Dr. Mim John, Dr. Don Kerr), the Role of Autonomy in DoD Systems (Dr. Robin Murphy, Mr. Jim Shields), and Basic Research (Dr. Craig Fields, Dr. Lydia Thomas). Likewise, three of our Permanent Task Forces are also now meeting: Defense Intel (Dr. Robert Lucky, Gen Rich O'Lear, studying Counter Insurgency Intelligence, Surveillance and Reconnaissance Operations), Nuclear Weapons Surety (Gen Larry Welch), and Survivability of DoD Systems and Assets to Electromagnetic Pulse (Dr. Mim John, Dr. Joe Braddock). In addition, the Terms of Reference for the Task Force on Predicting Violent Behavior (Mr. Larry Lynn, Dr. Anna Marie Skalka) were recently signed.

We've also had some personnel changes in the DSB Secretariat. LTC Karen Walters, USA, has moved to the Joint Staff J8. Capt Tom Bellamy, USMC, joined us for the summer as a temporary Military Assistant from the Office of Naval Research. Now, CDR Rob Medve, USN, is filling that Navy Military Assistant position.

In these days of sweeping efficiency initiatives, you can be confident that your participation is of great value to the Department. I continue to encourage your active involvement in as many DSB projects as your schedules allow.

Dr. Paul Kaminski

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Membership

The Board continues to actively solicit suggestions for highly qualified scientific and technical candidate members, with special emphasis on women and minority candidates. Prior Task Force participation offers an individual, OSD, and the Board an opportunity to determine a person's interest and suitability to Board activities and is a desirable prerequisite to membership on the Board.

Task Force Status

- **Improved Explosive Devices (IED) Study** [co-chairs: Dr. Eric Evans and LTG Paul Funk (USA, Ret.)] This follow-on task force to the first IED effort will develop strategic and operational plans and examine the goals, process and substance of those plans. It will also act as an independent sounding board to the JIEDDO by providing feedback at a quarterly interval. Sponsored by: USD(AT&L) and JIEDDO. **Task force in progress.** (CDR Medve)
- **Science and Technology Issues of Early Intercept Ballistic Missile Defense** [Co-Chairs: General Lester Lyles (USAF, Ret.) and Admiral William Fallon (USN, Ret.)]. This task force will study the feasibility of ballistic missile defense in engaging regional-level, adversary ballistic missiles in the early intercept phase of the ballistic missile's trajectory. Sponsored by USD(AT&L), USSTRATCOM, and VCJCS. **TOR signed December 2009, task force in progress.** (CDR Medve)
- **Improvements to Services Contracting.** [Chair: Dr. Jacques Gansler]. This study will assess improvements in the procurement and oversight of services by the Department of Defense. This is in accordance with Section 802 of the National Defense Authorization Act for FY 2010 (H.R. 2647, 211-212). Sponsored by USD(AT&L). **TOR signed December 2009, task force in progress.** (Maj Warner)
- **Role of Autonomy in Department of Defense (DoD) Systems** [Co-Chairs: Dr Robin Murphy and Mr. James Shields]. This study will inform the Department's plans as it introduces significant numbers of unmanned platforms. It will deliver a roadmap for realizing as rapidly and efficiently as possible the battlefield potential of autonomous systems. Sponsored by USD(AT&L). **TOR signed March 2010, task force in progress.** (CDR Medve)
- **Trends and Implications of Climate Change for National and International Security** [Co-Chairs: General Larry Welch (USAF, Ret.) and Dr. William Howard] This study will provide a comprehensive picture of the current situation and trends regarding climate change. The task force will recommend an overall structure to capture effects on U.S. government programs to aid decision making to mitigate the effects on U.S. national and African partner security. Sponsored by USD(AT&L) and AFRICOM. **TOR signed April 2010, task force in progress.** (Maj Warner)
- **2010 Summer Study on Enhancing Adaptability of our Military Forces** [Co-chairs: Mr. Al Grasso and Dr. Bill LaPlante]. This study will examine how the military can improve and enhance the adaptability of our forces and force structure to meet the challenges of the 21st century. The Summer Study will establish defining metrics and identify fundamental attributes of an architecture to enhance adaptability. Sponsored by USD(AT&L). **TOR signed April 2010, task force in progress.** (Maj Warner)
- **Assessment of Nuclear Treaty Monitoring and Verification Technologies** [Co-Chairs: Dr. Miriam John and Dr. Donald Kerr]. This study will assess the adequacy of the nation's technical tools to support monitoring and verification, both as part of the cooperative verification regimes of the treaties and through national intelligence. Sponsored by USD(AT&L), NNSA, and the DNI. **TOR signed April 2010, finalizing report.** (Maj Warner)
- **Basic Research** [Co-Chairs: Dr. Lydia Thomas and Dr. Craig Fields]. This study will assess matters relating to departmental planning and managing the defense basic research program. Sponsored by USD(AT&L). **TOR signed August 2010, task force in progress.** (CDR Medve)
- **Predicting Violent Behavior** [Co-Chairs: Mr. Larry Lynn and Dr. Anna Marie Skalka]. This study will examine governmental and non-governmental programs and best practices to establish standards, training, reporting requirements/mechanisms, and procedures for assessing predictive indicators relating to pending violence. Sponsored by USD(AT&L) and USD(P). **TOR signed October 2010, membership forming.** (Maj Warner)

Permanent Sub-Committees

- Nuclear Weapons Surety
- Advisory Group on Defense Intelligence
- Advisory Group on Electron Devices (AGED)
- Nuclear Weapons-Survivability of DoD Systems and Assets to EMP and other Nuclear Weapons Effects

Updates from Other Boards



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During 2010, the NRAC studied “The Status and Future of Naval R&D Enterprise”. In the context of the Maritime Strategy, the NRAC studied the Navy’s technical competencies which reside primarily in the Naval Warfare Centers to develop an assessment of their “as is” capability to meet the technological needs of the Navy and in particular to innovate in areas of anticipated Department of Navy technical need. This assessment included consideration of the current technical workforce, physical infrastructure, and technical planning, as well as the strategic planning for future development and investment. Further, the NRAC was asked to recommend what future technical core competencies will be required, and identify both “white space” in the current Warfare Center/ laboratory structure, as well as redundancies.

Specific tasking included:

- Assess the current technical core competencies of the Warfare Centers employed by the SYSCOMs and PEOs, as well as the stewardship provided for those competencies. Also assess the technical core competencies that are provided by the Navy UARCs. Consider technical quality of the workforce and physical infrastructure. Specifically, the scope of the study should include
 - Warfare Centers and NRL in support of SYSCOMs, PEOs, and ONR
 - MCWL in support of MARCORSYSCOM
 - To the extent practical, Navy UARCs in support of SYSCOMs, PEOs and ONR
- Identify areas where the Department of the Navy holds a leadership role in science & technology; where it is a credible fast-follower or early adopter; where it is an excellent practitioner, and where it is deficient relative to the state of the art.
- Identify future core competencies likely to be needed within the context of the Maritime Strategy, along with the Navy's current and future required position in the leadership through practitioner spectrum above. Assess the likelihood that the Warfare Centers will be able to develop these competencies under the current structure.
- Recommend approaches (within the context of constrained future budgets) to maximize the likelihood of developing the required core competencies.

The NRAC presented its findings to the Assistant Secretary of the Navy for Research, Development and Acquisition, (ASN (RDA)), Mr Sean J. Stackley on 17 September 2010. Mr. Stackley indicated that he was going to make sure that others in Naval and DoD leadership heard the message. He's asked for a "pocket briefing" to go to CNO, Commandant, Undersecretary, DDRE, and possibly OSD (AT&L). The NRAC also made similar presentations to senior Navy and Marine Corps leaders (Warfare Center Commanders) on September 22nd and a presentation to the public that drew an audience in excess of 60 persons on September 23rd, both at the Pentagon.



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Upcoming DSB Meeting Dates

- **February 23-24, 2011 – Winter Quarterly Meeting**
- **May 11-12, 2011 – Spring Quarterly Meeting**
- **August 1-12, 2011 – Summer Study Conclusion**
- **October 26-27, 2011 – Fall Quarterly Meeting**

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