

PONI 2011 Capstone Conference

Tuesday, December 6, 2011

Offutt AFB, Nebraska

Dougherty Conference Center

7:00 CONFERENCE CHECK-IN AND BREAKFAST

7:50 CONFERENCE WELCOME

Dr. Clark Murdock, Senior Adviser and PONI Director, Center for Strategic and International Studies

8:00 MAINTAINING NUCLEAR CAPABILITIES IN THE U.S. AND UK

Mr. David Jarvis CBE, Director, UK PONI, Royal United Services Institute and Strategic Systems Analyst, Lockheed Martin

Overview of Weapons Enterprise Transformation and Mathematical Assessment Tools

Dr. Carol Meyers, Mathematician, National Security Engineering Division, Lawrence Livermore National Laboratory

An Overview of Nuclear Detonation Safety

Mr. Raymond Wolfgang, Member of Technical Staff, Sandia National Laboratories

The UK-France Nuclear Agreement in Context

Mr. Matt Harries, PhD Candidate, King's College London

Management of Key Technologies in the UK Naval Nuclear Propulsion Programme

Mr. Christopher Palmer, Assistant Chief Engineer, Astute Programme, Rolls Royce Submarines

9:20 BREAK

9:30 STRATEGIC STABILITY CHALLENGES IN ASIA

Moderator: Mr. Gregory Weaver, Deputy Director of Plans and Policy, U.S. Strategic Command

The Threat that Leaves Something to Chance in U.S.-China Relations

Mr. Vincent Manzo, Research Analyst, Institute for National Strategic Studies, National Defense University

Cruise Missiles in Southern Asia: Strategic Implications for China and India

Mr. Kalyan Kemburi, Associate Research Fellow, S. Rajaratnam School of International Studies

Are Conventional Weapons a Viable Option for Damage Limitation Operations against Medium-sized Nuclear-armed Adversaries?

Mr. Tong Zhao, PhD Candidate, Sam Nunn School of International Affairs, Georgia Tech University

Benefits of ICBMs to U.S. Nuclear Posture and Global Stability

Mr. Jerry Maxwell, Systems Engineer, Northrop Grumman Aerospace Systems

11:00 BREAK**1:10 NUCLEAR ARMS CONTROL AND FORCE REDUCTIONS**

Moderator: Amb. Linton Brooks, Senior Adviser, Center for Strategic and International Studies

Next Steps in Arms Control: Restoring Consensus on Nuclear Policy

Dr. Tom Karako, Assistant Professor of Political Science, Kenyon College

Qualitative Considerations for Nuclear Forces for Future Arms Control Agreements

Mr. Tom Devine, Policy Analyst, SAIC and Ms. Rebecca Gibbons, PhD Candidate, International Relations, Georgetown University

Contextualizing Russian Nuclear Policy

Mr. Alejandro Sueldo, JD Candidate, University of California at Berkeley

The Duma-Senate Logjam Revisited: Actions and Reactions in Russian Treaty Ratification Debates

Ms. Anya Loukianova, PhD Candidate, Policy Studies, University of Maryland

12:40 LUNCH AND AFTERNOON KEYNOTE

Dr. John Hamre, President and CEO, Center for Strategic and International Studies

2:00 EXPLORING THE HISTORY OF THE NPT AND NONPROLIFERATION REGIME

Moderator: Dr. James Wirtz, Dean, School of International Graduate Studies, and Professor, Department of National Security Affairs, Naval Postgraduate School

Superpower Collusion and the Nuclear Nonproliferation Treaty

Ms. Jane Vaynman, PhD Candidate, International Relations, Harvard University

Military Tradeoffs as a Constraint on Nuclear Acquisition

Mr. Gene Gerzhoy, PhD Candidate, International Relations, University of Chicago

The Question of Nuclear Disarmament and the Enforcement Paradox

Mr. Jonathan Snider, PhD Candidate, Political Science, University of California, Davis

Transition to Zero: A Change Leadership Perspective

Mr. Paul Higson, Organizational Development Specialist, Atomic Weapons Establishment

3:20 BREAK**3:30 TECHNICAL ASPECTS OF NUCLEAR SECURITY**

Moderator: Dr. James A. Tegnalia, Former Director, Defense Threat Reduction Agency (TBC)

Multi-actinide resonance ionization mass spectrometry (RIMS) for Nuclear Forensics Applications and Rapid Response

Dr. Brett Isselhardt, Post-doctoral Fellow, Chemical Sciences Division, Lawrence Livermore National Laboratory

Characterization of Uranium Oxyfluoride Particles for Nuclear Safeguards

Dr. Ruth Kips, Research Scientist, Lawrence Livermore National Laboratory

Verification Challenges at Low Numbers

Mr. Paul Booker, Mechanical Engineer, Pacific Northwest National Laboratory

4:45 BREAK

4:55 BUILDING THE NONPROLIFERATION REGIME TO ADDRESS CONTEMPORARY CHALLENGES

Moderator: Dr. Clark Murdock, Senior Adviser and Director, Project on Nuclear Issues,
Center for Strategic and International Studies

Iran's Nuclear Strategy: Understanding Tehran's Acquisition Pathway

Mr. Patrick Disney, MA Candidate, International Relations, Yale University

Strengthening the IAEA: the Double Track

Ms. Sonia Drobysz, PhD candidate, Panthéon Sorbonne University; Junior Associate
Researcher, Center for International Security and Arms Control Studies (France)

***Transnational Networks and Nonproliferation: Strengthening the Multilateral Nuclear
Export Control Regime***

Mr. Michael M. Lieberman, Associate, International Department, Steptoe & Johnson LLP;
Fellow, Truman National Security Project

6:15 END OF PRESENTATION PANELS

6:30 RECEPTION

7:15 DINNER AND EVENING KEYNOTE

General Robert Kehler, Commander, United States Strategic Command

8:30 END OF CONFERENCE