



DSB Newsletter

February 2012



Dr. Paul Kaminski, Chairman

General Lester Lyles, USAF (retired), Vice Chairman

Mr. Brian Hughes, Executive Director

Chairman's Corner

Welcome to the Winter Quarterly Meeting

Our Cyber Initiative is entering into the report-writing phase. The Cyber Resiliency Metrics for Military Systems (co-chairs Mr. Jim Gosler and Mr. Lou Von Thaer), and the Cybersecurity and Reliability in a Digital Cloud (co-chairs Dr. Eric Evans and Dr. Robert Grossman) met many times over the last year and received briefings from some of the foremost authorities on specific areas of interest. The October offsite resulted in a significant understanding of the cyber issues facing the Department today.

Similarly, the Predicting Violent Behavior Task Force (co-chairs Ms. Judith Miller and Mr. Larry Lynn) is heading towards resolution. Initiated in the wake of the Fort Hood tragedy, many are eagerly awaiting the task force findings. The Role of Autonomy in Department of Defense (DoD) Systems Task Force (co-chairs Dr. Robin Murphy, Mr. Jim Shields) is entering its report-writing phase as well and we look forward to results of this significant effort.

In addition, two congressionally directed task forces are in their formative stages: Countering and Contractor Logistics Support of Contingency Operations. A third task force - Multi Mission Sensor is in coordination and it's anticipated that the TOR will be signed very shortly.

The Basic Research Task Force (co-chairs Dr. Craig Fields, Dr. Lydia Thomas) concluded its efforts and the report was released to the public. We look forward to receiving valuable feedback from the Services and the Department on this important topic.

In a new era of tighter budgets and an increased focus on efficiency, your efforts are now more important than ever as we forge ahead in a dangerous world requiring smarter tools and processes. Please continue your strong support 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

- **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 studied 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, Report released September 2011.** (CDR Reinbold)
- **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, finalizing report.** (CDR Reinbold)
- **Trends and Implications of Climate Change for National and International Security** [co-chairs: General Larry Welch (USAF, Ret.) and Dr. William Howard]. This study provided a comprehensive picture of the current situation and trends regarding climate change. The task force recommended a 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, Report released October 2011.**
- **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.** (CDR Reinbold)
- **Basic Research** [co-chairs: Dr. Lydia Thomas and Dr. Craig Fields]. This study assessed matters relating to departmental planning and managing the defense basic research program. Sponsored by USD(AT&L). **TOR signed August 2010, Report released February 2012.** (CDR Reinbold)
- **Predicting Violent Behavior** [co-chairs: Mr. Larry Lynn, Ms. Judith Miller]. 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, task force in progress.** (CDR Reinbold)
- **Cyber Resiliency Metrics for Military Systems** [co-chairs: Mr. Jim Gosler, Mr. Lou Von Thae] This study will examine how to effectively measure the resiliency of military systems relative to various cyber attacks and adversaries, as a first step toward quantifying and developing systematic methods and standards to improve the resiliency of these systems and our confidence in the same. Sponsored by USD(AT&L). **TOR signed May 2011, task force in progress.** (CDR Reinbold)
- **Cybersecurity and Reliability in a Digital Cloud** [Co-chairs: Dr. Eric Evans, Dr. Robert Grossman] The task force will evaluate all aspects of providing reliable, secure, and responsive services for military and intelligence applications using a digital cloud, a richly networked, distributed core of data storage and computational resources. Sponsored by USD(AT&L). **TOR signed May 2011, task force in progress.** (CDR Reinbold)
- **Contractor Logistics Support of Contingency Operations** [chairs: pending] The task force shall carry out a review of Department of Defense organization, doctrine, training, and planning for contractor logistics support of contingency operations. It is in accordance with section 848 of the National Defense Authorization Act for FY 2011 (H.R. 5136, 150-151). Sponsored by USD(AT&L). **TOR in draft, membership forming.** (CDR Reinbold)

- **Countering Violent Extremism** [chair: Mr Michael Bayer] The task force shall conduct an independent assessment of the Department of Defense strategy to counter violent extremism outside of the United States. It is in accordance with section 1239 of the National Defense

Authorization Act for FY 2011 (H.R. 6523, 267-268). Sponsored by USD(AT&L). **TOR signed May 2011, membership forming.** (CDR Reinbold)

Permanent Sub-Committees

- **Nuclear Weapons Surety**
 - No recent activity.
- **Nuclear Weapons-Survivability of DoD Systems and Assets to EMP and other Nuclear Weapons Effects**
 - No recent activity.

Updates from Other Boards



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Army Science Board (ASB)

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Current Army Science Board Studies

Strengthening Sustainability and Resiliency of an Expeditionary Force

Create an overarching architecture of a Brigade Combat Team's requirements for external support, including water, food, fuel, ammunition, etc and how that affects their capabilities. From the systems perspective-the study will be broken into subcommittees to address the following:

1. Fuel, energy and water usage both for the mounted and dismounted soldier
2. Cost of delivering the fuel to the expeditionary units
3. DOTMLPF approaches to reducing consumption, exploiting local resources, improving logistics for these consumables
4. Identification of technologies that could improve efficiency or reduce utilization
5. Long term alternative fuel sources and technologies to reduce eliminate dependence upon oil

Soldier Resilience and Performance Sustainment

This study will identify the characteristics of excellent performance in an individual soldier, identify meaningful metrics correlated with characteristics of the best-fit soldier, determine the effect of performance degraders such as fatigue, nutrition, pharmaceuticals, disease, and anxiety and examine methodologies to enhance as well as sustain performance.

Non-cooperative Biometric Metrics

This study will examine collection devices with regards to range, illumination techniques, frequency spectrums, and data formats and develop recommendations on (1) how to define and identify non-cooperative biometric thresholds and objectives, and (2) data fusion methodologies, that will provide confident actionable identification.



Chairman – Dr. John C. Sommerer
Program Director – Mr. William Ellis, Jr.
Executive Director – BGEN Thomas Murray, USMC

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Chairman – Mr. John Goodman
Executive Director – Ms. Phyllis Ferguson

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At their January 19th meeting, the Defense Business Board deliberated and approved recommendations on the "Information Technology Modernization," study. This study, tasked by the Deputy Secretary of Defense and led by David Langstaff, provided recommendations on how DoD should apply best business practices to consolidate IT data centers and modernize the DoD IT enterprise cloud computing. A copy of the briefing may be found at <http://dbb.defense.gov/reports2012.shtml>.

The Board has three other studies underway.

In response to a tasking by the VCJCS, Arnold Punaro is leading the task group "New Ways to Execute the Joint Requirements Process." The group is reviewing the current Joint Capability and Integration System (JCIDS) with the intent of recommending best business practices to improve the process and allow prioritized warfighter needs to be met on a timely basis. The Task Group will present its findings and recommendations at the April 19, 2012 meeting.

In response to a tasking by the Secretary of Defense, Ned Powell is leading a task group "Promoting Veterans Employment through Concurrent Credentialing." This study is looking at options to allow the military services to award professional credentials and licenses concurrent with military training and improve servicemember access to credentialing and licensing programs. The Task Group will brief out during the

Board's April 19, 2012 meeting.

In response to a tasking by the VCJCS, Jack Zoeller is leading a study to review how the Department is using public-private collaborations, identify their merits, and how PPCs might be better utilized across DoD. The Task Group plans to present its findings and recommendations at the Board's July 19, 2012 meeting.

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Upcoming DSB Meeting Dates

- **May 23-24, 2012 – Spring Quarterly Meeting**
- **TBD – Summer Quarterly Meeting**
- **October 24-25, 2012 – Fall Quarterly Meeting**

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