President's Page

The Aerospace Medical Association has worked to maintain membership, improve member services, increase the Association's internet resources, and support the general field of aerospace medicine. Even with these efforts, the membership has declined from approximately 4000 members to 2900. This decline can be partially attributed to the reduced use of humans in military aircraft cockpits, fewer research laboratories, and cutbacks in funding for science in the space program--to mention a few. Another factor may be the limitation in training and funding options for those wishing to enter the field.

This column centers on my top priority as AsMA president, and that is the creation of a parallel tax-exempt 501(c)(3) Foundation to help support young members of the Association and the field of aerospace medicine. Unlike most other professional associations, even those in preventive medicine such as occupational medicine, aerospace medicine has never created a foundation for individuals and companies to support the field with tax-deductible contributions under IRS law. As a result, there are only limited scholarships available to support our young students and scientists. Among these are the scholarship provided from general revenue from AsMA, the Jeffrey R. Davis Endowed Aerospace Medicine Scholar-ship, and the scholarship provided by the International Academy of Aviation and Space Medicine (IAASM).

As a residency director and educator in aerospace medicine, it has been encouraging to be exposed to the bright, energetic, and dedicated individuals that attend the UTMB/NASA-JSC residency, complete the MPH degree for their military residencies, attend the UTMB/NASA space physiology courses, attend the introduction to aerospace medicine short course, or participate in grand rounds from Columbia. Through AsMA, I have had the opportunity to see the tenacity and interest of the members of AMSRO. You can be proud of those training in the various aerospace medicine, nursing, physiology, technical and science fields who will eventually replace us. The heartache comes from the fact that interest in aerospace medicine is overwhelming, but the ability to support students for training programs, graduate studies, the International Space University, certificate training programs in other countries, or support travel and presentations at the annual scientific meeting is limited to these three scholarships. In addition, there is essentially no seed money available to help students initiate research projects that provide training opportunities or the possibility of obtaining full institutional funding for projects that prove worthwhile.

Small scholarships and grants can often be leveraged to improve access to our field. For example, the UTMB residency is generally constrained by its funding sources to accept U.S. citizens who can project to work in the space program. Recently, the IAASM awarded its scholarship to one of the UTMB non-traditional residents

Richard T. Jennings, M.D., M.S.

to help with the costs of the MPH degree in aerospace medicine. Upon learning that the IAASM had honored the student/resident with this grant, the primary care residency offered to cover the cost of the aerospace medicine practicum year. From the support and honor of one scholarship grant, the field of aerospace medicine will have a new international practitioner.

To implement projects in a presidential year, many activities have to start well in advance, and the formation of the Aerospace Medical Association Foundation is no exception. I am extremely grateful for the leadership and assistance of Russell Rayman, the help of the AsMA attorney, input from AsMA members, and concurrence of the executive committee in developing and approving the Articles of Incorporation and initial Bylaws of the AsMA Foundation. The founding Board of Directors, which must include 3 former AsMA presidents and a minimum of 4 additional AsMA members, is composed of Drs. George Anderson, Jim Vanderploeg, Jeffrey Davis, David K. Broadwell, Ron Hansrote, Masanobu Kaji, and Ramon Dominguez Mompell. With input from AsMA membership, the Board will determine the best policy for long-term investment of funds and eventual distribution of support to our young members with need. The Foundation should be ready to accept funds within several months, and we have already received generous pledges from Castle Connolly/Russ Rayman, Wyle Laboratories, and Jeffrey Davis. It is my hope that each of the AsMA members who are able will support the next generation of students, nurses, physiologists, scientists, and physicians as they enter this rewarding field. It is also a dream that we create named endowed scholarship and grant programs to honor outstanding individuals and indefinitely support those entering the field of aerospace medicine long after we are gone.

Many of you know that I like quotations, and you will probably be seeing more during this year. I hope you enjoy this one: *A man has made at least a start on discovering the meaning of human life when he plants shade trees under which he knows full well he will never sit.*

D. Elton Trueblood

Executive Director's Column

Rayman

Space Life Sciences

The Exploration Life and Medical Sciences Coalition (ELMS) of which AsMA is a member held a forum on March 31 in the Dirksen Senate Office Building under the auspices of the American Institute of Aeronautics and Astronautics (AIAA). The title of the forum was Restoration and Sustainability of our National Space Life Science Research Capability. The purpose of this forum was to inform members of Congress of our alarm at the shrinking space life sciences budget. The following is illustrative:

a) At the end of FY06, at least 87 space life sciences investigations will be terminated.

b) The overall research budget has been reduced by 70% in the past several years.

c) 480 students working on research projects will be adversely affected.

A number of well-known personalities of our space program were in attendance, including several astronauts. The keynote speaker was Representative Brad Miller of North Carolina who is an enthusiastic supporter of the space program. Following his address, there were a number of presentations including an overview of life sciences issues and panel discussions on the benefits and implications of exploration.

All the presentations were exceptionally well done, displaying a very convincing argument in support of the critical need for space life sciences research. Following the formal presentations, Dr. Chris Brown, Director of North Carolina Space Institute, NC State University, who chaired the forum, summarized the papers and issued a call for action. A list of recommendations was made including continued efforts to meet not only with lawmakers but also with members of the Executive Branch of Government. A full report should be ready in the near future with a complete listing of these initiatives. It is hoped that our message rang loud and clear. We will see in the coming months.

AsMA Future Meetings

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

May 11-15, 2008
Sheraton and Hilton Hotels
Boston, MA

May 3-7, 2009
Westin Bonaventure Hotel
Los Angeles, CA

National Academies' National Reserach Council says-- NASA Lacks Resources Needed to Sustain Vigorous Science Program

WASHINGTON --- NASA does not have the resources necessary to maintain a vigorous science program, complete the International Space Station, and return humans to the moon, says a new congressionally mandated report from the National Academies' National Research Council.

"There is a mismatch between what NASA has been assigned to do and the resources with which it has been provided," said Lennard A. Fisk, chair of the committee that wrote the report and Thomas M. Donahue, Collegiate Professor of Space Science, University of Michigan, Ann Arbor. "We are particularly concerned that the shortfall in funding for science has fallen disproportionately on small missions and on funding for basic research and technology. These actions run the risk of disrupting the pipeline of human capital and technology that is essential for the future success of the space program."

The committee reviewed NASA's plan for research programs for the next five years in space science, which includes astrophysics, heliophysics, planetary science, and astrobiology; earth science; and microgravity life and physical sciences. The committee found that the program proposed for space and earth sciences is neither robust nor sustainable, and that it is not properly balanced to support a healthy mix of small, moderate-sized, and large missions.

The report recommends that NASA restore small missions, research and analysis programs, and technology investment in the future missions. The agency also should preserve the ground-based and flight research required to support long-duration human space flight. For space and earth sciences, the committee concluded that the short-term resource allocation problem is modest, probably slightly more than 1 percent of the total NASA budget. To revive the microgravity life and physical sciences, the short-term allocation of resources needed is also modest -- less than 1 percent of the total NASA budget.

The National Research Council is the principal operating arm of the National Academy of Sciences and the National Academy of Engineering. It is a private, nonprofit institution that provides science advice under a congressional charter. .

Copies of An Assessment of Balance in NASA's Science Programs are available from the National Academies Press; tel. 202-334-3313 or 1-800-624-6242 or on the Internet at http://www.nap.edu.

Point your mouse to the AsMA home page at: **www.asma.org**
It's frequently updated with important, new information about your Association.
August Feature:
Annual Meeting photos, awards, reports

MEETINGS CALENDAR 2006-2007

September 10-14, 2006, Bangalore, India. 54th International Congress of Aviation and Space Medicine. This meeting is being hosted by the Indian Society of Aerospace Medicine. A preliminary registration form may be found at http://www.isam-india.org/conference44/newreg.php.

October 16-20, 2006, Moscow, Russia. 5th International Scientific and Practical Congress. For more info, please call Mr. Valentin Vlasov at 095-953-5842, or Mrs. Dina Valeeva or Mrs. Natalia Mitrokhina at phone/fax 095-239-9851; or e-mail medic@mak.ru, attn: Mr. Vlasov V.D. or e-mail infan.ltd@relcom.ru, attn: Mr. Gabbasov I.Z.; or by fax at 095-953-3508.

October 19-21, 2006, Kauai, Hawaii. US/Japan Panel on Diving Physiology, Diving Technology, and Aerospace Medicine biennial meeting. Abstracts are to be submitted to Don Chandler at donchandler@uhms.org or submitted online at http://www.uhms.org/Meetings/US_JAPAN/UJNR_06.ASP.

October 23-25, 2006, Reno, NV. SAFE Association 44th Annual Symposium. For more info: Ms. Jeani Benton, (541) 895-3012; safe@peak.org; www.safeassociation.org.

November 2-3, 2006, London, UK. Aviation Health: Tackling the Issues, Full details can be found at www.quaynote.com or contact Alison Singhal via e-mail or phone +44 (0) 20 8374 6474.

November 9-12, 2006, Eilat, Israel. Air Travel and Health. This symposium will deal with flight physiology and a wide array of health issues in air travelers. For more info, visit www.palexconventions.co.il/ath2006.

November 8-11, 2006, Huatulco, Oaxaca, México. XXIII International Meeting of Aerospace Medicine, sponsored by the Mexican Association on Aviation Medicine,A,C. General Theme: Advances in Clinical Aerospace Medicine. For additional information,please contact: www.amma.org.mx or lamezcua@att.net.mx

April 22-26, 2007, Dayton, OH. International Symposium on Aviation Psychology: "Airspace as a Cognitive System." For more info, visit www.wright.edu/isap.

2006 Award Winners of the Aerospace Medical Association

Honors Night Ceremonies of the 77th Annual Scientific Meeting of the Aerospace Medical Association were held May 18, 2006, at the Caribe Royale in Orlando, FL. Fifteen awards for outstanding contributions in aviation and space medicine were presented. The presentations were made by Prof. Michael Bagshaw, president of the Aerospace Medical Association. The winners were recommended by the Awards Committee, chaired by Andrew Bellenkes, and approved by the Executive Committee of the Aerospace Medical Association.

LOUIS H. BAUER FOUNDERS AWARD

James E. Whinnery, Maj. Gen.(Ret.), Ph.D., MAT, M.D., FAsMA, F.A.C.C., FAIC, FANGFS

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. It is sponsored by the Jefferson C. Davis Wound Care and Hyperbaric Medicine Center.

James E. Whinnery, Maj. Gen.(Ret.), Ph.D., MAT, M.D., FAsMA, F.A.C.C., FAIC, FANGFS, was presented the 2006 Louis H. Bauer Founders Award. Dr. Whinnery's theory for the basis of acceleration induced loss of consciousness (G-LOC) is one of the most significant contributions to aviation medicine. It elucidated the event as a syndrome, not a symptom; it presented G-LOC as a protective mechanism; and it quantified it so that it can potentially be predicted and, therefore, lives can be saved. Additionally, his research on the neurophysiological basis of unconsciousness has been critical to the design, development, testing, and delivery of hardware, software, and methods to enhance the U.S. Air Force and Navy missions. He has shown unequaled dedication to the aviation community, demonstrated a depth and breadth of expertise in military and civilian aerospace medicine, and had an unrelenting interest in the professional development of those around him.

Dr. Whinnery earned a B.S. in Chemistry in 1968 from West Texas State University, then a Ph.D. in Physical Chemistry and an M.A.T. in Chemistry in 1972 at Texas Christian University. He received his M.D. in 1975 from the University of Texas. He took the Flight Surgeon's Course in 1975, then a course in Global Medicine the following year, both at the USAF School of Aerospace Medicine (USAFSAM). He served his residency in Internal Medicine at Wilford Hall USAF Medical Center at Lackland Air Force Base, TX, from 1976 to 1977. In 1979, he continued his education with a course in Hyperbaric Medicine at USAFSAM. His education has continued throughout his career.

His research experience is extensive, starting in private industry and continuing throughout his military service. He served as Chief, Acceleration Effects Laboratory, Crew Technology Division, at USAFSAM between 1983 and 1987. From 1987-1995, he held the position of Chief Aeromedical Scientist at the Naval Air Development Center in Warminster, PA. He was the Air Surgeon, National Guard Bureau, the Pentagon, 1991-93; Air National Guard Assistant to the Command Surgeon Air Mobility Command, Scott AFB, IL 1993-96; and the Air National Guard Assistant to the Surgeon General USAF/Deputy Surgeon General for Air National Guard Affairs, 1997-2000. He retired from military service in 2000 with the rank of major general.

Dr. Whinnery is an NAUI certified SCUBA diver. He has extensive flight experience as a flight surgeon and has been an experimental research subject with 15 years of acceleration research experience (highest G-level +12 Gz x 60 s, 32 G-LOC episodes, 3750 runs); as well as chemical defense, hypobaric and hyperbaric stress, thermal stress, flight test and development research.

Dr. Whinnery has taught at institutions such as Texas Christian University, USAFSAM, Drexel University in Philadelphia, PA, and at the Air National Guard Fighter Surgeons Course. He has served on the Editorial Board of *Aviation, Space, and Environmental Medicine*, and has been a guest reviewer for the *Journal of Applied Physiology* and the *Journal of Cardiac Rehabilitation*. He has over 200 publications, preprints, abstracts, book chapters and invited lectures, and has 11 television credits to his name.

He has been the President of the Life Sciences and Biomedical Engineering Branch of the Aerospace Medical Association (AsMA) and is a Fellow of AsMA, the American College of Cardiology, the American Institute of Chemists, and the Alliance of Air National Guard Flight Surgeons. He is also a Life Member of the National Guard Association of Texas, and a member of the American Chemical Society and the American Association for the Advancement of Science.

His numerous awards include AsMA's Arnold D. Tuttle Award in both 1981 and 1988, the Sustained Superior Performance Award from the Department of the Air Force, Air National Guard Flight Surgeon of the Year, the Commanding Officer and Technical Directors Award for Outstanding Scientific Achievement from the Naval Air Development Center, the Scientific Achievement Award from the Alliance of Air National Guard Flight Surgeons, Honorary Doctor of the State Scientific Research Test Institute in Moscow, Russia, AsMA's Theodore C. Lyster Award in 1996. In 1998, the James E. Whinnery Aerospace Medicine Lecture was established in his honor by the Alliance of Air National Guard Flight Surgeons. He received the 1999 George E. Schafer Award from the Society of USAF Flight Surgeons for lifetime contributions and accomplishments in aerospace medicine and the Professional Excellence Award from the Life Sciences and biomedical Engineering Branch of AsMA. He also has many military decorations including the Legion of Merit with one oak leaf cluster; Meritorious Service Medical with three oak leaf clusters; Ari Force Commendation Medal with one

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oak leaf cluster; Air Force Outstanding Unit Award, National Defense Service Medal with service star; and the Air Force Longevity Service Award Ribbon with five oak leaf clusters.

Dr. Whinnery currently serves as Manager of the Aerospace Medical Research Division at the Federal Aviation Administration Civil Aerospace Medical Institute in Oklahoma City, OK. His contributions to aviation medicine span the civilian, academic, industrial and military domains. His ability to blend these interests has resulted in a unique global understanding of aviation medicine that has benefited our community through innovative thinking in scientific research.

ARNOLD D. TUTTLE AWARD

Michel A. Paul, M.Sc.

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.*

Michel A. Paul, M.Sc., received the 2006 Arnold D. Tuttle Award for his role as the lead author of the article "Motion-Sickness Medications for Aircrew: Impact on Psychomotor Performance" (Aviat Space Environ Med 2005; 76:560-5). This article presented the results of a study on the effects of various anti-motion-sickness drugs on psychomotor performance. The study also determined whether adding pseudoephedrine or d-amphetamine to promethazine would ameliorate its adverse effects on performance.

A native of Canada, Paul graduated from Queen's University in 1974 with a B.A. in Arts and Sciences and a B.Sc. in Life Sciences. In 1983, he earned an M.Sc. in aerospace physiology/performance psychology from York University. While he was attending Queen's University, Paul performed physical testing and chemical analysis for Research and Development at DuPont of Canada until 1968. From 1968-1970, he conducted neutron generator research under the auspices of A.E.C.L. in the Department of Metallurgy at Queen's University. From 1970-1972, he served in Queen's University's Department of Internal Medicine preserving vital body organs and limbs for transplant. In 1972, he began work in the Perinatal Intensive Care Unit in the Department of Obstretrics and Gynecology at Kingston General Hospital. He remained there until 1977, when he joined the Pressure Physiology Section of Aerospace and Deep-Sea Diving Physiology in the Department of National Defence, Defence Research and Development Canada.

In his present position, Paul is a member of a "Phoenix" team to evaluate existing life support equipment and develop new life-support systems for new fighter aircraft. He has published articles on high sustained Gz physiology, flying performance after G-LOC, evaluation of operational medications and their impact on psychomotor performance, fatigue management, and the role of melatonin and phototherapy as countermeasures for fatigue and for circadian entrainment to counter jetlag/shiftlag. He has also participated in the development of the STING life-support system.

A member of AsMA since 1980, he is a past member of the executive committee of the Association of Medical Technologists. Paul is an A.C.U.C. certified diver, a Ship Diving Officer in the Canadian Forces, and a multi-engine rated commercial pilot.

KENT K. GILLINGHAM AWARD

William B. Albery, Ph.D.

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.

William B. Albery, Ph.D., received the 2006 Kent Gillingham Award for his nearly 20 years of spatial disorientation research for the U.S. Air Force. A personal friend of the late Dr. Gillingham, he is considered the Air Force's top expert in spatial disorientation (SD) and has been a researcher, lecturer, technical leader, prolific author, and presenter of SD research. He has developed the pilot attitude perception technology, called the spatial orientation retention device (SORD), which will save millions of dollars lost to spatial disorientation. SORD combines multi-sensory cues with helmet-mounted symbology to increase aircraft attitude information to the pilot when it is needed.

Born in Dayton, OH, William Albery graduated from Kettering Fairmont West High School in 1965. He received his B.S. degree in systems engineering from Wright State University in Dayton in 1971 and his M.S. in biomedical engineering from Ohio State University in 1976. He earned his Ph.D. in biomedical sciences from Wright State in 1987.

Dr. Albery became an electronics engineer in the Air Force Human Resources Laboratory (AFHRL) in 1971. He was a project engineer on the Advanced Simulator for Undergraduate Pilot Training at Williams AFB, AZ, from 1972 to 1975. He served as Motion and Force Simulation Task Manager from 1975-1978, and in 1979 was appointed Program Manager for the Advanced Tactical Air Combat Simulation project. In 1981, Dr. Albery left AFHRL for a position at HQ Air Force Logistics Command, Wright-Patterson AFB, OH, and in

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1982 he accepted a position at the Armstrong Aerospace Medical Research Laboratory. Dr. Albery is currently Senior Electronics Engineer and Team Leader, Maneuvering Acceleration, with the Biodynamics and Acceleration Branch, Biodynamics and Protection Division, Human Effectiveness Directorate, AFRL, Wright-Patterson AFB, OH (one of the longest job titles ever!)

He was the Technical Manager of the USAF's SDCM (spatial disorientation countermeasures) program. He and his team had the goal of reducing the number of Class A mishaps due to SD. He was selected for the Gillingham award because of his outstanding leadership through the advancement of both SDCM training and technology development, which obviously have had a significant effect on the Class A SD mishap rate, which has dropped to just 1/3 of the rate prior to 2000. Recently, Dr. Albery and his team have been promoting in-flight demonstrations of illusions to USAF pilots. These demos are very powerful and impress upon the pilot how easy it is to have unrecognized spatial disorientation. In the future, the monitoring of pilots' EEGs may lead to the possibility of recognizing electronically when a pilot is disoriented. Over the past 5 yr, Dr. Albery has been active in developing the DES centrifuge into an SD research device, implementing vestibular and visual illusions on the device and taking advantage of its multi-axis, precise control features.

Dr. Albery is a Fellow of the Aerospace Medical Association (AsMA), and a member of the SAFE Association. Within AsMA, he has served on the Scientific Program and Awards Committees. He is a member of the Aerospace Human Factors Association and the Aerospace Physiologists Society, a past president of the Life Sciences and Biomedical Engineering Branch, and the organizer of an International Acceleration Research Workshop. His awards include the Harry G. Moseley Award from AsMA, the Harry G. Armstrong Award for Scientific Excellence, and the Outstanding Alumni Achievement Award from Wright State. He was also named the Air Force System Command's Outstanding Civilian (Senior Category) in 1988.

Dr. Albery has authored or co-authored over 70 technical papers, reports, abstracts, and one book chapter. He has three Air Force inventions, one U.S. Statutory Invention Registration, and two U.S. Patents pending. He has been honored by the State Scientific Research Test Institute of Aerospace Medicine in Russia, and is a National Research Council Associateship Program Advisor.

WON CHUEL KAY AWARD

Gen. Robert Auffret, FAF(Ret.), M.D., Ph.D. (Posthumously)

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.

General Robert Auffret, FAF(Ret.), M.D., Ph.D., was posthumously awarded the 2006 Won Chuel Kay Award. He was honored for his more than 50 years of international service in both military and civilian aviation. He specialized in research on human engineering and acceleration and taught many students. He was the author of more than 200 papers on aeromedical topics, vibration, protection against acceleration, biodynamics of ejection, clinical aviation medicine, airline pilot medical examination, commercial pilot workload, human performance at altitude, and supersonic flight. He personally tested protective equipment and even suffered a spinal injury testing an ejection seat.

Dr. Auffret earned his M.D. from the University of Paris in 1955. The following year, he trained in aerospace medicine at the Centre d'Etudes et de Medicin Aeronautique in Paris. From 1956-57, he served as Medical Officer for paratroopers in Algeria. In 1958, he joined the Test Flight Center as a flight surgeon, and then spent a year serving as a fighter pilot at Meknes, Morocco. He was an experienced fighter and test pilot with over 4000 pilot-hours in 60 different aircraft, with 1500 of those hours having been during test flights.

From 1960-63, he was Head of the Human Engineering Section of the Test Flight Center. In 1968, he was appointed head of the Center's Acceleration Center. He then went on to become Assistant to the Head of Medical Services in 1971 and Head of Medical Services in 1973. In 1972, he received his Ph.D. in Human Biology from the University of Paris. He retired from the French Air Force in 1988 after 37 years of service to become the Head of the Medical Department at Aeroports de Paris.

Dr. Auffret's commitment to international aerospace medicine is evident by his memberships and awards from many renowned international organizations. As a member of NATO/AGARD panel and chair of the Biodynamic committee, he attended 25 international meeting. He was a member, selector, chancellor, vice-president and president of the International Academy of Aviation and Space Medicine, attending 29 international congresses. He was an honorary member of the Korean Aerospace Medicine Association and received their Chang Memorial Award. He was also a member of JAA and was chair of the working group on air passenger health issues for the European Civil Aviation Conference. He was a Fellow of the Aerospace Medical Association, and a member of the French Civil Aviation Board. He was also a founding member and Past President of the French Aerospace Medicine Society.

Dr. Auffret's awards included the Eric Liljencrantz Award from the Aerospace Medical Association, the French Aerospace Medicine Society Award, the French Aeronautics Medal, the Silver Medal for Scientific Achievement, the Medal of Honor of the French Air Force Medical Corp, Chevalier of the French Legion of Honor, and Officer in the French National Order of Merit.

BOOTHBY-EDWARDS AWARD

Masanobu Kaji, M.D., Ph.D.

Established in memory of Walter M. Boothby, M.D., pioneer aviation medicine researcher, and Howard K. Edwards, M.D., clinical practitioner of aviation medicine, this 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.

Masanobu Kaji, M.D., Ph.D., was the 2006 recipient of the Boothby-Edwards Award. He was honored for his dedication to the protection and promotion of health and prevention of diseases in professional airline pilots. He is Vice President, Medical Council, Medical Services, Japan Airlines International, Tokyo, Japan, and Associate Professor, Jikei University, School of Medicine. As a specialist in infectious disease, he took a special interest in leading a team of colleagues in research on *Heliobacter pylori* and peptic ulcer disease. His publications and presentations on the subject of the health of professional airline pilots are serving as international guidelines.

Dr. Kaji's outstanding career encompasses 25 yr of airline medical practice, always dedicated to the health and well-being of aircrew. In parallel with his airline medical practice, his has maintained his academic affiliation with Jikei University.

Born in the Fukuokoa Prefecture in Japan, Dr. Kaji graduated from the Jikei University School of Medicine with an M.D. in 1979. He served an internship at Jikei University Hospital for 1 yr, then attended post-graduate school at Jikei University, graduating in 1986 with a Ph.D. While he was attending school, he served as Medical Director for Japan Airlines from 1979 to 1990. In 1984, he served as Clinical Assistant and then Research Associate of the 2nd Department of Medicine at the Jikei University School of Medicine. From 1990-1992, he was Medical Director at the Flight Crew Medical Services Department at Japan Airlines and then Medical Director of Medical Services from 1992-1996.

From 1992-2003, Dr. Kaji was an Assistant Professor at Jikei University School of Medicine. During this period, from 1996 to 2003, he also held the position of Chief Medical Director of Medical Services at Japan Airlines. In 2003, he became Vice President of the Medical Council, Medical Services at Japan Airlines. That same year, he was also promoted to Associate Professor at Jikei University.

Dr. Kaji is a Fellow of the Aerospace Medical Association. He is also a member of the Airlines Medical Directors Association, where he has served on the Executive Council; a member of the International Academy of Aviation and Space Medicine; the Civil Aviation Medical Association; the Japanese Society of Internal Medicine; the Japanese Society of Environmental Infections; and the Japanese Association of Infectious Diseases. He is a member, councilor, and director of both the Japanese Society for Occupational Health and of the Japan Society of Aerospace and Environmental Medicine. He holds the 1st Research Encouragement Award of the Japan Society of Aerospace and Environmental Medicine.

Dr. Kaji is board-certified by the Japanese Society of Internal Medicine, the Japanese Association of Infectious Diseases, and the Japan Society of Aerospace and Environmental Medicine. He holds a private pilot license and is an AME. In addition to his medical license, he holds a license as an industrial hygiene consultant.

JOHN PAUL STAPP AWARD

Francis S. "Ted" Knox, III, Ph.D.

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.

Francis S. "Ted" Knox, III, Ph.D., was the recipient of the 2006 John Paul Stapp Award for his 35 years of contributions to the field of aerospace biomechanics and his promotion of progress in protection from injury resulting from ejection and impact. He has performed research and development in the fields of aircraft escape systems, helmet-mounted systems, and impact injury criteria. His promotion of an earpiece accelerometer that records head accelerations and motion has revolutionized the auto racing industry. He is credited with the development of the "Knox Box," a mass properties standard that is used by helmet mounted hardware manufacturers worldwide.

Dr. Knox is currently Principal Scientist in the Biomechanics Branch of the Air force Research Laboratory, conducting research on the measured responses of human volunteers and racecar drivers during impact events, and further developing his burn prediction model, used by the Joint Strike Fighter.

Dr. Knox earned a B.A. degree in biology from Brown University in 1963, an M.S. degree in physiology from Iowa State in 1966, and a Ph.D. with majors in physiology and biomedical engineering from the University of Illinois at the Medical Center in Chicago in 1971. He served as a Captain in the U.S. Army from 1970-1973 at the U.S. Army Aeromedical Research Lab (USAARL), Ft. Rucker, AL, as Chief of the Bioinstrumentation Branch. From 1973 to 1980, he served as an Assistant and then Associate Professor of Neurophysiology in the Physiology and Biophysics Department of Louisiana State University School of Medicine in Shreveport, LA.

While at LSU, he worked on evoked potentials and developed a burn injury prediction model. He then returned to USAARL where he researched onboard oxy-

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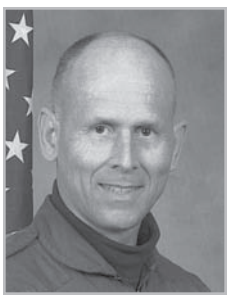
gen generation systems, physiological and psychological effects of NBC defense ensembles on combined arms crews, effects of drugs on aviator performance, integration of smart stretcher technology into a medical information net for the battlefield, and burn injury models. From 1986-1987, he served as Army Fellow at Bell Laboratories working on physiological time series.

In 1989, he accepted a promotion and moved from the Army to the Air Force when he became the Chief of the Escape and Impact Protection Branch in the Armstrong Aeromedical Research Laboratory at Wright-Patterson AFB, OH. Ted's group at initiated pioneering joint research with Russia on the K-36 ejection seat under the Air Force CREST program. Ted is credited with the development of the renowned "Knox Box." The box establishes criteria for ejection-safe (catapult phase) headwear for pilot ejections from aircraft. His group also develops standards for female aircrew. Recently he has successfully promoted the use of a triaxial accelerometer system, capable of measuring head acceleration and motion in high-impact crashes. The device has been applied to professional racing and even boxing. The recordings are helping to develop prediction criteria for the potential of brain injury topilots, auto racers, and boxers.

Dr. Knox has served as president of the Wright Brothers Chapter of the SAFE Association, was the 1996-1997 president of the Life Sciences and Biomedical Engineering Branch of the Aerospace Medical Association, and is a Fellow of the Aerospace Medical Association. He has over 50 publications and 80 presentations to his credit.

Some of his previous honors include the Fritz Russ Award in Biomedical Engineering (2000) - Dayton Chapter of IEEE, Elected Fellow, Aerospace Medical Association, (1998), Harry G. Mosley Award, Aerospace Medical Association (1997), and Outstanding Senior Scientist/Engineer, SAFE Association (1994).



HARRY G. MOSELEY AWARD
Col. Peter B. Mapes, USAF, MC, CFS

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.

Col. Peter B. Mapes, USAF, MC, CFS, was the recipient of the Harry G. Moseley Award for 2006. He was recognized for his leadership role in the fight for improvements in many areas related to aviation safety. He currently serves as the Pilot Physician assigned to the Air Force Research Laboratory at Wright-Patterson AFB, OH. He is an expert aviation epidemiologist who has developed a means of accurately forecasting the losses of both aircraft and people in aviation mishaps.

Col. Mapes has contributed significantly to the FAA's Accident Prevention Program and has won acclaim as an Accident Prevention Counselor-of-the-Year for two FAA organizations. He also has a long history of contributing to aviation safety through his role as one of the first-ever USAF Bomber Pilot-Physicians, by defining a new in-flight visual illusion, and by contributing extensively to aviation safety research. Recently, Col. Mapes has been an international leader with regard to the issue of controlled flight into terrain (CFIT) mishaps. His leadership and vision in this area have resulted in a paradigm shift for this important debate.

Col. Mapes' strong record for promoting aviation safety is evident as he has served on numerous USAF accident boards and chaired the Air Force Surgeon General's Human Performance Enhancement Functional Area Working Group. By recognizing the in-flight visual illusion called "cell-turning illusion" during formation flight, he has doubtlessly saved lives and aircraft. An excellent speaker, he has chaired sessions on topics from CFIT to aviation safety/human factors.

Col. Mapes was born in The Dalles, OR, and hails from Oscoda, MI. He graduated from the U.S. Air Force Academy with a B.Sc. degree in Life Sciences and became a rated military pilot at Craig AFB, Selma, AL. He was an Outstanding Graduate of B-52 Combat Crew Training at Castle AFB, CA, and a Distinguished Graduate of Squadron Officer School at Maxwell AFB, AL. He has served the United States for over a third of a century, including duty as an Air Force Command Pilot in B-52s and as a T-37B Instructor Pilot with over 3000 military flying hours accrued.

A widely recognized operational physician, Col. Mapes was awarded the Malcolm Grow Award in 1993 for being the USAF Flight Surgeon of the Year by the Society of USAF Flight Surgeons. The National Aeronautic Association and the Secretary of the Air Force recognized him with the other four members of the B-52 crew of Griff 21 for the Most Outstanding Military Flight of the Year with the award of the Mackay Trophy in 1993. Serving in a pilot role, he and his crew saved a B-52 after multiple in-flight failures where some engines caught fire and eventually burned off of the wing, with a massive hydraulics failure as well. Remarkably, both plane and crew survived.

Col. Mapes holds both an Airline Transport Pilot Certificate from the Federal Aviation Administration and a Certified Instrument Flight Instructor Certificate. He has logged nearly 10,000 hours as a pilot including over 3000 hours of flight instruction given and voluntarily serves as an Aviation Medical Examiner. He graduated from the Uniformed Services University of the Health Sciences with both Doctor of Medicine and Master of Public Health Degrees. He is a Chief Flight Surgeon with 1000 military flight surgeon hours logged who is board-certified in both Aerospace and Occupational Medicine. He is a Fellow of the Aerospace Medical Association and has served as Chairman of Membership and Scientific Program Panel Chair. He is a Past President of the International Association of Military Flight Surgeon Pilots. He has extensive flying and medical experience including tours in operations, command, staff and research. He holds

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an adjunct faculty position in Military and Emergency Medicine at the Uniformed Services University of the Health Sciences, F. Edward Heber School of Medicine.

THEODORE C. LYSTER AWARD

Robin E. Dodge, M.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.

Robin E. Dodge, M.D., received the 2006 Theodore C. Lyster Award from the Aerospace Medical Association. He was recognized for his significant contributions to aerospace medicine over the past 25 years. He has contributed to civil aviation medical policy both in Canada and the U.S., and has supported education by serving as a member of the Residency Advisory Committee for the Air Force and Navy Residencies in Aerospace Medicine. He has also published extensively and has served as a consultant to several national organizations.

Dr. Dodge earned a B.Sc. in science and biology in 1972 from the University of New Brunswick and an M.D. degree from Memorial University in St. John's, Newfoundland, in 1976. Following his graduation, he spent 2 years in an internship at the Royal Alexandra Hospital in Edmonton, Alberta from 1976 to 1978. He then earned an M.S. from Wright State University in Dayton, OH, in 1981. He also served a residency in aerospace medicine at Wright State from 1980-1982.

Dr. Dodge served as an Assistant Clinical Professor at Wright State in the Department of Community Medicine from 1982 to 1988. In 1988, he became an Assistant Professor and the Assistant Director of the Aerospace Medicine Program. From 1993 until 2003, he was the Associate Director of that program, and also served as an Associate Professor, a position he still holds. He is board-certified in aerospace medicine by the American Board of Preventive Medicine.

From 1978 to 1980, Dr. Dodge was in general practice in Port Hawkesbury, Nova Scotia. He also served as an Aviation Medical Officer, Acting Director, and then Deputy Director of Civil Aviation Medicine for Health and Welfare Canada in Ottawa from 1982 to 1988. He is currently a member of the medical staff at Good Samaritan Hospital and a member of the Wright State University Physicians. Additionally, he serves as a consultant and medical investigator for NTI, Inc., in Dayton, OH. He has also been serving as a Consultant on the Occupational Health working Group for NASA's Aerospace Medicine Division and on the Natinal Board of Medical Examiners and the American Board of Preventive Medicine Exam Committee.

Dr. Dodge is a Fellow of the Aerospace Medical Association (AsMA) and has been a member of AsMA's Council, its Education and Training Committee, the Scientific Program Committee, and of the committee that selected the Tuttle award recipient. He is also a charter member of the American Society of Aerospace Medicine Specialists and served as both the Secretary/Treasurer and then President of AsMA's Space Medicine Branch. He has served in a variety of positions for the Civil Aviation Medical Association and was President of the Canadian Society of Aviation Medicine.

Dr. Dodge's awards include the Ross McFarland Student Paper Award from AsMA's Life Sciences and Biomedical Engineering Branch, the Julian Ward Memorial Award and the John A. Tamisiea Award from AsMA, the CLICKIT Award from the Wright State University Center for Teaching and Learning, and the Board of Trustees Award from the Civil Aviation Medical Association.

SIDNEY D. LEVERETT, JR. ENVIRONMENTAL SCIENCE AWARD

Victor A. Convertino, Ph.D.

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.*

Victor A. Convertino, Ph.D., was awarded the 2006 Sidney D. Leverett, Jr., Environmental Science Award for his role as lead author for the article "Inspiratory Resistance as a Potential Treatment for Orthostatic Intolerance and Hemorrhagic Shock" (Aviat Space Environ Med 2005; 76:319-25). In this paper, Convertino et al. investigated the use of an impedance threshold device to increase blood flow to the heart, lungs, and brain in a variety of experimental conditions. The paper provided evidence to support the use of inspiratory resistance as a countermeasure to circulatory collapse caused by orthostatic intolerance and hemorrhagic shock.

Dr. Convertino is currently a senior research physiologist at the U.S. Army Institute of Surgical Research at Fort Sam Houston, TX. In addition, he holds adjunct professor positions on the faculty of six universities and at the U.S. Air Force School of Aerospace Medicine. He has been especially dedicated to the academic training and development of graduate students and junior scientists and worked with the Director of NASA Life Sciences and the ACSM foundation to establish the ACSM Foundation NASA Space Physiology Graduate Student Research Fellowship.

He received baccalaureate degrees in Mathematics and Physical Education at the California State University at San Jose, and a Masters degree in Exercise Science and a Ph.D. degree in Physiology at the University of

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California at Davis. His professional career has taken him to positions at NASA's Ames Research Center, the Stanford University School of Medicine, the University of Arizona, NASA's Kennedy Space Center, and the U.S. Air Force Research Laboratory before assuming his present position.

Dr. Convertino is a contributor to many areas of research including: regulation of plasma volume during acute and chronic exercise; interrelationship of plasma volume and electrolytes with adaptation to microgravity and thermoregulation during heat and exercise exposures; effect of acute and chronic exercise on blood pressure regulation and orthostatic competence; development of exercise training and countermeasures for astronauts and crew members of high-performance aircraft; and physiological adaptation to varying gravity environments. Perhaps his most important work is his current research designed to develop decision-support algorithms and therapeutic devices to advance the capabilities of combat medics to save lives of battlefield casualties. Dr. Convertino has successfully collaborated with nationally and internationally recognized scientists from more than 20 different laboratories. He has published over 200 peer-reviewed manuscripts, invited reviews, and chapters in the scientific literature. He has delivered more than 65 scientific papers at professional meetings and more than 120 invited presentations and lectures to medical, scientific, and lay groups in 34 states and 14 countries.

Dr. Convertino serves on the editorial boards of four international journals and has reviewed more than 300 manuscripts for 25 scientific journals. He has served as an invited member on numerous NASA Working Groups for development of countermeasures for space flight, including as a member of the National Space Biomedical Research Institute External Advisory Council, and as a consultant to the United States Department of the Navy Bureau of Medicine and Surgery during Operation Desert Storm. In 1992, he was invited to testify to the Presidential Commission on the Assignment of Women to the Military. He has served as a member of study sections for the National Institute of Health and American Institute of Biological Sciences.

Dr. Convertino has been actively involved in the Aerospace Medical Association (AsMA) since becoming a member in 1980. He was elected an AsMA fellow in 1993, and has served as a member of its journal editorial board and on numerous scientific program committees. Over the past 30 years, Dr. Convertino has attended 26 AsMA meetings in which he's presented papers in 24 slide sessions, 10 invited panel presentations, and served as chair of 6 scientific sessions. He has authored or co-authored 45 papers in *Aviation, Space, and Environmental Medicine*, and participated as a member of the AsMA Writing Committee for the Bellagio Report on Cardiovascular Risks to Space Flight. Dr. Convertino is also a fellow of the American College of Sports Medicine (ACSM), where he has served on numerous committees, as an editorial board member of their journal, on the Board of Trustees, and as Vice President. He is also a member of the American Physiological Society and 2007 President of the International Society for Gravitational Physiology.

Among other recognitions, Dr. Convertino has received the 1982 ACSM New Investigator Award, the 1985 AsMA Ellingson Literary Award, the 1986 ACSM Visiting Scholar Award, USAF Scientific Achievement Awards (1996-1998), 2003 Research Citation Award from the Society of Critical Care Medicine, and the 2006 ACSM Citation Award.

ERIC LILJENCRANTZ AWARD

David Gradwell, B.Sc., Ph.D., M.B.Ch.B, D.Av.Med., FRCP, FRAeS

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.

Group Captain David P. Gradwell, B.Sc., Ph.D., M.B.Ch.B., D.Av.Med., FRCP, FRAeS, RAF, was the 2006 recipient of the Eric Liliencrantz Award. He was recognized for his excellence in aerospace medicine education and research. Since 1986 when first posted to the United Kingdom's Royal Air Force Institute of Aviation Medicine at Farnborough, he has been instrumental in all aspects of education and research and has also been a key lecturer to the U.S. Air Force Residency in Aerospace Medicine program. His accomplishments have ranged from instructing students undertaking the Royal College of Physicians' Diploma in Aviation Medicine to being a guest lecturer to the German, Polish, and Australian Air Forces, to being a master's degree examiner at King's College.

Although Group Captain Gradwell grew up in Cornwall, in the southwest of England, he went to university in Scotland where he first graduated from the University of Dundee with a B.Sc. (Hons.) in Physiology in 1976. He then entered the medical school there, graduating M.B. Ch.B. in 1981. After house officer posts in Ninewells Teaching Hospital, he undertook a rotational training scheme in internal medicine. Thereafter, he joined the Royal Air Force in 1984, specializing in aviation medicine. An initial posting to a fighter station was followed by a posting to the Royal Air Force (RAF) Institute of Aviation Medicine, Farnborough, to begin specialist training. Within 2 years he had gained a Diploma in Aviation Medicine and was working on aspects of altitude life support systems, including those for the Harrier GR5 and then the Eurofighter. His related research into cardiovascular and respiratory physiology at high altitude lead to his being awarded his Ph.D. in 1993. Later in the same year, he was appointed a Consultant in Aviation Medicine at Farnborough and became Head of the Altitude Life Support Division there.

In addition to his research activities, David was responsible for a considerable part of the teaching in altitude physiology and related subjects at what had, by

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then, become the RAF School of Aviation Medicine. He also became involved in international activities through NATO and the Air Standardization Coordinating Committee. Invitations to teach in the United States and Germany were followed by ones from Poland and the Czech Republic. An honorary appointment to King's College London recognized his contribution to teaching aviation medicine to students there, including, from 1999, those studying for the Diploma in Aviation Medicine.

In 1998, when of the RAF Centre of Aviation Medicine at Henlow in Bedfordshire was formed, David became the RAF Consultant Adviser in his specialty and Head of Operational Aviation Medicine. In addition, he has for some years been the Chairman of the Aviation Medicine Group of the Royal Aeronautical Society and a member of the International Academy of Aviation and Space Medicine.

He has written on a wide range of topics including pulmonary hypertension, rapid decompression, high altitude physiology and patient fitness for flight. He has contributed to textbooks on aviation medicine and now co-edits the standard U.K. textbook on the topic.

Dr. Gradwell serves on a number of national and international advisory committees including The House of Lords, The Department of Trade and Industry, The Royal Aeronautical Society, and Working Party 61. He has been recognized for his contributions, receiving the Fox-Linton Memorial Award for contributions to flight safety, and the Lady Cade Medal from The Royal College of Surgeons, London. He was the 1999 Stewart Memorial Lecturer at the Royal Aeronautical Society. He received Louis H. Bauer Award from the Aerospace Medical Association in 2005 in recognition of his contributions to aerospace medicine, particularly in the area of education.

He is a Fellow of the Aerospace Medical Association and the Royal Aeronautical Society, and was elected a Fellow the Royal College of Physicians in 2004. Dr. Gradwell currently serves as a Board Member at Large on the AsMA Council and is a representative to the Executive Committee, a member of the Scientific Program Committee, and is a reviewer, formally on the Editorial Board of *Aviation, Space, and Environmental Medicine.*

JULIAN A. WARD AWARD

Lt.Col. Lee H. Harvis, M.D., USAF

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.

Lt.Col. Lee H. Harvis, M.D., USAF, was presented the 2006 Julian E. Ward Award for his superb academic and professional leadership at the USAF School of Aerospace Medicine (USAFSAM). Lt.Col. Harvis' research into +Gz-induced arrhythmias in aircrew with aortic insufficiency is an important contribution to aerospace medicine. As a pilot-physician, he has brought a wealth of experience in Air Force rotary wing operations to USAFSAM and his ongoing work on chlorine gas exposure and its effects on the pulmonary system is a further demonstration of his academic excellence.

Lt.Col. Harvis is currently the Commander of the 51st Aerospace Medicine Squadron, 51st Fighter Wing, Osan Air Base, Republic of Korea (ROK). He commands a squadron of five flights, including 12 officers, 38 enlisted, and 10 civilian personnel and manages an annual budget of $500K. He directs operations involving flight medicine, optometry, physiologic training, medical readiness, public health, bioenvironmental engineering, and health promotions. Additionally, he protects the health, welfare, and morale of airmen as a member of the Osan Armed Forces Disciplinary Control Board.

Lt.Col. Harvis entered the Air Force on an ROTC Scholarship to study aerospace engineering at the University of Michigan and was commissioned in 1985. He was awarded pilot wings in 1986 and served as an H-3 pilot and aircraft commander. He graduated in 1996 from the Philadelphia College of Osteopathic Medicine through the USAF Health Professions Scholarship Program and was a distinguished graduate at the USAF Aerospace Medicine Primary Course and was the Chief Resident, USAF Residency in Aerospace (2004) and Occupational Medicine (2005), School of Aerospace Medicine, Brooks City-Base, TX.

His teaching abilities have been utilized frequently across the host of courses offered by USAFSAM. He was a preceptor for the Aerospace Medicine Primary student aircrew briefs and taught a block on rescue operations. He briefed rotary wing operations in the Medical Group Commanders course and aircrew operational fatigue in the triservice Global Medicine Course. As Chief Resident he fostered better communication across the training program, ensured flying billets for residents, and enhanced resident input regarding residency quality and educational opportunities.

During his career, he served as a rescue liaison to the NASA Space Shuttle program and commanded the 66th Expeditionary Rescue Squadron in Operation Northern Watch. Following the events of "9/11," he was assigned as the acting Director of Operations to the 66th Rescue Squadron, Nellis AFB, NV. In January 2002, he was deployed to Operation Enduring Freedom, where he established a forward operating base in Kandahar, Afghanistan, serving as the unit's first Detachment Commander, and was awarded the Bronze Star.

He completed his M.P.H. at Harvard in 2003 and while there lectured at the Kennedy School of Government on AF rescue capability in Operation Enduring Freedom. He was also selected to serve on an expert working group to develop Harvard's disaster preparedness and bioterrorism education Program. During his aerospace medicine practicum year Lt. Col. Harvis published several articles including hypertrophic car-

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diomyopathy and medical certification in the Federal Air Surgeon Bulletin, and a "You're the Flight Surgeon" article on essential thrombocytopenia.

Lt.Col. Harvis is board-certified in aerospace medicine, board-eligible in occupational medicine, and is one of the Air Force's few pilot-physicians. A Senior Pilot and Senior Flight Surgeon, he has more than 2300 hours, including 60 plus combat hours in Afghanistan and Iraq. His awards include the Bronze Star, the Meritorious Service Medal, the National Defense Medal with one star, the Armed Forces Expeditionary Medal, the Global War on Terrorism Expeditionary Medal, and the Korean Defense Service Medal. He is an Associate Fellow of the Aerospace Medical Association.

JOHN A. TAMISIEA AWARD

David P. Millett, M.D., M.P.H.

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.

David P. Millett, M.D., M.P.H., received the 2006 John A. Tamisiea Award for his more than 30 years of dedicated service to aviation medicine. As a flight surgeon, Air Force medical officer, Embassy air attaché, senior aviation medical examiner, Director of Flight Medicine for Eastern Airlines, and FAA Regional Flight Surgeon for the past 13 years, he has adhered to the highest principles for the safe certification of aviators and staunchly supports aviation.

A native of New York City, Virginia, New Jersey, and Ohio, Dr. Millett received his undergraduate degree from Denison University. He graduated from the Yale University School of Medicine in 1968. After medical school, he spent 2 years as an assistant resident in surgery at the Yale-New Haven Medical Center. He graduated from the USAF School of Aerospace Medicine in April 1971. He received his M.P.H. from Florida International University in 1987.

He served on active duty in the U.S. Air Force from 1970-78, achieving the rank of lieutenant colonel in the Medical Corps. He served as Chief of Aviation Medicine at Shaw AFB from 1975-78, thereafter remaining in the reserves until 1990. From 1973-75 he served as the Assistant Air Attaché and Post Medical Officer at the American Embassy in Moscow. He was designated a Senior Aviation Medical Examiner in 1978 and in the same year became Director of Flight Medicine for Eastern Air Lines, serving in that position until 1987. After several years of private practice, he was chosen to be the FAA Regional Flight Surgeon for the Southern Region in 1990, and still holds that position today.

Dr. Millett's teaching positions included Adjunct Professor, Embry-riddle University (1980-87), Adjunct lecturer at Florida International University (1988-90), and Adjunct Assistant Professor of Medicine at Emory University (1990-present).

Dr. Millett is a Diplomate of the National Board of Medical Examiners, a Fellow of the Aerospace Medicine Association (AsMA), a trustee of the Civil Aviation Medical Association, a member of the International Academy of Aviation and Space Medicine, and a member of the Airlines Medical Directors Association (AMDA). He has served on many AsMA committees for 35 years. He was chairman of the Air Transport Medicine Committee for 5 years and chairman of arrangements twice. He has been the chairman of the program and arrangements three times for the AMDA.

Dr. Millet's previous awards include the Joint Services Commendation Medal, the Air Force Commendation Medal, the FAA Flight Surgeon of the Year, the FAA Regional Employee of the Year, the FAA Spirit Award, several FAA Superior Accomplishment Awards, the CAMA President's Award, and an Honorary Membership in Birds of a Feather. He has presented and authored numerous scientific papers on aviation medicine. However, he is probably best remembered for his 1983 AsMA presentation on the "Mystery of the Red Sweat."

MARY T. KLINKER AWARD

Dan Roper, RN, CEN, CFRN

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

Dan Roper, RN, CEN, CFRN, the Bioterrorism Program Manager for Navajo County, Arizona, was recognized with the 2006 Mary T. Klinker Award for his commitment to aerospace medicine. He has positively influenced many aerospace endeavors especially as a flight nurse instructor and a member of the Department of Defense Space Shuttle Support Team at White Sands. Countless physicians, nurses, physicians assistants, and medical technicians have relied on him for hands-on training in all aspects of critical and emergency patient care. He commands an extensive range of military and civilian aeromedical patient knowledge and has peacetime and combat military aeromedical evacuation expertise.

Dan earned his Bachelor of Science in Nursing at Arizona State University. He was an Air Force Institute of Technology Fellow from 1992-1995. Upon assignment to Wilford Hall Medical Center in 1996 he completed the Veterans Administration Intensive Care Course and

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worked in Oncology/Bone Marrow Transplant. He then transferred to the Level I Trauma Center at Wilford Hall. He completed correspondence Squadron Officer School and a Nursing Service Management course at Sheppard AFB, TX. He is a graduate of the School of Aerospace Nursing's Flight Nurse and Battlefield Nurse courses. His graduate work has been in Nursing, and he is currently working on a Master of Emergency and Disaster Response from American Military University. His Ph.D. dissertation was on the professional behaviors of eastern United States flight nurses at the Kennedy Western University in Wyoming. He is a licensed Private Pilot.

He began his military career as a Fuels Specialist, Nellis AFB, NV in 1984. He served as a Non-Commissioned Officer in Charge of Bulk Petroleum/Cryogenics Storage as Shemya AS, AK, and Luke AFB, AZ, prior to his commission. He served as a C-130 and C-17 Flight Nurse Instructor, 43th Aeromedical Evacuation Squadron, at Pope AFB, NC. In 2002, he was transferred to Holloman AFB, NM, where he became the Flight Commander of Medical Readiness/Education and Training. He was involved in numerous operations including Operation Enduring Freedom from October 2001 to April 2002 as a member of Joint Special Operations Task Force Dagger. He served as faculty for the Defense Medical Readiness Institute as a trauma instructor teaching essential war skills to medics. He recently retired after 22 years of service.

Dan Roper has been a recognized military leader and contributed to many aerospace successes. He was the 2003, 49th Medical Group's Company Grade Officer of the Year. In 2002 he received the Aerospace Nursing Society's Hans Krakauer Award as Junior Flight Nurse of the Year. He was recognized in 2005 as the recipient of the Brigadier General Hoefly Award for significant contributions to clinical flight nursing. He was a pioneering member of the Air Force's Pediatric Critical Care Air Transport Team which tested and trained on military and civilian aircraft.

Dan Roper has earned many awards and decorations including the Meritorious Service Medal, the Air Force Commendation Medal with four oak leaf clusters, the Air Force Achievement Medal with four oak leaf clusters, the Combat Readiness Medal with one oak leaf cluster, the National Defense Service Medal with one oak leaf cluster, and the Afghanistan Campaign Medal. He was recently awarded the Healthcare Innovations Award at the February 2006 Tricare Conference. He has accumulated more than 3000 military and civilian flight hours in numerous airframes.

RAYMOND F. LONGACRE AWARD

Donald E. Hudson, Jr., M.D., M.P.H.

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

Donald E. Hudson, Jr., M.D., M.P.H., received the 2006 Raymond F. Longacre Award on May 18 in Orlando, FL, at Honors Night ceremonies at the 77th Annual Scientific Meeting of the Aerospace Medical Association. Dr. Hudson has dedicated his career to aviation psychiatry and improving the psychological health of airline pilots. He was the driving force in establishing and formalizing the airline industry Critical Incident Response Program and the primary administrator of the HIMS program, an FAA-sponsored project to manage the educational program for treating airline pilots afflicted with the disease of alcoholism and/or drug dependencies and safely integrating them back into the cockpit after successful recovery. He has been a steady advocate for pilots' mental health treatment programs and work-rest scheduling issues, and his initiatives and recommendations to aeromedical certification authorities for expanded options in treating psychiatric disease in pilots are being adopted worldwide as a standard for safety and health.

From 1985-1987, Dr. Hudson studied fatigue effects of long-range flight operations while working with the USAF and NASA. Subsequently, he was appointed as Chairman of the FAA Aviation Rulemaking Advisory Committee on Flight-time/Duty-time. Since 1987, he has been active in educating numerous line pilots, airline management officials, and EAP personnel on the recognition, intervention, rehabilitation, and safe return of substance-abusing airline pilots. He assumed an administrator role in addition to his education role in 1993, resulting in the implementation of similar programs internationally. He has educated airline and union officials on the impact of disease and the optimum way of protecting pilots' health, dignity, and careers in a safe manner.

Dr. Hudson is a 1978 graduate of the Mayo Medical School and is certified by the American Board of Preventive Medicine in Aerospace Medicine. A native of Missouri, he went through residency training in psychiatry at the University of California, San Francisco, after graduating from the Mayo Clinic and received extensive training in the treatment of alcohol and drug dependencies. He then served 1 year as a resident instructor in psychiatry at Boston University Hospital before entering active duty in 1982 as a Flight Surgeon in the U.S. Air Force. He then served on active duty for 5 years, completing residency training in aerospace medicine in 1985. His last assignment on active duty was as a USAF/NASA Exchange Flight Surgeon at the NASA Ames Research Center in Mountain View, CA. He joined the Aviation Medicine Advisory Service (AMAS) medical staff in 1987 and became the Director and ALPA Aeromedical Advisor in 1993. He continued his military career in the Colorado Air National Guard, serving for 6 years as the State Air Surgeon before leaving the Guard in 1998. Although no longer an active pilot, he holds an instrument rating and has amassed over 1400 flight hours since gaining his private pilot's license at 17 years of age.

Dr. Hudson is the Aeromedical Advisor for the Air

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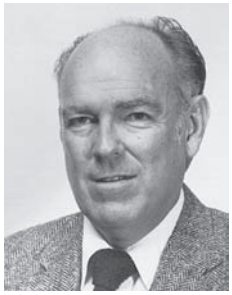
Line Pilots Association (ALPA) and the Director of AMAS, located in Denver, CO. In his capacity as the ALPA Aeromedical Advisor, he is tasked with duties outside the purely clinical aspects of aerospace medicine and has responded to hundreds of airline pilots facing psychological trauma and the full spectrum of psychiatric disease. In addition, he serves on several national and international committees and advisory bodies dealing with issue of fatigue in airline cockpits and, in this capacity, he has given presentations around the world on this topic. He has served two tenures as Chairman of the FAA Aviation Rulemaking Advisory Committee (ARAC) on Flight Time/ Duty Time. He is an Associate Fellow of the Aerospace Medical Association and is a 1996 recipient of the Boothby-Edwards Award.



MARIE MARVINGT AWARD

Stanley R. Mohler, M.D., M.A.

Established and sponsored by the French Aerospace Medical Association in memory of Marie Marvingt (1875-1963), a pioneer French pilot and surgical nurse who, for more than 50 years, actively and untiringly involved herself in the conception and development of air ambulance services and in the education of the general public regarding their use and benefits. The award is presented annually to honor excellence and innovation in aerospace medicine.

Stanley R. Mohler, M.D., M.A., received the 2006 Marie Marvingt Award during Honors Night ceremonies at the 77th Annual Meeting of the Aerospace Medical Association on May 18 in Orlando, FL. Dr. Mohler is a world-renowned scholar and educator who excels in bringing to life and public attention the historical background of aviation medicine. His sustained work in the history of aviation medicine has been exemplary, and his ability to weave that history into aeromedical education while bringing it to life has been notable. His membership and chairmanship of the History and Archives Committee throughout the past 25 years has led to an improved understanding of our heritage, and has produced an exceptional amount of exciting research. He has collected historic aeromedical information on the pioneering work of some key contributors to aviation, including Louis Bauer, Harry Armstrong, Wiley Post, and the Wright brothers. In addition to his historical and educational work, he has been an ambassador for aerospace medicine in the international medical community. He has served on at lease 12 AsMA committees plus Council over the years. Throughout all of these efforts, he has been primarily recognized as an educator without peer. He has published nearly 300 papers and served on the editorial boards of numerous peer-reviewed journals. He clearly epitomizes the wide-ranging interests and sharp intellect which characterized Marie Marvingt.

Dr. Mohler is Professor Emeritus, Aerospace Medicine, Boonshoft School of Medicine, Wright State University, Dayton, OH. He is a graduate of the University of Texas Medical Branch (UTMB), Class of 1956, and has a masters degree from UTMB with his thesis research conducted on the topic of blood coagulation. He is certified in Preventive Medicine/Aerospace Medicine by the American Board of Preventive Medicine. His professional history includes post-graduate clinical training at the U.S. Public Health Service Hospital, San Francisco, and 4 years as a Public Health Service officer at the Center for Aging Research, National Institutes of Health, Bethesda, MD. This experience was followed by 17 years in the Federal Aviation Administration, initially as Director of the FAA Civil Aeromedical Research Institute, Oklahoma City, OK, and then as Chief of the FAA Aeromedical Applications Division, Washington, DC.

Dr. Mohler became the founding Director in July 1978 of a new Aerospace Medicine Residency Program for physicians at Wright State University School of Medicine, Dayton, OH, and also served as Vice Chair of the Department of Community Health, positions he held until July 2004, when he was appointed as Emeritus. During his tenure, the program graduate nearly 100 physicians from 21countries, many of whom are now key personnel in the aerospace medicine activities of their home countries.

His studies continue to focus on pilot aging, performance and health aspects, including fatigue, pilot medical certification aspects, medication and alcohol effects on pilot performance, airplane passenger health, and aviation accident causes. He consults with the FAA, NASA, and the aerospace industry. He holds the ATP pilot certificate, is an active flight instructor, and is an active FAA Aviation Medical Examiner. He publishes his studies on aerospace safety topics in the scientific journals and in publications for aircrew members, for example, those of the Flight Safety Foundation. He also publishes on key historical topics in aviation and space that have human factors and aeromedical underpinnings.

During 1983-84 Dr. Mohler served as President of the Aerospace Medical Association (AsMA). A Fellow of AsMA, he is a past recipient of the Theodore C. Lyster Award, the Louis H. Bauer Founders Award, the Harry G. Moseley Award, and the Walter M. Boothby Award. He was also the 1998 Harry G. Armstrong lecturer and is currently chair of AsMA's History and Archives Committee. Other awards and honors include the Cecil A. Brownlow publication award from the Flight Safety Foundation; the Strughold Award from the Space Medicine Branch of AsMA, the President's Award from the Society of NASA Flight Surggeons, the Poberzny Award of EEA, and the Sharples Award from Aviation, Space and Environmental Medicine

This Month in Aerospace Medicine History-- July 2006

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

Seventy-five Years Ago

The industrial medical department, job requirements, and physical health of the worker (Philo, OH): "It is the duty of the medical department to work helpfully and understandingly with other departments, but it must work unceasingly with a clear vision towards its goal. Precise data must be obtained that will result in forming a logical basis for practical recommendations. To be studied and applied, this data must be comparable and free of all errors of unmeasured judgment. Industrial medicine's progress and success will ultimately depend upon how much it can enable each industry to sanitate itself and minimize its hazards.

"This raises the question as to the application of physical classification to plant organization. There can be only one answer; the same reasoning must be applied to the inanimate machine that has been applied to the animate machine. If this is done, industrial efficiency will mean that each worker will be physically capable of performing the duties delegated to him under right conditions, because, each machine or each job will be analyzed from the stand point of the natural physiological differences of individuals…

"Further, there can be no well defined policy of transfer and promotion in a plant without a standardized measurement of job requirements. As it is, workers are transferred and promoted haphazardly, at the whim of a foreman or because of certain stand-ins - sometimes social and even religious. Often tendency is not towards promotion and transfer within the organization on the basis of physical fitness for handling the job or even on the basis of competency. The measurement of the job or at least that part which concerns itself with physical energy demanded by the worker who is filling the job, should, therefore, involve a careful survey of each and every plant operation" (2).

Fifty Years Ago

Retinal response to G level in blackout: "Our observation that the electroretinogram persists during blackout indicates that the rods and cones still react to light, despite the fact the subject cannot see. The observation that there is an electroretinogram during blackout does not necessarily mean that nerve impulses are transmitted. The question as to whether or not there is nerve transmission is, however, settled in the affirmative by the observation that the consensual light reflex persists during blackout. In addition, the fact that the consensual light reflex persists indicates that the reflex pathways are functioning at the level of the brain stem. This is based on the anatomical path of reflex fibers which pass medially to both geniculates into the brachium of the superior colliculus, and from there into the pretectal region, where they synapse with fibers that go to the Edinger-Westphal nucleus. It would seem, therefore, that the sire of neural block in blackout occurs at some higher point and the first presumption would be that the site is most likely in the visual cortex…

"There is, perhaps, more evidence to suggest that blackout is a retinal rather than a cortical phenomenon. For example, the observation that pressure on the eyeballs decreases the G level at which blackout occurs and that decreased extraocular pressure increases the blackout level points very clearly to the eye rather than the brain. In our opinion, present evidence is in favor of blackout as a retinal rather than a cortical phenomenon" (4).

Frequency of civil trans-Atlantic flight: "An average of 86 civil airplanes flew across the North Atlantic each day during July and August of 1956, according to a CAA survey. This means that every 16 or 17 minutes a passenger plane took off on a transatlantic flight" (1).

Twenty-five Years Ago

Form ratio, glidepath and the black hole effect (FAA Civil Aeromedical Institute, Oklahoma City, OK): "One cue for visual judgment of glidepath angle has been referred to as form ratio. Form ratio is defined as the ratio of vertical height of the runway to width of the far end in the runway retinal image. The ability of pilots to judge form ratios was compared with the ability to judge approach angles in the nighttime 'black hole' situation in two experiments. Responses in both static and dynamic simulated approach conditions indicated a general tendency to overestimate form ratios and approach angles less than 3º. Intersubject and intrasubject variability of form ratio and approach angle responses were comparable. These findings (i) do not support the utility of form ratio judgments as an aid in selecting approach angle, (ii) add to the empirical evidence of visual illusions and the danger of reliance on visual information for judgment of approach angle in the nighttime 'black hole' situation where only runway lights are visible, and (iii) point to variability in perception of approach angle as an important part of the problem." (5)

Parotid urea levels in diving (Naval Medical Research Institute, Bethesda, MD, and Naval Submarine Medical Research Laboratory, Groton, CT): "A significant increase was found in parotid gland urea excretion in nine U.S. Navy divers during 8 d of air saturation hyperbaric exposure. The parotid urea levels correlated positively and reflected changes in blood concentrations. Considering the simplicity and ease of parotid sampling, it is suggested that this method be used for monitoring blood urea levels in humans during hyperbaric exposure" (3).

Comparative effectiveness of cooling garments (Ames Research Center, NASA, Moffett Field, California and LDM Associates, San Jose, CA): "Tests were performed on five male subjects to compare the heat transfer performance and physiological effects of three different cooling garments when used under a sealed, impermeable garment which simulated a space suit. The mean exercise metabolic rate while walking at 0.9 m/s (2 mph) was 464 ± 33 W. An equilibrium condition was never reached during the uncooled suited control runs and the subjects lost a mean of 1.12 ± 0.15 kg (2.5 ± 0.3 lb) - approximately 2% of body weight - during exercise. The mean weight loss was 0.35 ± 0.10 kg (0.8 ± 0.2 lb) with an Apollo-type garment; 0.26 ± 0.11 kg (0.57 ± 0.24 lb) with the full-body cooling patch (garment 2); and 0.52 ± 0.12 kg (1.15 ± 0.26 lb) with the partial-coverage cooling patch (garment 3). Impedance plethysmography data showed an increase in leg blood flow when the working muscles were not cooled by liquid flow (garment 3), and the arm blood flow remained unchanged whether or not there was liquid cooling to the arms" (7).

Hemodynamic effects of lower temperature and pressure (Southwestern Medical School, Dallas, TX): "Six young healthy male subjects were studied to evaluate the use of whole body surface cooling (WBSC) as an antiorthostatic intervention. Previous studies in our laboratory have demonstrated that perfusion of an Apollo cooling garment with 16ºC water produced a significant increase in stroke volume and decrease in heart rate at rest and during lower body negative pressure (LBNP). However, optimal perfusion temperatures have not been determined. The present study examined the effects of WBSC using perfusion of water at a temperature of 10ºC. This perfusion temperature produced a greater decrease in mean skin temperature (T_{sk}) than water at 16ºC, -4ºC drop compared to -2ºC respectively. The hemodynamic effects were also more prominent with 10ºC water as shown by the increase in stroke volume of 11% at rest and of 35% during LBNP at -50 torr compared to control measurements at ambient temperature. Heart rates were lowered significantly (8 beats/min) and systolic arterial blood pressure was higher (8 torr). Cooling with 10ºC water produced a slight increase in muscle tone, reflected by a small but significant increase (+84 ml/min) in oxygen uptake. These data suggest that WBSC is an effective nonpharmacologic means of controlling preload and deserves further investigation as an antiorthostatic intervention" (6).

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Message from the President

Greetings,

As the current President of the Aerospace Physiology Society it is now my turn to work with you, the members of the AsPS, in fulfilling the goals of our Society. These goals are generally directed by our By-Laws. We have massaged these By-Laws over the past 2 years and they are now a reflection of how we do business today. I want to give a special acknowledgement to Col. Jim Dooley. It has been his leadership this past year that has put the Society on the track we are now following. Of course, he got copious amounts of help and input from the Board of Governors and Committee Chairs.

The By-Laws state that our purpose is to promote Aerospace Physiology for the community we serve and for the individuals in the Society. I believe we are doing just that, and have been doing so for over two decades (the first two decades were a lot of fun). How does this happen? It seems obvious, but I want to stress this point: VOLUNTEERS. We have a Board of Governors of 11 people and a number of Committee Chairs and members of these Committees. Most of the people that have been in various volunteer positions over that past decades are now about to retire, or are retired. Those of you that have less than 10 years in the Business, and are members of AsPS are going to have to pick up both the elected positions and appointed positions. The Society has an important future: as you all know, the job we do to help get the bombs on target and get the crewmember home are as important as ever. In civil and commercial aviation, look to the A380 for ongoing challenges for the aerospace physiologist. Our Society needs YOU.

This coming year I see several goals that fit into our needs: 1.) We need to be able to 'spam' the membership for a variety of reasons; especially to draw your attention to the web site to get business done and make all of you aware, on a timely basis, of events. Susan Richardson has volunteered as Chair of an ad hoc committee to get this done. 2.) We need to discuss and possibly experiment with new protocols at the annual meeting. We meet so many times during the week of AsMA; I would like to see if we can cut that back. One year we skipped the luncheon and did all the business, recognition, and awards at the evening social. It was fun, saved money, and a lot of time. However, since that one-time experiment we now have the Smith W. Ames Memorial Lecture and that has to be accommodated. If you have attended a few AsMAs, or a lot of them, I am sure you have a better way to get our business done. It is input from the membership that will determine the course of this goal. 3.) We need a mechanism for feedback from all the members, not just those that can get funding to AsMA. To this end I would like to get a survey out to all, once we get our e-mail addresses under control. I hate being surveyed, so I would like you all to understand that this one will be as painless as possible.

We have a Society of professionals. I am continuously proud of your individual accomplishments. We are also a group that knows how to have fun, so let the good times roll when we get together in New Orleans. Remember, don't sweat the small stuff and everything is small stuff.

Joe Zellers
President 2006-2007
zellers@carltech.com

AsPS Member Benefits

The outstanding network potential and the chance to gain knowledge from the field's top minds.

The opportunity to take part in forums for the integration and utilization of experts in many diverse professional fields. Our members have shared their expertise in multinational and multi-service working groups for altitude effects, acceleration, spatial disorientation, passenger and patient transport, and human factors.

The opportunity to recognize scientific acheivement in the field of aerospace physiology. There are three Society awards presented each year.

The chance to contribute to the success and quality of the annual AsMA conference. The Society's Education and Training Day has been one of the most widely attended sessions during the annual conference. Membership is only $10. For more information, please contact Joe Essex at joseph.essex@navy.mil, or write to:

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FAA-AME Seminar 2006 Schedule

AME Seminars are offered by the FAA. The following is the schedule for the rest of 2006. N/NP/P = neurology/neuropsychology/psychiatry, AP/HF = aviation physiology/human factors, O/O/E = ophthalmology/otolaryngology/endorcrinology.

June 12-16	Oklahoma City, OK	Basic*
July 14-16	Albuquerque, NM	N/NP/P†
August 4-6	Washington, DC	AP/HF†
September 11-15	Oklahoma City, OK	Basic*
September 22-24	Atlanta, GA	O/O/E†
December 11-15	Oklahoma City, OK	Basic*

* This is a 4-1/2 day seminar which prepares physicians to be designated as Aviation Medical Examiners. Contact your Regional Flight Surgeon for more information (to find your Regional Flight Surgeon, visit http://www.faa.gov/licenses_certificates/medical_certification/rfs/index.cfm).

† This is a 2-1/2 day AME seminar consisting of 12 hours of AME-specific subjects plus 8 hours of subjects related to a designated theme. For more information or to register, call the AME Programs office in Oklahoma City at 405-954-4830 or 4258.

Taken from the FAA's web site: www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/ame/seminar_schedule/

The Civil Aviation Medical Association Invite you to attend their:

CAMA ANNUAL SCIENTIFIC MEETING

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Ottawa Marriott
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Theme: Bringing the World Together

Speakers slated to speak include:
- The Minister of Transportation Canada
- Tony Evans, M.D., ICAO
- Clayton Cowl, M.D., Mayo Clinic
- Frederick Tilton, M.D., U.S. Federal Air Surgeon
- Douglas Ivan, M.D., U.S. Air Force Aviation Ophthalmologist
- John Hastings, M.D., FAA Neurology Consultant
- Mike Muhm, M.D., Boeing Corporation
- David Bryman, D.O., CAMA President
- AND MANY MORE

There will also be a full social agenda!
Please Join Us!

Send information for publication on this page to: **Dale Orford**
15516 E Acacia Way,
Fountain Hills, AZ 85268
480-837-7919; dorford@cox.net

Message from Our President

By Conoly Barker

Hello and Aloha to my fellow Wing members. I am honored and excited to be your president for the upcoming year. I know we will have a fantastic meeting in New Orleans. The best part is knowing that our meeting will be helping this wonderful city get back on its feet after the devastation of Hurricane Katrina. I know all our hearts go out to the residents of New Orleans who have suffered the loss of their homes and workplaces.

As I reflect on what the Wing has meant to me over the years, what stands out in my mind are the friendships that I have made from around the world and the fun I have had exploring different parts of my own country! I must confess that I would never go to some of these cities on my own, but I have found that each one has something to offer that is unique and interesting.

I started with the Wing when my husband was an Aerospace Medicine Resident at Pensacola, FL. The first meeting I attended was in Atlanta. Do you remember how we wore hats and gloves to go to lunch at Miss Pitty Pat's Porch! I went to school in Atlanta in the 60's, and yes, we did dress up to go into town! I had a great time revisiting some familiar places and sharing them with my friends. Other memorable moments were having lunch at the Seattle Space Needle and being introduced to cherries in Detroit - of all places! There have too many amazing adventures to mention in this short space.

That is what the Wing is all about - making new friends from around the world and visiting new places. I hope you feel the same way and I look forward to seeing you again in New Orleans! Let the good times roll!

Meet Sue Hudson

Sue grew up in the county of Lancashire, in the North of England, and currently resides in Cheshire, just 50 miles south of two of England's largest cities, Manchester and Liverpool. She also spent part of her childhood in the Blackpool region where she met her husband, Martin, while attending a school dance.

Sue attended Leeds University and earned her degree in Economics, worked for a few years in industry, then pursued her career in teaching. She taught 14 - 18-year-olds Economics, Accountantcy, and Business Studies. While Sue was busy teaching, Martin was studying medicine at St. Bartholomew's Hospital in London and later working as a medical officer in the Royal Air Force. Sue says, "We both enjoyed Air Force life, although Martin's unaccompanied posting to Bahrain was not so popular, especially as I was pregnant with our second son. I did, however, get to visit him for 3 months before the baby was born."

After a 5-year commission in the RAF, the Hudsons joined a medical practice in Cheshire, and they have been there ever since. Says Sue, "In 1994, we took a 6-month sabbatical and exchanged jobs with a New Zealand doctor who lived in Christchurch. This was a most wonderful experience, living in NZ, meeting the lovely New Zealanders, and seeing their beautiful country. We were very tempted to stay, but our family in England was too precious to leave for long! Both of us retired from our professions in 2000 to set up our own practice doing pilot medicals. Martin has the medical expertise and I have the business skills - we make a good team! Martin is also the company doctor for MyTravel Airways, a UK charter company. We work hard when we are at home, but manage to take about 12 weeks of holiday a year."

The Hudsons have two sons in their late 20s. The older one, Paul, lives in Holland, speaks fluent Dutch, and works in the bulb industry, exporting millions of tulips to the USA. He is not married. Their younger son, Philip, works for the gardening side of Bosch, lives in England and has three children - 5-year-old twin girls, and a baby boy born in November of 2005. Says Sue, "They are a happy family and we try to see them as often as possible - they live only a 4-hour drive away."

When Sue and Martin are not involved with their jobs, they spend their time with their many hobbies and leisure activities. They both love golf and are able to play year round at their local club. Martin has been the Club's Captain and President, and they manage to get in games about two or three times a week. They also very involved with classical music. As well as attending concerts whenever possible, Sue's greatest love is playing the clarinet in an orchestra, chamber group or with a pianist. She says, "In order to maintain a good standard I need to practice regularly and finding time can be a problem. The highlight of every year is when I go for a whole week to Harrogate for a Wind Course with 50 other wind players - flutes, oboes, clarinets, horns and bassoons. To play for up to 10 hours a day for 6 days is extremely demanding, but wonderful! Martin and I have always been in choirs and have sung in St. Paul's Cathedral and at The Royal Albert Hall in London. We also founded a music society in our village so that top professional artists could come to give us concerts. This society is now over 30 years old and is still thriving. We have attracted artists from all over the world. This season Angela Hewitt, a Canadian pianist, played for us."

"We lead a very busy, but a very happy life. We are lucky to be fit and healthy and hope that we can continue to jog daily, and maintain the same pace of life for a few more years."

Sue and Martin Hudson.

FLAMINGO HEAD--Jeanette Wells kicks back with the flamingos in Florida!

NEW WING MEMBERS--New members enjoy the Wing's reception in Orlando.

Send information for publication on this page to: **News of Members**
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News of Members

In Memoriam
G. Donald Whedon, M.D.

By Paul C. Rambaut, Sc.D., M.P.H.

Space medicine pioneer Dr. G. Donald Whedon passed away on May 4, 2006, at his home in Clearwater Beach, FL. He was 90 years old. Beginning with the two-man, Earth-orbital missions of the Gemini spacecraft in 1965 and continuing through the Apollo and Skylab missions, Don Whedon led NASA's efforts to understand the effects of spaceflight on human muscular and skeletal structures. He is best known for the metabolic balance studies he oversaw during the long-term Skylab flights where rigorous scientific requirements were successfully reconciled with daunting engineering constraints and grueling crew timelines. However, Don's interests in the effects of disuse on bone and muscle began many years prior to human spaceflight. Beginning in the 1940s, he coauthored a series of papers on the effects of disuse upon human metabolic and physiological functions. These later became the gold standard for many long-term bed rest studies carried at the U.S. Public Health Service Hospital in San Francisco and elsewhere that were used to probe the effects of simulated microgravity on humans and to assess the efficacy of various countermeasures. Don maintained his interest in spaceflight-induced bone and muscle loss throughout his life and published his last review of the subject in Acta Astronautica in January 2006.

Don Whedon graduated in 1936 from Hobart College. In 1941 he received an M.D. degree from the University of Rochester Medical School where his principal training was received at the Cornell University Medical Center. At the National Institutes of Health he rose to be the Director, from 1962 until 1981, of the National Institute of Arthritis, Metabolism and Digestive Diseases. After leaving NIH he was associated with the Kroc Foundation and the Shriners Hospital Headquarters in Tampa, FL. Dr. Whedon contributed more than 80 publications. He was both an investigator for, and a consultant to, the National Aeronautics and Space Administration. At one time, Dr. Whedon served as Chairman of NASA's Life Sciences Advisory Committee and as a member of Space Sciences Board of the National Academy of Sciences.

Among Dr. Whedon's many awards were honorary Doctor of Science degrees from Hobart College in 1967 and the University of Rochester in 1978. In 1974 he received NASA's Exceptional Scientific Achievement Medal and in 1996 its Award of Merit. AsMA awarded him its John A. Tamisiea Award in 1978.

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 Associate Fellows new webiste at : www.asmaafg.org.

Wilbur C. Blount

Wilbur C. Blount, M.D., died May 8, 2006, in Columbus, OH, at the age of 77. He had been a member of the Aerospace Medical Association since 1963 and a Fellow since 1992.

He received his bachelor's degree from The Ohio State University (OSU) in 1951, and earned his medical degree from The OSU College of Medicine in 1959. His internship was at the University of Illinois R&E Hospitals, his ophthalmology residency was completed at The OSU Medical Center; he received a fellowship from NIH which he completed at the University of Minnesota, and then served as a faculty member for the University of Kentucky Medical Center Department of Ophthalmology.

Wilbur enrolled at the Ohio State University at a time when ROTC membership was required for all male students. He thrived and continued into the Advanced Air Force ROTC and later served as the first black cadet Colonel and Wing Commander of the entire Air Force ROTC cadet wing. As a reservist he completed the Primary Course in Aerospace Medicine at Brooks AFB, TX. He was a Tuskegee Airman, having served in the Air Force during the Korean era. Beginning with his enrollment in the ROTC program at OSU, Dr. Blount had a distinguished military career as a medical physician. In 1984 he was promoted to Colonel and served as the State Air Surgeon of the Ohio Air National Guard until 1991.

Dr. Blount is a nationally recognized ophthalmologist for his work advancing retinal surgical techniques and lectured at medical schools and teaching hospital throughout the United States.

He was a great educator, especially in the Air Force when it came to teaching medics. He was active in presenting information on senior health care, as well. His lifelong commitment to young people, especially African American youth, is an extension of his service to his country and his patients. In 1987, with help from his congressman, he established a Junior Air Force ROTC unit at his alma mater, East High School. Each year, he selected an outstanding ROTC student to receive the Soaring Eagle award, established to honor the memory of his father. In addition, he volunteered by teaching classes, lining up speakers, and sponsoring students so they could attend military balls and special summer leadership programs.

He was active in numerous organizations, including the Young Astronauts Program, the board of nominations for the National Aviation Hall of Fame and the boards of the Motts Military Museum, and the James D. Weaver Society. He Was also a member of the Ohio Chapter of the Tuskegee Airman, Inc., the National Medical Association, and the Ohio Diabetes Association. In private practice in Columbus, OH, ,from 1977-2004, Dr. Blount served as a physician consulting for the Erdey Eye Group from 2004 until his passing. He was also a volunteer for the Physicians Free Clinic, and was inducted into the Ohio Veterans Hall of Fame.

New Members

Ameerjan, Feroz Babu, M.B.,B.S.; Doha, Qatar
Baczuk, Rebecca, M.D., MSEE; Virginia Beach, VA
Banerjee, Tamara P., BSc., BM,BCh.; Welwyn, Garden City,UK
Belenky, Gregory, M.D.; Spokane, WA
Dawn Yin Lim, BSc., M.D.; Toronto, Canada
Frey, Michael, Maj., USAF, MC; Schertz, TX
Giovannetti, Jennifer, Capt., USAF, BSC; Moore, OK
Johnston, Brian, Capt., USAF, MC; Great Falls, MT
Koning, Marco, Maj., RNLAF; Nieuw-Vennep, Netherlands
Mohr, Nicholas M., B.S., M.D.; Iowa City, IA
Novak, Joseph D., Capt., USAF; Chicago, IL
Perez, Cornelio J., MSgt.,USAF; Columbus, NJ
Peterman, Connie L., A.A.S.; Oklahoma City, OK
Robinson, Christle A., Maj., USAF, NC
Sada, Yoshitala; Koganei, Japan
Samuelsson, Samuel J., M.D.; Reykjavik, Iceland
Smith, Gregory D., M.D.; Vista, CA
Van Amerongen, Pieter, M.D.; Amersfoort, Netherlands
Velosa, Yolima Rodriguez; Bogota, Colombia

Award Nominations Sought

December 15 is the deadline for receiving nominations for awards to be presented at the 2007 Annual Scientific Meeting in New Orleans, LA.

Nominations can be made by any member of AsMA. The nomination must be submitted via e-mail or online through the AsMA website under Committees and in the Members Home Section: (http://www.asma.org/members/awards/award-nomination.php). The completed form should be e-mailed (NO Faxes, Please!) to the Awards Committee Chair, Andy Bellenkes: andrew.bellenkes@usafa.af.mil

Attachments or biographical material will be retained in Association files.

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