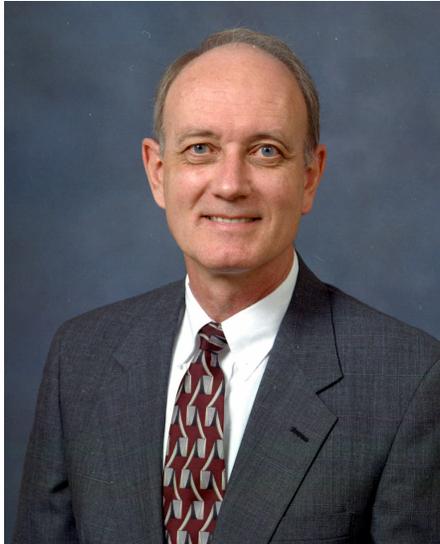




BIOGRAPHY

UNITED STATES AIR FORCE

Dr. Keith L. Kushman



Dr. Keith L. Kushman is the Director of Plans and Requirements at Arnold Engineering Development Center (AEDC), Arnold Air Force Base, Tenn. He is responsible for corporate planning for the free world's largest complex of ground aerospace test facilities, providing developmental testing for Air Force propulsion, aircraft, missile, and space systems, as well as test support to Air Force labs, NASA, other DoD agencies, DoE, commercial interests, and foreign governments. His responsibilities include strategic planning, business development, test facility concept development, and international affairs for this highly technical organization of approximately 2,600 Air Force and contractor personnel.

Dr. Kushman entered the federal civil service at AEDC in November 1980 after five years active duty with the Air Force and three years with the Tennessee Valley Authority. He served as a division chief, Technical Director and director of AEDC's Directorate of Technology from 1990 to 1993. He was responsible

for planning and implementing an applied research program to develop new test capabilities for AEDC and other elements of the DoD Major Range and Test Facility Base.

Dr. Kushman served from 1987-1993 as a Fluid Dynamics Panel member of the NATO Advisory Group for Aerospace Research and Development. He also served as the U.S. member of the Technical Advisory Panel for the von Karman Institute from 1991-1997.

EDUCATION:

- 1968 Bachelor of Science in Aerospace Engineering, N.C. State University
- 1969 Master of Science in Aerospace Engineering, N.C. State University
- 1974 Doctor of Philosophy in Aerospace Engineering, N.C. State University
- 1994 Program for Senior Officials in National Security, Harvard University

ASSIGNMENTS:

1. February 1978 – July 1975, Center Aeronautical Engineer, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.
2. August 1975 - February 1978, System Aeronautical Engineer, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.
3. March 1978 - February 1980, Mechanical Engineer, Tennessee Valley Authority, Chattanooga, Tenn.
4. March 1980 - November 1980, Manager of Particulate Control Technology, Tennessee Valley Authority, Chattanooga, Tenn.

Current as of June 2003

5. December 1980, Aerospace Engineer, Aeromechanics Division, Arnold Engineering Development Center, Arnold Air Force Base, Tennessee.
6. January 1981 - September 1984, Chief of Aeromechanics Division, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.
7. October 1984 - August 1988, Chief of the Facility Technology Division, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.
8. September 1988 - September 1990, Technical Director of the Applied Technology Directorate, Arnold Engineering Development Center, Arnold AFB, Tenn.
9. October 1990 - March 1993, Director of the Applied Technology Directorate, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.
10. April 1993 - Present, Director, Plans and Programs Directorate, Arnold Engineering Development Center, Arnold Air Force Base, Tenn.

CERTIFICATION:

1993 APDP Level III, Test and Evaluation Engineering

OTHER ACHIEVEMENTS:

- 1988 Co-author of AIAA paper 88-1996, A Plan for Coupling Wind Tunnel Testing with CFD Techniques
- 1992 Principal author of AIAA paper 92-3901, Integrated Test and Evaluation for Hypervelocity Systems
- 1994 Editor, AGARD Advisory Report 304, Quality Assessment for Wind Tunnel Testing

EFFECTIVE DATES OF PROMOTION:

Second Lieutenant	May 25, 1968
First Lieutenant	May 25, 1971
Captain	August 15, 1975
GS 0861-12	November 16, 1980
GS 0861-13	December 18, 1980
GS 0861-14	September 16, 1984
GS 0861-15	October 7, 1990