

# President's Page

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I started writing this column while waiting at the Denver International Airport for my connecting flight to Anchorage to attend the 75th Annual Meeting of the Aerospace Medical Association. My expectations of having a great meeting were high because this year we had a record number of abstracts (679) accepted for presentation, the number of pre-registrations was very promising, and the location was unique and attractive to both national and international members. However, what made this meeting particularly special for me was that, for the first time, I had the opportunity to bring my wife Sandi and my sons Evan and Adam to attend an AsMA meeting with me. Even though my sons had to take a week off school (before final exams), the experience was well worth it!

The overall theme of this year's scientific program was "Frontiers in Aerospace Medicine" which included presentations covering a wide variety of topics that fulfilled the broad interests and educational needs of our membership. This meeting represented a very significant and memorable milestone for our Association. For the past 75 years, AsMA has provided a global forum for the dissemination of scientific knowledge and developments in Aerospace Medicine, the exchange of ideas and experiences, the open debate on a variety of issues that have an impact on our profession and the customers/stakeholders we support, and the discussion and coordination of collaborative national and international efforts of common interest and benefit. The great news is this year was no different. That is, our 75th anniversary meeting in Anchorage was a success! Attendance included about 1,500 registered members and non-members, and 33 exhibitors. This is particularly significant considering that the Air National Guard did not hold a joint meeting with AsMA this year. Having successful annual meetings is critical to the current and future financial health of our association because they provide our main source of income, followed by membership dues.

AsMA's humble beginnings trace back to October 7, 1929, when a small group of about 60 colleagues met for the first time in Detroit, Michigan, to lay the foundation for the establishment of our association. Since then, AsMA has evolved into a thriving international, multi-disciplinary, and multi-cultural organization consisting of more than 3,000 individuals representing more than 80 countries around the world.

The scientific program included three 5-hour workshops on "Human Factors Approach to Accident Investigation and Prevention Analysis," "Medical Aspects of Aircraft Accident Investigation," and "Aircrew Fatigue, Causes, Consequences & Countermeasures." I wish to express our appreciation to Scott Shappell, Ph.D., Alex Wolbrink, M.D., and John Caldwell, Ph.D., for their willingness to organize and conduct these pre-meeting (Sunday) workshops. Another educational activity of-



**Melchor J. Antuñano, M.D., M.S.**

ferred for the first time this year (Sunday and Thursday) was a 6-hour workshop on aviation physiology and global survival for civil aviation pilots residing in Alaska. Educational activities that promote aviation safety in this part of the country are particularly important considering that there is a large concentration of aircraft operating in Alaska (about 10,000), and up until last year Alaska had one of the highest general aviation accident rates compared to all other states in the U.S. Our thanks to Rogers Shaw and Junior Brown who organized and conducted these workshops.

I hope everyone had the opportunity to attend the 50th Annual Louis H. Bauer Lecture that featured Peter Hackett, M.D., who delivered a very interesting and educational presentation on "The Human Body at Extreme Altitude or Getting High for Science." A take-home message from his presentation was that despite all of our impressive advances in scientific knowledge and technological developments to support human activities in high altitude environments, these hazardous activities still pose significant challenges to our scientific community.

The 39th Annual Harry G. Armstrong Lecture entitled "Ensuring Human Behavioral Capability at the Frontiers of Space and Time" was delivered by David Dinges, Ph.D. His outstanding presentation covered the practical aspects of sleep physiology and pathology, fatigue and its effects, fatigue countermeasures, and ongoing research studies on sleep and fatigue.

The French, German, and Spanish panels provided some of our foreign colleagues with the opportunity to present in their mother language with audiovisual aids in English. Did you know that the first foreign language panel (Spanish) was a unique idea implemented by AsMA several years ago? This had not been done before by any other medical association in the U.S.

I want to recognize Carol Manning, Ph.D. (Chair), Scott Shappell, Ph.D. (Deputy Chair), Alex Wolbrink, M.D. (Panels Chair), and Jeff Myers, M.D. (Posters Chair), for their efforts and dedication that were critical to the high quality of our 2004 scientific program. I also

want to take this opportunity to acknowledge the valuable contributions of our AsMA members who serve on the Scientific Program Committee and participate in the review and approval of all abstracts submitted for presentation in the annual meetings. Perhaps most important, I want to personally thank you, the members of our Association, for your interest in submitting abstracts, delivering presentations, chairing panels, and attending the scientific sessions. Without you the meeting would not have been the success it was.

I would be remiss if I did not thank Robert Rigg, M.D., for making arrangements for the Military Band (Air Force Band of the Pacific) and Color Guard (Dimond High School) at the opening ceremonies and for the Tuesday night social event at the Anchorage Museum of History and Art. As Chair of the Arrangements Committee, Dr. Rigg was AsMA's liaison with the Alaskan Medical Association, the Alaskan Pilot Community, the Anchorage Convention & Visitors Bureau, and local hotels.

We also appreciate the support provided by our staff at the AsMA Home Office for handling advanced registrations and other logistical tasks in preparation for the annual meeting. In addition, we thank Susan Northrup, M.D. (Registration Committee Chair), Jim Devoll, M.D. (Deputy Chair), Dan Callan, Larry Wilson, and all other committee members who ensured that the onsite registration was handled effectively and efficiently.

Our sincere appreciation goes out to all the corporate organizations for your continued membership in AsMA and for your sponsorship of special functions and awards at the annual meeting. Your support is very important!

Last but not least, a special personal thank you to Lady Mary Baird (President of the Wing of AsMA) and to several Wing officers and members for extending a warm welcome to my wife during the meeting. You made Sandi feel very special and I deeply appreciate it!

I congratulate our newly elected AsMA officers: Michael Bagshaw, M.D. (President Elect), Richard Jennings, M.D. (Vice-President for Education and Research),

Peach Taylor, M.D. (Vice-President for Member Services), John "Jack" Hastings, M.D. (Vice-President for Representation and Advocacy), Andrew Bellenkes, Ph.D. (Vice-President for International Activities), and Members At Large Susan Richardson, M.S., Robert Weien, M.D., and Dwight Holland, Ph.D. For the first time in the history of AsMA a non-North American member has been selected to the office of President Elect. Great accomplishment, Dr. Bagshaw! It will be a great pleasure to continue working with you!

The theme for our 76th AsMA Meeting in Kansas City will be "Charting the Course for the Future." The Scientific Program Committee will be chaired by Scott Shappell, Ph.D., Jeff Myers, M.D. (Deputy Chair), Alex Wolbrink, M.D. (Panels Chair), Raymond King, Ph.D. (Panels Deputy Chair), and Veronica Prinzo, Ph.D. (Posters Chair). Joel Dickmann, D.O., volunteered to be the Arrangements Committee Chair, and he is already working on his plan for the meeting in Kansas City.

In closing, I would like to inform you that the President of the Aerospace Medicine Student and Residents Organization (AMSRO), Maj. Daniel Shoor, M.D., submitted a proposal for the establishment of an AsMA Mentorship Program. We welcome this proposal that is aligned with one of the goals in the new AsMA Strategic Plan. During my opening remarks as AsMA President, I shared with you my commitment to the development of a formal mentorship program. Throughout my entire aerospace medicine career, I have been fortunate to have colleagues and superiors who have been willing to mentor me and give me advice/guidance concerning my professional development. I strongly believe that we must spend the time and effort required to mentor our students and residents who represent the future leadership of our Association. Therefore, I have tasked Dr. Jennings (Vice-President for Education and Research) to lead the development of this mentorship program in coordination with the Education and Training Committee, the AsMA Fellows Group, the AsMA Associate Fellows Group, and AMSRO. I ask for your full support on this challenging task.

## 2004-2005 Committee Chairs

### **Committee:**

Aerospace Human Factors  
Air Transport Medicine  
Aviation Safety  
Awards  
By-Laws  
Communications  
Corporate & Sustaining  
Education & Training  
Finance  
History & Archives  
International Activities  
Membership Co-Chair  
Membership Co-Chair  
Nominating  
Resolutions  
Science & Technology  
Fellows  
Associate Fellows Group  
Scientific Program  
Deputy Program Chair  
Arrangements

### **Chair:**

Thomas E. Nesthus, Ph.D.  
Alex M. Wolbrink, M.D.  
Charles A. DeJohn, D.O., M.P.H.  
Verba Moore  
M. Kirk Nailling  
Ronald B. Hoffman  
Marian B. Sides, Ph.D.  
Daniel L. VanSyoc, M.D.  
Robert Weien, M.D.  
Stanley R. Mohler, M.D.  
Pooshan Navathe M.D.  
Andy Bellenkes  
Warren Silberman, M.D.  
Claude Thibeault, M.D.  
Tom Faulkner, M.D.  
Len Goodman, Ph.D.  
Daniel B. Lestage  
Arleen Saenger  
Scott Shappell, Ph.D.  
Jeffrey Myers, M.D.  
Joel Dickmann

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## Constituent Organization Presidents 2004-2005

### Fulton Leads Naval Flight Surgeons

CAPT Dwight Fulton, MC, USN, has been chosen as the new President of the Society of U.S. Naval Flight Surgeons. A native of Baltimore, MD, he attended undergraduate school at Temple University in Philadelphia where he graduated in 1974 with a Bachelor of Arts Degree. Commissioned through the Armed Forces Health Scholarship Program in 1975, CAPT Fulton attended Temple University School of Medicine, graduating with the degree of Doctor of Medicine in 1980.

Following graduation, CAPT Fulton completed a general surgery internship at Naval Hospital Portsmouth, VA. He then completed training to become a Naval Flight Surgeon at the Naval Aerospace Medical Institute in Pensacola, FL, where he received his wings in 1981. Following two tours as an operational Flight Surgeon for Carrier Air Wing One and the Navy Flight Demonstration Squadron (Blue Angels), CAPT Fulton transferred to the Naval Hospital in Jacksonville, FL, where he completed a Family Practice Residency from 1986 to 1988.

After one tour as Family Practice Staff at the Naval Hospital in Newport, RI, from 1989 to 1991, CAPT Fulton returned to his roots in operational medicine. He served one tour as the Senior Flight Surgeon for Naval Aviation Schools Command in Pensacola, FL, and then, in 1993, applied for and was accepted into the Residency in Aerospace Medicine (RAM) at the Naval Aerospace and Operational Medical Institute in Pensacola, FL. As part of the residency, he attended Johns Hopkins University in Baltimore, MD, receiving his Masters in Public Health in 1994. CAPT Fulton completed the RAM Program in 1996 and immediately reported to the USS Dwight D. Eisenhower (CVN-69) in Norfolk, VA, serving as Senior Medical Officer from July 1996 to July 1998. From August 1998 through June 2001, CAPT Fulton served as Officer in Charge at the Navy Environmental and Preventive Medicine Unit No. 2 in Norfolk, VA. In July 2001, he transferred to the Bureau of Medicine and Surgery (BUMED) to serve as the Director, Aerospace Medicine (M3F8) and the Aerospace Medicine Specialty Leader. After 15 months in this role, he fledged up to the position of Acting Deputy Chief for Fleet Operations Support, M3FB. He recently departed BUMED to take a clinical position at Naval Hospital Oak Harbor, Whidbey Island, WA.

CAPT Fulton's personal decorations and awards include two Meritorious Service Medals, three Navy and Marine Corps Commendation Medals, Battle "E", and the National Defense Ribbon.

### Morrison is AMDA President

Ion Morrison, M.B.B.S., was chosen to be the President of the Airline Medical Directors Association. A native of Brisbane, Australia, he graduated from the University of Queensland. He spent 3 years at the Royal Brisbane Hospital, then left there to attend the Aviation Medicine course in the Royal Australian Air Force. Following that, he spent 1 year full-time at Sydney University to earn a Diploma of Public Health in Occupational Medicine. He joined Qantas in 1984 as a medical officer and has stayed in Qantas for the past 20 years, going from Manager of Aviation Health Services to General Manager of Aviation Health Services 3 years ago. He has a Fellowship in the Faculty of Public Health Medicine of the Royal Australian College of Physicians, in the Royal Aeronautical Society, and in the Aerospace Medical Association. He is a Member of the International Academy of Aviation and Space Medicine.



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### This Month in Aerospace Medicine History-- July 2004

By Walter Dalitsch III, M.D., M.P.H.

#### Fifty Years Ago

*Work after blood donation:* "To determine the effects of donating 500 cc. of blood on an average healthy adult, performance studies were made on a treadmill traveling at 3.5 mph with the slope increasing by 0.5 per cent of belt travel per minute. Fourteen subjects, twenty-two to forty-five years of age, were each tested five times during a four-week period. Two tests were control runs seven days apart, and the other three followed the blood donation. All subjects were tested one hour following donation, and the group was divided to be retested either on the second and tenth days or on the third and eighth days after the bleeding. Pulse rate, blood pressure, oxygen intake, oxygen pulse, pulmonary ventilation, hemoglobin concentration, and work capacity were determined. The results indicated (1) a statistically significant decrease in optimal work capacity one hour following a custom-

### ERRATUM

In the June issue, we mistakenly listed David Hiland as the incoming President of the International Association of Military Flight Surgeon Pilots (IAMFSP). Dwight Holland is the current president. The term is 2 years. Dave Hiland will assume the presidency next year. We apologize to IAMFSP for this error.

### New Fellows Selected for 2004

The following Fellows were selected during the 75th AsMA Annual Scientific Meeting: Richard E. Bachman, Daniel K. Berry, Andrew J. Breuder, Bob S. K. Cheung, Nicholas A. Davenport, Thomas B. Faulkner, Dwight Holland, Raymond E. King, Pooshan D. Navathe, Susan E. Northrup, Hugh J. O'Neill, Chrysoula Papadeli, Chandler A. Phillips, James H. Raddin, Douglas J. Robb, and Phillip E. Whitley.

Point your mouse to the AsMA home page at: [www.asma.org](http://www.asma.org)  
It's frequently updated with important, new information about your Association. This News section is now online!  
August Feature:  
AsMA Annual Meeting Issue & Photos

ary blood donation; (2) no significant changes two and three days following such a blood loss; and (3) a significant improvement in the work capacity tested on the eighth and tenth days after the bleeding. Based on these findings, there is no need to limit the physical activities of an average healthy adult for more than a few hours following an average blood donation" (1).

*Man and the machine:* "We must emphasize development of the human element in our military forces fully as much as we emphasize the development of material elements in these forces. In this human element lies an extraordinary opportunity to increase our power and reduce our costs; it offers the quickest and highest return for money invested in national security. Our ingenuity in the use of man has not kept pace with our ingenuity in the use of the machines man manufactures. Fleets of atomic aircraft, costing billions of dollars, can be operated efficiently only by a skilled, satisfied and experienced personnel; yet thousands of expert airmen leave the service each year to get better jobs in civil life. Economy itself demands that in this complicated electromechanistic age long years of expensive training

See HISTORY, p. 644.

# 2004 Award Winners of the Aerospace Medical Association

Honors Night Ceremonies of the 75th Annual Scientific Meeting of the Aerospace Medical Association were held May 6, 2004 at the Anchorage Hilton Hotel, Anchorage, AK. Fourteen awards for outstanding contributions in aviation and space medicine were presented. The presentations were made by David J. Schroeder, Ph.D., president of the Aerospace Medical Association. The winners were recommended by the Awards Committee, chaired by Verba Moore, and approved by the Executive Committee of the Aerospace Medical Association.



## BOOTHBY-EDWARDS AWARD

**Nestor B. Kowalsky, M.D.C.M., M.S.**

*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 award 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.*

Nestor B. Kowalsky, M.D.C.M., M.S., is the 2004 recipient of the Boothby Edwards Award for his outstanding research in aviation and preventive medicine, and for his promotion of health and prevention of disease in professional airline pilots. Since 1987 Dr. Kowalsky has been the Area Medical Director for American Airlines in Chicago, where he practices aviation and occupational medicine. In this position, he has personally monitored and managed over 450 pilots with chemical dependency, allowing them to return to flying.

Born in Canada, Dr. Kowalsky earned his B.Sc. degree at Loyola College and M.D.C.M. degree at McGill University in Montreal. After completing an internship at the Montreal General Hospital, he served as a Flight Surgeon with the Royal Canadian Air Force in Rivers, Manitoba, and then as Deputy Officer Commanding (Medical Officer Training) at the Canadian Armed Forces School of Aviation Medicine, Institute of Environmental Medicine, in Toronto. He completed residency training in Aerospace Medicine, a Master's thesis on electromechanical time intervals as indices of hypoxic circulatory stress in man, and received an M.S. at Ohio State University in Columbus, OH.

In 1971, Dr. Kowalsky accepted a senior staff position in the Department of Preventive Medicine at the Lovelace Foundation and Clinic in Albuquerque, NM, where, in addition to clinical support of the NASA Flight Research Center at Edwards AFB, he conducted research in pilot error-related aircraft accidents. In 1975, he joined Eastern Airlines in Miami, FL, as Director of Flight Medicine.

Dr. Kowalsky was employed as Associate Aeromedical Advisor to the Air Line Pilots Association in Denver from 1978-87. While in that position he also served as Medical Advisor to the Human Intervention and Motivation Study, a program funded by the National Institute for Alcohol Abuse and Alcoholism, that involved multidisciplinary research, education,

and clinical support of professional airline pilots. This program allowed pilots to receive treatment for alcoholism so that they can return to flying in a closely monitored aftercare program.

He has co-authored research on the dynamics of the semicircular canals compared in yaw, pitch, and roll that was published in *Aerospace Medicine*; and on the effects of CO<sub>2</sub> and whole-body vibration on ventilation that was published in the *Journal of Applied Physiology*. He has also co-authored research into the effect of altitude on cardiac systolic time intervals which was published in *Angiology* and participated in an analysis of pilot-related aircraft accidents at the Lovelace Foundation.

Board certified in Preventive Medicine (Aerospace), Dr. Kowalsky is also certified by the American Board of Independent Medical Examiners and is a designated senior FAA aviation medical examiner. He is a licensed private pilot, a Clinical Assistant Professor in the Department of Medicine at the University of Chicago, and is on the staff at the Lutheran General Hospital in Park Ridge, IL. He is a member of the International Academy of Aviation and Space Medicine, a Fellow of both the American College of Preventive Medicine and the Aerospace Medical Association, and has been active in the Aerospace Medical Association, having served on the Executive Council and a number of standing committees since 1973. He also served as the 1997-98 President of the Airlines Medical Directors Association (AMDA).



## LOUIS H. BAUER FOUNDERS AWARD

**James W. Brinkley**

*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.*

James Brinkley received the 2004 Louis H. Bauer Founders Award for his 45 years of contributions to aerospace medicine. His major technical accomplishments include developing and demonstrating technologies for personnel protection systems for air and space systems as well as automotive and industrial applications.

Mr. Brinkley began his research career with the  
*See BRINKLEY, p. 633.*

*BRINKLEY, from p. 632.*

Aerospace Medical Laboratory at Wright-Patterson Air Force Base in 1958 after his graduation from the Ohio State University. From 1959 to 1961, he conducted research to define human impact exposure limits and means to provide crew protection during emergency crew escape. His research results were used in the development of the NASA Project Mercury spacecraft and for the development of the first encapsulated crew escape systems used in the B-58 and XB-70 aircraft. From 1962 to 1966 he developed aeromedical design criteria for the first whole-cockpit escape system, which was used in the F/FB-111 aircraft. His experimental efforts created the technology base for the Project Gemini ejection seats and Project Apollo Earth and Moon landing systems. Mr. Brinkley's research during 1966-7 led to a major reduction of spinal injuries resulting from ejections from the F-4 aircraft. He also conducted research efforts to develop innovative methods to rescue downed pilots using unique aerial retrieval techniques. His research at this time was also the key to the development of improved design and performance evaluation criteria for the highly successful ACES II ejection seat, now used in all contemporary U.S. Air Force aircraft. As part of this effort, he developed and experimentally validated the first mathematical model to estimate the probability of spinal injury during emergency escape.

From 1970 to 1988, he was a branch chief within the Biodynamics and Bioengineering Division of the Aerospace Medical Research Laboratory. He planned and directed research at Wright-Patterson and Holloman Air Force Bases to define human impact exposure limits, to investigate the effects of windblast, and to develop crew protective equipment technologies. He also carried out a pioneering series of impact tests with volunteer subjects to demonstrate the safety of the first automotive passenger air bag restraint system. This work formed the technical foundation for General Motors, in cooperation with the National Highway Traffic Safety Administration, to undertake the first field trial of 1,000 automobiles equipped with air bag restraints.

His technical accomplishments from 1970 to 1988 include development of the first analytical method to evaluate the risk of injury due to multi-axial acceleration and development of numerous Air Force, national, and international standards for personnel protection equipment design and evaluation. His research led to establishment of technologies for such diverse systems as fall protection harnesses, snowmobile seating, free-fall lifeboats, and hostage rescue systems. In 1986, his analytical capabilities were used in the investigation of the Challenger accident. In 1988, he was appointed to the Air Force Senior Executive Service and became Director of the Biotechnology and Bioengineering Division of the Aerospace Medical Research Laboratory. From 1990 to 1997, he was the Director of the Crew Systems Directorate of the Armstrong Research Laboratory. From 1997 to May 2003, he was Director of the Human Effectiveness Directorate of the Air Force Research Laboratory. As director of this 600-person organization, he focused its research and develop-

ment efforts on revolutionary training simulation technologies, cognitive systems engineering to improve decision effectiveness, innovative biotechnology initiatives, and crew protection against combat stresses, including directed energy weapons.

He established the first joint tests of military equipment between the United States and the former Soviet Union and championed development of a lightweight version of the Russian K-36 ejection seat, successfully demonstrating safe escape at adverse attitudes and velocities up to 700 knots equivalent airspeed. He is an author or co-author of more than 75 journal articles, technical reports, and book chapters on the human response to impact acceleration, vibration, and windblast as well as the development of military and civilian personnel protection technologies.

He has held many important offices including president of the SAFE Association and the International Society for Fall Protection, and more recently, was the chair of the Human Systems Technology Area for the U.S. Department of Defense. After retiring from the Air Force, Mr. Brinkley joined the Biodynamic Research Corporation in San Antonio, TX, as Director of Research.

Mr. Brinkley has received numerous honors and awards. He has been a Fellow of the Aerospace Medical Association since 1985. He received the Association's Eric Liljencrantz Award for his research on acceleration effects in 1983 and the John Paul Stapp Award in 1995 for his accomplishments in biodynamics. In 2001, he was inducted into the International Safety and Health Hall of Fame of the National Research Council. In 2003, he received the Air Force Outstanding Civilian Career Service Award, and the President of the United States conferred on him the rank of Meritorious Executive in the Senior Executive Service for his sustained superior accomplishments.



#### **KENT K. GILLINGHAM AWARD**

**Col. Malcolm Braithwaite, MC, RA, OBE**

*This award was established and sponsored by the AMST Group of Companies in Austria and the United Kingdom, to honor the memory of Kent K. Gillingham, M.D., Ph.D. The award is presented annually to an individual who has made a significant contribution in the field of spatial disorientation and situational awareness related to flight.*

Col. Malcolm Braithwaite, MC, RA, OBE, received the 2004 Kent K. Gillingham Award for his research, innovation, and international influence on aircrews concerning the danger of spatial disorientation, a subject he has been involved with for nearly 20 years. He is an expert aviation medicine advisor to both U.S. and U.K. helicopter aircrews, and his rotary wing training course is used in several countries. He has been an inventor and prolific author, with over 50 publications, and

*See BRAITHWAITE, p. 634.*

*BRAITHWAITE, from p. 633.*

chairs the spatial disorientation project group 117 for the five-nation Air Standardization Coordinating Committee (ASCC) Working Party 61.

Col. Braithwaite was commissioned into the Royal Army Medical Corps in 1972 as a medical student. He received his medical degree in 1975 from Birmingham University and then served for 5 years as a Regimental Medical Officer and family practitioner in the Far East and Germany. He transferred to Army Aviation Medicine in 1981 and following military helicopter pilot training, completed his specialist training in 1989. While on active duty as a military pilot, he became interested in the reasons behind helicopter mishaps blamed on pilot spatial disorientation. He accepted a position as the U.K. Exchange Research Flight Surgeon at the U.S. Army Aeromedical Research Laboratory (USAARL) in Ft. Rucker, AL, from 1995-7, where he was the Spatial Disorientation Principal Investigator and was the team leader for that activity. In that post, as chief of the Spatial Disorientation team, he conducted operational and epidemiological research and advised commands on training and technological solutions to the problem. He also developed a standardized in-flight demo of spatial disorientation that is still used today by both U.S. and U.K. aircrews and has been accepted by Turkish and Canadian forces.

He is the co-inventor and developer of a new type of cockpit flight instrument display that has been successfully assessed in the UH-60 helicopter and simulator.

In 1998, Col. Braithwaite proposed a new project group on spatial disorientation to the five-nation ASCC Working Party 61. His proposal was accepted, and now representatives from the United States, the United Kingdom, Australia, Canada, and New Zealand meet yearly to develop aircrew standards related to spatial disorientation training and interoperability issues that will help reduce the number of mishaps in both fixed and rotary-wing aircraft.

Through his operational experience both as a doctor and helicopter pilot in various theaters, he has personally experienced many of the hazards associated with aviation. His professional responsibilities have included advising commanders and military staff on many aviation medicine operational matters. Although a generalist in rotary-wing aviation medicine, his particular interests lie in spatial disorientation and operationally focused research. He was a research medical officer at the Royal Air Force Institute of Aviation Medicine, Farnborough, UK. He contributed to the work of the U.S. Triservice Working Group on Situational Awareness and Spatial Disorientation.

Colonel Braithwaite teaches the Diploma in Aviation Medicine course, the U.K. Operational Aviation Medicine course, and is a frequent presenter at national and international medical and technical meetings. He has had over 15 presentations at the annual Aerospace Medical Society meetings since 1995 and 6 articles in Aviation, Space, and Environmental Medicine, as well as contributing to a new textbook entitled Spatial Disorientation in Aviation. He is currently an examiner for the Diploma in Aviation Medicine of the Faculty of Occupational Medicine of the Royal College of Physicians. He is a past president of the International

Association of Military Flight Surgeon Pilots, which attained constituency status within AsMA during his tenure.

In 1998 he was appointed as the Consultant Adviser in Aviation Medicine to the Director General Army Medical Services and continues to serve as professional head of this sub-specialty of Army Occupational Medicine.



#### WON CHUEL KAY AWARD

Israel Glazer, M.D.

*Established by the Korean Aerospace Medical Association in honor of Won Chuel Kay, M.D., the former Surgeon General of the Korean Air Force, founder and first Medical Director of Korean Airlines and first President of the Korean Aerospace Medical Association. This Award is presented annually to a member who has made outstanding contributions to international aerospace medicine. The award was established and is sponsored by the Korean Aerospace Medical Association.*

Israel Glazer, M.D., received the 2004 Won Chuel Kay Award for his outstanding contributions to international aerospace medicine. He has been an extremely active member of the international aerospace medicine community for over 50 years and has fostered international cooperation. He has been especially active in the subspecialty of allergy, while serving as Senior Medical Officer for El Al Airlines, and through his work in international organizations such as the International Academy of Aviation and Space Medicine and AsMA.

Dr. Israel Glazer was born in the USSR, came to Palestine (now Israel) in 1925, and since then has lived in Tel Aviv. He graduated from the Hebrew Gymnasium "Herzelia" and later studied Biology at the Hebrew University of Jerusalem and the University of Geneva. In 1943 he earned his BA and in 1947 his MD (both with distinction) from the American University of Beirut. He had his entire post-graduate training in the United States as an intern at the Brooklyn Jewish Hospital and as a resident in Internal Medicine at Mount Sinai Hospital in NY. He then had a Dazian Foundation training Fellowship in Allergy, thus completing the American Board's requirements in Internal Medicine and Allergy.

In 1956 Dr. Glazer established the Allergy unit at the Tel Hashomer Government Hospital (now the Sheba Medical Center), which he headed until his retirement. He was active in organizing the medical specialties boards of the Israel Medical Association and was a certified specialist in Internal Medicine as well as Allergology (1962). He was the first Medical Officer of the Civil Aviation Administration (Israel), and established and chaired the first non-military Aircrew Medical Board at the Tel Hashomer Hospital in 1956. In 1958 he joined El Al Israel Airlines, where he still serves as the senior medical officer.

In 1962 Dr. Glazer joined the Airline Medical Directors  
*See GLAZER, p. 635.*

GLAZER, from p. 634.

Association (AMDA) and served it in many capacities including President from 1991-2. He was honored with its annual award in 1990. In 1969 he was elected a member of the International Academy of Aviation and Space Medicine, served on its committees, and was Vice President from 1982-4. He organized the 1971 International Congress of Aviation and Space Medicine (ICASM) and was President of the congress in 1996.

He was one of the founders of the Israel Society of Aerospace Medicine, an affiliate of the Aerospace Medical Association (AsMA), and served as its President for many terms. He joined AsMA in 1958 and was elected a Fellow in 1972, thus being perhaps the longest standing active international member of AsMA (46 years). He served on many committees, particularly the Nominating, Membership, International Activities, and Air Transport Medicine committees. He served on the Council and was twice a Vice President. He received the 1983 Howard K. Edwards Award for outstanding practice of clinical aviation medicine, health promotion, and disease prevention in professional pilots.

Dr. Glazer was a member of the Medical Committee of the International Airlines Transport Association (IATA) and when it was disbanded, he was one of the Founding Members of the International Airlines Medical Advisory Council (IAMAC). He hosted its annual meeting in 1991 in Tel Aviv, and served as Chairman in 1992.

He has established many medical procedures in cooperation with other International Airlines medical people. He was instrumental in formulating procedures for medical follow-up of airline employees and particularly for aircrews, assisting in licensing problems and counseling. He was involved in formulating the IATA Procedures and Standard Medical Information Form for Air Travel (MEDIF) and other publications. He is a Senior Aviation Medical Examiner for the CAA (Israel), FAA, UK, and Canada. He is a member of the International Society of Travel Medicine and was elected Honorary Member of the Aerospace Medical Association of Korea (Seoul, 1990).

As for his second specialty, Dr. Glazer was one of the founders of the Israel Society of Allergology, serving as its President for many terms. He is a Fellow of the American Academy of Allergy since 1954. In 1975 he was elected Fellow of the American College of Allergy, Asthma, and Immunology. The College then named him Honorary Distinguished Fellow in 1991. He is a member of the Collegium Internationale Allergologicum and served on its council, organized its biennial meeting in Tel Aviv and Rehovot in 1968, and was a contributing editor of its publication *International Archives of Allergy and Applied Immunology*. He was on the Executive Committee and then Treasurer and First Vice President of the International Association of Allergology and Clinical Immunology (now the World Allergy Organization, with over 20,000 members) and organized its 10th triennial congress with about 5,000 participants in Jerusalem in 1979. He was presented with its Achievement Award in 1982.

He is a member of the International Association of Asthmology (Interasma), served on the board, and was President of its XIV World Congress of Asthma

(Jerusalem, 1993). His main interest, presentations, and publications cover, among other topics: aircrew medical selection, training, health maintenance, and licensing; passenger medical clearance; first aid and medical kits on board; decompression events as well as etiological factors of bronchial asthma, allergic rhinitis, and hay fever in Israel; and drug and food sensitivity including peanuts, mold and pollen surveys, and evaluation of new drugs for allergic diseases and asthma.

He is active in the private practice of Aviation Medicine and Allergology.



ARNOLD D. TUTTLE AWARD

Ulf Balldin, M.D.

*Established in memory of Col. Arnold D. Tuttle, USAF, MC. Awarded annually for original research that has made the most significant contribution toward the solution of a challenging problem in aerospace medicine and which was published in Aviation, Space, and Environmental Medicine. Sponsored by Wyle Laboratories.*

Ulf Balldin, M.D., Ph.D., Dr.h.c., received the 2004 the Arnold D. Tuttle Award. The award was given for his role as lead author of the article "Endurance and Performance During Multiple Intense High +Gz Exposures with Effective Anti-G Protection" (*Aviat Space Environ Med* 2003; 74:303-8). During his career, Dr. Balldin has published well over 200 scientific articles, reports, proceeding articles, and abstracts in diving and aerospace medicine. In 2002-4 alone, he has authored or co-authored 10 articles of original research in Aviation, Space, and Environmental Medicine. He has been reviewer for *Aviation, Space, and Environmental Medicine*; *Journal of Applied Physiology*; *Undersea Medical Research*; *Acta Physiologica Scandinavica*; *Journal of Gravitational Physiology*; and the *SAF Journal*. He served as a member of the Editorial Board of *Undersea Medical Research* and as member of the Advisory Editorial Board for *Aviation, Space, and Environmental Medicine*.

A native of Malmö, Sweden, Dr. Balldin earned a B.Sc. (1959), an M.D. (1968), and a Ph.D. (1973) from the University of Lund, Sweden, where he later became Associate Professor in Medical Physiology. He also studied general and thoracic surgery and anesthesiology. He was trained as a Naval Diving Medical Officer and Naval Salvage Diver in the Royal Swedish Navy, and later as a Flight Surgeon in the Swedish Air Force. He became a Senior Research Flight Surgeon and later Senior Medical Research Officer at the Institute of Aviation Medicine at National Defence Research Establishment (FOA), Sweden.

As an NRC Research Associate at the USAF School of Aerospace Medicine, Brooks AFB, TX, from 1981-2, he was involved in postgraduate acceleration physiol-

*See BALLDIN, p. 636.*

*BALLDIN, from p. 635.*

ogy research in humans.

He returned to Sweden to become the only part-time Professor in Aerospace Medicine and Head of the Department of Aerospace Medicine at the Karolinska Institute Medical School, Stockholm. During his 9-yr tenure, he was responsible for the human centrifuge and the Acceleration Physiology Research Program in collaboration with the Swedish Air Force. He also he acted as on-duty Senior Physician in the Hyperbaric Medicine Emergency Team at the Karolinska Hospital in Stockholm. During the same time period, Dr. Balldin was Director of the Institute of Aviation Medicine, FOA, in Linköping, Sweden. He flew his twin-engine aircraft between his two jobs every week. He participated in the development of, and was responsible for, the centrifuge tests of the new Tactical Flight Combat Suit for Swedish Air Force's Gripen fighter aircraft. This anti-G suit system is now operational in over 100 Gripen aircraft of the Swedish Air Force.

He moved back to Texas in 1992, and became a U.S. citizen in 2002. During the 1990s, Dr. Balldin was assigned to Brooks AFB, TX, and worked as Research Director and Liaison Scientist under a Memorandum of Agreement between the Departments of Defense in the United States and Sweden with research in aircrew protection and performance. His main research area was acceleration physiology with the use of the human centrifuge, but he also worked with hypobaric physiology in altitude chambers. He was designated as a Member of the Faculty at the USAF School of Aerospace Medicine, Brooks AFB, and appointed Clinical Assistant Professor at the University of Texas Medical Branch at Galveston. Currently, he is a Senior Scientist, Wyle Laboratories at Air Force Research Laboratory, Brooks City-Base, San Antonio, TX.

Since 1984 Dr. Balldin has been an elected Academician of the International Academy of Aviation and Space Medicine, has served as its Selector, Director, 2nd and 1st Vice Presidents, and recently the Academy's President for 2001-3. As a Fellow of the Aerospace Medical Association, Dr. Balldin served two terms as Vice President of the AsMA and was a Member of its Executive Committee and a Council Member. He has been Chair of its International Activities Committee and a member of several other AsMA standing committees. Recently, he finished a term as 2003-4 President of the Life Science and Biomedical Engineering Branch of AsMA. In addition, he has been President of the Swedish Aviation and Naval Medical Association, as well as President of the Nordic Association of Aerospace Medicine. In 1991, he served as President of the Organizing Committee for the 39th International Congress of Aviation and Space Medicine in Stockholm. An elected lifetime Academician in the Royal Swedish Academy of War Sciences, Dr. Balldin was also Correspondent in Finnish Aerospace Medical Association and in Gravitational Physiology in the International Union of Physiological Sciences' Commission on Gravitational Physiology. For 10 years he was a member of the Aeromedical Advisory Board of the Aeromedical Training Institute, Southampton, PA.

Dr. Balldin had been honored many times through-

out his international career. He received the U.S. Air Force Commendation Medal for meritorious service for his scientific research in the USAF. The Department of Aerospace Medicine at Karolinska Institute (with Dr. Balldin as Chief) has received the "Ilmavoimat, Qualitas Pontentia Nostra" Award from the Finnish Air Force. AsMA's Eric Liljencrantz Award (1989) and the Physiology Society's Paul Bert Scientific Award (1993) were given to Dr. Balldin for his research in acceleration and barophysiology, and he has also received AsMA's Life Science and Biomedical Engineering Branch Professional Excellence Award. In the mid-1990s, the State Scientific Research Test Institute in Moscow, Russia, gave him an Honorary Doctorate for his activities in aerospace medicine. After presentation of the Stewart Memorial Lecture at the Royal Aeronautical Society in London, UK, he received the RAF IAM Stewart Memorial Award for distinguished contributions to Aviation and Hyperbaric Medicine. He has received the Swedish Society of Aeronautics and Astronautics' prestigious Thulin medal and the Royal Swedish Academy of War Sciences' award and medal for his long-lasting works in the aviation medical field with the purpose of developing the Tactical Flight Combat Suit for the Swedish fighter aircraft Gripen. Last year he received the Air Marshal Subroto Mukherjee Memorial Oration Medal at the Indian Society of Aerospace Medicine conference in Bangalore, India.



**HARRY G. MOSELEY AWARD**

**Nicholas L. Webster, M.D.**

*Established in memory of Col. Harry G. Moseley, USAF, MC, in recognition of his material contributions to flight safety. It is given annually for the most outstanding contribution to flight safety. Sponsored by Lockheed-Martin Corporation.*

CAPT Nicholas L. Webster, MC, USNR, a widely recognized expert in the field of aeromedical mishap evaluation, was the recipient of the 2004 Harry G. Moseley Award. He was honored for his outstanding contributions as an author, editor, and teacher to flight safety and for championing the recognition of human factors in all aspects of aviation. A dynamic leader in the field of flight safety, he is often consulted on complex issue involving occupational and aerospace medicine. His efforts continue to open up new venues for mitigating hazardous trends and enhance readiness and safety.

CAPT Webster is the chief editor and driving force behind the fifth edition of the U.S. Naval Flight Surgeons Pocket Reference to Aircraft Mishap Investigation, which has been widely recognized as the most complete guide for the aeromedical evaluation of mishaps and is used as a major reference by the

*See WEBSTER, p. 637.*



WEBSTER, from p. 636.

Aerospace Medical Association's Medical Accident Investigation Workshop. Dr. Webster is responsible for the Aviation and Aeromedical Safety Resources CD-ROM that has been requested by, and distributed to, aviation safety and aeromedical professionals throughout the world. He has also upgraded and published the aeromedical safety checklist for operational flight surgeons and supplemented the information with a web-based guide to aeromedical duties and responsibilities. He teaches aircraft mishap investigation at the AsMA meetings and Air Force mishap investigation courses, and manages all naval courses on aeromedical mishap investigation.

CAPT Webster has provided invaluable "on-site" assistance to numerous fleet squadrons and improved their aeromedical programs and the awareness of their command safety climate. Timely analysis of complex aviation mishaps has identified significant human factors and command climate issues. His work has had a tremendous impact on the identification and subsequent mitigation of aviation hazards leading to intervention strategies to prevent similar events.

Though born in Canberra, Australia, CAPT Webster considers Memphis, TN, to be his hometown. He became a naturalized United States citizen at the age of 18. He received a Bachelor of Arts degree in Microbiology from the University of Tennessee at Knoxville in 1981; a Doctorate in Medicine from the University of Tennessee Center for the Health Sciences at Memphis in 1985; and a Masters of Public Health from Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD, in 1996.

CAPT Webster attended medical school on a Navy scholarship from 1981 to 1985. After completing medical school, he underwent postgraduate medical education in Family Practice from 1985-6 at Naval Hospital Charleston, SC. The following year he completed 6 months of aeromedical training at the Naval Aerospace Medical Institute in Pensacola, FL, and was designated as a Naval Flight Surgeon in 1987. He was stationed at NAS Lemoore, CA, then NAS Fallon, NV, with the Pacific Fleet Advisory Squadron VFA-127 from 1987-90. He was then assigned as Flight Surgeon for Helicopter Mine Counter Measures Squadron 15 in NAS Alameda, CA, from 1990-2. Following completion of that tour, Dr. Webster was transferred to Naval Air Warfare Center, Aircraft Division in Patuxent River, MD, where he served as Strike Aircraft Test Squadron Flight Surgeon then senior Flight Surgeon for Test Wing Atlantic from 1992-5. He, along with other flight surgeons, worked with the Naval Hospital at Patuxent River to create the Military Medicine Department where he served as Department Head in 1993.

After obtaining his M.P.H. from Johns Hopkins in 1996, he was stationed at the Naval Operational Medicine Institute in Pensacola, FL, where he completed the Navy's Aerospace Medicine Residency in 1998. He reported aboard the PCU Harry S. Truman (CVN 75) in 1998 as Senior Medical Officer and was a member of the commissioning crew. Following completion of his tour on board USS Harry S. Truman, CAPT Webster transferred to the U.S. Naval Safety Center in Norfolk, VA, where he served as Assistant Command

Surgeon from July 2000 to Aug 2003. He became the Command Surgeon at the Naval Safety Center in August of 2003.

CAPT Webster heads the Aeromedical Division at the Naval Safety Center. He is currently responsible for review of all aeromedical aspects of Naval Aircraft Mishaps, analysis of human factors trends and creation of intervention strategies to prevent Naval Aviation mishaps. He was appointed head of the Human Factors Working Group under the Defense Safety Oversight Council, Aviation Safety Improvement Task Force in October 2003. He organizes and teaches a course on human factors and aircraft mishap investigation to student Naval Flight Surgeons. He is Board Certified by the National Board of Medical Examiners and holds a Virginia Medical License. He is Board Certified in Aerospace Medicine. His military qualifications include Naval Flight Surgeon and hyperbaric medical officer. He is a Basic Life Support provider, Advanced Cardiac Life Support Instructor, and Advanced Trauma Life Support Provider.

He is a member of the American Medical Association, the Society of U.S. Naval Flight Surgeons (Life Member), and the Aerospace Medicine Association. He was elected a member of Delta Omega, Alpha Chapter, Honorary Public Health Society in May 1996; was awarded two Meritorious Service Medals; two Navy Commendation Medals; two Navy Achievement Medals; the National Defense Medal; the South West Asia Service Medal; and the Navy Expert Pistol Medal.



#### THEODORE C. LYSTER AWARD

Jon Jordan, M.D., J.D.

*This award was established to honor the memory of Brig. Gen. Theodore C. Lyster, the first Chief Surgeon, Aviation Section, United States Signal Corps. It is given annually for outstanding achievement in the general field of aerospace medicine. Sponsored by Lockheed-Martin Space Operations.*

Jon Jordan, M.D., J.D., is the recipient of the 2004 Theodore C. Lyster Award. He was recognized for his outstanding achievements as a physician and leader dedicated to the development and promotion of civil aerospace medicine in the U.S. and abroad. He is responsible for the implementation of significant changes to optimize the effectiveness and efficiency of FAA aeromedical certification, aeromedical evaluation, aviation human factors research, aeromedical research, and drug abatement programs. He has had a significant effect on the U.S. civil aviation community.

Dr. Jordan, who is currently a Senior Executive at the Federal Air Surgeon Office of Aviation Medicine, was born in December of 1936 in West Virginia. He earned an A.B. at West Virginia University in 1958, and his  
*See JORDAN, p. 638.*

JORDAN, from p. 637.

M.D. at the Medical College of Virginia in 1963 after an internship at Petersburg General Hospital in Petersburg, VA. He later attended the University of Cincinnati as a resident in Occupational Medicine. After a general practice at Highland Clinic, Williamson, WV, he went on to earn a J.D. at the University of Virginia in Charlottesville in 1967. He joined the U.S. Army Medical Corp that same year and, after Basic Training, completed the Army's Basic Aviation Medicine Training at Fort Rucker, AL, and was assigned as a flight surgeon to Gray Army Airfield, Ft. Lewis, WA. He was later promoted to Chief of Aviation Medicine at Madigan General Hospital.

In 1969, he left the Army with the rank of major and joined the FAA as Chief of the Projects Development Branch, Aeromedical Standards Division, Office of Aviation Medicine, at the FAA in Washington, DC. In 1976, he was promoted to Chief, Aeromedical Standards Division, Office of Aviation Medicine, at the FAA. From November 1979 to February 1987, he served as Deputy Federal Air Surgeon. In 1987, he became Acting Federal Air Surgeon. In 1991, he was appointed Federal Air Surgeon, making him responsible for certification of the nation's pilots, the FAA's Civil Aeromedical Institute in Oklahoma City, OK, the administration of the aviation anti-drug program, and a national health awareness program for FAA employees.

He has been licensed by the Medical Licensing Board, WV; the State Board of Health, KY; and the Virginia State Board of Medical Examiners. He was admitted by the Virginia Board of Bar Examiners (Virginia Supreme Court of Appeals) and was also admitted to the DC Bar (DC Court of Appeals).

He is a fellow of the Aerospace Medical Association and a member of the International Academy of Aviation and Space Medicine. His awards include: the FAA Superior Achievement Award; the John A. Tamisiea Award from the Aerospace Medical Association; Award of Merit from the Civil Aviation Medical Association; Presidential Rank Meritorious Executive Award; and the Airlines Medical Directors Award.



**JOHN PAUL STAPP AWARD**

**Henning E. von Gierke, Dr. Eng.**

*This award was established and sponsored by Environmental Tectonics Corporation to honor Col. John Paul Stapp, USAF(Ret.). The award is given annually to recognize outstanding contributions in the field of aerospace biomechanics and to promote progress in protection from injury resulting from ejection, vibration, or impact.*

Dr. Henning E. von Gierke, currently a clinical professor at the Wright State University School of Medicine, was the recipient of the 2004 John Paul Stapp Award for his more than 50 years of unparalleled contributions to the field of aerospace biomechanics and

his promotion of scientific progress in aircrew protection from injury resulting from ejection, vibration, and impact. His work in the early space program helped define safe re-entry and landing criteria for astronauts, and the ejection, acceleration, and impact standards he developed for USAF aircrew are now used by air forces worldwide.

Henning E. von Gierke, Dr. Eng., is a native of Karlsruhe, Germany. In the late 1930s, he began studies of electronics, communication engineering, and acoustics at the Technical Universities in Karlsruhe and Munich. He received the Diplom Ingenieur in 1943 and a Doctor of Engineering degree in 1944 from the Technical University in Karlsruhe. After doing research in acoustics, aero-acoustics, and teaching, he came to the United States in 1947 as part of a program called "Operation Paperclip," which was designed to enhance American aviation science and technology research programs after World War II, to join the Aerospace Medical Research Laboratory at Wright Patterson AFB, OH. He worked there for over five decades with an increasing number of co-workers and research responsibilities until his retirement as Director of the Biodynamics and Bioengineering Division. He directed and was actively involved in research in vibration, impact, acceleration, shock, blast noise, communication, and vestibular performance. His work focused on the interaction of all types of mechanical energy with the human organism (the transmission, action, human physiological response, and perception) and is published in over 160 scientific publications. He also pioneered work on ameliorating unwanted flight control inputs during flight that are referred to as biomechanical feed-through, or pilot-induced oscillations, and developed a series of lectures on "The Effects of Shock and Vibration on Man" that later became a book chapter in the Shock and Vibration Handbook.

When the USAF was developing supersonic aircraft such as the F-108, XB-70, and B-58 bombers that were to be equipped with ejection seats that encapsulated the pilot prior to ejection, there was concern about the impact accelerations during the landing phase. It was discovered that the current acceleration limits published in the aircraft design handbooks were inadequate to handle the varied impact conditions and the relatively short-stroke impact attenuator designs that appeared feasible. Dr. von Gierke provided sound, physics-based insights and guided the engineers with a more theoretically based set of acceleration limit criteria for emergency escape systems. These criteria allowed NASA to explore Project Mercury landing impact conditions with more confidence.

Dr. von Gierke has served on committees of the Executive Office of the President of the United States and on many NASA, Department of Transportation, Federal Aviation Administration, EPA, and National Institute of Health Advisory committees. He has been dedicated to seeing the scientific research results applied to practical societal needs in a correct and timely manner. He worked with patience and energy over three decades leading the development of national and international standards (ANSI, ISO) addressing human safety and well-being with respect to noise, vibration,

*See VON GIERKE, p. 639.*

VON GIERKE, from p. 638.

shock and impact, noise-induced hearing loss, and hearing conservation.

He was elected a member of the National Academy of Engineering, the International Academy of Aviation and Space Medicine, the International Academy of Astronautics, an Honorary Fellow of the Institute of Environmental Sciences, and an Honorary Member of the Military Audiology Association. He is a Fellow and Past President of the Acoustical Society of America and a Fellow and past Vice President of the Aerospace Medical Association.

Among the awards he has received are: the DoD Distinguished Civilian Service Award; the Eric Liljencrantz Award and the Arnold D. Tuttle Award from the Aerospace Medical Association; the Commander's Cross of the Order of Merit from the Federal Republic of Germany; the Hubertus Strughold Award from the German Aerospace Medical Association; the H.R. Lissner Award from the American Society of Mechanical Engineers; the Rayleigh Medal from the UK Institute of Acoustics; the Award for Outstanding Contributions to the Field of Hearing Conservation from the National Hearing Conservation Association; and the Distinguished Executive Presidential Rank Award, presented by the President of the United States.



**ERIC LILJENCRANTZ AWARD  
and  
SIDNEY D. LEVERETT, JR.  
ENVIRONMENTAL SCIENCE  
AWARD**

**Barry S. Shender, Ph.D.**

*The Eric Liljencrantz award was established in memory of CDR Eric Liljencrantz, MC, USN, whose brilliant career in aviation medicine was cut short by his death in an airplane accident in 1942. It is given annually to honor excellence as an educator in aerospace medicine, or basic research into the problems of acceleration, altitude, or weightlessness. Sponsored by The Aerospace Medical Association.*

*Established in memory of Sidney D. Leverett, Jr., Ph.D., this Environmental Science Award is presented annually to an individual who has made a significant contribution in the field of environmental medicine through a publication in Aviation, Space and Environmental Medicine, or by activities conducted in support of aerospace systems operation. Sponsored by Environmental Tectonics Corporation.*

Barry S. Shender, Ph.D. was awarded both the Eric Liljencrantz Award and the Sidney D. Leverett, Jr. Environmental Science Award for his article "Acceleration-Induced Near Loss of Consciousness: The A-LOC Syndrome" (*Aviat Space Environ Med* 2003; 74:1021-8). This article researched the phenomenon of A-LOC syndrome in order to define the syndrome, increase pilots' awareness of the symptoms, and further the understanding of the relationship between the outward symptoms and the underlying physiological changes.

A native Philadelphian, Barry S. Shender, Ph.D., received his bachelor's degree in Biology from Temple University, Philadelphia, PA, in 1977. He went on to re-

ceive both his Master of Science degree in 1985 and his Ph.D. in 1988 in Biomedical Engineering from Drexel University, Philadelphia, PA. Dr. Shender has worked for the Naval Air Systems Command (NAVAIR) Human Systems Department since 1987 at Warminster, PA, and Patuxent River, MD. His technical accomplishments have focused on life support in aviation systems, particularly in determining the relationship between physiologic, cognitive, and motor responses to exposures to environmental stresses. His key research areas include: 1) effects of acceleration forces on (a) consciousness (ranging from the first explicit description of the "Almost Loss of Consciousness" Syndrome to frank G-LOC), (b) non-invasive monitoring of blood and cerebrospinal fluid supply in the brain with his development of the rheoencephalograph, and (c) determining the ability of small stature females and males to tolerate multi-vector stresses, fly, and eject from high-performance aircraft; 2) studying the impact of wearing chemical-biological protection garments on the ability of men and women to tolerate exposures to extreme thermal stress; 3) neck injury during maneuvering flight; 4) isometric and dynamic neck strength and the effects of work/rest cycles on strength and psychomotor ability; 5) development of technologies to mitigate the risk of neck injury in flight; and 6) development of integrated life support technologies that provide protection against multiple threats. His injury research involved the design and development of unique devices to measure isometric and dynamic neck strength and muscular endurance and the "G-load simulator," which can reproduce the increased head/neck loading on a pilot's neck associated with high-G maneuvering flight in a fixed-based flight simulator. He is the program manager of two Office of Naval Research Future Naval Capabilities Warfighter Protection programs in the areas of Injury Prevention and Aircrew Integrated Life Support System (AILSS). Both programs include joint service participation through a Joint Warfighting Capability Technology and Defense Technology Objectives, respectively.

Dr. Shender is author or co-author of over 60 publications in the areas of crew protection, physiology, and human performance, including "Human Tolerance to Acceleration Loads Generated in High Performance Helicopters" (*Aviat Space Environ Med* 2001; 72:693-703), "Human Cognitive and Psychomotor Response to the Push-Pull Effect (PPE)" (abstract; *Aviat Space Environ Med* 2000; 71:275), and "High Performance Supine Flight Assessment Using the NAWC Dynamic Flight Simulator" (*Aviat Space Environ Med* 1996; 67:414-22). He has also been principal investigator on 20 research projects encompassing such subjects as +Gz acceleration, neck injury and head weight limits, and human physiological responses to acceleration. He is an adjunct professor for the University of Maryland University College and the Florida Institute of Technology. He is a NAVAIR Fellow and has received the Professional Excellence award from the AsMA Life Sciences and Biomedical Engineering Branch in 1998 and the Laura S. Campbell Award for Excellence in Teaching from Drexel University in 1995. He also led the AILSS team that received the SAFE Association

*See SHENDER, p. 640.*

*SHENDER, from p. 639.*

2003 SAFE Award for Team Achievement for Outstanding Contributions in the Field of Safety.

His artistic achievements include the cover design for Biomedical Engineering in High-G Environments, IEEE/EMBS Magazine, Volume 10(1), March 1991, and the logo design for the Science and Technology Watch Column of ASEM. As a Fellow of AsMA, he is very active with the Association. He served as Chair of the AsMA Science and Technology Committee, editor of the Science and Technology Watch Column, President of LSBEB and its Council representative. He has been a member of the Scientific Program Committee since 1991, has chaired many sessions at the annual meeting, and has given presentations at every annual meeting since 1988. He is also a member of the Aerospace Physiology Society, the Aerospace Human Factors Society, and the IEEE Engineering in Medicine and Biology Society. He has also served as the chair of the Philadelphia IEEE EMBS section from 1990 to 1992.



**MARY T. KLINKER AWARD**

**Col. Martha A. Stowe, USAF, NC**

*Established by the Flight Nurse Section in 1968, this award became an official AsMA award in 1972. In 1978 it was renamed in memory of Mary T. Klinker, who was killed in a C-5A crash while performing a humanitarian mission. The award is given annually to recognize significant contributions to, or achievements in, the field of aeromedical evacuation. Sponsored by the Aerospace Medical Association.*

Colonel Martha A. Stowe, USAFR, NC, the Air Force Reserve Command Advisor to the Command Surgeon, Headquarters Air Mobility Command, Scott AFB, IL, was recognized with the 2004 Mary T. Klinker Award for her unparalleled commitment to aerospace medicine. She has had a positive effect on many USAF aeromedical evacuation crewmembers' lives and was instrumental in designing a single, integrated, requirements-based military aeromedical evacuation system that operates in peace as it would in war. She was also pivotal in driving decisions regarding military aeromedical evacuation policies, processes, and resources into the new millennium. She is currently involved in a Tri-Service Nursing Research Grant entitled "Air Force Combat Casualty Aeromedical Nursing Post September 11, 2001."

Col. Stowe earned her Bachelor of Science in Nursing at St. Louis University, St. Louis, MO, in 1980. After a 1-year internship in Nursing at Mather AFB Hospital, Mather AFB, CA, in 1981, she completed correspondence Squadron Officer School and a Nursing Service Management course at Sheppard AFB, TX, in 1983. She graduated from the School of Aerospace Nursing at Brooks AFB, TX in 1986 and earned a Masters of Public Administration in 1989 and a Master of Human Relations in 1990 from the University of

Oklahoma at Andersen AFB, Guam. She continued her education with the Aeromedical Evacuation Contingency Operations Course in Little Rock, AK, in 1993 and a C-141 Flight Nurse Instructor Upgrade at March AFB, CA, in 1994. She attended an Air Command and Staff College Seminar at Scott AFB, IL, in 1996 and earned a Flight Nurse Examiner Upgrade at Headquarters Air Mobility Command, Scott AFB, IL, in 1997. She graduated from an Air War College Seminar at Scott AFB, IL, in 1999.

She began her military career as a Staff Nurse, Multi-Service Unit, from 1981-3 and as Officer-in-Charge/Outpatient Services and Hospital Education Coordinator from 1983-5 at Wurtsmith AFB, MI. From 1985-7, she served as a C-130 Flight Nurse, 45th Aeromedical Evacuation Flight, at Selfridge ANGB, MI. She was transferred to Andersen AFB, Guam, where she became Individual Mobilization Augmentee, 43rd Strategic Clinic, in 1987. From 1990-5, she served as an Instructor Flight Nurse/Officer-in-Charge Aircrew Scheduling, 452 Aeromedical Evacuation Squadron, at March AFB, CA. In 1991, she was involved with Operation Desert Storm as a C-141 Flight Nurse in Upper Heyford, England, and from 1993-4 was involved in Operation Continue Hope as Officer-in-Charge, Mobile Air Staging Facility, in Mogadishu, Somalia, where she organized the recovery of C-130 crash victims off the coast of Kenya. She also taught Pakistani physicians and nurses the skills needed to perform aeromedical evacuation after U.S. forces withdrew from Somalia. From 1995 to the present, she has served as Air Force Reserve Advisor to the Command Surgeon at Headquarters Air Mobility Command, Scott AFB, IL.

Recent conflicts have found a different forum for Col. Stowe's considerable aeromedical evacuation experience. She was responsible for helping to set up an aeromedical evacuation theater laydown plan to support movement of war-injured soldiers from the point of conflict back to the United States. She was directly responsible for the mobilization of Reserve and Guard flight surgeons, flight nurses, aeromedical evacuation technicians, Critical Care Air Transport Team members, and ground aeromedical evacuation personnel needed to support the various aeromedical evacuation theater contingency requirements. She was instrumental in the execution of Integrated CONUS Medical Operations Plan for wartime casualty redistribution from the conflict site to their stateside homes. She opened 5 patient reception hubs, mobilized 262 Aeromedical Staging Facility personnel, and moved over 2,000 wartime casualties.

Col. Stowe has contributed to many peacetime aeromedical evacuation accomplishments. She received the 2001 Charles Roadman Mirror Force Award for her role in developing a global Aeromedical Evacuation Patient Safety Program modeled after the Aircraft Mishap Process. Prior to its development, there was no universal, collective database/process for reporting and tracking aeromedical evacuation safety violations or near-miss events. As the Air Mobility RODEO guru for aeromedical evacuation, she masterminded the integration of aeromedical evacuation into a previously medical "off-limits" international airlifter flying compe-

*See STOWE, p. 641.*

STOWE, from p. 640.

tition. As the aeromedical evacuation project officer for the first and subsequent two RODEOs with aeromedical evacuation participation, she solidified aeromedical evacuation as one of Air Mobility Command's core missions. She was also involved with the aeromedical evacuation testing and training of 510 aeromedical evacuation crewmembers and Critical Care Air Transport Team members on a commercial Boeing 767 Civil Reserve Air Fleet exercise. She has been the principle planner and on-site commander for various international military medical/aeromedical evacuation exchange exercises including Bulgaria, Tunisia, and Chile. Her civilian assignments include Maternal/Child Education Coordinator at Catherine McCauley Health Care Center in Ann Arbor, MI; a Site Representative, University of Oklahoma/Advanced Programs at Andersen AFB, Guam; a Nursing Staff Development Instructor at Desert Hospital, Palm Springs, CA; and the Director of Hospital Education at St. Mary's Hospital, East St. Louis, IL.

She has earned many awards and decorations including the Meritorious Service Medal, the Air Force Commendation Medal with two oak leaf clusters, the Army Achievement Medal, the Air Force Achievement Medal with four oak leaf clusters, the Combat Readiness Medal with three oak leaf clusters, the National Defense Service Medal, the Armed Forces Expeditionary Medal, the South West Asia Medal with one bronze star, the Kuwait Liberation Medal, and a Chief Nurse Flight Badge. She has accumulated more than 1,000 flight hours on the C-9, C-130, C-141, C-17, and KC-135.



RAYMOND F. LONGACRE AWARD

Royden W. Marsh, M.D.

*Established to honor the memory of MAJ Raymond F. Longacre, MC, USA. It is given annually for outstanding accomplishment in the psychological and psychiatric aspects of aerospace medicine. Sponsored by Aeromedic Innovations.*

Royden W. Marsh, M.D., Col. USAF, MC (Ret.), was the recipient of this year's Raymond F. Longacre Award. He was recognized for his notable contributions to aerospace psychiatry throughout his wide-ranging career. A former T-38 flight instructor, he has had a 26-year career in aeromedical psychiatry as a clinician, flight surgeon, teacher, and administrator. At the NASA Johnson Space Center he served as deputy crew surgeon on two space shuttle launches and as chief psychiatrist on three astronaut selection systems. At USAFSAM, he taught aerospace psychiatry to hundreds of flight surgeons, evaluated hundreds of aviators, and published extensively.

A native of Colorado, Dr. Marsh graduated from the University of Colorado in 1964 with a Bachelor of Arts

degree. He was a distinguished graduate of the U.S. Air Force Officer Training School, and subsequently entered U.S. Air Force Undergraduate Pilot Training at Williams AFB, AZ, graduating in 1966 with distinction and garnering the Commander's Trophy as the highest overall class graduate. Returning to Williams AFB as a first assignment T-38 instructor pilot, he accumulated some 1,800 hours of instructor time over the next 3 years, including a master instructor award.

He attended the University of Colorado Medical School beginning in 1969, sponsored by the U.S. Air Force Medical Education Program. He completed the Aerospace Medicine Primary Course at Brooks AFB, TX, shortly prior to graduation from medical school in May 1973. Internship and residency in psychiatry at Wilford Hall USAF Medical Center, Lackland AFB, TX, were completed in 1976. He had assignments as staff psychiatrist at Keesler AFB, MS, and Wilford Hall, where he became Chief, Outpatient Mental Health Clinics.

Between 1981 and 1983, Dr. Marsh served with the USAF School of Aerospace Medicine, Aeromedical Consultation Service, Neuropsychiatry Branch, as Chief, Psychiatry Function, Brooks AFB, TX. This tour clarified his career goal of blending aviation, psychiatry, and aerospace medicine. Therefore, after spending a one year tour at Incirlik AB, Turkey as Chief of Mental Health Services, Chief of the Department of Medicine, and as Psychiatric Consultant for U.S. Forces in Turkey, he returned to the Neuropsychiatry Branch as Chief, Psychiatry Function at Brooks AFB.

He was next assigned to Bolling AFB, DC, as the designated Psychiatric Consultant to the USAF Surgeon General in Psychiatry and Deputy Chief of the Clinical Consultant Division. But when the opportunity arose in late 1987 he returned to the USAFSAM as Chief of the Neuropsychiatry Branch, while retaining AF/SG and AFMPC/SG Psychiatry Consultant duties.

Dr. Marsh retired from the Air Force in 1990 after 26.5 years of active duty service. During that time, he received numerous awards including four Commendation medals, two Meritorious Service medals, and a Legion of Merit. But he did not stop practicing aerospace psychiatry.

Subsequent to USAF retirement, Dr. Marsh joined NASA/Johnson Space Center in Houston, TX, first as a contracted Medical Operations Psychiatry Consultant, then as a medical officer. He served as psychiatric consultant and flight surgeon in the Medical Operations Branch of the Space and Life Sciences Directorate supporting the Flight Medicine Clinic and Astronaut Office. He contributed to resolving psychiatric issues associated with space shuttle missions, proposed space station missions, and planned long-duration space missions. Additionally, he supported multiple space shuttle missions as Deputy Crew Surgeon and Flight Control Room Surgeon. He served as the Chief Psychiatrist for the Astronaut Selection Psychiatric and Psychological Evaluation Program and in 1994 was designated as Lead, Mission Support Psychological Services Group within the Medical Operations Branch.

In 1996, Dr. Marsh transferred from the NASA/Johnson Space Center back to the Department  
*See MARSH, p. 642.*

*MARSH, from p. 641.*

of the Air Force as Chief, Neuropsychiatry Branch at the Aeromedical Consultation Service within the USAF School of Aerospace Medicine at Brooks AFB, TX, where he remains today. In 2001, Dr. Marsh was designated as a Consultant to the USAF Surgeon General in Aeromedical Psychiatry. He remains a consultant to NASA/JSC as a member of the Behavior and Performance Integrated Product Team and provides operational support in aeromedical psychiatry to flight surgeons and mental health professionals throughout the Air Force.

Throughout his career, as a teacher and mentor, he has actively encouraged residents in aerospace medicine and members of his staff to research and publish aeromedically pertinent material on mental health subjects, as well as on the history of aerospace medicine. By presenting aeromedical instruction to mental health professionals and mental health instruction to aeromedical professionals, he has enabled informed liaison between these two disciplines.

Dr. Marsh has published extensively on aerospace psychiatry, and has developed, updated, and maintained reference material in the Air Force Flight Surgeon's Guide and the USAFSAM Waiver File. These documents are electronically available to USAF flight surgeons around the world and have effectively brought aerospace psychiatry into the 21st century. In addition, he has compiled 17 publications, seven of which have been in peer-reviewed journals. Dr. Marsh has made a career of aviation and the practice of psychiatry and aerospace medicine in support of aviator health, flying safety, and mission completion.

He is board certified in psychiatry and a Fellow of the Aerospace Medical Association.



**JOHN A. TAMISIEA AWARD**

**Michael A. Berry, M.D., M.S.**

*This award was established and sponsored by the Civil Aviation Medical Association in memory of John A. Tamisiea, M.D. The award is given annually to an aviation medical examiner or other individual who has made an outstanding contribution to the art and science of aviation medicine in its application to the general aviation field.*

Michael A. Berry, M.D., M.S., received the John A. Tamisiea Award for his significant contributions to aerospace medicine and civil aviation medicine. He is a well-known aviation medicine consultant who has performed medical evaluation of pilots, risk factor identification, and has provided lifestyle modification recommendations and clinical care services for pilots for over 20 years. He has extensive experience and service in aviation medicine and is a recognized leader in the aerospace medicine community. He has also provided a broad scope of services, nationally and internationally, in the fields of preventive and aerospace medicine. He

has an outstanding international reputation and has received a number of awards of excellence. Because of his outstanding reputation and expertise, he is often consulted by major U.S. airlines including Delta Airlines, Southwest Airlines, and Continental Airlines. He is currently a partner and Vice-President of Preventive & Aerospace Medicine Consultants, P.A., in Houston, TX.

Dr. Berry was born in 1946 in San Francisco, CA. He received his M.D. degree from the University of Texas Southwestern Medical School in Dallas in 1971. After a general surgery internship in the United States Air Force at Wilford Hall USAF Medical Center, Lackland AFB, TX, he took the primary course in aerospace medicine at the USAF School of Aerospace Medicine, Brooks AFB, TX. He then spent 4 years as a fighter squadron flight surgeon in Madrid, Spain, and England. While in Madrid, he was flight surgeon to both the 98th Strategic Wing and the 613th Tactical Fighter Squadron and Chief Physician for Remote Radar Sites in Spain. He was also a member of a special accident investigation team, and commander of a transportable hospital during NATO exercises.

After a year as a flight surgeon at RAF Lakenheath, UK, in 1976, he entered his residency in Aerospace Medicine at Ohio State University in Columbus, OH, and received his Master's Degree in Preventive Medicine in 1977. In 1978, he was certified by the American Board of Preventive Medicine in Aerospace Medicine. Following his residency, he became the Chief of the Flight Medicine Clinic at the NASA Johnson Space Center in Houston, TX, where he was responsible for the screening and selection of new astronauts, clinical and preventive medicine for the astronauts and their dependents, and participated in the medical certification and training of astronauts for spaceflight, as well as medical monitoring during flight. In addition to participating in the extensive medical preparations for the first flight of the Space Shuttle, he served as a member of the Flight Control Team for the first two flights of the shuttle Columbia. On leaving NASA, he entered his current private practice of aerospace medicine. He has been a Senior Aviation Medical Examiner for the FAA since 1979. He is also an Aviation Medical Examiner for Canada.

Dr. Berry is a Past President and Fellow of the Aerospace Medical Association, and a Fellow of the American College of Preventive Medicine. He was also past Vice-President of the Civil Aviation Medical Association, and a past Director and Selector of the International Academy of Aviation and Space Medicine. He served as a Board Member and Trustee of the American Board of Preventive Medicine and as the Vice-Chair for Aerospace Medicine for the Board from 1990 through 1998. He has also served as President of the Society of NASA Flight Surgeons.

He is the recipient of numerous national awards, including the Air Force's National Defense Service Medal (1971); the Special Award for outstanding contributions to the Approach and Landing Test Program (1978); AsMA's Julian E. Ward Memorial Award (1979); the Physician's Recognition Award of the American Medical Association (1979 and 1982); NASA Special Achievement Award (1980); and the First Shuttle Flight

*See BERRY, p. 643.*

BERRY, from p. 642.

Achievement Award (1981). He has several academic appointments, including Adjunct Assistant Professor of Aerospace Medicine at the University of Texas School of Public Health in Houston, TX, and Visiting Lecturer in Space Medicine at the USAF School of Aerospace Medicine at Brooks AFB, TX. He has published numerous articles in professional journals and chapters in major textbooks including a chapter on Civil Aviation Medicine in the standard textbook "Fundamentals of Aerospace Medicine." He is also a member of the Space Medicine Branch of the AsMA, the American College of Preventive Medicine, the Society of U.S. Air Force Flight Surgeons, the Society of NASA Flight Surgeons, and the Wilderness Medical Society.



**JULIAN A. WARD AWARD**

**Thomas Clarke, M.D.**

*Established and sponsored by the Society of U.S. Air Force Flight Surgeons in memory of its first member to lose his life in an aircraft accident, and to honor all flight surgeons whose lives are lost in the pursuit of flying activities relating to the practice of aerospace medicine. The award is given annually for superior performance and/or outstanding achievement in the art and science of aerospace medicine during residency training.*

Maj. Thomas Clarke, USAF, MC., was honored with the 2004 Julian E. Ward Award for his first-class efforts and accomplishments during his aerospace medicine residency. He was instrumental in assisting junior residents, aiding staff, and achieved the highest academic scores in his class. He supplemented the staff when they took residents on a 2-week field practicum to Peru. During that trip he provided valuable language skills and a vast knowledge of customs and society norms, gained from previous visits to Peru.

He was chosen as Chief Resident from among several more senior residents because of his academic excellence, personable nature, and natural leadership capabilities. He prepared and presented a week's worth of aerospace medicine training lectures and then traveled to Lithuania to present those lectures to their military forces and civilian personnel, thus advancing the study and application of aerospace medicine principles in that nation. He researched, updated, and expanded residency elective training opportunities for not only his class, but future residents as well. He also arranged a local Survival Training course for residents when positions for the usually scheduled training at Fairchild AFB became unavailable. In addition, Dr. Clarke took on and coordinated the scheduling of RAMS giving lectures with the Aerospace Primary Course so that residents could not only expand their teaching skills, but at the same time share their experiences with other soon-to-be flight surgeons.

A native of Utah, Dr. Clarke earned his B.S. in

Zoology and Psychology at Brigham Young University in 1988. He then graduated with an M.D. in 1992 from the Uniformed Services University of the Health Sciences. He served his residency in aerospace medicine at the School of Aerospace Medicine, Brooks AFB, TX, in 2002. During his career, he has served in several positions including flight surgeon at Edwards AFB, CA, from 1993-1995; flight commander at Fairchild AFB, WA, from 1995-1999; flight commander, SGP 16th Medical Ops Squadron, Hurlburt Field, FL, from 2002-2003; and flight commander, 16th Operational Support Squadron-Medical, also at Hurlburt Field, from 2003 to the present (he is currently deployed to Iraq). Also during that time, he continued to advance his medical knowledge with such courses as: a hyperbaric medicine course; an advanced cardiac life support instructors course; NASA's flight surgeons' course; the U.S. Army's Research Institute of Environmental and Operational Medicine course; an Air Force mishap investigation course; a global/travel medicine course at Brooks AFB, TX; and a combat advanced life support course.

Dr. Clarke has submitted a number of articles for publication and has prepared for and given several presentations on topics such as treatment of non-Hodgkins Lymphoma, human performance issues with Unmanned Aerial Vehicles, and aircrew fatigue and rest policy. He received the Society of USAF Flight Surgeons Howard R. Unger Award in 2003 for his article "Corneal injury threshold in rabbits for the 1540 nm infrared laser" (Aviat Space Environ Med 2002; 73; 787-90). He has been a USAF Flight Surgeon since 1993, the historian of the Society of USAF Flight Surgeons, and was Valedictorian of USUHS Medical School (1992).

Board-certified in aerospace medicine and preventive medicine, he has earned a variety of awards and recognitions, including: the Lange Medical Publication Award for Outstanding Achievement as a Medical Student; the Joint Services Achievement Medal for academic accomplishment as the first to graduate from USUHS with a 4.0 GPA; Distinguished Graduate Aerospace Medicine Primary Course; the Expert Marksman Medal; and the Meritorious Service Medal.

### **Award Nominations Sought for 2005**

The deadline is December 15 for receiving nominations for awards to be presented at the 2005 Annual Scientific Meeting in Kansas City, MO. The committee chair emphasizes, however, that the names of prospective award winners should be submitted as far in advance of the deadline as possible. Lots of time is needed to review all of the names and select the winners.

Nominations can be made by any member of AsMA.

The nominations must be submitted on forms available from the AsMA website and printed in the journal.

Nomination forms should be e-mailed to the awards chair: [verba.moore@langley.af.mil](mailto:verba.moore@langley.af.mil), and [jcarter@asma.org](mailto:jcarter@asma.org); or mailed to:

**Chair, Awards Committee**  
**Aerospace Medical Association**  
**320 South Henry Street**  
**Alexandria, VA 22314-3579**

**Please take the time to nominate a worthy  
colleague for one of our awards.  
Give them the recognition they deserve!**

### HISTORY, from p. 631.

should be followed by opportunities, pay and conditions which encourage people to remain in the careers they were trained for" (4).

Metabolic rate and altitude. "The Hartmann-Braun basal metabolic rate indicator was used to determine the basal metabolism of ten male and two female medical students, twenty to twenty-three years of age, at sea level and at 1.85 km. (6000+ feet) altitude for twelve days. The BMR's of all but one subject were lower than the calculated standards on repeated determinations at sea level. By the fifth to sixth day on the mountain the BMR's were definitely increased and remained so for the entire twelve-day stay. They gradually returned to pre-ascent levels following return to sea level. The respiratory quotient values decreased from an average of 0.92 to 0.84-0.85 at altitude and returned to pre-ascent levels on return to Istanbul. Respiratory minute volumes increased by the fifth to sixth day at altitude, then gradually diminished. These changes appeared to parallel the onset of hastened erythropoiesis" (6).

### Twenty-five Years Ago

Physiologic response to nutritional and sleep deprivation (Norway): "There were 18 young men who participated in a ranger training course in June 1978 with more than 100 h of continuous activities, almost without sleep. The subjects used about 10,000 kcal/d and their food intake gave only about 1,600 kcal/d. Changes from circadian rhythm in performance and mood were studied once in the week before the course, on the first and last day of the course, and once in the week after the course. The subjects were tested at 4-h intervals. Significant and substantial impairments were observed in all tests, as well as in mood during the course (more pronounced on the last day). The impairment was mainly in reduced capacity, although there were minor increases in errors. The oscillations in circadian rhythm during baseline and recovery were small ( $\pm 10\%$  of the 24-h mean), with a tendency to have low values in the early morning. The oscillation increased during the course to 20-40% of the 24-h mean; the tendency was to increase the fluctuations of the natural circadian rhythm with a crest in the afternoon and a trough in the early morning. The profile of mood-state showed similar fluctuations and was highly correlated to performance. After 4 d of rest, there was complete restitution of performance and mood in our tests" (3).

Vigilance after cold exposure (Canada): "This study investigated the effect of cold exposure on vigilance performance in men working and sleeping under Arctic conditions. The results were compared with

changes in the amount of REM sleep. EEG sleep recordings were made on six subjects during five baseline nights in laboratory conditions, 16 experimental nights in Arctic conditions, and four recovery nights in the laboratory. Vigilance tests were administered every second day during the experimental period and two times during each of the baseline and recovery periods. During the first night in the Arctic, the amount of REM sleep fell to 50% of baseline and a large decrement occurred in detection performance on the following morning. During the remaining nights in the cold, REM deprivation averaged about 25% with somewhat greater deprivation occurring during colder nights. Reaction time measures generally increased throughout the experimental period and subsequently showed incomplete recovery. However, detection performance gradually improved during the experimental period but showed some regression following colder-than-usual nights, when REM deprivation increased. This suggested that performance on this type of task may be related to temperature variations and changes in REM deprivation" (1).

Physical training at altitude (India): "Effect of systematic physical training at moderate altitude (1850 m) on hypoxic tolerance was estimated on a group of young soldiers, by determining the Time of Useful Consciousness (TUC) at a simulated altitude of 7620 m in a hypobaric chamber together with the Critical Flicker Frequency (CFF) test. The subjects, after initial testing at Delhi

(near sea level) were taken to an altitude of 1850 m and divided into two groups. One group was given systematic endurance physical training for 8 weeks, while the other group served as control. The subjects were then taken to an altitude of 3500 m and kept at that altitude for 4 weeks, after which they were brought back to Delhi and TUC was estimated again within 2 d. The results indicate that endurance physical training at moderate altitude improved hypoxic tolerance and the central nervous system activity under hypoxia" (5).

### References

1. Angus RG, Pearce DG, Buguet AGC, Olsen L. Vigilance performance of men sleeping under Arctic conditions. *Aviat Space Environ Med*, 1979; 50(7):692-6.
2. Balke B, Grillo GP, Konecki EB, Luft UC. Work capacity after blood donation. *J Appl Physiol*, 1954; 7:231.
3. Bugge JR, Opstad PK, Magnus PM. Changes in the circadian rhythm of performance and mood in healthy young men exposed to prolonged, heavy physical work, sleep deprivation, and caloric deficit. *Aviat Space Environ Med*, 1979; 50(7):663-8.
4. Lindbergh CA. Greater ingenuity in the use of man. *Sat Eve Post*, 1954; July 17.
5. Sen Gupta J, Mathew L, Gopinath PM. Effect of physical training at moderate altitude (1850 m) on hypoxic tolerance. *Aviat Space Environ Med*, 1979; 50(7):714-6.
6. Terzioglu M, Aykut R. Variations in basal metabolic rate at 1.85 KM. altitude. *J Appl Physiol*, 1954; 7:329.

## FAA Seminar Schedule 2004

July 9-11	Denver, CO	Aviation Physiology/HF
August 6-8	McLean, VA	Ophth/Otolaryn/Endocrin
September 13-17	Oklahoma City, OK	Basic
November 5-7	Tampa/Ft. Lauderdale, FL	Neuro/Psychol/Phys
November 15-19	Oklahoma City, OK	Basic

**For further info, call your regional flight surgeon. To schedule a seminar, call the FAA Civil Aerospace Medical Institute AME Programs Office at (405)954-4830.**

## MEETINGS CALENDAR

**August 11, 2004, Leicester, UK.** UK SPACE MEDICINE DAY. University of Leicester, Leicester, UK. Full day of presentations, workshops, and posters by leading UK and International Space experts. Conference pack issued. Cost: £20. Contact: alyson-calder@doctors.org.uk.

**September 20-24, 2004, New Orleans, LA.** 48th Annual Meeting of the Human Factors and Ergonomics Society. Info: HFES (310)394-1811; info@hfes.org; http://hfes.org.

**September 27-29, 2004, Salt Lake City, UT.** SAFE Association 42nd Annual SAFE Symposium. Info: Jeani Benton (541)895-3012; www.safeassociation.com.

**September 16-19, 2004, Adelaide, South Australia.** Annual Scientific Meeting of the Australasian Society of Aerospace Medicine. Contact: Jodie Parker, Iceberg Events. +61 7 3715 5000; jodie@icebergevents.com.au.

**October 27-30, 2004, Port of Acapulco, Guerrero, Mexico.** XXI International Meeting of Aerospace Medicine. Theme: Human Factors and Aerospace Medicine. Sponsor: Aviation Medicine Association of Mexico. Info: Claudia Palomeque ó Azucena Laguna, Tel.: 5575-1860, 5575-7295 y 1994-3691;

cpalomeque@grupodestinos.com.mx; alaguna@grupodestinos.com.mx.

**July 22-27, 2005, Las Vegas, NV.** 11th International Conference on Human-Computer Interaction. Further info: HCI International 2005, School of Industrial Engineering, Purdue University, Grissom Hall, 315 N. Grant St., West Lafayette, IN 47907; hci2005.engr.wisc.edu.

**August 28-September 1, 2005, Warsaw, Poland.** The International Congress of Aviation and Space Medicine under the auspices of The International Academy of Aviation and Space Medicine. Info: Civil Aviation Office of the Republic of Poland, att: ICASM 2005, 4/6 Chalubinskiego Str., 00-928 Warsaw, Poland; tel./fax: (+48 22) 630-1785; icsam2005@ulc.gov.pl.

**September 15-18, 2005, Gold Coast, Queensland, Australia.** Conjoint Meeting of the Australasian Society of Aerospace Medicine (ASAM) and the Asia Pacific Federation of Aerospace Medical Associations (APFAMA). This meeting represents the Annual Scientific Meeting of ASAM, together with the 5th Asia Pacific Congress of Aerospace Medicine (APCASM). Contact: Anne Fleming, ASAM Secretariat, +61 3 98991686; fleminga@bigpond.net.au; www.asam.org.au.

## AsMA Future Meetings

May 8-12, 2005  
Kansas City, MO  
Hyatt Regency Crown Center

May 14-18, 2006  
Caribe Royale Hotel  
Orlando, FL

May 13-17, 2007  
Sheraton and Marriott Hotels  
New Orleans, LA



# AEROSPACE PHYSIOLOGY REPORT

Send information for publication on this page to: **LCDR Joe Essex, MSC, USN**  
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## Outgoing President's Message

The last year has been very successful for the members of the Aerospace Physiology Society. We have seen our members make significant contributions to enhancing the safety, survivability, and performance of our aircrews. They have participated in Operation Iraqi Freedom and many other challenging deployments and projects. These allowed us to support the aviation community and provide answers to the challenges that they meet as they push the performance envelope. We recently have had the opportunity to enjoy fellowship with friends, recognize professional achievements, and share our common interest in the field of Aerospace Physiology at the AsMA conven-

tion in Anchorage. The convention and the Society events were a tremendous success.

Our goal this year was to strive for the future and remember the past. We renewed old acquaintances with our fellow professionals and saw the relevance of what we do through the eyes of our distinguished Smith Ames Memorial lecturers. And finally, we congratulated those newly certified in Aerospace Physiology and recognized our outstanding performers through our society awards. You will read about these events in upcoming journals. I would like to personally thank the Board of Governors, Committee Chairs and members, our Sponsors, and all that have contributed to the success of our society over the past year. Thank you for a job well done.

I want to thank COL Don Choisser for his

review of the society's history that was printed in the AsMA Journal as we celebrated the 75th anniversary of our association this year in Anchorage. He was presented with the President's Award for Outstanding Service at the luncheon.

I turned over the gavel to our new president for 2004, CDR Gail Hathaway. I ask our outstanding membership to support her in the many challenges for the upcoming year in the same way that you supported me this year. I wish you all good luck for 2004 and thank you all for the opportunity to serve you as your President this past year. Best wishes as we steam forward to new horizons.

**Donna M. Murdoch**  
**President 2003-2004**

# AEROSPACE NURSING SOCIETY NEWS

Send information for publication on this page to: **Eileen Hadbavny**  
**1266 Merton Rd,**  
**Charleston SC, 29407-3317**  
**e-mail: hadbavny@usit.net**

## Greetings from the ANS President

I would like to thank the members of the Aerospace Nursing Society (ANS) for giving me the opportunity to serve as your president. I am honored to represent the ANS and I am looking forward to a very productive year. The Aerospace Nursing Society celebrated its 40th anniversary this year in Alaska. To kick it off the ANS designed a limited edition coin with the ANS logo and slogan "Reaching New Heights." We were privileged to have Col (r) Mary Foley as our guest speaker for our annual luncheon. Col. Foley spoke on the role and opportunities available to nurses in aerospace medicine. In addition, we are thankful to USAF MG

Peach Taylor and USAF BG Bruce Green for taking time out of their busy schedule to participate in our luncheon. The Aerospace Nursing society is a dynamic constituent organization of the Aerospace Medical Association. Our membership includes nurses and technicians from the U.S. Air Force, Army, and Navy, in addition to civilian and international members from countries such as Australia, Canada, and Korea. In an effort to increase awareness of our association and the numerous benefits of membership we have a new website at [www.aerospacenursingsociety.org](http://www.aerospacenursingsociety.org). Over the next year we will expand our web site and communications. We will continue to pursue creating a seamless process for offering CEUs at the Aerospace Medical Association Annual Scientific Meetings as well as spon-

soring a nursing-transport grand rounds at next year's meeting in Kansas City. Again, it is truly an honor to represent the ANS and please feel free to contact me at [Colleen@vidacare.com](mailto:Colleen@vidacare.com) with any questions, concerns or ideas on how to enrich and enhance the Aerospace Nursing Society.

Thank you

**Colleen Morissette RN CFRN, EMT-P**  
**President, Aerospace Nursing Society**

It is not too late to get your 40th ANS Anniversary Coin if you missed the Anchorage Meeting. Contact Colleen Morissette if you are interested to obtaining one of these limited edition coins.

## Submit your 2005 Scientific Meeting Abstract on the Internet!

**May 8-12, 2005**  
**Kansas City, MO**  
**"Charting the Course for the Future"**

**[www.asma.org](http://www.asma.org)**

**Site available: August 4, 2004**

**Submission deadline: October 28, 2004.**

Online step-by-step instructions will guide you through the process. You will receive immediate confirmation with a control number for online submissions.

Look for new instructions inserted in this issue of the journal. Go to our home website and click on "Submit Abstract Online."

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2. Presenters can add their biographical information. This will allow nurses to get credit for attending the presentation.

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PLEASE, explore this site to take full advantage of its features!

## A Message from Harriet:

### Wing Is a Celebration of Friendship

It takes many words to describe friendship. Loyalty, helpfulness, and laughter are a few of the words that come to mind. No matter how you describe friendship, Wing members are some of the best friends you will ever have, and their friendship crosses all geographical boundaries. I have always appreciated my Wing friends, but I appreciate them more today.

Marian DeMar, Wing President from 1990-1991, is an example of this friendship. Six and a half years ago, almost seven, my husband's aorta dissected on the way to work and he spent two weeks in the hospital. The news quickly spread through the Wing and I received a call from Marian. In poor health herself, Marian called to comfort me. "I heard about John," she began, "and I want you to know that he will survive this."

Five heart operations, including the insertion of a defibrillator, didn't stop Marian from coming to Wing meetings. Ed would push her along in a wheelchair and Marian was always smiling. Marian called me several times during the last year of her life to ask about John and thank me for being her arrangements chair. Though she is gone, Marian's gift of friendship is still with me.

Elina Takahashi is another example of Wing friendship. In 1991, when I was publicity chair, I needed some photos for the Wing page. I knew Elina and George had attended the International Congress meeting in Singapore so I contacted her. Elina sent me a photo of herself with a python wrapped around her neck! "How did you find the courage to do this?" I asked. Elina explained that she was born in the year of the snake and said "the snake and I bonded nicely."

The photo is imprinted in my mind and it makes me smile. The Wing is filled with marvelous friends like Elina and Marian and our lives are richer for them. When you hear the word friendship I hope you immediately think of the Wing. Anchorage was a celebration of friendship and the Kansas City meeting will be one, too. I hope to see you there.

## Spotlight on Mitzi Hansrote

One of the more interesting aspects of writing for the Wing's page is the opportunity to learn more about our members. Of course, we all know Mitzi as our tireless secretary and editor of our newsletters. But did you also know that she has been a commercial pilot, a volunteer with the Epilepsy Foundation, and a registered nurse, as well as a member of the Red Hat Society? Well, hold on to your hats, because you are about to discover just what an interesting life Mitzi has led.

Mitzi's first career involved a wide range of nursing assignments from Pediatrics at the Akron Children's hospital, to the Metabolic

Unit at Case Western University Hospitals Babies and Childrens Unit. Says Mitzi, "The physicians were attempting to discover ways to diagnose and treat Cystic Fibrosis Babies, insensible water loss in babies with diarrhea, as well as other metabolic disorders of the infant. We conducted Sweat Tests to determine the amount of salt in their sweat for Cystic Fibrosis diagnosis, etc. It was the most interesting and challenging nursing experience. It was not long before it became impossible to be objective with ill babies, as our own family came along. Thereafter, my nursing progressed toward adult care, and consequently, my final position was at the Veterans Hospital in Omaha, Nebraska. I retired from nursing after the birth of our third child."



It was while living in Oklahoma City that Mitzi volunteered for the Epilepsy Foundation. Mitzi says, "Our daughter, Linda, has Epilepsy, and because I knew some of the difficulties of dealing with the disease, I felt that I could make a difference as a volunteer. The Epilepsy Foundation provided some monetary assistance with medications for those who could not afford them, as well as educated patients about how to live with the disease. We participated with Special Olympics functions, provided speakers for Epilepsy support groups, as well as maintained an office to assist in various ways those afflicted with Epilepsy."

Mitzi is also a past-president of the Palm Beach Medical Society Alliance, and volunteered for the Cancer Society to educate high school girls in the procedure of self-examination to detect changes in their breasts. Says Mitzi, "That paid off for me personally several years later, because I discovered my own lump that was malignant."

Mitzi says that flying came about due to the lowering of speed limits by the Government to fifty-five miles per hour. "Our daughter was in a special school over two hundred miles from West Palm Beach. That was too far to drive, spend time with her and return conveniently, at the slower speed. Ron offered to fly us to visit her, but I had to learn to act as a pinch-hit pilot to land the airplane, if necessary. After the initial ten hours he purchased for lessons at our local airport, I was addicted, and went on to obtain the Commercial/Instrument Ratings. Aviation took the place of nursing as a new interest. The opportunity arose to fly for a West Palm Beach law firm, which was a most challenging and interesting position. I flew charter for the lawyers to attend depositions around the state as well as flying expert witnesses to trials. I caught up on reading while I waited for them at airports. In addition, while our husbands worked and children were in school, a friend and I rented planes from a local fixed base operator and flew all over Florida for lunch and

shopping wherever an airport existed with shopping centers nearby. That was a lot of fun until my friend moved away. Ron and I built a hangar with a house attached in the Wellington Aero Club - that was the final stage of my flying adventures when medical and physical circumstances caused me to decide to retire from flying."

Today, Mitzi and Ron make their home in Malabar, Florida, part of Florida's Space Coast which, as Mitzi says, "Adds excitement when rockets are launched from Kennedy Space Station. We watch them from our front yard. The neighbours gather to enjoy the event as well." When Mitzi first returned to Florida from Oklahoma in 2000, she quickly discovered how difficult it is to meet new friends when you are, as she says, "A seasoned citizen," in a new locale. Says Mitzi, "I organized a group called The Brook Hollow Red Hat Babes, a chapter of The Red Hat Society, in order to meet some friends. We wear purple dresses and red hats and have a great time - it is all social, nothing serious. It serves as a support group for older, lonely women. We have luncheons, teas, visit other interesting areas of Florida, and local events. In addition, I am very active in our church, and our family, grandchildren, and Ron keep me busy trying to keep up with them all."

Mitzi says, "My first Wing meeting was in Anaheim, thanks to Bernice Davis. I did not know about the Wing until she talked me into attending the reception with her. I have been helping Judy Waring with the Newsletter and am currently, the Wing Secretary. I really enjoy my time with the Wing - it is composed of interesting and accomplished members and I consider it a privilege to be a part of it."

## Join the Wing!

The Wing of the Aerospace Medical Association was formed in 1952 "to support the specialty of aviation, aerospace, and environmental medicine by facilitating cooperation among its practitioners and by increasing public understanding and appreciation of its importance." A second purpose of the Wing is "to promote sociability among its members and their families." Each year at the scientific meeting, AsMA spouses meet new friends from every corner of the world, sharing in the many cultural experiences and educational opportunities of the host city. Dues are \$20 per year. For further information, contact: Judy Waring, 4127 Kenyon St., Seattle, WA 98136; (206) 933-0884; e-mail: judywaring@comcast.net.

Send information for publication on this page to:  
**Corporate News**  
**Aerospace Medical Association**  
**320 S. Henry Street**  
**Alexandria, VA 22314-3579**

## Air Methods gets FAA Certification for Patient Loading System

Air Methods Corporation today announced its Products Division has received FAA Supplemental Type Certification on an improved patient loading system for the Eurocopter EC-130 helicopter. The improved system eliminates over 40 lbs. of weight while increasing functionality and reliability over the existing system. The new system also uses Air Methods standard patient litter, providing fleet commonality. Additionally, the improved patient loading system has a low profile designed to accommodate aircraft that require reduced loading heights or have limited cabin clearance to ensure that loading ergonomics and en-route patient care are optimized. The first EC-130 aircraft equipped with this certified system was recently delivered to Air Methods LifeNet Division in Augusta, GA. A second aircraft is due to delivery in March to the LifeNet Division.

Air Methods Corporation also publicized the placement of a major order for ten Eurocopter EC135 twin-engine helicopters as part of the Company's long-term fleet expansion and modernization program. The aircraft are scheduled for delivery to Air Methods throughout 2004. These helicopters feature a wide-open design and over-sized sliding doors and rear clamshell doors for convenient loading of patients. They incorpo-

rate state-of-the-art helicopter technology and panoramic visibility for improved sight line capabilities as well.

In addition, Air Methods announced it had expanded its community-based operations in Virginia. The Company, in coordination with Medicorp Health Systems in Fredericksburg, VA, recently commenced operations with a BK 117 twin-engine helicopter. The operation initiated service from nearby Stafford Regional Airport and will also maintain a presence at Mary Washington Hospital. The program provides surrounding communities improved access for critically ill or injured patients.

Air Methods Corporation is a leader in emergency aeromedical transportation, medical services and technology. The Air Medical Services Division is the largest provider of air medical transport services for hospitals. The LifeNet Division is the largest community-based provider of air medical services. The Products Division specializes in the design and manufacture of aeromedical and aerospace technology. The Company's fleet features more than 180 helicopters and fixed-wing aircraft.

### Profile of New Corporate Member:

**Aeroform Ltd.**  
**Dawkins Road IND Estate**  
**Poole, Dorset BH15 4JW**  
**United Kingdom**  
**www.aeroformHLM.co.uk**

Aeroform Ltd., Poole, Dorset, United Kingdom, is the latest company to join the Aerospace Medical Association as a Corporate Member. Aeroform Ltd. designs and builds equipment suitable for any process which requires monitoring and maintenance within strict tolerances. Although Aeroform is primarily known as one of the foremost producers of autoclaves, they have produced equipment for a wide variety of applications and disciplines, including the following: Aerospace--Primary structures, Engine nacelles, Interiors; Medical Equipment--Patient Support Systems; Hypobaric Chambers--Altitude Simulation; Motor Sport--Formula 1, USA Champ cars, Le Mans/sports car chassis and world rally cars; Defence--Ordnance packaging, Fighting vehicles, Aircraft ground equipment; Tyre Manufacture; Electronics--Systems, Man machine interface, Sub systems; and Pressure & Temperature Reaction Vessels.

Aeroform has specialised in the design and manufacture of process equipment and component development for the composite and process industries over the past decade. Prior to this, their experience in the design and manufacture of structural and decorative carbon fibre aircraft components, artificial limb structures, race car parts, body armour, hovercraft directional control surfaces and sports equipment has enabled Aeroform to design moulding and processing equipment from an end-user's point of view, providing simplified operation whilst maintaining precision control of all processing parameters including unpar-

alleled traceability through system information archiving, which in turn provides greater flexibility, component quality and improved equipment utilization.

*News from Aeroform:*

Aeroform operated the Airbus A380 Wing Skin autoclave for the first time in August 2002. This was a preliminary systems check prior to fine tuning and performance testing. The autoclave performed outstandingly, achieving a total spatial uniformity within the 5.5M dia. x 40M length of  $\pm 1.2^\circ\text{C}$  overall at  $150^\circ\text{C}$  (the Airbus pre-commissioning requirement was  $\pm 5^\circ\text{C}$ ). The autoclave was delivered on schedule in May 2002 for final assembly on site at Airbus and has now been completed, to underline Aeroforms commitment to meeting customer schedules and milestones (despite a number of problems beyond Aeroforms control). The autoclave was activated one day earlier than the agreed date of 31st August 2002.

### **Aeroform Ltd Incorporates Hampshire Laminating Machinery Limited**

Since the acquisition of HLM in January this year, a new company was established to continue operations at their original site in Andover under the name Aeroform HLM Ltd. As of 5 April 16, 2004 all manufacturing has been relocated to Poole and will now be incorporated within Aeroform Ltd.

With increased requirements for pre-form laminates being utilised in autoclave cures and RTM, the Aeroform Group strategy is to create a 'one stop' cure shop with unrivalled product support and maintenance throughout the world. The acquisition of Hampshire Laminating Machinery Ltd. completes yet another steppingstone in achieving this goal.

### **UK Carriers Sign on for Aeromedic Medical Kits**

Aeromedic Innovations has widened its customer base with the recent introduction of new medical and first aid kits to UK low-fare airlines FlyBE, Flyglobespan, and Excel Airways. FlyBE has just placed a repeat order for first aid kits having introduced them on board its BAe 146 fleet late last year. Flyglobespan and Excel Airways have taken kits for their Boeing 737/757 fleets, joining new Eastern European customer Air Baltic of Latvia, which selected three kits for its Airbus A340s serving long-haul destinations. BWIA has also selected the Aeromedic Enhanced Medical Kit for its long-haul operations served by the A340.

Aeromedical Innovations, based in Uxbridge, Middlesex, UK, has been providing medical kits, and their ongoing maintenance to such airlines as British Airways, Emirates, and Cathay Pacific since 1989 and more recently oxygen systems and stretchers. Many major airframe suppliers have also chosen Aeromedic as their preferred supplier. The medical equipment provided by the company is fully compliant with the latest CAA, JAA, and FAA regulations and includes the best practice medical contents.

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For information on becoming a Corporate Member, please call Gloria Carter at (703)739-2240, ext. 106, [gcarter@asma.org](mailto:gcarter@asma.org); or Dr. Marian Sides at [mb-sides3@myexcel.com](mailto:mb-sides3@myexcel.com)

Send information for publication on this page to: **News of Members**  
**Aerospace Medical Association**  
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**Alexandria, VA 22314-3579**  
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## NEWS OF MEMBERS

**Ann Marie B. Stokes, M.D.**, of Columbus, MS, recently accepted the position of Director of the Occupational Health Clinic in Baptist Memorial Hospital-Golden Triangle. She became an FAA senior medical examiner in 2004, a certified MRO in 2003, won the Physician's Recognition Award, and is a new member of ACOEM, where she has completed the first of three segments of an occupational training course.

**Matthew F. Dumstorf, M.D.**, of Chicago, IL, formerly a clinical strategist at Eclipsys Corporation in London, OH, was recently hired as the Area Medical Director for American Airlines at Chicago O'Hare Airport. He passed his board exams in 2003 and is now a Diplomate of the American Board of Preventive Medicine, specializing in aerospace medicine. He was recently certified by the FAA as a 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> class AME.

**Marlene Grenon**, of Boston, MA, formerly a research fellow at the National Space and Biomedical Research Institute, Brigham's Women's Hospital, is now a senior resident in cardiac surgery at McGill University in Montreal, Quebec, Canada. She recently earned a Masters degree in Clinical Investigations from Harvard Medical School and was presented with the Henry Christian Award from the American Foundation for Medical Research.

**CAPT Christopher L. Schuyler, MSC, USN**, of Alpine, CA, formerly the Executive Officer at the Naval School of Health Sciences, San Diego, CA, was transferred to the position of Commanding Officer at the Field Medical School in Camp Pendleton, CA.

**Col. Richard W. Sumrall, USAF, MC, SFS**, of Hurlburt Field, FL, was promoted to Colonel in May. Formerly the Chief of Clinical and Aerospace Medicine for Air Force Special Operations Command, he recently accepted assignment as Chief of Medical Modernization and Requirements for Air Force Special Operations Command.

**Regina R. Buccello, B.S.**, of Friendswood, TX, graduated from Wright State University in 2002 with an M.S. in Human Factors Psychology. She was originally pursuing a B.S. She is now a doctoral student at the University of Texas Medical Branch.

### Kira Bacal Selected for Robert Wood Johnson Health Policy Fellowship

The Institute of Medicine (IOM) of the National Academies, Washington, DC, has named seven behavioral scientists and health professionals as the Robert Wood Johnson Foundation Health Policy Fellows for 2004-2005, including AsMA member Kira Baca, M.D., Ph.D., M.P.H. Dr. Bacal is Chief Clinical Consultant to the Branch of Medical Informatics & Health Care Systems, NASA-Johnson Space Center, Wyle Laboratories and Life Sciences, Houston, TX, and Assistant Professor, The University of Texas Medical Branch, Galveston, TX.

The fellows—outstanding, mid-career scientists and health professionals working in academic and

community-based settings—were chosen on a competitive basis from nominations by academic institutions, as well as by organized health care delivery systems and other community-based providers. They will complete a wide range of activities designed to enrich their knowledge of the public policy process and foster a better understanding of how government health and biomedical research activities relate to the mission of their home institutions and local communities. After a period of orientation, each fellow will work in legislative or executive branch offices with key responsibilities for health legislation and programs.

The fellowship program was established in 1973 at the Institute of Medicine with a grant from The Robert Wood Johnson Foundation, Princeton, NJ.

Dr. Bacal was also offered a fellowship from the American Association for the Advancement of Science (AAAS) and was named a national finalist in the White House Fellowship. Unfortunately she was forced to withdraw from consideration in the White House Fellowship program and to decline the AAAS fellowship in favor of the RWJ award.

Dr. Bacal received her B.A. in mathematics and biology in 1988 from Amherst College, Amherst, MA. She received her Ph.D. in molecular physiology and biophysics in 1993. She went on to receive her Master of Theological Studies from Amherst in 1994. She received her M.D. degree in 1996 from the Baylor College, College of Medicine, and her M.P.H. in 2001, from UTMB Galveston. She was a distinguished graduate of the USAF Flight Surgeon Primary Course at Brooks AFB, TX, and is an FAA Aviation Medical Examiner, in addition to her many other achievements and community activities.

### In Memoriam Harry Pitts Hoffman, Jr.

*(taken from Tahoe Daily Tribune Staff Reports, May 19, 2004)*

Harry Pitts Hoffman, Jr., Medical Doctor and Master of Public Health, age 61, Zephyr Cove, NV, died unexpectedly May 11, 2004, at Sutter Memorial Hospital, Sacramento, CA. He had recently attended the AsMA conference in Anchorage, AK.

He was born in New Bern, NC, and raised in Bloomsburg, PA, where he graduated from Bloomsburg High School in 1960. He also graduated from the United States Naval Academy, Annapolis, MD. Following several tours of duty as a Navy pilot in Vietnam, he returned to Philadelphia, PA, and graduated from Hahnemann Medical School. He held the dual rank of Naval Flight Surgeon-Pilot for 18 years. Following his naval service, Dr. Hoffman worked on various medical projects worldwide.

Dr. Hoffman resumed his military service with the U.S. Air Force, retiring with the rank of lieutenant colonel on August 31, 1989. In his retirement, he enjoyed managing web sites for his high school class, his Naval Academy class and several professional organizations, including the International Association of Military Flight

Surgeon Pilots, an AsMA constituent organization. He served on the editorial board of the Electronic Journal of Surgery and Specialist Medicine.

Hoffman was a member of the MENSA Society, the Aerospace Medical Association, the International Association of Military Flight Surgeon Pilots, the Civil Aviation Medical Association, and a past member of the Association of Military Surgeons of the U.S. Society of Air Force Engineers Association, the Society of U.S. Air Force Flight Surgeons, the Society of U.S. Navy Flight Surgeons and the Society of Experimental Test Pilots.

Harry had several papers published in the Naval Institute Proceedings and in the technical publications of the U.S. Navy. He made a presentation on Traumatic Lesions of the Cervical Spine at the NATO Conference in Bodo, Norway. As a member of the AsMA Civil Aviation Safety Subcommittee, he was a co-author on the Age 60 position paper to be published in the August 2004 issue of *Aviation, Space, and Environmental Medicine*.

### Reminder for Prospective Associate Fellows

The Chair of the Associate Fellows Group reminds prospective Associate Fellows that their applications must be received by August 1 each year in order to be considered for the annual selection.

Update forms are available from the Home Office and at the Annual Meeting.

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