

Statement of
Patricia K. Falcone
Nominee for Associate Director for National Security and International Affairs
Office of Science and Technology Policy
Executive Office of the President
to the
Committee on Commerce, Science, and Transportation
United States Senate
May 10, 2012

Chairman Rockefeller, Ranking Member Hutchison, members of the committee, I welcome this opportunity to meet with you today.

First, I would like to introduce my family. My husband of 35 years is here, Roger Falcone; he is a Professor of Physics at the University of California at Berkeley. We met in an engineering class during our sophomore year in college. Our daughter Elizabeth is also here. She has the privilege of working in the U.S. Senate as a legislative assistant for a member of this Committee, Senator Warner. Our son Michael is unable to join us today. He is a senior at the University of Washington in Seattle, where he will graduate next month with a bachelor's degree in computer science and soon thereafter begin work at a technology start-up.

With those important people introduced, I would like to turn to the business at hand. I am very honored to be here as the President's nominee for Associate Director for National Security and International Affairs in the Office of Science and Technology Policy (OSTP). My professional experience is as an engineer working at the Sandia National Laboratories where I have come to appreciate the close relationship between national security and excellence in science and innovation. I became an engineer based on the accurate but imprecise guidance that engineering was for folks who liked math and science and wanted to do something with them. Also, I was told that I would have a better opportunity getting scholarships to support my college education were I to study engineering. All of that came true – I received financial support for my undergraduate training in aerospace and mechanical engineering carried out in the early days of coeducation at Princeton University, where I was the first woman to complete the full engineering curriculum. I completed my graduate work in mechanical engineering at Stanford University.

My father was in the Air Force; he and my mother instilled the values of education and national service in my siblings and me. Like my dad, I have had the great satisfaction and pleasure to contribute to important national challenges, in my case, by working in a research laboratory, working on mathematical models and computer simulations, and serving as a technical manager and leader. I have worked on the processes of pollutant formation, on the development of solar thermal power plants, as well as on a range of national security topics including studies and analyses related to new technologies such as biodetectors for homeland security, spectroscopy of high altitude rocket plumes, and assessments of our nation's nuclear posture. Engineering is a team sport, and I have particularly enjoyed the process of developing

frameworks for challenging problems, defining requirements for new technologies, understanding operational contexts, and outlining action recommendations for decision-makers.

For the past three years, I have had the pleasure of working on loan from Sandia at OSTP under Dr. John Holdren, on a range of topics especially the technical dimensions of the President's nuclear security agenda. My experience at OSTP has both deepened and broadened my understanding of the linkage between national security and excellence in science and innovation. That excellence must combine a deep understanding of the specific policy or military challenge with the very best technical insights. I come before this committee offering what I believe to be is a balanced synthesis of both of these capabilities. If confirmed, I will seek to ensure that policy development always benefits from the Nation's technical excellence, and that we work to build policies and institutions that will continue to provide that excellence into the future. If confirmed, I also would value the opportunity to continue a longstanding interest in and commitment to inspiring students and, in particular, girls and minorities, to pursue coursework and careers in engineering, and other STEM- (Science, Technology, Engineering and Mathematics) related fields. Now more than ever, our national security depends on a solid grounding in science and technology. Thank you, and I would be pleased to answer any questions the committee may have.