

**WALTER D. DOWNING, P.E.**

Executive Vice President  
Operations

B.S. in Electrical Engineering, Southern Methodist University, 1973  
Graduate Study in Electrical Engineering, University of Houston, 1976  
M.B.A., University of Texas at San Antonio, 1986

Mr. Downing is a senior manager with over 28 years of engineering and technical management experience.

While attending Southern Methodist University (SMU), Mr. Downing completed a two-year cooperative work-study program with the U.S. Air Force Security Service at the Air Force Cryptologic Depot Laboratory. His work involved design and development of special purpose electronic intelligence systems.

After graduating from SMU, Mr. Downing accepted an electrical engineering position in the petrochemical instrumentation and control systems department of Brown & Root, Inc. At B&R, Mr. Downing designed process measurement and control systems for a variety of plant applications.

Mr. Downing joined Southwest Research Institute as a senior research engineer in the Data Systems Department of the Electronic Systems Division. His engineering assignments included design and development of an automated system for reliability testing of ballistic missile reentry vehicle electronics.

Moving into technical management, Mr. Downing became manager of the Instrumentation and Control Systems Section to develop a new technical program area at the Institute. The technical program area evolved into the field of automated testing of aircraft electronics which became the Avionics and Support Systems Section. This section gained national recognition for work in the field of modular automated test equipment for the U.S. Air Force.

Mr. Downing expanded his technical program area into avionics systems design and development. Recognizing the unique needs of military customers who must manage avionics systems far beyond commercial electronics lifetimes, the section began to focus on solving reliability and maintainability problems with existing systems through technology insertion. Mr. Downing managed the U.S. Air Force Design Engineering Program, a major R&M initiative. Under this program, Mr. Downing directed over \$100 million of contract research, thereby growing his section into a department and later into a division. As division vice president, his job functions included planning, organizing, directing and controlling of research and development in the field of avionics and associated aerospace electronics, technologies for training, maintenance, and logistics support.

Following a brief assignment as vice president for planning and program development, Mr. Downing was appointed executive vice president and member of the board of directors. He is currently responsible for managing the technical operations of the Institute.

**PROFESSIONAL ACTIVITIES:** Registered Professional Engineer in the State of Texas. Senior member of the Institute of Electrical and Electronics Engineers, Aerospace & Electronics Systems Society, Instrumentation and Measurement Society, Engineering Management Society, Society of Logistics Engineers, Association of Old Crows, Air Force Association, National Defense Industrial Association, and National Training Systems Association. Technical Program Chairman of AUTOTESTCON '86, '90 and '93, General Chairman of AUTOTESTCON '99, AUTOTESTCON Board of Directors 1996-9 & 2001, Aerospace Electronics Systems Society Board of Governors, and Technical Program Chairman of SOLE '95. Member of the Executive Board for the School of Engineering at Southern Methodist University. Member of the Advisory Councils for the College of Engineering and the College of Business at the University of Texas at San Antonio. Member of the Visiting Committee for the Department of Electrical and Computer Engineering of the University of Texas at Austin. Member of the National Advisory Board for the NSF Foundation Coalition. Member of the Board of Trustees of the World Affairs Council of San Antonio.

**PROFESSIONAL CHRONOLOGY:** Electronic engineer trainee, USAF, 1971-3; design engineer, Brown & Root, Inc., 1974-9; Southwest Research Institute, 1979-(senior research engineer, 1979-81; section manager, 1981-8; department director, 1988-94; division vice president, 1994-7; vice president for planning and program development, 1998; executive vice president, operations, 1998-); instructor, Department of Management and Marketing, School of Business, University of Texas at San Antonio, 1990-2.