## MEMBERSHIP BIOS

### Laurence J. Adams

Laurence J. Adams, Chairman, was appointed President of Martin Marietta Aerospace effective July 1, 1976. He was subsequently elected Vice President of Martin Marietta Corporation. Mr. Adams joined the Corporation in Baltimore, Maryland, in 1948 as a stress analyst for pilotless aircraft, guided missile and rocket programs. Mr. Adams holds the Air Force Systems Command Award for technical and managerial contributions to the Titan III program in 1965, and in 1970 he was awarded the University of Minnesota Regents Commendation for outstanding achievement. In 1975, he was the recipient of the NASA Public Service Award and, in 1977, NASA's top civilian award, the Distinguished Public Service Medal. Mr. Adams was elected a Fellow of the American Institute of Aeronautics and Astronautics in 1978 for personal and technical leadership in building and directing the engineering teams responsible for the design, development, and operational success of the Titan Space Launch System, the Skylab experiments and Multiple Docking Adapter Integration, and the Project Viking landers.

### Robert J. Bayuzick

Dr. Bayuzick received his Bachelor of Science degree from the University of Pittsburgh in 1961. The Master of Science degree in Physical Metallurgy was obtained from the University of Denver in 1963 and the Doctor of Philosophy degree in Materials Science from Vanderbilt University in 1969. He began his professional career in 1961 as a Metallurgical Engineer at the Bell Aerosystems Company (Buffalo, N.Y.) where he did x-ray diffraction studies and mechanical property studies on aerospace materials. After obtaining his Master's degree, Dr. Bayuzick worked for the Battelle Memorial Institute (Columbus Laboratories) as a Research Metallurgist. Here he conducted research on high-temperature nuclear fuels, primarily ceramics. He joined the faculty of Vanderbilt University in 1969 and directed his research efforts towards applications of Field Ion Microscopy in Physical Metallurgy. Dr. Bayuzick is also the Director of the Center for the Space Processing of Engineering Materials at Vanderbilt University, one of the NASA-supported Centers for the Commercial Development of Space. The Vanderbilt Center involves major U.S. corporations on projects for the development of new materials by the application of the microgravity environment.

## **Donald A. Beattie**

Donald A. Beattie has been a consultant on domestic and international energy and space technology since 1984. Most of his career has been in government service, beginning in 1963 with NASA as program manager for the Apollo lunar surface experiments. Mr. Beattie then began work in advanced energy research for the National Science Foundation, the Energy Research and Development Administration (ERDA), and the Department of Energy. He closed out his federal service with NASA as Division Director of the Energy Systems Division of OAST, receiving performance and achievement awards. After five years as a naval

aviator he worked for Mobil Oil in Colombia and retired from the BDM Corporation as Vice President of Houston operations.

## **Radford Byerly**

Radford Byerly began his career in 1961 as an engineer at Northern Research and Engineering. In 1967 he had a post doctoral fellowship at the Joint Institute for Laboratory Astrophysics in Boulder, Colorado. He served at the National Bureau of Standards from 1969 to 1975 as Manager of Air Programs; Deputy Chief of the Fire Technology Division; and as Assistant to the Director of the National Bureau of Standards. From 1975 to 1987 he was on the professional staff of the Committee on Science and Technology, U.S. House of Representatives. From 1975 to 1980 he was with the professional staff of the Subcommittee on Natural Resources and Environment; from 1980 to 1985 he was on the professional staff of the Subcommittee on Space Science and Applications; and from 1985 to 1987 he was Staff Director of that Committee. He is currently the Director for Space and Geoscience Policy at the University of Colorado. He received his B.A. and M.A. in physics from Williams College (Phi Beta Kapa) and his Ph.D. from Rice University in atomic and molecular physics.

## **Edward F. Crawley**

Edward F. Crawley is an Associate Professor of Aeronautics and Astronautics and Deputy Director of the Center for Space Engineering Research at MIT. He has spent most of his career with the Massachusetts Institute of Technology where he received all three of his degrees, including a Ph.D. in Aeronautics and Astronautics in 1980. That same year he was a finalist in the NASA Mission Specialist Astronaut selection. His research and teaching specialities are design and development of large space systems, and the structures and dynamics of spacecraft. In 1988 he was a visiting scholar in Aeronautics and Astronautics at Stanford University. In 1981 he assessed the dynamics and control of the Shuttle Remote Manipulator System and crew simulation for NASA at Johnson Space Center. He is a National Science Foundation Presidential Young Investigator and served as an advisor for the National Research Council Committee on Space Station

# Lawrence R. Greenwood

Lawrence R. Greenwood, has recently accepted the position of General Manager of the Spacecraft Operations General Electric Astro-Space Division in Princeton, NJ. Prior to that he was President of the Space Systems Division of Ball Aerospace in Boulder, earned his three degrees in Mechanical Engineering at Virginia Polytechnic Institute and State University. He also chaired the Executive Improvement Team for the Pride in Excellence Program for Ball. Previously he was Vice President for Strategic Operations and Systems Development. He began his career with NASA Langley Research Center as an Aerospace Technologist, head of the Mission Environmental Effects Section, the Environmental Quality Program Office and Special Assistant to the Director. At NASA Headquarters he served as Director of the Upper Atmospheric Research Program and the Environmental Observations Division.

### **Benjamin Huberman**

Benjamin Huberman is Vice President of The Consultants International Group in Washington, D.C. He consults on science and technology issues, including aerospace and nuclear power. Formerly Deputy Science Advisor to the President of the United States, he also served in senior positions at the Nuclear Regulatory Commission, the National Security Council, and the nuclear reactor program of the U.S. Navy. Mr. Huberman received a B.A. degree and a B.S. degree in electrical engineering, both from Columbia University. He holds a Diploma of the Imperial College from the Imperial College of Science and Technology of the University of London, where he was a Fulbright scholar.

## Jack L. Kerrebrock

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Jack L. Kerrebrock is Associate Dean of Engineering and Richard Cockburn MacLaurin Professor at the Massachusetts Institute of Technology. From 1978 to 1981 and from 1983 to August 1985, he was the head of the Department of Aeronautics and Astronautics at MIT. Dr. Kerrebrock was Associate Administrator for Aeronautics and Space Technology of NASA from July 1981 to July 1983. He has taught and conducted research in energy conversion and propulsion since 1956 when he received his Ph.D. degree from California Institute of Technology. His early work was on nuclear rockets, space propulsion and power, and magnetohydrodynamic generators. More recently, he has addressed the fluid mechanics of turbomachinery for aircraft engines, and is the author of a text on aircraft engines and gas turbines. He was the Director of the MIT Gas Turbine Laboratory from 1968 to 1978, when he became head of the Department of Aeronautics and Astronautics. Dr. Kerrebrock is a Fellow of the AIAA and of the American Academy of Arts and Sciences. He is also a member of the National Academy of Engineering and the National Commission on Space. He was decorated by the U.S. Air Force for Exceptional Civilian Service in 1981, and received the Distinguished Service Medal from NASA in 1983.

JOHN H. McElroy

John H. McElroy was named Dean of Engineering at the University of Texas at Arlington in September of 1987. He was previously Vice President for Technology of Hughes Communications, Inc., and Director of Special Projects in the Government Systems Division of the Hughes Aircraft Company's Space and Communications Group. Prior to joining Hughes, he was Assistant Administrator for Satellites at the National Oceanic and Atmospheric Administration, Deputy Director of NASA's Goddard Space Flight Center, Director of Communications and Information Systems Programs at NASA Headquarters, and Head of Laser Research at Goddard. He has been elected a Fellow at the Institute of Electrical and Electronics Engineers, the American Institute of Aeronautics and Astronautics and the Washington Academy of Sciences. He was named the Wernher von Braun Memorial Lecturer for 1986 by the Smithsonian Institution and is a member of the Board of Directors of the American Astronautical Society.

### Robert H. Moser

Robert H. Moser, M.D., has been Vice President for Medical Affairs of The NutraSweet Company since 1986, following 10 years as Executive Vice President at the American College of Physicians. From 1949 to 1969 he served in the U.S. Army Medical Corps, retiring at the rank of Colonel and as Chief of the Department of Medicine at the Walter Reed Army Medical Center. Author of five books and a hundred articles, he has served on 14 editorial boards and, from 1973 to 1975, was Editor in Chief of the Journal of the American Medical Association (JAMA). He is a member of the Institute of Medicine, a fellow of the Royal College of Medicine in Canada, a fellow of the American College of Cardiology and an adjunct professor of Medicine at Northwestern University. He served as a consultant in internal medicine on Project Gemini and the Apollo Project. He now serves as Chairman of the NASA Life Sciences Committee and as a member of the NASA Advisory Council.

#### Peter E. Wilkniss

Peter E. Wilkniss, Director, Division of Polar Programs for the National Science Foundation has been with them since 1976, holding manager and directorate positions in the Science Technological, and International Affairs Division and the International Ocean Drilling programs. Before joining the NSF he was Chairman of the Radiological Committee and Head of the Oceanography Branch of the U.S. Naval Research Laboratory. Prior to that he was Head of the Nuclear Chemistry Branch of the U.S. Naval Ordnance Station Dr. Wilkniss received his Ph.D in Radio and Nuclear Chemistry from the Technical University, Munich, Germany where he also worked as a Research Assistant prior to graduation. Among the many awards he has received is the President's Distinguished Executive Rank Award. He holds memberships in the American Geophysical Union and the Antarctican Society and has authored numerous scientific articles and technical journals.

# A. Thomas Young

A. Thomas Young, Senior Vice President of Martin Marietta Corporation and President of its Electronics and Missiles Group in Orlando, Florida, joined the company in 1982 as Vice President of Aerospace Research and Engineering in Bethesda, Maryland. In 1985 he was named Executive Vice President of Orlando Aerospace and became its President in 1985. Prior to joining Martin Marietta, Mr. Young spent 21 years at NASA including service as Director of the Goddard Space Flight Center, Deputy Director of the Ames Research Center and Mission Director of the Project Viking Mars Landing Program at Langley Research Center in Virginia. Born in Nassawadox, Virginia, he earned a Bachelor's degree in Aeronautical Engineering and Mechanical Engineering at the University of Virginia. He obtained his Master of Management degree from MIT where he attended as a Sloan Fellow. He is a fellow of the American Institute of Aeronautics and Astronautics and the American Astronautical Society.