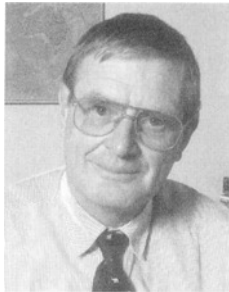


2000 Award Winners of the Aerospace Medical Association

During the Honors Night at the 71st Annual Scientific Meeting of the Aerospace Medical Association, 13 awards for outstanding contributions in several areas of aviation and space medicine were presented. The 2000 Annual Meeting was held May 14-18 at the Westin Galleria in Houston, TX.

The presentations were made by Jeffrey R. Davis, M.D., 1999-2000 president of the Aerospace Medical Association. The winners were recommended by the Awards Committee and approved by the Executive Committee of the Aerospace Medical Association.



BOOTHBY-EDWARDS AWARD

Lutz Bergau, M.D.

Established in memory of Walter M. Boothby, M.D., pioneer aviation medicine researcher, and Howard K. Edwards, M.D., clinical practitioner of aviation medicine, this ward is presented annually for outstanding research and/or clinical practice directed at the promotion of health and prevention of disease in professional airline pilots. (The separate Boothby and Edwards Awards were given annually 1961-73, and then alternately until 1985.) Sponsored by Harvey W. Watt and Company.

Lutz Bergau, M.D., who was awarded the Boothby-Edwards Award, is the Chief Medical Officer of Lufthansa, and is internationally known in the area of airline aviation medicine. He is actively involved in research pertaining to aircrew health, and, as Senior Medical Advisor to the International Air Transport Association, Dr. Bergau contributes substantially to the well-being of airline employees and passengers.

Born in 1941, Dr. Bergau studied medicine at the Johann Wolfgang von Goethe University in Frankfurt, graduating in 1967. He received his board certification in 1970 and his Ph.D. dissertation the same year, and received his degree as specialist in internal medicine in 1978. He qualified in aviation medicine during his military service in the German Air Force Institute of Aviation Medicine in Fürstfeldbruck, and in occupational health at the AEG company. He also trained in radiation medicine and tropical medicine. During military reserve training at Fürstfeldbruck, he was officially recognized as flight surgeon of the German Air Force, his final rank being Lieutenant Colonel. In 1978, he finished his private pilot license, and designated a senior aviation medical examiner by the German FAA. In September 1984, he was selected by Lufthansa to take over the position of the Head of the Airlines Medical Services. He is responsible for the Department of Occupational Health, Aviation Medicine and Tropical Medicine in Hamburg, Munich and Frankfurt.

Dr. Bergau has been very active in the formulation of medical standards for pilots in Europe which have international implications. He contributes extensively to the advancement of aircrew health, especially regarding radiation, fatigue, jet lag and in the workplace. His laboratory and clinical studies on circadian rhythm, aircrew fatigue, and problems of airline passengers were presented at AsMA meetings and to its Air Transport Medicine Committee. Dr. Bergau's personal interest concentrates on scientific evaluation of stress and strain in civil aviation and the specific environmental conditions of flying. Thus, a number of scientific studies in cooperation with different universities have been performed.

The author of numerous articles, he is a Fellow of the Aerospace Medical Association; a former president of the Airlines Medical Directors Association, European Airlines Medical Directors Society, and International Airlines Medical Advisory Committee; and a member of the German Society of Aerospace Medicine and Frankfurt Society of Aeronautics; and an International Air Transport Association Medical Advisor.



LOUIS H. BAUER FOUNDERS AWARD

Thomas J. Tredici, M.D.

This award was established to honor Louis H. Bauer, M.D., founder of the Aerospace Medical Association. It is given annually for the most significant contribution in aerospace medicine. Sponsored the Jefferson C. Davis Wound Care and Hyperbaric Medicine Center.

Thomas J. Tredici, M.D., Senior Scientist, Aerospace Ophthalmology Branch, Brooks Air Force Base, TX, and Clinical Professor, Department of Ophthalmology at the University of Texas Health Science Center in San Antonio, was awarded the Louis H. Bauer Founders Award for his outstanding contributions to aerospace medicine and the Aerospace Medical Association. He is

world renowned for his exceptional contributions to aerospace ophthalmology and has been active in the fields of clinical aerospace medicine, teaching and research. He has taught over 100 flight surgeon courses and 10,000 flight surgeons at USAF School of Aerospace Medicine over the past 35 years. He has participated in every annual scientific meeting since 1966 (if not longer!).

Dr. Tredici entered the Army Air Corps in 1942 in the Aviation Cadet Program and was trained as a pilot. He flew 18 combat missions in B-17s with the 457th Bomb Group of the Eighth Air Force. After his wartime service, he attended Washington and Jefferson College, Washington, PA, graduating Phi Beta Kappa. He received his medical degree from the University of Pittsburgh, School of Medicine in 1952, and interned at Brooke Army Hospital in San Antonio, TX. He completed a residency in ophthalmology at the Eye and Ear Hospital, Pittsburgh, PA, in 1957. He is a rated U.S. Air Force pilot and Flight Surgeon and a graduate of the U.S. Air Force Command and Staff College.

Following his residency training, Dr. Tredici served as Chief of Ophthalmology at Scott AFB, IL and at Clark AFB, Philippines. He was assigned to the Ophthalmology Branch at the USAF School of Aerospace Medicine in 1964 as ophthalmic pathologist, staff ophthalmologist, and researcher. However, in 1965, he reverted back to an ophthalmic surgeon, serving in Vietnam and at Clark AFB, Philippines. Upon his return to Brooks AFB, he was named Chief of the Ophthalmology Branch at the USAF School of Aerospace Medicine.

During his tenure as Chief, he and his staff were responsible for many important breakthroughs applied to vision science. As a clinician and researcher, he was instrumental in establishing and implementing the U.S. Air Force policy on glaucoma for aviators. To date, over 600 USAF aviators have been returned to full flight status as a result of this program, saving millions in training costs. He became one of the nation's leading authorities on the use of contact lenses in aviation. Thus, in 1969, he was able to return the first USAF aviator to the cockpit after having had cataract surgery, by the use of contact lenses. Another of his research projects dealt with the implantation of intra-ocular lenses in primates. Beginning in 1976, this research allowed USAF aviators to return to full flight status in any type aircraft, following cataract surgery after having an intra-ocular lens implanted. There are now 72 USAF aviators and 1 NASA astronaut in unrestricted flight status with implanted intraocular lenses. Prior to this research, all would have been grounded, their careers ended.

In addition, Dr. Tredici discovered the principle reason for failure of stereopsis in aviators, (microstrabismus) and devised an ocular prism test to facilitate the diagnosis. He and his staff created the Night Vision manual used by all USAF Flight Surgeons. As Chief of the Branch and active researcher, he and his staff developed protective visors against flash blindness and retinal burns that might be produced by nuclear weapons. This led to the development of the first laser laboratory in the Department of Defense, which was planned and built in 1969 in the Ophthalmology

Branch at Brooks AFB, TX. Also developed were a windscreen laboratory to evaluate visual distortions in the new LexanTM multi-layered aircraft windscreens and an electrophysiology laboratory that now ranks amongst the nation's best. Working with NASA, he and his staff developed criteria for visors to protect astronauts from ultraviolet energy during the exploration of the Moon. In 1976, he was primarily responsible for developing the 20/50 visual acuity, - 1.25 diopter regulation which allowed Air Force Academy cadets, for the first time, to enter flight training wearing spectacles. This visual standard, with minor variations, is still in force today. Presently, Dr. Tredici is a research and clinical contributor to the Aerospace Ophthalmology Branch project dealing with refractive surgery in the aviator.

Dr. Tredici has been the principal lecturer in Ophthalmology (now Aerospace Ophthalmology) since his arrival in 1964. He has now lectured to 108 consecutive classes in the Primary Course in Aerospace Medicine (AMP). Over 10,000 Flight Surgeons have received this training. He is also the principal lecturer to classes of Residents in Aerospace Medicine (RAMS), and to the Advanced Aerospace Medicine International Medical Officer classes. As Chief, he initiated a project to train assigned Branch Flight Surgeons in Aerospace Ophthalmology. To date, all 25 of his trainees have been accepted and have graduated from major ophthalmology residency training programs throughout the United States. He and his staff also began a program to train ophthalmology technicians, the first in the Department of Defense, many of whom have become certified by the Joint Commission on Allied Health Personnel in Ophthalmology.

Col. Tredici was retired from the USAF in 1981, but was immediately recalled to active duty by the Secretary of the Air Force. He was retired and recalled again in 1986. At his *final* military retirement from active duty in the USAF in August of 1987, he was awarded a second Legion of Merit. At his retirement, Col. Tredici had the distinction of being the last USAF B-17 pilot to fly in combat during World War II, then still on active duty. He holds 17 military awards and decorations.

A Fellow of AsMA, Dr. Tredici received the Theodore C Lyster Award in 1979. He holds the Academy of Ophthalmology Senior Honor Award. He was the USAF representative on the National Research Council, Committee on Vision, and the Department of the Defense representative on the National Advisory Eye Council, National Eye Institute. He also has been a committee member in the NATO-AGARD, and was a founding commissioner of the Joint Commission on Allied Health Personnel in Ophthalmology. He has won the USAF-SAM Docere Award as Outstanding Teacher and Thomas F. Koritz Award as Outstanding Instructor in the Primary Course in Aerospace Medicine. He has also received the USAF Scientific Achievement Award and the George E. Shafer Award for life-time achievements from the Society of USAF Flight Surgeons. Dr. Tredici has over 200 publications and 260 major presentations and scientific exhibits to his credit.