Dennis M. Bushnell
Chief Scientist
NASA Langley Research Center

Responsible for Technical Oversight and Advanced Program formulation for a major NASA Research Center with technical emphasis in the areas of Atmospheric Sciences and Structures, Materials, Acoustics, Flight Electronics/ Control/ Software, Instruments, Aerodynamics, Aerothermodynamics, Hypersonic Airbreathing Propulsion, Computational Sciences and Systems Optimization for Aeronautics, Spacecraft, Exploration and Space Access . 49 years experience as Research Scientist, Section Head, Branch Head, Associate Division Chief and Chief Scientist. Technical Specialties include Flow Modelling and Control across the Speed Range, Advanced Configuration Aeronautics, Aeronautical Facilities and Hypersonic Airbreathing Propulsion. Author of 252 publications/ major presentations and 340 invited lectures/ seminars, Member of National Academy of Engineering , Selected as Fellow of ASME, AIAA and the Royal Aeronautical Society, 6 patents, AIAA Sperry and Fluid and Plasma Dynamics Awards , AIAA Dryden Lectureship, Royal Aeronautical Society Lanchester, Swire and Wilber and Orville Wright Lectures, ICAS Guggenheim Lecture, Israel Von Karman Lecture, USAF/ NASP Gene Zara Award, NASA Exceptional Scientific Achievement and Outstanding Leadership Medals and Distinguished Research Scientist Award, ST Presidential Rank Award,9 NASA Special Achievement and 11 Group Achievement Awards, University of Connecticut Outstanding Engineering Alumni, Academy of Engineers ,Pi Tau Sigma and Hamilton Awards, Univ. of Va. Engineering Achievement Award , service on numerous National and International Technical Panels and Committees and consultant to National and International organizations. DOD related committee/ consulting assignments include USAF Rocket Propulsion Laboratory, BMDC, ONR, Intelligence Community/ STIC, AFOSR, NRAC, NRC,WL, LLL, HASC, NUWC, DARPA, AGARD, ARL,IAT, AEDC, JANNAF, NAVSEA, Air Force 2025,AFSOC,Sandia ,SAB, Army War College ,ACOM Joint Futures ,SOCOM,TRADOC,SEALS,JFCOM,IDA,NDU,DSB and Army After Next. Reviewer for 40 Journals and Organizations, Editor, Volume 123 of AIAA Progress Series “Viscous Drag Reduction in Boundary Layers.” Responsible for invention/ development of “Riblet” approach to Turbulent Drag Reduction, High Speed “Quiet Tunnels” for Flight-Applicable Boundary Layer Transition Research, Advanced Computational Approaches for Laminar Flow Control and Advanced Hypervelocity Airbreathing and Aeronautical Concepts with revolutionary performance potential. Contributions to National Programs include Sprint, HSCT/ SST, FASTSHIP, Gemini, Apollo, RAM, Viking, X15, F-18E/ F [patent holder for the “fix” to the wing drop problem],Shuttle, NASP, Submarine/ Torpedo Technology ,Americas’ Cup Racers, Navy Rail Gun, MAGLEV Trains and

Planetary Exploration. B.S. in M.E. degree from University of Connecticut with Highest Honors, Distinction, University Scholar (1963), M.S. degree in M.E. from University of Virginia (1967).U.S. Govt. ST