

**ARUN A. SERAPHIN**

**EXPERIENCE**

**National Defense Industrial Association (NDIA)**  
Executive Director, Emerging Technologies Institute

*January 2022 - present*

Responsible for directing Institute activities including developing workshops, conferences, webinars, research papers, articles, and other information on emerging defense technologies for NDIA member companies and universities, and government officials. Managing team of research fellows, associates, interns, and other staff to execute activities of the Institute. Host “Emerging Tech Horizons” podcast. Leading planning of annual Emerging Technologies Conference and Exhibition. Engage with senior government leaders and industry and academic executives on activities of the Institute relevant to defense technology funding and policy issues.

**United States Senate Committee on Armed Services**  
Professional Staff Member

*March 2014 – January 2022*  
*July 2001 – December 2009*

Senior Congressional committee staff member responsible for: defense acquisition and procurement, including major weapons systems, activities of Undersecretaries for Acquisition and Sustainment (USD(A&S)) and Research and Engineering (USD(R&E)) and Service Acquisition Executives, industrial base and manufacturing, software and information technology (IT) systems, cloud computing, services, small business programs; oversight of over \$20 Billion in Department of Defense (DOD) science and technology (S&T) and other R&D investments, such as quantum science and artificial intelligence programs, energy technology programs, defense laboratories, innovation units, and test centers, technology transfer, university research programs, and microelectronics; defense business reform, including Pentagon audit and management data analytics; and technical workforce and STEM education initiatives.

Develops and manages funding and legislative language for the National Defense Authorization Act during committee markup, Senate floor consideration, and conference negotiations. Manages hearings, including Pentagon oversight and confirmation of DOD civilian and military leaders, for the full committee and the Subcommittees on Readiness and Management Support and Emerging Threats and Capabilities. Directly briefs Senators and works with Senate leadership staff on defense S&T, IT, acquisition, and innovation programs and funding. Supervises junior staff and staff assistants.

Oversight of DoD S&T, IT, and management activities, including working closely with high level principals and staff from the USD(A&S), USD(R&E), CMO, CIO, Comptroller, Military Services, DARPA, Defense Innovation Unit, Defense Digital Service, other federal organizations, industry and university representatives, and other Congressional committees.

**White House Office of Science and Technology Policy (OSTP)**      *April 2010 – March 2014*

*January 2012 – March 2014:* Principal Assistant Director for National Security and International Affairs (NSIA) – Deputy director of NSIA division, assisted in supervising ten senior policy advisors and staff in developing policies, programs, technical analyses, and support to the President’s Science Advisor and other senior government and industry leaders; and led partnership with National Security Council (NSC) and Office of Management and Budget on development of national security policies and federal budgets. Led government-wide effort on federal STEM workforce personnel policies, and initiatives to connect DoD activities with OSTP-led government-wide initiatives including in small business programs, data analytics, STEM education, federal workforce reform, and manufacturing.

*January – August 2012:* Performed duties of Associate Director for National Security and International Affairs (Senate confirmed position). Served as OSTP representative on NSC Deputies Committee meetings and as co-chair of the interagency National Science and Technology Council’s Committee on Homeland and National Security. Supervised ten senior policy advisors and support staff. Participated in OSTP Director’s daily senior staff meetings.

*April 2010 - December 2011:* Assistant Director for Defense Programs - Led initiatives in defense S&T budget and legislative proposals; DOD participation in Administration technology and innovation initiatives; support for the First Lady’s Joining Forces initiative to increase veteran’s employment and quality of STEM education for military children; Small Business Innovation Research (SBIR) program policy development; and federal laboratory revitalization. Served as OSTP program manager for think tank policy research activities.

**Defense Advanced Research Projects Agency (DARPA)**      *Jan 2010 – March 2014*  
Special Assistant for Policy Initiatives/Senior Scientist (ST/SES)

Provided support and analyses to the Director and Deputy Director on policy issues, including DARPA small business programs; personnel management; Congressional relations; and interagency, legislative, and agency policy initiatives. Detailed to White House OSTP.

**US House of Representatives**      *March 2001 – July 2001*  
**Committee on Science Subcommittee on Research**  
Professional Staff Member

Staff member responsible for oversight of portions of National Science Foundation (NSF) budget and information technology issues. Legislative projects included: reauthorization of Networking and Information Technology R&D and nanotechnology programs, and resolution to commemorate 50th anniversary of NSF.

**Office of Senator Joseph Lieberman**  
Congressional Science and Engineering Fellow

*September 1999 – November 2000*

Legislative fellow responsible for civilian and defense science and technology policy issues, including funding of R&D in federal agencies, university-industry-government technology partnerships, STEM education, and commercial and defense S&T. Responsibilities included working with constituents, preparing legislation, briefings, speeches, and memoranda for the Senator, and assisted in all technology related events.

**Institute for Defense Analyses** - Alexandria, VA  
Research Staff Member

*August 1996 – February 2001*

Led and staffed research projects for DOD program managers, including technology transition from R&D into defense systems, technology assessments for international cooperative programs, assessments of international technology capabilities, industrial base assessments, and microelectromechanical systems (MEMS) technology.

## EDUCATION

**Massachusetts Institute of Technology**  
**Department of Materials Science and Engineering** - Cambridge, MA

Ph.D. in Electronic Materials, June 1996. GPA: 4.6/5.0

Thesis: "Photoluminescence Properties of Silicon Nanocrystallites"

Research on the development of silicon nanotechnology for displays and optical computing applications. Research included pulsed laser ablation synthesis and optical characterization of nanomaterials, and development of tools and models to understand and explain optical properties of quantum dots.

Minor: Media Studies - Role of new media technologies in culture and society.

**State University of New York at Stony Brook** - Stony Brook, NY  
B.A. in Political Science - American Government concentration,  
B.E. in Engineering Science - Materials Science concentration,  
May 1991, graduated Magna Cum Laude, GPA: 3.82/4.00

## SECURITY CLEARANCES

Department of Defense Top Secret clearance.  
Central Intelligence Agency SCI clearance.

## ACTIVITIES

Research Fellow, Acquisition Innovation Research Center, Systems Engineering Research Center, Stevens Institute of Technology  
Senior Fellow in International and Public Affairs, Watson Institute of International & Public Affairs, Brown University  
Member, Congressional Commission on Reform of Defense Planning, Programming, Budgeting and Execution (PBBE) Process  
Committee Member, National Academies of Science, Engineering, and Medicine  
Review of the Small Business Innovation Research and Small Business Technology Transfer Programs at the Department of Defense  
Senior Advisor, WestExec Advisors  
Senior Advisor, Revere Federal Strategies  
Special Government Employee, US Department of Defense.

## AWARDS

APLU Council on Government Affairs, Exemplary Public Servant Award, 2020.  
Kerala Center, Service to Government Award, 2013.  
Small Business Technology Council National Milton Stewart Award, 2010.  
Roll Call "Top 10 Defense Staffers to Know", 2009.  
Member, Optical Society of America Public Affairs Committee, 2004-2006.  
Member, SUNY Stony Brook Alumni Association Board of Directors, 2000-2004.  
Chairman & Secretary, ASM International Washington, DC Chapter, 1998-2001.  
Materials Research Society and Optical Society of America Congressional Science and Engineering Fellow, 1999-2000.  
National Defense Science and Engineering Graduate Fellow, 1992-1995.  
Stony Brook Foundation Award as top student in Engineering Science, 1991.  
Stony Brook Senior Leadership Award, 1991.  
Phi Beta Kappa Honor Society, 1990.  
Pi Sigma Alpha National Political Science Honor Society, 1990.

## PUBLICATIONS/PRESENTATIONS

Co-author of a number of technical papers and limited distribution policy documents on nanotechnology, foreign technology capabilities assessments, counterterrorism, and MEMS.

Numerous keynote, technical and policy-related presentations at conferences, and government and corporate meetings.