

Dr. Raymond J. Leopold
The Jerome C. Hunsaker Visiting Professor of Aerospace Systems
Department of Aeronautical and Astronautical Engineering, Massachusetts Institute of
Technology

BIOGRAPHY

Dr. Leopold had led the Arizona-based licensing and technology transfer business for Motorola Corporate Technology when he retired in 2003. He had previously served as the Chief Technology Officer (CTO) for the Global Telecom Solutions Sector (\$6B sales and 20,000 people in 2001), and prior to that assignment had served as the CTO for the Satellite Communications Group (\$1B sales and 3,500 people in 1998). He is one of the three engineers who created the Iridium® System, the first realization of global, wireless, personal communications. The Iridium System integrates a packet-switched architecture within its globally deployed constellation of satellites together with the circuit-switched architecture of the public-switched telephone network. (Today, Iridium Satellite LLC, Loudin County, Virginia, operates the Iridium System.) He is known throughout the world for having presented keynote addresses and technical papers in many international forums, and for engaging in telecom regulatory activities. He has served for five years on both the Motorola Science Advisory Board and the Motorola Technical Action Council.

Dr. Leopold joined Motorola in 1987 after having spent a career in the U.S. Air Force where he held a variety of technical and technical management positions. He directed the development of communications systems at the Electronics Systems Division in Massachusetts. He served two tours in the Pentagon, one in the Office of the Secretary of Defense and one on the Air Staff. He taught for over five years at the U.S. Air Force Academy in Colorado, and worked in research and development for four years at the Air Force Weapons Laboratory in Albuquerque. He was also an Adjunct Professor of Electrical Engineering at George Washington University, and he is currently a Senior Lecturer at MIT and chairs their Industry Advisory Board for the Aero/Astro Department. He has also lectured at Stanford University.

He earned three degrees in electrical engineering, a bachelor's degree from the United States Air Force Academy in 1967, a master's degree from North Carolina State University in 1968, and a Ph.D. from the University of New Mexico in 1973. He was also honored with a Doctor of Telecommunications Management Degree from South Dakota of Mines and Technology in 1997. He has completed Executive Education courses at the Harvard Business School, MIT (Sloan), The University of California (Berkeley), The Center for Creative Leadership, and The Defense Systems Management College.

Ray is an *Aviation Week and Space Technology* Laureate for Space (1996) and an inductee in their Hall of Fame at the National Air and Space Museum. He is a recipient of the IEEE Third Millennium Medal, and a recipient of the American Institute of Aeronautics and Astronautics (AIAA) Biennial Communications Award for 1998. He has been named a *Fellow* of The Institute of Electrical and Electronics Engineers (IEEE), and has served on their Committee on Engineering Accreditation Activities. He was named a Motorola Distinguished Innovator in 1993. Motorola also conferred their highest technical honor, the Title of Dan Noble Fellow, upon him in 1995. He was named a Master Innovator by Motorola in 2001. He was named a Distinguished Alumnus of the University of New Mexico School of Engineering in 2003. He also served as a member of the Engineering

Accreditation Commission of The Accreditation Board for Engineering and Technology (ABET). He has served both on a Defense Science Board study group and on a NASA advisory committee. He has been elected to *Phi Kappa Phi*, *Tau Beta Pi*, and *Sigma Tau*. Ray holds 27 U.S. patents and more than 75 patents in other countries. He is married and has six children. He is active in Church and Community activities, having founded a new Cub Scout Pack, and serving as its Committee Chair, in Chandler, Arizona, and recently stimulating the founding of a new Boy Scout Troop and serves on its Committee. He and his family are avid skiers and adventurers who can be found on the slopes of Big Mountain near Whitefish, Montana in the winter and in nearby Glacier National Park in the summers.