COLLEGE OF ENGINEERING NUCLEAR ENGINEERING & RADIOLOGICAL SCIENCES UNIVERSITY OF MICHIGAN

Third Annual Michigan Memorial Phoenix Project Lecture



Presented by Anne Harrington, Deputy Administrator for Defense Nuclear Nonproliferation National Nuclear Security Administration

Friday, March 27, 2015 4:00 PM to 5:00 PM White Auditorium, Cooley Building, 2355 Bonisteel Blvd, Ann Arbor, MI 48109

Policy and Technology: Can They Work Together to Minimize Future Security Risks?

We all recognize that hindsight is 20-20 and that we often find ourselves in situations where the politics and policies of the past create challenges for politics and policies of the present. This talk will explore a current example involving two Presidents, who each was very personally vested in nuclear issues, each of whom operated in two very different political and threat environments. In some significant ways, the two resulting Presidential policy directions continue to interact with each other today. On the one hand, we have President Eisenhower on December 8, 1953, proposing to promote the peaceful uses the atom, and through the successful implementation of this policy, the United States and other countries exported highly enriched uranium (HEU) to countries around the world, much of which was used to fuel research reactors. If we fast forward to the beginning of the 21^{st} century, the events of 9/11, along with indications that terrorist groups were interested in improvised nuclear devices, accelerated concerns that too much material that was weapon useable was available in too many places with too little security. President Obama, in his April 5, 2009 speech in the Czech Republic, asserted that "... the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up.... Black market trade in nuclear secrets and nuclear materials abound ... so, we must ensure that terrorists never acquire a nuclear weapon." The policy and technical communities have joined together to respond to the challenge of how to maintain vital peaceful uses research, while minimizing the risk related to the materials involved. This raises the broader question of how the policy and technology communities can work together to look at the potential future consequences of both policy decisions and technological advances, in a world where information and technology move at astonishing speed

About the Speaker

Anne Harrington was sworn in as Deputy Administrator for Defense Nuclear Nonproliferation for the National Nuclear Security Administration in October 2010. Previously, Ms. Harrington was the Director of the U.S. National Academy of Sciences Committee on International Security and Arms Control (CISAC) a position she held from March 2005 to October 2010. While at CISAC, she managed several key studies on a variety of nonproliferation, threat reduction and other nuclear security issues, including: Global Security Engagement: A New Model for Cooperative Threat Reduction (2009); Future of the Nuclear Security Environment in 2015 (2009); Internationalization of the Nuclear Fuel Cycle: Goals, Strategies, and Challenges (2008, joint report with Russian Academy of Sciences); and English-Chinese Chinese-English Nuclear Security Glossary (2008, produced jointly with the Chinese Scientists Group for Arms Control).

Ms. Harrington served for 15 years in the U.S. Department of State, where she was Acting Director and Deputy Director of the Office of Proliferation Threat Reduction and a senior U.S. government expert on nonproliferation and cooperative threat reduction. She has dedicated much of her government career to developing policy and implementing programs aimed at preventing the proliferation of WMD and missile expertise in Russia and Eurasia, and also launched similar efforts Iraq and Libya.

Her State Department assignments include serving as the U.S. senior coordinator for efforts to redirect former Soviet WMD/missile experts 1993–1998. She was based in Moscow from 1991 to 1993, where she was the Senior Advisor to the U.S. Delegation to the International Science and Technology Center (ISTC) Preparatory Committee and Science Analyst at the U.S. Embassy in Moscow. She was instrumental in negotiating the agreements that established the ISTC and the Science and Technology Center in Ukraine (STCU), and the agreement between the United States and Kazakhstan for the secure storage of spent fuel and safe shutdown of the Aktau BN-350 breeder reactor.

She was selected to attend the National Defense University's National War College in 2002–2003, where she was also a research fellow and authored the paper, "Reducing the Threat from Biological Weapons: Perspectives on U.S. Policy." Ms. Harrington has been author or co-author on a number of papers on countering biological threats.

Ms. Harrington graduated with a bachelor's of arts degree from St. Lawrence University, an M.A. from the University of Michigan, and an M.S. from the National Defense University National War College. She has two children, Meredith and Owen Lynch.