



HISTORICAL ACHIEVEMENTS

VALLEY OF THE GIANTS

"When I want to understand what is happening today or try to decide what will happen tomorrow, I LOOK BACK."

OLIVER WENDELL HOLMES

DR. ERNEST (FRANK) MOORE

Colonel (USAF Retired)

Director Edison Materials
Technology Center (EMTEC)

Frank Moore is a highly qualified technical manager and leader, with exceptional credentials and experience. His career history spans over thirty-five years in engineering, technology development, project and program management, technology transfer, systems field testing and development. Colonel Moore was Commander of the Air Force Avionics Laboratory at Wright-Patterson AFB at the time of his AF retirement (career change) on St. Patrick's Day, 1985. Dr. Moore is now the Director of the Edison materials Technology Center (EMTEC) in Kettering, Ohio.

Throughout his career, and continuing to this day, Dr. Moore is directly involved in working the tough management and technical problems at the forefront of technology in an increasingly competitive world. In his 26-year military career, Frank served in many Air Force pioneering programs which advanced aeronautical science on an

international basis. One of the more significant technical efforts was the Advanced Fighter Technology Integration program (AFTI/F-16). History shows that in 1902 Wilbur and Orville Wright developed the first flight control system for airplanes. Their control system permitted the airplane to fly stable and perform normal turn, climb, and descent maneuvers. Frank Moore, as program manager, took the Wright Brothers flight control system to the next level of technology. For the first time in the history of aviation, through the use of digital flight controls, the pilot can select task-tailored unconventional flight modes. While flying straight and level he can now displace the aircraft laterally, ascend or descend without changing the fuselage attitude. The pilot now has expanded control over his aircraft attitude and flight position in free space. This major advance has revolutionized the science of flight. Digital, task-tailored flight control is now accepted as a world standard for all high performance flight vehicles, and is finding its way into commercial aviation.

Dr. Moore has exceptionally broad management experience in high technology avionics research. As Commander, Air Force Avionics Laboratory, he directed a workforce of over 800 people, planned and managed an annual budget of over \$400 million, involving over 500 contract and in-house programs. He directed exploratory and advanced development programs for all aerospace vehicle avionics systems. These systems include airborne radar; electro-optical and infrared sensors; electronic warfare; communications; signal processors and on-board computers, avionics architecture, and the Air Force's VHSIC program. He led the efforts to establish many of these advanced technology programs in the laboratory and to transition the final products to the F-14, F-15, F-16, B-1, the Air Force Advanced Tactical Fighter (ATF), and the Navy ATA aircraft. Some of these aircraft and their avionics suites are used in the NATO countries and by other allies of the United States.

Colonel Moore completed twenty-six years of service in the Air Force at the time of his retirement in 1985. He has the unique mixture of a free thinker,

tempered with the analytical qualities of a highly trained scientist, and the leadership drive of a senior executive manager. He is an easy going individual with a constant what-can-I-do-to-help-you attitude. Frank fully fits the time honored statement, "When you want to get the job done, give it to a busy man." He was the perfect choice for pioneering leadership of the Edison Materials Technology Center.

Dr. Moore is presently serving as Director, Edison Materials Technology Center (EMTEC). This is a not-for-profit consortium of nine Ohio colleges and universities, forty-eight industry members, Air Force Logistics Command, Air Force Aeronautical Systems Division, Wright Aeronautical Laboratories, Mound Laboratories, State of Ohio, and numerous civic organizations. He played a significant role in the creation and development of this new corporation, which combines and applies the best combination of academic, industrial, government, and civic strengths to assure that Ohio industry remains viable and competitive. The technological focus of EMTEC is industrial materials and process development, and the application of existing technology to problems defined by the EMTEC industry members. Created in January 1987, EMTEC and its members have participated in over eighty short- and long-term projects designed to remove technological barriers faced by Ohio industry. Dr. Moore is always ready to describe this important Ohio program, and has served as guest speaker at numerous technical, professional, and civic meetings throughout the state.

At this writing, Dr. Moore is working with many community leaders throughout Ohio in a statewide effort to create an Ohio Advanced Technology Center, involving all of Ohio industry, academia, and Wright-Patterson AFB. No doubt you will hear more of this important initiative in the very near future.

Dr. Moore is a recognized high technology leader in the Miami Valley. His exceptional technical background coupled with a broad creative perspective, and a constant can-do attitude are contributing to the Dayton area's image as a center for high technology.