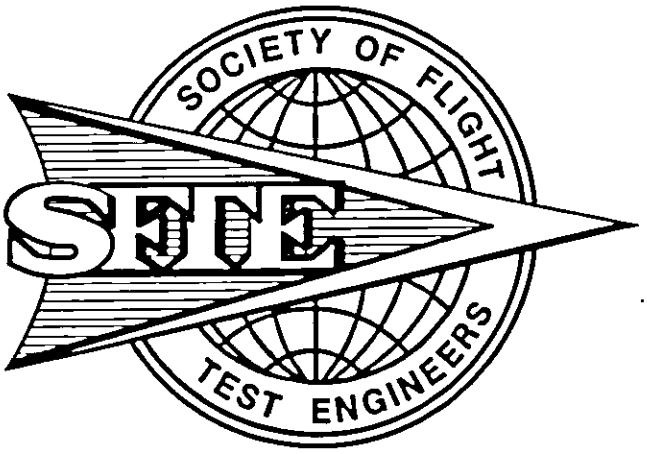
SOCIETY OF FLIGHT TEST ENGINEERS

15th ANNUAL SYMPOSIUM PROCEEDINGS



"KEY ISSUES AND TECHNOLOGY FOR FUTURE PROGRAMS"

BRECKENRIDGE CONCOURSE HOTEL
ST. LOUIS, MO
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FOREWORD

Welcome to St. Louis and the 15th Annual International Symposium of the Society of Flight Test Engineers. The goal of the St. Louis Chapter is to be a good host to all those attending the Symposium. This year's theme "Key Issues and Technology for Future Programs" reflects the need to address those problems and opportunities.

The St. Louis Chapter thanks all those who submitted technical papers and the vendors for their significant support of the Symposium. Our sincere thanks to McDonnell Douglas for its assistance and excellent support of Symposium activities.

The following members of the Symposium Committee dedicated much time and effort in an attempt to put on a first rate conference.

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Special appreciation is given to the following committee members for their contribution to the formation of the 15th Annual SFTE Symposium.

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KELLY JOHNSON AWARD

This year the annual Kelly Johnson Award for outstanding achievement in the Flight Test engineering discipline is awarded to Mr. James H. Lincoln of the Flight Test Engineering Organization, Boeing Commercial Airplane Company. Jim is recognized for his contribution to flight test management, communication, and computing technology. He is deserving of this award for his outstanding contribution to the successful and timely certification of the Boeing 757 and 767, as well as for his lifetime contribution to flight testing technolgoy.

Jim joined the Boeing Company in 1952. He has served in varying capacities in Flight Test operations and data analysis on military and commercial airplanes. He has taken increasing leadership in advancing the technology of data recording, analysis, and computing systems from oscillograph and photorecorders to high-speed digital data systems, onboard data analysis, and interactive computing systems unequalled in the industry.

Since 1965, he has been Manager of the Data Section of the Boeing Flight Test organization and has been responsible for the development of new recording and computing techniques to keep pace with airplane and avionics technologies. During the 747 test programs, Jim managed the development of an on-line, onboard computing system to enhance flight crew test visibility and efficiency. That system has grown into an integral part of the Flight Test computing system and is now in its third generation development.

In the late 1970's, Jim initiated a study of Flight Test computing methods and was appointed manager of the resulting Flight Test computing system redevelopment. After successfully guiding the project to a timely completion for the 757 and 767 programs, he has continued to manage and expand the system to meet the needs of the largest high technology airplane, the 737-300, for test evaluation and management visibility. In 1982, he received an Outstanding Achievement Award from Boeing Flight Operations Management for his dedicated efforts and achievements.

Jim assisted in promoting the original SFTE organizational efforts. He was awarded the SFTE Achievement Award for his "Contribution to Good Humor" for his production "Everything You Wanted to Know About Flight Test, But Were Afraid to Ask." Jim is well known for his skills in communication and the "human factor" technologies associated with flight testing, and has successfully demonstrated his abilities as an outstanding engineer, manager, and communicator throughout a long and illustrious career in flight test engineering.

GUEST OF HONOR/BANQUET SPEAKER
MR. JACK JACKSON
CHAIRMAN OF THE BOARD
JACK JACKSON AND ASSOCIATES

Mr. Jackson began his career experience with the U.S. Air Force followed by employment in the Civil Service. After four years of manufacturing experience with the Boeing Company, he gained greater insight into the corporate world with 23 years as an instructor with American Airlines. During his last 13 years with American, he was honored to be the Goodwill Ambassador for the company and traveled extensively nationwide and was a spokesperson for the company. Today he is chairman of the board for Jack Jackson and Associates. His firm specializes in designing programs for conferences, seminars, retreats and special events for business and educational groups.

He has been called a speaker's speaker with the ability to combine humor with a timely and dynamic message. He has spoken to groups in the armed services, banking, colleges, chambers of commerce, realtors, utilities, civic clubs, engineering, management, religious and agricultural organizations.

KEYNOTE SPEAKER
DONALD MALVERN
PRESIDENT MCDONNELL AIRCRAFT COMPANY

Mr. Donald Malvern is president of McDonnell Aircraft Company. He was graduated with a bachelor of science degree in mechanical engineering from the University of Oklahoma at Norman in 1946, following a three-year tour as a maintenance officer and pilot with the U.S. Army Air Force. He later flew P-51 fighters with the Missouri Air National Guard.

He joined McDonnell Aircraft Company in 1946 as an aerodynamicist. He was named project flight test engineer for the F3H Demon Navy jet fighter in 1951 and was promoted to chief flight test engineer in 1954. Starting in 1958 he served as company wide project manager for the F4H-1 Phantom during its initial development and early production phase. When the Phantom was redesignated as the F-4, he continued to serve as the company wide project manager for U.S. Navy fighters and reconnaissance versions as well as the Air Force RF-101 reconnaissance jet. In addition he managed the programs for Royal Navy and Royal Air Force fighter versions of the Phantom.

In 1968 the American Institute of Aeronautics and Astronautics (AIAA) St. Louis Section presented him with a technical management award for outstanding accomplishment in program management of the F-4 series of aircraft.

That same year he was appointed vice president-advanced program manager for Air Force programs; he was named vice president-general manager F-15 Eagle a year later. He led a team of 5200 in developing the F-15 which made its first flight in 1972 and became operational in Air Force squadrons in 1975. As a result of this effort he received, in 1980, the Reed Aeronautics Award, the highest AIAA honor, for "distinguished engineering and scientific achievement in leading the U.S. Air Force F-15 Eagle through design, production and testing into operational status" and in 1984 was awarded the grade of AIAA Fellow.

He was named executive vice president of McDonnell Aircraft Company in 1973 and also was made a corporate vice president of McDonnell Douglas Corporation. In 1982 he was promoted to his present position as president of McDonnell Aircraft Company.

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