

# 2008 FALL CONFERENCE ATOMIC WEAPONS ESTABLISHMENT READING, BERKSHIRE UNITED KINGDOM

# THURSDAY, OCTOBER 9<sup>TH</sup>

Security video viewing and badging completed on the bus.

#### 8:45 TEA/COFFEE RECEPTION

#### 9:00 OPENING REMARKS AND WELCOME ADDRESS

Don Cook, Managing Director, Atomic Weapons Establishment

#### 9:15 SESSION 1: LABORATORY MISSIONS AND CAPABILITIES

Moderator: Dr. Peter Roberts, Head of Plasma Physics, Atomic Weapons Establishment

#### **Broadening the Lab Mission to Sustain Nuclear Capabilities**

Benn Tannenbaum, Associate Program Director, Center for Science, Technology and Security Policy, American Association for the Advancement of Science

#### Red Pill or Blue Pill: Maintaining the U.S. Nuclear Deterrent

Francis Slakey, Associate Director of Public Affairs, American Physical Society and Upjohn Professor of Science and Public Policy, Georgetown University

#### **Ensuring Nuclear Competency at the National Security Science Laboratories**

Tom Tierney, Project Leader, Los Alamos National Laboratory

#### **Balance of Investment for Nuclear Physics Package Certification**

Andrew Randewich, Head of Physics Programmes, Atomic Weapons Establishment

# 11:00 BREAK

#### 11:10 SESSION 2: U.K. NUCLEAR STRATEGY AND POSTURE

Moderator: Cdre. David Jarvis, Chief Strategic Systems Executive, UK Ministry of Defence

# Cautiously Approaching the Future of Nuclear Arms Control and Disarmament: Adopting a "Virtual Nuclear Arsenal" in Britain

David Gill, Ph.D. Candidate, Aberystwyth University

#### What would be the consequences of leaving France as the only nuclear power in Europe?

Richard White, Technical Strategy & Capability Assessment, Chief Scientist Group, Atomic Weapons Establishment

#### 12:20 LUNCH

# 1:15 UPDATE: COMMISSION ON THE UNITED STATES STRATEGIC POSTURE

Steve Henry, Deputy Assistant to the Secretary of Defence for Nuclear Matters

#### 1:30 SESSION 3: U.S. NUCLEAR STRATEGY AND POSTURE

Moderator: Steve Henry, Deputy Assistant to the Secretary of Defence for Nuclear Matters

# Transforming the U.S. Nuclear Posture: A Risk-Based Approach to Capabilities-Based Planning

Amon Tarakemeh, Associate Operations Research Analyst, Systems Planning and Analysis

**U.S.** Nuclear Posture: Reassessing Roles and Missions in an Age of Enhanced Counterforce Daryl Press, Associate Professor, Department of Government, Dartmouth College

# Building an Extended U.S. Nuclear Deterrent for the 21<sup>st</sup> Century

Zachariah Becker, Project Manager, Science Applications International Corporation Darci Bloyer, National Security Analyst, Science Applications International Corporation

#### 3:00 BREAK

#### 3:10 CHIEF SCIENTIFIC ADVISOR ADDRESS

Professor Mark Welland, Chief Scientific Advisor, Atomic Weapons Establishment

#### 3:30 SESSION 4: PROLIFERATION PREVENTION

Moderator: Jeffrey Lewis, Director, Nuclear Strategy and Nonproliferation Initiative, New America Foundation

#### **Reactive Proliferation: Why Nuclear Dominoes Rarely Fall**

Philipp Bleek, Nonresident Fellow, Center for a New American Security and Ph.D. Candidate, Georgetown University

Categorizing Latency: A Tool to Monitor and Control Nuclear Technology Proliferation Heather Pragnell, Senior Scientist, Atomic Weapons Establishment

An "All Things Nuclear" Approach to Reducing Global Nuclear Danger Andrew Walter, Strategic Studies Department, Sandia National Laboratories

#### 5:00 COACH TO APOLLO HOTEL

#### 7:00 RECEPTION

#### **7:30 DINNER**

# 8:15 EVENING ADDRESS: Insiders, Allies and Outsiders: Engagement in the Nuclear Mission Professor Sir Peter Knight, Principal, Faculty of Natural Sciences, Imperial College London and Member, Science and Technology Advisory Committee, Atomic Weapons Establishment

# FRIDAY, OCTOBER 10<sup>TH</sup>

8:00	COACH TO	<b>ALDERMA</b>	STON
0.00		A 1 /1 / 1 / 1 X 1 X 1 X 1 A	

#### 8:30 TEA/COFFEE RECEPTION

#### 9:00 SESSION 5: NUCLEAR FORENSICS

Moderator: William Ulicny, Program Manager, Domestic Nuclear Detection Office, U.S. Department of Homeland Security

### Nuclear Forensics in the UK: Policy Perspectives and Questions

Oliver Welch, Nuclear and Space Desk Officer, UK Ministry of Defence

#### **Technical Constraints in Nuclear Forensics**

Brett Isselhardt, Lawrence Scholar, Lawrence Livermore National Laboratory and Ph.D Candidate, University of California at Berkeley

# Technical Nuclear Forensics and the Future of the Weapons Laboratories: Modernizing the Mission

Jessica Yeats, Research Assistant, Center for Strategic and International Studies

#### **Arms Control Challenges of Nuclear Forensics**

Richard Weitz, Senior Fellow and Director, Political-Military Analysis, Hudson Institute

## 10:45 AWE CHIEF SCIENTIST ADDRESS

Professor Richard Clegg, Chief Scientist, Atomic Weapons Establishment

#### 11:15 PHOTOGRAPHS AND BREAK

#### 11:30 SESSION 6: DETERRENCE AND STRATEGY

Moderator: Clark Murdock, PONI Director and Senior Advisor, Center for Strategic and International Studies

#### How Much is Enough? Nuclear Deterrence Then and Now

Keir Lieber, Associate Professor, Political Science, University of Notre Dame

#### **Minimum Deterrence**

Kristan Stoddart, Research Fellow, Mountbatten Centre for International Studies, University of Southampton

## 12:45 LUNCH AND PLENARY SESSION

Clark Murdock, PONI Director and Senior Advisor, Center for Strategic and International Studies

#### 2:00 AWE TOUR AND HISTORICAL TALK

#### 3:30 END OF CONFERENCE