



Sheila E. Widnall

Institute Professor
Massachusetts Institute of Technology

Sheila Widnall is an Institute Professor and Professor of Aeronautics and Astronautics at MIT. She served as Secretary of the Air Force from 1993 to 1997, placing special emphasis on space capabilities. She served as Associate Provost at MIT (1992–1993) with responsibility for academic integrity including conflict of interest policy, federal relations, and international programs. She served as Vice President of the National Academy of Engineering and as President of AIAA (2000–2001). She was a trustee of the Carnegie Corporation, The Aerospace Corporation, and Aerojet Rocketdyne; a director of the Draper Laboratories; and past president of the American Association for the Advancement of Science. Research activities have included the following: boundary-layer stability, unsteady lifting-surface theory, unsteady leading-edge vortex separation from slender delta wings, tip-vortex aerodynamics, helicopter noise, aerodynamics of high-speed ground transportation vehicles, vortex stability, aircraft-wake studies, and turbulence and transition. As a consultant, major research activities have included experiments on jet noise, studies of compressor noise, V/STOL noise, prediction of unsteady air loads on launch vehicles due to turbulence, shock oscillation, flow separation, measurement of pressure and velocity fluctuations in turbulent boundary layers and wake regions in both subsonic and supersonic flow, and three-dimensional steady and unsteady-aerodynamic lifting surface methods for flutter analysis and gust response.