

Dr. Scott Pace

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PROFESSIONAL EXPERIENCE

George Washington University, Washington, DC, 2008-Present

Director, Space Policy Institute and Professor of Practice of International Affairs in the Elliott School of International Affairs, Secondary appointment on the faculty of the Trachtenberg School of Public Policy and Public Administration
Graduate and undergraduate teaching and research in the fields of civil, commercial, and national security space policy, international science and technology policy, management of technical innovation, and methods of policy analysis. Member of the Executive Committee of the Trachtenberg School. Served on the GW Advisory Council for Research, the Elliott School faculty advisory committee on undergraduate curriculum, and doctoral candidate committees. Created and grew an endowment fund for the Institute.

National Space Council, Washington, DC, August 2017 – December 2020

Deputy Assistant to the President and Executive Secretary
Responsible for all aspects of the National Space Council, a White House policy development function covering all aspects of space policy across national security, civil, commercial, and international sectors. Worked directly for the Vice President of the United States, in his role as Chair of the National Space Council. The Council membership consisted of Cabinet members with space responsibilities and was supported by a small White House staff as well as an outside advisory group of eminent Americans. Served in this position full-time while on leave from George Washington University.

- Led successful interagency development of Space Policy Directives, Presidential Memoranda, and Executive Orders on human space exploration, commercial space regulatory reform, export control reform, space traffic management, the U.S. Space Force, licensing of space nuclear power sources, radiofrequency spectrum management, and space-based positioning, navigation, and timing.
- Managed eight public meetings of the National Space Council, chaired by the Vice President and attended by Cabinet-level members of the Council. Supported all space-related speeches and other engagements by the Vice President.
- Provided White House coordination for the legislative proposal creating a U.S. Space Force and signed into law by the President on December 20, 2019.
- Led U.S. delegations to meetings of the UN Committee on the Peaceful Uses of Outer Space in Vienna, to include adoption of consensus guidelines on the long-term sustainability of outer space activities.
- Co-led U.S. delegation at annual bilateral meetings of the U.S.-Japan Comprehensive Dialogue on Space, in Tokyo and Washington.

- Under the direction of the Vice President, worked with the Office of Management and Budget, NASA, and the Department of Defense to set annual budget topline for space activities in the President's Budget Request to Congress.
- Worked with the Office of Science and Technology Policy on recommendations for space weather monitoring, planetary protection, planetary defense, treatment of lunar surface sites, and global environmental monitoring from space. Authored space sections of the annual OSTP-OMB R&D priorities memo.
- Worked with the National Security Council to co-author the National Space Strategy, conduct space-related military exercises with senior leadership, and produce classified products.
- Numerous public presentations to industry, congressional offices, international meetings, and professional associations to explain Administration space priorities and policies.

George Washington University, Washington, DC, 2012-2015

Director, Center for International Science and Technology Policy

Program Director, Master of Arts in International Science and Technology Policy

The Center focuses on the policy implications of scientific advances and technological development, innovations, especially comparative analyses across countries and regions. Research areas include space policy, technology and industry dynamics, information technology, and the evaluation of R&D programs. The Master's program consists of two-year full-time coursework and a capstone project.

National Aeronautics and Space Administration, Washington, DC, 2002-2008

Associate Administrator for Program Analysis and Evaluation 2005-2008

Responsible for objective studies, analyses, cost estimates, and outside reviews in support of policy, program and budget decisions by the NASA Administrator. Duties include managing a five-division office of 80 technical professionals and administrative staff at NASA Headquarters and the Langley Research Center.

- Development and implementation of the Program, Planning, Budget, and Execution (PPBE) budget process for NASA; coordination of budget issues for NASA budget submissions for Fiscal Years 2007-2010.
- Management of top agency decision forums: Strategic Management Council, Operations Management Council, and the Program Management Council.
- Oversight of all independent reviews and cost estimates associated with NASA programs and projects with life-cycle costs of \$250M or more.
- Direct development of an Agency-sponsored venture capital fund.
- Oversight of PA&E studies and analysis for the Administrator; including the Exploration Systems Architecture Study in 2005.

Chief Technologist for Space Communications, 2003- 2005

Responsible for coordination of programmatic, policy, and regulatory issues related to space-based information systems providing functions such as communications, navigation, and remote sensing. Focus on domestic and international protection of U.S. interests related to the Global Positioning System,

active and passive sensor bands, aeronautical safety bands and dual-use space communications.

- Managed multi-center and multi-university test programs measuring interference to aircraft and scientific systems from new commercial wireless technologies. Oversight of research and development of improved search and rescue capabilities using GPS.
- NASA representative for US-European Commission negotiations on cooperation in satellite navigation, National Security Council review of space-based positioning, navigation, and timing policy (e.g., GPS), the Interagency GPS Executive Board, and the White House Spectrum Reform Initiative.
- Coordinated successful industry-to-industry and industry-government negotiations to adopt best commercial practices for new wireless technologies that protect critical government services. New rules protecting safety and scientific services subsequently adopted by the Federal Communications Commission.

Deputy Chief of Staff to the Administrator, 2002-2003

Responsible for overseeing implementation of the President's Management Agenda in Human Capital, Competitive Sourcing, Expanding e-Government, Financial Management, and Integrating Budget and Performance. Coordinated policy and programmatic issues with the Office of Management and Budget and other White House offices, such as the Integrated Space Transportation Plan and responding to the loss of the Space Shuttle *Columbia*.

Office of Science and Technology Policy, Washington, DC, 2001-2002

Assistant Director for Space and Aeronautics

Responsible for space and aviation-related issues and coordination of civil, commercial and dual-use space issues through the Space Policy Coordinating Committee of the National Security Council. Coordinated policy and programmatic issues with the Office of Management and Budget and other White House offices. Directly supported the Senate confirmation of the Director of the Office of Science and Technology Policy.

Bush-Cheney Transition Team 2000-2001

Policy Coordinator

Conducted agency interviews and wrote transition books and action plan memos for NASA and the National Science Foundation. Provided technical input for the OSTP Transition Team.

RAND Corporation, Washington, DC, 1993 - 2001

Senior Policy Analyst, Science and Technology Policy Institute

Project leader for analytical studies for the White House Office of Science and Technology Policy. Research areas include civil, military, intelligence, and commercial space policy, aviation, domestic and international spectrum management, and information technologies.

- Direct participant in U.S. State Department negotiations with Japan and Europe on the Global Positioning System (GPS). This resulted in a Joint Statement by Japan and the United States in 1998. Negotiations with the European Commission and Member States resulted in an agreement in 2004.
- Key member of successful U.S. efforts to protect radionavigation satellite spectrum at the 1997 World Radiocommunication Conference (WRC-97) in Geneva, Switzerland and to gain new allocations for GPS at WRC-00 in Istanbul, Turkey. Experienced participant in ITU study groups and regional meetings.
- Led major study of GPS policy issues that resulted in a new presidential decision directive on in 1996. Conducted assessments of space transportation, launch facilities, satellite technology, commercial and civil remote sensing, and the use of commercial data for environmental monitoring for the Executive Office of the President. These assessments contributed to several presidential directives, statements, and interagency agreements.
- Lead author on a study of environmental uses of intelligence systems as well as military space studies for the Office of the Joint Chiefs of Staff. Monograph on *Space: Emerging Options for National Power* used as a core text for space policy courses at the Air War College, National Defense University, and Industrial College of the Armed Forces.
- Member of Department of Defense Senior Review Group on Commercial Remote Sensing and National Research Council's Committee on Earth Sciences.
- Dissertation Committee member for the RAND Graduate School. Guest lecturer at the National Foreign Affairs Training Center, U.S. Department of State.

U.S. Department of Commerce, Washington, DC, 1990 - 1993

Deputy Director and Acting Director, Office of Space Commerce

Senior technical and policy analyst for space issues in the Office of the Deputy Secretary of Commerce. Represented the Department in interagency working groups and advisory committees on civil, military, and commercial space matters.

- Worked with industry leaders in preparing a report on the space industrial base for the Vice President of the United States and the National Space Council.
- Led Department support for the streamlining of U.S. export controls affecting GPS receivers, communication satellites, and private remote sensing systems.
- Lead author of those portions of the Land Remote Sensing Policy Act of 1992 dealing with the licensing of private remote sensing satellites.
- Worked with the Office of Federal Procurement Policy to define new ways for the government to be a more predictable customer for industry that were later approved by Congress.
- Worked with the Departments of Defense and Transportation to develop policy guidance for the disposal of surplus strategic ballistic missiles. U.S. delegation member in negotiations with South Africa to stem ballistic missile proliferation.
- Key participant in developing U.S. positions for space trade negotiations with Europe, China, and Russia. Provided technical support for “Super 301” trade negotiations with Japan on communication satellites in 1990. Co-led first commercial space trade mission to Russia in 1992.

- Oversaw an international assessment of space launch vehicle and communications satellite technologies that included NASA, DOD, and the intelligence community.

Rockwell International, Downey, CA, 1989

Member Technical Staff, Advanced Engineering

Managed independent R&D funds for military applications of the Space Shuttle and mission and system requirements analysis for Shuttle-derived launch vehicles. Wrote the risk management portion of the Assured Crew Return Vehicle Study Proposal to NASA.

The RAND Corporation, Santa Monica, CA, 1985 - 1989

RAND Graduate School Fellow

Dissertation on "U.S. Access to Space: Launch Vehicle Choices for 1990 -2010." Contributor and author for RAND Corporation projects on space system survivability, the Space Station, the National Aerospace Plane, military applications of civil space systems, and antiproton technology.

Rockwell International, Downey, CA, 1981 - 1985

Member Technical Staff, Advanced Engineering

Project Engineer in the Space Transportation Systems Division's Advanced Engineering Group. Responsibilities encompassed space market analyses, space system architectures, preliminary spacecraft design requirements, and satellite servicing in space.

Massachusetts Institute of Technology, Cambridge, MA, 1980 - 1982

Teaching Assistant, Department of Aeronautics & Astronautics

Part of three-person team that organized and taught all sophomores taking the engineering laboratory course in "Unified Engineering."

Jet Propulsion Laboratory, Pasadena, CA, 1976 - 1980

Member Technical Staff, Space Sciences Division

Summer employee. Participated in the development of zero gravity space processing experiments for Spacelab and the cryogenic system for IRAS (Infrared Astronomy Satellite). Served on the flight crew during zero-g operations of KC-135 aircraft at Ellington AFB, Texas. Approximately 2.5 hours of total zero-g time.

EDUCATION

Ph.D., Policy Analysis, 1989, RAND Graduate School

S.M., Technology & Policy, 1982, Massachusetts Institute of Technology

S.M., Aeronautics & Astronautics, 1982, Massachusetts Institute of Technology

B.Sc., with distinction, Physics, 1980, Harvey Mudd College