

## UNCLASSIFIED PROGRAM

### TECHNICAL PANEL LOCATOR

<b>AM Unclassified Technical Panels</b>	<b>PM Unclassified Technical Panels:</b>
<b>N/A – PM Technical Panels ONLY</b>	<b>2:15 PM – 5:15 PM</b>

**TP1: Unmanned Aerial Systems and their Impact on the Global War on Terrorism**

**Date: October 18, 2005 (Tuesday)**

**Time: 2:15 – 5:15**

**Room: 201**

**Panel Organizer: Vas Kalomiris, Deputy Director JFPO, SPAWAR-CIPO**

**Panel Chair: Gary W. Blohm, Director, Space & Terrestrial Communications Directorate,  
US Army, CERDEC RDECOM**

**Panelists:**

- 1. Lt. Col. Reed F. Young, Product Manager for Robotic and Unmanned Sensors, US Army  
Title: SAR/GMTI Payload Success in Operation Iraqi Freedom**
- 2. Lt. Col. Steven Ward, Unmanned Aerial Vehicle Battlelab Integration Division Chief, USAF  
Title: Battlelab 101 and USAF Center of Excellence**
- 3. Major Scott Hamann, Assistant Product Manager for “One System”, US Army  
Title: Army UAV Program Update**
- 4. Michael T. Fuqua, Fire Scout VTUAV Business Strategy Development Manager, Northrop  
Grumman Corp.  
Title: The RQ-8B Fire Scout VTUAV**
- 5. Dr. Chi-Yung Chang, Space and Airborne Systems, Raytheon Company  
Title: Global Hawk Integrator Sensors Suite – Maritime Surveillance Capabilities**
- 6. Rick Ludwig, J-UCAS Business Development, Northrop Grumman Unmanned Systems  
Title: X47, Joint Unmanned Combat Aerial Systems (J-UCAS)**

#### **Abstract**

The role of Unmanned Aerial Systems in military operations continues to expand. Lessons learned from Kosovo and the first Persian Gulf War in 1991 where Iraqi soldiers surrendered to Pioneer Unmanned Aerial System in order to avoid much more serious confrontation resulted in the enlargement and wider acceptance of Unmanned Aerial Systems in the current Persian Gulf War where a Predator Unmanned Aerial System armed with Hellfire missiles successfully accomplished a combat mission. Thus Unmanned Aerial Systems have proven their worth and are assigned C4ISR and combat missions taking the human out of the risk and the expensive aircraft away from enemy's fire.

Our panel of experts includes warfighters, developers and industry technologists selected to present current topics including SAR/GMTI payload success in OIF, Battlelab 101 and the USAF Center of Excellence and the Army's UAV program update. Additional presentations by industry representatives will cover work on the development of the Fire Scout Vertical Takeoff and Landing Unmanned Aerial System, the Global Hawk Integrator Sensors Suite in support of Maritime surveillance and the progress on the development of the Joint Unmanned Combat Aerial System J-UCAS (X-47).

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**TP2: New Technology and Architectures for Military Communications**

**Date: October 18, 2005 (Tuesday)**

**Time: 3:15 – 5:15**

**Room: 202**

**Panel Co-Chairs: Dr. Vincent Chan, Joan and Irwin Jacobs Professor of Electrical Engineering, MIT**

**Panelists:**

1. **Brig. Gen. Ellen Pawlikowski, Director, Military Satellite Communications Joint Program Office, Space and Missile Systems Center, Los Angeles Air Force Base, CA**  
**Topic: DoD Transformation Communication Visions and Applications**
2. **Dr. John Chapin, CTO Vanu Inc.**  
**Topic: Software Radios**
3. **Rick Sanford, Director, Space and Intel Initiatives, Cisco Systems**  
**Topic: Space Networks**
4. **Namish Patel, CTO Sycamore Networks**  
**Topic: Fiber Networks**
5. **Professor Moe Win, MIT**  
**Topic: Ultra Wideband Radios and Networks**

**Abstract**

In this panel, a group of distinguished experts from the Government, industry and academics forecast the trends in several technology areas that could have a profound impact in the future direction of military communications. These technology areas include software and programmable radios, ultra wideband, optical communications and networking in space.

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***TP3: Self-Defending Security Software***

***Date: October 19, 2005 (Wednesday)***

***Time: 3:15 – 5:15***

***Room: 201***

***Panel Chair: Dr. Harvey Freeman, Associate, Booz Allen Hamilton***

***Panelists:***

1. ***Dr. John Kerivan (Jack), Managing Partner, nGran***
2. ***Ken Brothers, CTO, CleanComputes***
3. ***Mark Kadrich, Senior Scientist, Sygate Technologies***
4. ***Karen Goertzel, Associate, Booz Allen Hamilton***
5. ***Dr. Larry Wagoner, Information Assurance Directorate, NSA***

**Abstract**

Self-Defense must be a basic requirement for any security software that runs on a Microsoft OS platform. Today's "Zero Day" trojans, worms and blended threats have been designed to eliminate security software defenses that are commonly used in today's desktop and laptop machines. Unfortunately, most major vendors of host-based security software are not rated on their ability to defend themselves from process suspension and termination. In other words, if the security software has been stopped and/or unloaded from memory then it is safe to assume that the machine is unprotected.

This panel will discuss the Self-Defending security software problem in light of platform requirements, optimum security "hardening" configurations, useful attack detection methods and recommendations for preventing the compromise of PC platforms by current termination methods. In addition, the panel will recommend the adoption of test techniques to better simulate termination methods used by malware to verify the integrity of host-based security software. This will include a review of promising integration test frameworks and prevalent malware injection and "blocking" methods.

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***TP4: Impact of the DoD IPv6 Transition on Coalition and Federal Communications***

***Date: October 19, 2005 (Wednesday)***

***Time: 3:15 – 5:15 pm***

***Room: 202***

***Panel Chair: Alex Lightman, Chairman, IPv6 Summit, Inc.***

***Panelists:***

- 1. Mark Harvey, Chief, Department of Defense IPv6 Transition Office***
- 2. John Shipp, Deputy Director Technical Architecture, US Army CIO/G6 AAIC***
- 3. Mark Evans, Navy IPv6 Transition Lead, COMSPAWARSSYSCOM***
- 4. Eric Lubeck, IPv6 Action Officer, Air Force Communications Agency***

**Abstract**

In June 2003 The DoD mandated "IPv6-Capable" status from Oct. 2003 for all products and services tying into the Global Information Grid. In 2005 the DoD has delivered its IPv6 Transition Plan to Congress and gave testimony at the first Congressional Hearings on IPv6 that contributed to a planned move by the rest of the US Federal Government, as well as a growing number of IPv6 mandates in and between America's approximately 50 Coalition Partner countries and transnational alliances including NATO and the European Defense Forces.

This panel is led by the chairman of the Coalition Summit for IPv6, a group that attracted delegates from over 30 nations and 30 federal agencies. It also includes Dr. Lynch, the technical director of DoD-wide IPv6 efforts as well as leaders within each of the services. Attendees will receive an up-to-date situation report on the possibilities, challenges, and policies that will impact not only all military communications providers, but everyone who does business with the US Government and its allies.

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**TP5 *New Challenges in Military Communications Research***

**Date: *October 20, 2005 (Thursday)***

**Time: *3:15 – 5:15***

**Room: *201***

**Panel Chair: *Dr. Larry Stotts, DARPA***

**Panelists:**

- 1. *Dr. Jeff Jaffe, President of Advanced Technologies, Lucent Technologies***
- 2. *Dr. John Olsen, Technical Director of Integrated Communications Systems, Raytheon Company***
- 3. *Dr. Richard North, Technical Director for Joint Program Executive Office Joint Tactical Radio System (JPEO JTRS)***
- 4. *Colonel Jonathan Maddux, Program Manager, Unit of Action Network Systems Integration***
- 5. *Dr. John Parmentola, Director for Research and Laboratory Management, US Army***

**Abstract**

In this panel, a group of senior Government and industry R&D managers discuss the current challenges in funding and executing military communications research, and outline some of the possible directions that they could take to address such challenges.

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**TP6 *Transforming Spectrum Operations***

**Date: *October 20, 2005 (Thursday)***

**Time: *2:15 – 5:15 pm***

**Room: *202***

**Panel Organizer: *Thomas Taylor, OASD (NII) Spectrum Management Directorate***

**Panel Chair: *Badri Younes, Director, OASD (NII) Spectrum Management Directorate***

**Panelist Include:**

- 1. *John M. R. Kneuer, Deputy Assistant Secretary of Commerce for Communications and Information and Deputy Administrator of National Telecommunications and Information Administration (NTIA)***
- 2. *Bruce Franca, Acting Chief, FCC Office of Engineering and Technology (Invited)***
- 3. *Mr. Julio “Rick” Murphy, Chief, Spectrum Management Office, Wireless Services & Operations Division, Wireless Management Office, Office of the Chief Information Officer, U.S. Department of Homeland Security***
- 4. *Peter Pitsch, Director of Communications Policy, Intel Corp***
- 5. *Dr. Linton Wells, II, Acting Assistant Secretary of Defense, Networks and Information Integration and DoD Chief Information Officer, Principal Deputy Assistant Secretary of Defense Networks and Information Integration***
- 6. *Edmond J. Thomas, Engineer and Partner, Harris Wiltshire & Grannis***

## **Abstract**

The Department of Defense is faced with numerous challenges as it endeavors to transform US military operations to an information based network-centric architecture assuring information superiority for the warfighter. This transformation has resulted in considerable technological development that is significantly more dependent on access to spectrum resources. Similarly, new commercial technologies entering the marketplace have further increased the pressure for access to Government spectrum resources. These internal and external pressures combined with the increasing need for on-demand access to spectrum resources, creates new challenges which require the DoD to utilize spectrum resources more effectively. Meeting these challenges entails a transformation in DoD spectrum management policies, techniques and tools in order to enable a more agile and responsive spectrum community.

To increase awareness within the military communications community and stimulate discussion on current and future spectrum management challenges the Assistant Secretary of Defense for Networks and Information Integration (ASD-NII) sponsors a panel on the challenges of transforming spectrum access for military operations while the commercial sector expands its markets in new technologies at MILCOM 2005. The topics of discussion will include:

- Presidential Spectrum Initiative.
- Initiatives Addressing Efficient Operations.
- Future concepts for spectrum management systems.
- Emerging concepts for evaluating spectrum dependent devices.
- Challenges and opportunities for sharing spectrum with commercial users.
- Future spectrum regulatory frameworks.
- Balancing national security with economics.

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### ***TP7 Service Oriented Architecture (SOA) Experiences and Way Ahead***

***Date: October 19, 2005 (Wednesday)***

***Time: 2:15 – 5:15 pm***

***Room: 309***

***Panel Chairs: Mr. David Mihelcic, Chief Technology Officer, Defense Information Systems Agency***

***Panelists:***

- 1. Bernal Allen, Joint Command and Control (JC2), DISA***
- 2. Rob Vietmeyer, Net-Centric Enterprise Services (NCES), DISA***
- 3. Glen White, Global Combat Support Systems (GCSS), DISA***
- 4. Andrew Baer, America Online***

## **Abstract**

Not available at time of publication