

2010 PONI Summer Conference

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Sandia National Laboratories
Albuquerque, New Mexico

Speaker Biographies

KEYNOTE SPEAKER

Dr. C. Paul Robinson, President Emeritus and former Laboratories Director, Sandia National Laboratories

From October 1990 to January 2006, C. Paul Robinson served in various leadership posts at the Sandia National Laboratories, a Lockheed Martin Company, becoming its Laboratories Director in 1995, and President of Sandia Corporation. During the 10 years he led Sandia, he focused on the laboratories' national security missions, increasing its efforts in nuclear weapons design and development, in non-proliferation and material controls around the world, and led new initiatives in counterterrorism, homeland security, and broadened the lab's support for the Defense Department and the intelligence communities. He also pioneered broad and innovative strategies for partnering with universities and industry and led a major revitalization of laboratory buildings and experimental facilities. In April 2005 Robinson stepped down as President to support Lockheed Martin Corporation for a special project. He retired from LMC and Sandia on January 31, 2006.

Robinson recently served on the US Nuclear Command and Control System Comprehensive Review Committee for Secretary of Defense Robert Gates. He has joined the Defense Science Board Task Force on Verification (of nuclear treaties.) Since 1991 he has served on the Strategic Advisory Group for the Commander, US Strategic Command; he chaired the Policy Panel from 1992 to 2005. He also serves on the Nevada Test Site Advisory Panel. He previously served on the US State Department Council on International Security and Arms Control for Secretary Condoleezza Rice, and on the NASA Advisory Council for Director Michael Griffin, where he chaired the Space Operations Committee. He served as the Chairman of the US Presidential Technical Advisory Group on Verification of Warhead Dismantlement and Special Nuclear Materials Controls, and on the DNA Scientific Advisory Group on Effects, and on the Defense Threat Reduction Advisory Committee. From 2009-10 he chaired the Advisory Board for the Savannah River National Laboratory. He provides advice to many other government agencies, and often testifies before the U.S. Senate and Congress.

Appointed by President Ronald Reagan, confirmed by the US Senate, and reappointed by President George H.W. Bush, Ambassador Robinson served as Chief Negotiator and Head of the US Delegation to the US/USSR Nuclear Testing Talks in Geneva from 1988-90. These negotiations produced Protocols to the "Threshold Test Ban Treaty" and the "Peaceful Nuclear Explosions Treaty." Both, along with the treaties, were ratified unanimously by the US Senate in 1990 and are in force between the US and the Commonwealth of Independent States. The Joint Verification Experiment, which he and his delegation negotiated, was carried out in 1988. It laid the foundations for what have become extensive US and Russian Lab-to-Lab efforts.

From 1985-88, Robinson was Senior Vice President, Principal Scientist, and a Board Member of Ebasco Services, Inc., a major New York-based engineering and construction firm. He spent much of his early career (1967-85) at the Los Alamos National Laboratory serving in the Nuclear Test Division, the Advanced Concepts Group, and leading the Laser Spectroscopy and Isotope Separation Division (AP), and the nuclear weapons and other defense and national security programs as Principal Associate Director of the Laboratory.

Dr. Robinson was elected to the National Academy of Engineering in 1998. He also has received: the Outstanding Public Service Medal from the Joint Chiefs of Staff for contributions to strategic forces, NASA's Exceptional Public Service Medal for his contributions to Space Operations, the Smyth Nuclear Statesman Award from the American Nuclear Society for 40 years of contributions to national nuclear efforts, the American Physical Society's Pake Prize for outstanding leadership and research accomplishments, the Secretary's Gold Award from the Department of Energy, and two Distinguished Citizen Awards from New Mexico Governors.

Dr. Robinson earned a B.S. in Physics from Christian Brothers College and a Ph.D. in Physics from Florida State University, and also received an honorary doctorate from Christian Brothers University.

WELCOMING REMARKS

Dr. Al Romig, Executive Vice President, Deputy Laboratories Director and Chief Operating Officer, Sandia National Laboratories

Dr. Alton D. Romig, Jr., is currently Executive Vice President, Deputy Laboratories Director, and Chief Operating Officer at Sandia National Laboratories, Albuquerque, New Mexico. In this capacity he manages all aspects of Laboratory business and operations supporting the US Departments of Energy, Defense, State, Justice, Homeland Security, the Intelligence Community, and the Nuclear Regulatory Commission, including international engagement such as through the International Atomic Energy Agency (IAEA). In addition, he is the senior executive accountable for the science and technology base that supports all Laboratory programs.

Dr. Romig is a member of the National Academy of Engineering and is active on a number of National Academy of Engineering/National Research Council Committees and Boards. He is a Fellow of the American Association for the Advancement of Science (AAAS) and TMS (The Metals, Minerals and Materials Society). Dr. Romig is also Fellow and former President of ASM, International (formerly American Society for Metals). He is a Senior Member of IEEE (The Institute of Electrical and Electronics Engineers). Dr. Romig also serves on the Boards of Atomic Weapons Establishment Management Limited, a Lockheed Martin joint venture company in the UK and Technology Ventures Corporation, a Lockheed Martin subsidiary dedicated to technology commercialization.

Dr. Romig is a member of the Council on Foreign Relations (CFR). He is a past member of the Intelligence Science Board, an advisory body to the Director of National Intelligence, and has served on Defense Science Board Study committees. Dr. Romig also serves on the Board of the MIND Research Network, a not-for-profit company dedicated to the study of neurological disease and treatment. Dr. Romig is the recipient of the 2005 National Materials Advancement Award from the Federation of Materials Societies, an award which recognizes outstanding contributions to national materials policy. He is also the 2005 Acta Materialia, Inc., J. Herbert Hollomon Award winner for outstanding contributions to Materials

Science and Society. Dr. Romig was also named the 2003 ASM-TMS Distinguished Lecturer in Materials and Society. For his pioneering work in Analytical Electron Microscopy and Solid State Diffusion, Dr. Romig has received several awards, including the Burton Medal (1988 - Microscopy Society of America); the K. F. J. Heinrich Award (1991 - Microbeam Analysis Society); the ASM Silver Medal for Outstanding Materials Research (1992); and the Acta Metallurgica International Lectureship (1993-1994).

Dr. Romig received his B.S., M.S., and Ph.D. degrees in Materials Science and Engineering from Lehigh University in 1975, 1977, and 1979, respectively. In 1979, he joined Sandia National Laboratories as a member of the technical staff. After a variety of management assignments, he was named as Director, Materials and Process Sciences in 1992. From 1995 to 1999, he was Director of Microsystems Science, Technology, and Components. From 1999 to 2003, he was Chief Technology Officer and Vice President for Science, Technology, and Partnerships. In that role, he was Chief Scientific Officer for the Nuclear Weapons Program, accountable for Sandia's interactions with industry and academia. Additionally, he was responsible for the Laboratory Directed Research & Development Program. From 2003 to 2005, he was Vice President, Nonproliferation and Assessments. From 2005 to 2009, he was Executive Vice President for Integrated Technology and Systems, overseeing all work outside the Nuclear Weapons Program. He served in that capacity until attaining his present position in February 2009.

INTRODUCTION TO THE PROJECT ON NUCLEAR ISSUES

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

Clark Murdock is the senior adviser for the U.S. Defense and National Security Group at CSIS and the director of the Project on Nuclear Issues (PONI). Joining CSIS in January 2001, Murdock has completed studies on a wide range of defense and national security issues, including strategic planning, defense policy and governance, and U.S. nuclear weapons strategy and policy. He directed the four-phase study on Defense Department reform, "Beyond Goldwater-Nichols: USG and Defense Reform for a New Strategic Era," which released reports in March 2004, July 2005, and July 2006 and released several reports in 2008. Murdock is currently leading the U.S.-UK-France trilateral track-2 nuclear dialogue and has recently completed studies on methodological approaches to building force planning constructs and on nuclear posture implications of U.S. extended deterrence and assurance. He is the principal author of *Improving the Practice of National Security Strategy: A New Approach for the Post-Cold War World* (CSIS, 2004) and *The Department of Defense and the Nuclear Mission in the 21st Century* (CSIS, 2008). Murdock coauthored *Revitalizing the U.S. Nuclear Deterrent* (CSIS, 2002) and *Nuclear Weapons in 21st Century U.S. National Security* (AAAS, 2008). In 2000, Murdock taught military strategy, the national security process, and military innovation at the National War College. From 1995 to 2000, he was deputy director of the Air Force's headquarters planning function. As deputy special assistant to the chief for long-range planning, he helped define a coherent strategic vision for the 2020 Air Force and institutionalize a new long-range planning process. As deputy director for strategic planning, he helped implement the new planning process and led the development of several new planning products. Before joining the Air Force, he headed the Policy Planning Staff in the Office of the Under Secretary of Defense for Policy. Murdock has served in many roles in the defense world, including as a senior policy adviser to House Armed Services Committee chairman Les Aspin, as an analyst and Africa issues manager in the CIA, and in the Office of the Secretary of Defense. He also taught for 10 years at the State University of New York at Buffalo. He is an honors graduate of Swarthmore College and holds a Ph.D. in political science from the University of Wisconsin at Madison.

SESSION ONE: ADDRESSING THE NUCLEAR SECURITY CHALLENGES POSED BY NON-STATE ACTORS

Dr. James A. Tegnella, Former Director, Defense Threat Reduction Agency

Dr. James A. Tegnella was formerly the director of the Defense Threat Reduction Agency. During that time Dr. Tegnella was also dual-hatted as director of the U.S. Strategic Command Center for Combating Weapons of Mass Destruction (SCC-WMD). Prior to his selection to lead DTRA, Dr. Tegnella was the vice president, Department of Defense Programs, Sandia National Laboratories. Dr. Tegnella had been at Sandia since August 1998. A native of Monessen, Pa., Dr. Tegnella's career began in the United States Army, serving from 1968 to 1971, including a one-year tour in Vietnam. From 1971 to 1976, Dr. Tegnella worked for the U.S. Army Night Vision Laboratory in various positions progressing from supervisory research physicist to manager. His organization laid the engineering foundation for night vision devices deployed in Operation Desert Storm/Desert Shield. In 1976, he transferred to the Defense Advanced Research Projects Agency (DARPA), serving as a program manager and office director. From 1982 to 1985, he served as the assistant undersecretary of defense and acting deputy undersecretary of defense in the Office of the Undersecretary of Defense for Research and Engineering, where he oversaw program manager activity on the JSTARS radar and ATACMS missile. In 1985, he became the deputy director and later acting director of DARPA. In 1987, he joined the Martin Marietta Corporation, serving as the vice president of Engineering, and later as the vice president of Business Development of the Electronics Group. In 1993, Dr. Tegnella became the executive vice president and deputy director of Sandia National Laboratories. He then became the vice president, Business Development, for the Energy and Environment Sector of Lockheed Martin Corporation in 1995, and later served as the president of Lockheed Martin Advanced Environmental Systems, Inc. from 1996 to 1998. Dr. Tegnella earned a bachelor's degree in physics from Georgetown University, a master's degree in engineering from George Washington University, and a Ph.D. in physics from The Catholic University of America. His awards and decorations include the Bronze Star Medal, the Civilian Meritorious Service Medal, and the Senior Executive Service Meritorious Service Award.

Mr. David Maness, Special Assistant, International Security and Nonproliferation, U.S. Department of State

David C. Maness is a Special Assistant in the State Department's Bureau of International Security and Nonproliferation, supporting the U.S. Coordinator for Implementation of UN Security Council Resolution 1540. He was previously a reporting officer at the U.S. Mission to the United Nations in New York, and served in the U.S. Air Force. He is a graduate of Brigham Young University, and was awarded a Master of Arts degree by the Monterey Institute of International Studies. He speaks French.

Ms. Vonda Kimble Delawie, Special Advisor for Re-engagement, EXBS Program, Office of Export Control Cooperation, Bureau of International Security and Nonproliferation, U.S. Department of State

Ms. Delawie is a State Department Foreign Service Officer currently assigned to Berlin as a regional advisor for the Department's Export Control and Related Border Security Program. As the Special Advisor for Re-engagement with the 12 newest members of the European Union (Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Malta, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia), she provides host-government officials with training, technical assistance and equipment to improve strategic trade controls and enforcement. Ms. Delawie joined the Department in 1983 and has served abroad in Croatia, Italy, Turkey, Ireland, and Mexico, and in Washington in the Department's Bureau of European Affairs, the Bureau of Human Resources, the Bureau of Intelligence and Research, the Bureau

of Western Hemisphere Affairs, and in the Executive Secretariat. She attended the University of Richmond (BA 1979) and the Army War College (MIS 2008).

Ms. Megan A. Amer, Foreign Affairs Officer, Office of Export Control Cooperation, Bureau of International Security and Nonproliferation, U.S. Department of State

Megan Amer is a Foreign Affairs Officer at the U.S. Department of State in the Bureau of International Security and Nonproliferation's Office of Export Control Cooperation. She provides program management for the Export Control & Related Border Security (EXBS) foreign assistance program by covering the Eastern Europe and Sub-Sahara Africa portfolios. She received her MA in International Affairs from the George Washington University and BA in Political Science from the University of North Carolina at Charlotte. Prior to serving at the State Department, she worked in the private sector in technology.

Mr. Jasper Pandza, PhD Candidate, Centre for Science & Security Studies, Department of War Studies, King's College London

Jasper's research at King's College London seeks to identify the role that deterrence can play in countering radiological terrorism. His interests further to CBRN counter-terrorism include the proliferation of nuclear weapons and nuclear verification. Prior to starting his PhD in September 2009, he completed an internship at the Verification Research, Training and Information Centre (VERTIC), where he remains involved in a small number of projects. In September 2010, Jasper will be joining the International Institute for Strategic Studies (IISS) as Research Assistant under the Stanton Nuclear Security Fellowship programme. Jasper holds a BSc in Physics (2008) and an MA in Science & Security (2009) from King's College London.

SESSION TWO: PERSPECTIVES ON THE FUTURE OF NONPROLIFERATION AND DISARMAMENT

Mrs. Emily Cura Saunders, Ph.D. Candidate, Claremont University

Emily Cura Saunders recently completed her Masters of Theological Studies in Religion Ethics and Politics. She spent last summer at Lawrence Livermore National Laboratory on a Next Generation Safeguards Internship exploring the connection between Islamic law and Iran's attitudes towards the NPT. She is beginning a joint PhD/MBA program at Claremont Graduate University in the fall.

Ms. Margarita Zolotova, M.A. Candidate, Monterey Institute of International Studies

Margarita Zolotova is MA Candidate in International Security: Terrorism and Nonproliferation Studies (2011) at the Monterey Institute of International Studies, James Martin Center for Nonproliferation Studies. Ms. Zolotova's research interests include international nonproliferation regime and its perspectives, Iran's nuclear program and an international policy response to that challenge, role of new media and internet technology in strengthening global security and increasing transparency among nations. Margarita received her BA in Management (2004) and BA in Political Science (2002), with distinction from the Yaroslavl State University in Russia. Prior to studying at the Monterey Institute, she worked as a television journalist, political analyst and consultant in Russia.

Dr. Nancy E. Brune, Principal Member of the Technical Staff, Sandia National Laboratories

Nancy E. Brune is a Principal Member of the Technical Staff in the Strategic Studies Department at Sandia National Laboratories where she works on issues of national security, non proliferation and

energy security. Previously, she was Director of Research and Policy at the Institute for Security Studies at the University of Nevada, Las Vegas. Brune received her B.A. and Masters in Public Policy from Harvard University and Ph.D. from Yale University.

Mr. M. Scott Davis, Deputy Director, Office of Multilateral Nuclear and Security Affairs, U.S. Department of State

M. Scott Davis is Deputy Director, Office of Multilateral Nuclear and Security Affairs, at the U.S. Department of State. His area of responsibility is nuclear nonproliferation, including the Nuclear Nonproliferation Treaty and International Atomic Energy Agency issues. Formerly, he was responsible for U.S.-Russian cooperation on disposition of plutonium from their nuclear weapons programs. Prior to moving to the State Department, he was Deputy Director in the Office of Nonproliferation Policy at the Department of Energy, where his responsibilities included regional nonproliferation issues, and nonproliferation treaties and agreements. Mr. Davis has also worked as an expert on nuclear safeguards issues at the International Atomic Energy Agency, an action officer on a range of nonproliferation issues – particularly nuclear export controls – at the Arms Control and Disarmament Agency, and an analyst on a variety of international security issues at the Carnegie Endowment for International Peace, the Woodrow Wilson International Center for Scholars, and the Roosevelt Center for American Policy Studies. He is a Distinguished Graduate of the U.S. National War College, and holds a Masters Degree from the Fletcher School of Law and Diplomacy and a Bachelors Degree from the University of North Carolina at Chapel Hill. He lives in Virginia with his wife and daughter.

RESOLVED: THE UNITED STATES SHOULD REMOVE ITS NUCLEAR WEAPONS FROM EUROPE

Mr. Chris Jones, Research Assistant, Center for Strategic and International Studies

Chris Jones is a research assistant for the Defense and National Security Group at CSIS, where he works primarily on defense and nuclear issues including strategy and policy, force posture, nuclear nonproliferation, and arms control. Jones is also a primary contributor to the PONI Debates the Issues blog. Prior to joining CSIS, Jones conducted honors thesis research on Chinese nonproliferation decision-making in the context of the Nuclear Nonproliferation Treaty and Missile Technology Control Regime. Jones was also the recipient of the 2008-2009 William J. Taylor CSIS debate internship and graduated magna cum laude with a B.A. in international relations from the University of Southern California. He is a former distance runner and currently enjoys listening to the song “Mmbop” by Hanson on repeat while training to return to top form.

Mr. John K. Warden, Research Assistant, Center for Strategic and International Studies

John Warden is a research assistant at the Center for Strategic and International Studies (CSIS), where he works with the Defense and National Security Group and the Project on Nuclear Issues (PONI). He leads a number of PONI initiatives including International Outreach, the Next Generation Working Group, and PONI’s first essay contest and also coordinates the CSIS U.S.-Japan-South Korea Track II Nuclear Dialogues. He previously worked on the project staff for *Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance* as well as *Technical Challenges Associated with the New U.S. Nuclear Agenda* and has been a frequent contributor to the PONI Debates the Issues blog. After receiving a BA from Northwestern University, he joined the CSIS as a recipient of the William J. Taylor debate internship.

SESSION THREE: ALIGNING TECHNICAL CAPABILITIES AND NUCLEAR POLICY GOALS

Rodney Kingston Wilson, Ph.D., Director, National Security Studies & Integration, Sandia National Laboratories

Dr. Rodney K. Wilson is Director for Systems Integration Technical Support at Sandia National Laboratories. Dr. Wilson also serves as Sandia's Campus Executive for the University of Illinois. Dr. Wilson's other recent assignments at Sandia include: Chief of Staff to the Deputy Laboratories Director for Nuclear Weapons Programs, and Head of Corporate Planning, Studies and Government Relations. Dr. Wilson began his career at Sandia National Laboratories in December of 1980 as a member of the technical staff. He has led and participated in a broad range of national security-related activities in addition to his current work in nuclear weapons stewardship, including: the Future Look Study of the security and survivability of theater nuclear forces in Europe; studies on the safety and security of DOE transportation of nuclear weapons; arms control studies focused on the transparency and verification of nuclear warhead dismantlement; and activities associated with U.S. government programs combating terrorist use of nuclear weapons. Recently, Dr. Wilson was Deputy Director of the Nuclear Weapons Planning and Operations Office at Sandia National Laboratories. He also completed an assignment with the NNSA Office of Policy Planning, Analysis and Assessment.

Dr. Wilson earned his bachelor's degree in Engineering Science from the University of Michigan in 1975, and his M.S. and Ph.D. degrees in Theoretical & Applied Mechanics from the University of Illinois in 1977 and 1981, respectively. Since arriving at Sandia, he has completed additional education and training, including, most notably, the Program for Senior Executives in National and International Security at Harvard's Kennedy School of Government; the NATO School; courses and workshops in terrorism from the Air Force Special Operations School, the International Association of Chiefs of Police, and the Office of International Criminal Justice, as well as management and leadership training at UCLA and the University of Michigan. He is also a fellow of the MIT Seminar XXI Program in International Security. Rodney and his wife Marty, live in Albuquerque, New Mexico.

Dr. Dan Dorsey, Principal Member of the Technical Staff, Sandia National Laboratories

Dan Dorsey is a Principal Member of the Technical Staff in the Strategic Weapons Studies Department at Sandia National Laboratories in Albuquerque, NM. Current projects include the analysis of the effectiveness of current strategic weapon systems and requirements development for future weapon systems. Dan holds a BS and MS in Nuclear Engineering from Texas A&M University and a PhD in Mechanical Engineering from the University of Texas.

Dr. Steve MacLaren, Design Physicist, Weapons and Complex Integration Directorate, Lawrence Livermore National Laboratory

Steve MacLaren is currently a Secondary Design Physicist within A Division at Lawrence Livermore National Laboratory. His interests are radiation transport and experimental high energy-density physics. Steve earned his B.S. in Physics from the United States Naval Academy in 1990. He served five years as a nuclear submarine officer in the U.S. Navy, including billets as an instructor at the Navy's S1C prototype training reactor, and as Assistant Engineer on board USS Louisville (SSN 724). Following his Naval career, Steve earned his Ph.D. in Physics from the University of California, Berkeley in 2000, specializing in experimental plasma physics. That year, he joined A Division at LLNL, where he has spent the past 10

years using analytic theory, experiments, and large, multi-physics design codes to address stockpile issues.

Ms. Daniela Helfet, Foreign Affairs Specialist, U.S. Department of State

Daniela Helfet is a foreign affairs specialist in the WMD Terrorism Office in the International Security and Nonproliferation Bureau at the U.S. Department of State. She is responsible for international nuclear forensics issues and supports the Nuclear Trafficking Response Group (NTRG) as well as the Global Initiative to Combat Nuclear Terrorism (GICNT). She also has expertise in the area of Middle East politics and speaks both Arabic and Hebrew.

Dr. Lani Miyoshi Sanders, Manager, Defense Programs Studies Department, Sandia National Laboratories

Lani Miyoshi Sanders manages the Defense Programs Studies Department at Sandia National Laboratories. Prior to Sandia, Lani worked for the Defense Nuclear Facilities Safety Board at their headquarters in Washington, D.C. and on assignment at the Savannah River Site. Lani holds a B.S. from Rice University and M.S. from Stanford University, both in Civil Engineering, and a Ph.D. from the University of New Mexico in Chemical Engineering.

SESSION FOUR: NUCLEAR WEAPONS AND STRATEGIC COMPETITION

Hans Kristensen, Director, Nuclear Information Project, Federation of American Scientists

Hans M. Kristensen is Director of the Nuclear Information Project at the Federation of American Scientists in Washington, D.C. He is co-author of the bi-monthly Nuclear Notebook column in the *Bulletin of the Atomic Scientists* and the World Nuclear Forces overview in the *SIPRI Yearbook*. He is a frequent advisor to the news media and institutes on the status of nuclear forces and policy.

Colonel Melvin G. Deaile, Chief, Plans, Policy, and Integration Division (A5P), Air Force Global Strike Command, Barksdale AFB

Colonel Melvin G. Deaile serves as the Chief of the Plans, Policy and Integration Division in the A5/8 directorate at Air Force Global Strike Command. The Fresno, CA native graduated with an honors degree in Astronautical Engineering from the U.S. Air Force Academy in 1988. Upon graduation from Undergraduate Pilot Training (1989), Col Deaile reported to Barksdale AFB, LA, for his first tour in the B-52 where deployed to Iraq in support of Operation DESERT STORM. In 1995 he arrived at Minot AFB, ND, and subsequently attended the USAF Weapons School where he became the top academic performer and a Distinguished Graduate. While in the B-2 program at Whiteman AFB, MO, he flew a record setting 44.3 hour combat mission in support of Operation ENDURING FREEDOM and was recognized as the Air Force's Pilot of the Year for 2001. In 2002, he attended the Army's Command and General Staff College at Ft. Leavenworth, KS, and gained admission into the School of Advanced Air and Space Studies (SAASS) at Maxwell AFB, AL. While at SAASS, he was selected to enter the future faculty pipeline and entered a three-year doctorate program in American History at the University of North Carolina-Chapel Hill. His dissertation focused on organizational culture in Strategic Air Command, 1948-1962. In December of 2008, he deployed to Iraq to lead one of the Joint Interagency Task Force teams under Multi-National Force-I. Prior to his current assignment, Col Deaile was the Strategy Division Chief at the 608th Air and Space Operations Center, 8th AF, at Barksdale AFB, LA.

Mr. Raja Karthikeya Gundu, Research Specialist, SOS International Ltd.

Raja Karthikeya is an international security researcher based in Washington DC. He has a M.S. degree from the School of Foreign Service at Georgetown University, where he was also a Junior Fellow at the Institute for the Study of Diplomacy. He was a PONI Nuclear Scholar in 2009, was the Harold Rosenthal Fellow in International Affairs at the House of Representatives' Committee on Homeland Security, and prior to that a Research Intern in the South Asia division at the Center for Strategic and International Studies. He has a background in journalism and Marketing and has worked with public sector clients for Oracle Corporation in Egypt, Algeria and India. He has also been a columnist for The Hindu, India's national newspaper. He also has an MBA and a Bachelor's degree in Computer Sciences.

Mr. Matthew Hallex, M.A. Candidate, George Washington University

Matthew Hallex is currently a MA candidate in the Security Policy Studies program at the George Washington University where he specializes in Asian regional security and weapons of mass destruction. He has worked and interned at a number of organizations including the Project 2049 Institute, the Hudson Institute, the National Committee on US Foreign Policy, the Asia Society and the EastWest Institute. Matthew received his BA in Political Science from Hunter College, City University of New York and also studied at the Shanghai University of Finance and Economics.

Dr. Matthew Kroenig, Assistant Professor, Department of Government, Georgetown University

Matthew Kroenig is an assistant professor in the Department of Government at Georgetown University and a research affiliate with The Project on Managing the Atom at Harvard University. He is the author of "Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons" (Cornell University Press 2010). His writings on international politics have appeared in such publications as American Political Science Review, Foreign Affairs, Foreign Policy, Journal of Conflict Resolution, Security Studies, USA Today, and The Washington Post. Dr. Kroenig has also served as a strategist on the policy planning staff in the Office of the Secretary of Defense. He is a term member of the Council on Foreign Relations.

SESSION FIVE: NUCLEAR ARMS CONTROL OPPORTUNITIES AND CONSTRAINTS

Dr. Stan Fraley, Senior Scientist, Sandia National Laboratories

Dr. Stan Fraley has been involved in Arms Control and Nonproliferation issues related primarily to nuclear weapons and nuclear materials at the Arms Control and Disarmament Agency (ACDA), as a Science Attaché with the State Department assigned to the U S Mission to the International Atomic Energy Agency (IAEA) and as a Senior Scientist at Sandia National Laboratories. While employed by Sandia he has also had assignments to ACDA and to the State Department. During the last assignment he was the Director of the Office of Nuclear Affairs in the Verification and Compliance Bureau in the US State Department. Dr. Fraley served on the US delegation in Geneva that negotiated the Intermediate Nuclear Forces (INF) Treaty, where he was the US Chair of the US/Soviet working group that negotiated the Inspection Protocol provisions of the INF Treaty. He was one of the U.S. inspectors that travelled to North Korea to monitor the disabling activities that were conducted under the auspices of the Six-Party talks led by China. Recently he was on the delegation in Geneva that negotiated the New START Treaty that is currently under consideration in the U.S. Senate for its advice and consent to ratification. Dr. Fraley has also developed Monte Carlo programs for use in solving neutron and gamma-ray radiation transport problems and is a co-author of a book on the subject with Dr. Steve Dupree, also from Sandia. BS, North Carolina State University, 1966
MS, North Carolina State University, 1971

PhD, University of Tennessee, 1977

Ms. Amanda Tuninetti, Princeton University

Amanda is a student at Princeton University in the Woodrow Wilson School of Public and International Affairs. She is focusing on International Security with certificates in Contemporary European Politics and Russian and Eurasian Studies. Her academic interests include nuclear weapons policy, transatlantic security cooperation, and U.S.-Russian relations. She is currently working at CSIS with the Kissinger Chair in Diplomacy and National Security.

Ms. Stacy Durr, Research Assistant, The Brookings Institution

Stacy Durr is currently a research assistant at The Brookings Institution, where she supports Helmut Sonnenfeldt in studying arms control and, more broadly, U.S. relations with Russia, NATO and Iran. Stacy has recently completed a M.A. in the U.S. Foreign Policy program at American University's School of International Service, where her studies concentrated on U.S. policy towards international organizations.

Mr. Drake Warren, Senior Member of the Technical Staff, Strategic Studies Department, Sandia National Laboratories

While at Sandia, Drake Warren has worked on economic studies and economic analysis projects across a range of homeland security and national security issues. Prior to his arrival at Sandia, he earned a Ph.D. in Spatial and Regional Analysis from the Agricultural and Consumer Economics Department at the University of Illinois at Urbana-Champaign where he was a research assistant in the Regional Economics and Public Policy Research Group. He holds a bachelor's degree from Rice University and a master's degree from Northwestern University.