President’s Page

At our 2011 Annual Business meeting, we voted for a change to our Bylaws regarding the qualifications for Active Emeritus Membership in the Association. The 2011 change requires 25 years of previous membership, an age of at least 65 years even if not “retired”, and a $50/year dues payment to retain voting rights, hold office, and have access to the journal online. Those desiring a hardcopy journal will pay $50 extra. Many of our members who did not attend that meeting remain unaware of this benefit and continue to pay the full membership dues. I am hopeful that this benefit will be seen by most of our qualifying members as a worthwhile benefit and will become Active Emeritus members instead of merely leaving us. I am also hoping that those Active Emeritus Members (and Life Members) might consider joining us after the San Diego meeting at a no-host luncheon at some TBD restaurant near the meeting site to renew long-time friendships and get some updates on whose doing what now. I shall endeavor to provide more information on that event in my April 2014 President’s Page. If you know of someone who was once close to the Association and is no longer a member, please reach out and let them know we’re still here and they may choose to come to San Diego and meet that Friday.

My wife, Fran, and I are building our retirement home. Doing so has some analogies with building a good organization. It needs to have a solid foundation just like our 501(c)3 Aerospace Medical Association which is based on a rich history and fantastic people. They both should be sustainable in terms of energy. That means electricity and water in the case of our home which will hopefully be very close to net zero in electrical energy and independent of delivered water, unless you count rainwater which we will capture in a cistern under our porch. For our Association, the resource of people, our members, and their participation in our committees, activities, and meetings provides a good basis for a sustainable organization. Our Association is also becoming more self-sufficient as we move thru this year due to the initiatives started by Dr. Glenn Merchant, the Executive Committee, and Council this past year. We will be diversifying our financial base in case our Annual Meeting again suffers from the fiscal restraint that restricts travel to such meetings.

I appreciate Maj. Troy Faaborg’s input on the Aerospace Physiology Society in the continuing effort to let you know what our Constituent Organizations are all about. In its original form, the Aerospace Physiologist Society (AsPS) actually began developing prior to 1966. Thanks to the charter members who hailed from the Air Force, Navy, academia and industry, the first serious formative meeting took place at the AsMA Annual Scientific Meeting in New York in 1965. This first organizational meeting was, to a great extent, due to the inspiration and persuasive leadership of Capt. Giles W. Hall, USAF.

Thus, on April 28, 1965, a group of 13 physiologists held a dinner at the LaScala Restaurant in New York City and determined that an official organization for aerospace physiologists should be formed under the parent organization.

The Society has grown and broadened its scope of expertise; the interests and endeavors in the AsPS have tracked closely with advancements in human performance in aviation and space. 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. A good number of members are well established through research, publications, career leadership, and innovation in the field of aviation physiology. Other activities related to membership with AsPS include the opportunity to take part in forums for the integration and utilization of experts in many diverse professional fields; this occurs both during the annual Scientific Meeting as well as through independent projects outside of AsMA.

The Society’s Education and Training Day has been one of the most widely attended sessions during the annual AsMA conference. Additionally, the AsPS recognizes scientific achievement in the field of aerospace physiology through three Society awards presented each year. The Paul Bert Award for Physiological Research is named in honor of the famous French physiologist and “Father of Pressure Physiology.” The award is for outstanding research contributions in the field of aerospace physiology. The Fred A. Hitchcock Award for Excellence in Aerospace Physiology is named in honor of the exemplary physiologist and co-translator of Paul Bert’s classic work, Barometric Pressure. The award is for excellence in either operational physiology or physiological research. The Wiley Post Award for Operational Physiology is named in honor of the pioneer airman, Wiley Post, and represents all crewmembers that have benefitted from the efforts of operational aerospace physiologists.

Perhaps the most unique award sponsored by AsPS is

See PRESIDENT’S PAGE, p. 758.
the Partnership in Education Award. This special award is dedicated to the top secondary school science teacher in the district where the annual Scientific Meeting is held. The Society sends representatives to the nominee’s school to present the award and provide an opportunity for the students to see how science is applied in aviation and space; the teacher is also invited to the annual AsPS luncheon for a formal presentation.

At each annual scientific meeting, AsPS members enjoy two key society events. The annual AsPS luncheon affords members and guests the opportunity to formally recognize recipients of all of the society’s annual awards, and to enjoy the Smith W. Ames memorial lecture - a contemporary snapshot of current trends in aerospace physiology. The AsPS social makes each Wednesday night of AsMA meetings a memorable one, as the society visits a local sporting event, restaurant, or watering hole for a chance to catch up on all things unofficial. For many, the AsPS social is the reason they became involved with the group!

The AsPS website is hosted by AsMA and enables members to keep up with the latest news and events within the society through its dedicated news service and web links. Everything you need to know about the AsPS is available via the website, including comprehensive membership, careers and professional development information as well as a link to our Facebook blog for enhanced communication to our current member database as well as those interested in joining.

Above all, membership in the AsPS provides an outstanding network potential and the chance to gain knowledge from the field’s top minds. The AsPS organizational membership base is composed from aerospace physiology disciplines including human factors, safety, aviation medicine, human performance, education and training, research, extra-vehicular activity, and flight equipment engineers to name a few. The AsPS career advisors provide guidance and leadership for those interested in professional careers in aerospace physiology. It is supported by the parent organization of the Aerospace Medical Association.

Maj. Troy Faaborg is the current President of the AsPS. Please feel free to contact him through the AsPS website at http://aspsociety.org/ with any questions about the Society.
Russell B. Rayman, M.D., former Executive Director of the Aerospace Medical Association (AsMA), was the 2013 recipient of the Bauer Award for his over 50 years of service and dedication to the Aerospace Medicine community. He served for 27 years with the U.S. Air Force and later served for 18 years as the Executive Director of the Aerospace Medical Association. He continues to practice clinical aerospace medicine today. During his career, he has represented Aerospace Medicine in the United States at a national level as a delegate to the American Medical Association and with federal agencies and Congress. He served on the FAA’s Age-60 rule committee and was a regent of the American Board of Preventive Medicine (ABPM).

A native of Toledo, OH, Dr. Rayman received his M.D. in 1961 from the University of Michigan. He interned in Miami, FL, before joining the U.S. Air Force in 1962. After serving for 8 years with various international assignments, he entered the Aerospace Medicine Residency Program. After completing Phase I of his residency at Johns Hopkins School of Public Health, where he received an M.P.H. in 1970, he went to Brooks AFB, TX, for Phase II and the Air Force Inspection and Safety Center, Norton AFB, CA, for Phase III. From 1972-1976, he was assigned as Chief of Aeromedical Services at Clark AFB, the Philippines. Other assignments included 3 years as Chief of the Aerospace Medicine Branch and Director of the Aerospace Medicine Residency Program at the USAF School of Aerospace Medicine, Brooks AFB, TX; being the first RAF/USAF exchange medical officer assigned as Command Flight Surgeon to RAF Strike Command, High Wycombe, UK; Chief of the Medical Readiness Division; and Chief of the Aerospace Medical Division, Office of the Surgeon General, Bolling AFB, Washington, DC.

Dr. Rayman retired from the military in 1989 and became Manager, Medical Operations Department, Lockheed Engineering and Sciences, in Washington, DC. He then became Executive Director of AsMA in 1992 and served in that position until January 2010 when he retired. During that time, he worked with 18 different presidents, executive committees, and councils, and far too many committee chairs to count. He also steered the Association through 7 Special Committee Reports, 27 Resolutions, 15 Position papers, policies, and statements, 39 official letters, and other projects too numerous to mention. He oversaw the Association’s CME accreditation, and ensured that AsMA’s specialty in the AMA was represented. Under his leadership the annual meeting was always a success, the home office remained open and available to our members and committees for meetings, and he kept our association moving forward.

Since retiring, Dr. Rayman has spent his time caring for patients in two Free Clinics in Northern Virginia. He still remains active in aerospace medicine by consulting and attending various meetings. He also is Chair of the Mayo Clinic Residency Advisory Committee (RAC) and serves as a member of the CAMA Board of Trustees. Finally, the 5th edition of Rayman’s “Clinical Aviation Medicine” was available at AsMA’s 84th Annual Scientific Meeting in May 2013.

Dr. Rayman’s awards and honors include the Humanitarian Services Medal, the Vietnam Service Medal, the Outstanding Unit Award with V device and three oak leaf clusters, Air Force Commendation Medal with two oak leaf clusters, Meritorious Service Medal with two oak leaf clusters, and the Legion of Merit with two oak leaf clusters. Within AsMA, he was the 2002 recipient of the Theodore C. Lyster Award. He holds honorary memberships in the Aerospace Medical Association of the Philippines, the Argentine Society of Aerospace Medicine, the Aerospace Medical Association of Korea, the Airline Medical Directors Association, and the Japan Society of Aerospace and Environmental Medicine. He has been a member of the Society of USAF Flight Surgeons, where he was Treasurer, a member of the Board of Governors, and President. He has also been a member of the Air Force Association, a Fellow of the American College of Preventive Medicine, a member of the American Academy of Family Physicians, the International Academy of Aviation and Space Medicine, the Association of Military Surgeons of the United States, the Society of NASA Flight Surgeons, the Aerospace Human Factors Association, the Academy of Medicine of Washington, DC, and the Civil Aviation Medical Association.

Dr. Rayman is a Diplomate of the ABPM, certified in Aerospace Medicine, and a member of the Royal Society of Medicine and the Space Medicine Association. He is also a Fellow of the Aerospace Medical Association and has served on the AsMA External Relations, International

(See RAYMAN, p. 760.)
Dr. Ciancio was a Vice-President of the 6th Congress of the Iberoamerican Aerospace Medical Association, Buenos Aires, Argentina, in 1996. He was Adviser in Cardiology in the Medical Department of Aerolíneas Argentinas and performed the first dosimetry study on international routes of Aerolineas Argentinas through an agreement of collaboration with the Real Military Route of Aerolineas Argentinas, performed in collaboration with CAMI, Oklahoma City, OK. He is the first South American Member of the European Radiation Dosimetry (EURADOS WG11) 2012. He has been Director of the International Project of Cosmic-Solar Radiation Dosimetry at Satellite, Aeronautic and Terrestrial level of LPNU, since 2010. He is a Medical Scientist of the National Antarctic Institute and participated in two summer campaigns in the Antarctic Marambio Base (2012 and 2013).

Dr. Ciancio has been an Invited Teacher of the Civil Aeronautic Meetings in 2008, 2009, and 2010. He has also been an Invited Speake in the Uruguay I+M Diploma in Avian Medical of Cuba since 2009 and Invited Medical Speaker in the Uruguay I+M Aerospace Meetings in 2008, 2009, and 2010. He has also been an Invited Speaker at Turin University and Teacher and Staff Member of the Postgraduate Course of Aerospace Medicine in Padova University, Italy, since 2011, and a Speaker of the Master in Medical Physics of the Balseiro Institute, Bariloche Atomic Center since 2011. He is an Associated Scientist of the FAA in the genetic study of international flight attendants of Aerolineas Argentinas, performed in collaboration with CAMI, Oklahoma City, OK. He is the first South American Member of the European Radiation Dosimetry (EURADOS WG11) 2012. He has been Director of the International Project of Cosmic-Solar Radiation Dosimetry at Satellite, Aeronautic and Terrestrial level of LPNU, since 2010. He is a Medical Scientist of the National Antarctic Institute and participated in two summer campaigns in the Antarctic Marambio Base (2012 and 2013).

Dr. Ciancio was honored with the title of Distinguished Citizen of La Plata City, Province of Buenos Aires, Argentina, in 2011. He is an Associate Fellow of the Aerospace Medical Association.

Vicente R. Ciancio, M.D., was the 2013 recipient of the Aerospace Medical Association’s Boothby-Edwards Award for his 39 years of service in the field of preventive medicine. He developed a cardiological screening methodology for aircrew which permits the detection of myocardial ischemia at its early clinical phase. He has also studied ionized radiation exposure of aircrews operating on international routes and conducted seminal research on cytogenetic effects of that environment on aircrew and flight attendants. He is currently a Specialist in Cardiology and Aerospace Medicine at La Plata National University in Buenos Aires, Argentina. He is also Founder and Director of the Aerospace Medicine Course at the Medical Sciences Faculty of La Plata University and Director of the Civil Aeronautic Medical Institute, Buenos Aires, Argentina.

Dr. Ciancio is Founder and President of the Scientific Committee of Aerospace Cardiology of the National Federation of Cardiology, Argentina, Consultant Member of the Greek Association for the Studies of Cardiovascular Diseases, and a Medical Adviser of the Health Section of the Argentinean Aircennavigant Association. He is a member of the Argentinean Medical Association and ex-President of the Argentine Society of Aerospace Medicine (1994-1996), ex-Secretary of the Iberoamerican Association of Aerospace Medicine (1995 - 1996), and an Honorary Member of the Mexican Association of Aviation Medicine (2005) and the Brazilian Society of Aerospace Medicine (2006). He is also a Member of the Aerospace Human Factors Association and an Emeritus Member of the Aerospace Medical Association.

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Donald J. White, Col.(Ret.), USAF, FRAeS, was the recipient of the Aerospace Medical Association’s 2013 John Ernsting Award for his outstanding operational career that included leadership experience in acquisition, research, development, test and evaluation, education, aircrew training, operational physiology, and operational safety. His groundbreaking Armstrong Laboratory work in experimental aircrew life support, cockpit, and equipment integration made a significant operational impact on safety. As Chief, Education Division, Aerospace Physiology, he evaluated educational strategies, designed a human performance curriculum, and managed an education program that trained over 3,500 students annually. His vision, innovation, and leadership forged the transformation of the Aerospace Physiology program.

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White earned an M.A. in applied physiology at Kent State University, Kent, OH, and a B.S. in physical

See WHITE, p. 761.
education at Frostburg State College, Frostburg, MD. From 1978 to 1984, he served as Clinical Program Director, Cardiopulmonary Medicine Services, at Southern Maryland Hospital Center. He then became Deputy Chief of the Physiological Support Division at Edwards AFB, CA, until 1987, when he was made Chief of the Aerospace Physiology Unit at Naval Air Station, Barbers Point, HI. In 1990, he took a position as the Parachute Flight Commander, 94th Airmanship Training Squadron, at the U.S. Air Force Academy in Colorado. From 1992 until 2000, he served as Chief, Experimental Aircrew Life Support Systems Research Branch, Crew Technology Division, Armstrong Laboratory, Brooks City-Base, TX; Chief, Education Division, Department Aerospace Physiology, U.S. Air Force School of Aerospace Medicine, Brooks City-Base, TX; HQ AFMC Standardization and Evaluation Parachute Examiner; and Aerospace Medicine Flight Commander, Holloman AFB, NM.

In 2000, White became Director of Human Factors Investigation and Analysis at the HQ Air Force Safety Center, Kirtland AFB, NM, where he served until 2003, when he took a position as Investigator and Technical Editor, Columbia Accident Investigation Board, HQ NASA, Washington, DC. Later in 2003, he became Chief, Air Force Human Factors and Operational Safety, HQ Air Force Safety, at the Pentagon in Washington, DC. In 2004, he transferred to a position as Deputy Chief, Safety Issues Division, HQ Air Force Safety. He left that position in 2007, when he became Military Consultant to the Surgeon General for Aerospace & Operational Physiology, Office of the Surgeon General, at Bolling AFB, Washington, DC. At the same time, he also served as Director, U.S. Air Force Aerospace and Operational Physiology Programs, Biomedical Science Corps, Associate Corps Chief – Aerospace Physiology. Until 2010, he also served as Chief, Human Performance Enhancement Division and, starting in 2009, as Director of Research and Development at the Office of Assistant General Modernization, in Falls Church, VA. In November 2010, he took a position as Assistant for Aviation, Operational Safety, & Human Performance in the Office of the Deputy Undersecretary of Defense Installations & Environment, Environmental Readiness & Safety, in Washington, DC.

White’s awards and decorations include the USAF Meritorious Service Medal with four oak leaf clusters, AFMC and ACC Aerospace Physiologist of the Year (1995 and 1996/1998), the Wiley Post Award for Operational Physiology from the Aerospace Physiology Society, the Harry G. Moseley Award from AsMA, the Fred A. Hitchcock Award for Excellence in Aerospace Physiology from the Aerospace Physiology Society. He was inducted into the USAF Safety Hall of Fame in 2012. He is Past President of the Aerospace Physiology Society, former Chair of the Associate Fellows Group of the Aerospace Medical Association, immediate Past President of the Aerospace Human Factors Association, and a Fellow of the Royal Aeronautical Society. Within AsMA, he has served on the on the Council, Chair of the Aerospace Human Factors Committee, and currently serves on the Aviation Safety and Scientific Program Committees.

KENT K. GILLINGHAM AWARD

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.

The Aerospace Medical Association presented the Kent Gillingham Award to Royce Moser, Jr, M.D., MPH, in recognition of his contributions to prevention of aircraft accidents due to spatial disorientation (SD). SD occurs when misleading inputs from the eyes, inner ears, or body sensors convince the pilot the aircraft is flying safely when it is actually on a course to impact the ground or water. Dr. Moser’s first assignment after completing the U.S. Air Force residency in Aerospace Medicine was at Aerospace Defense Command. He conducted an epidemiologic study of aircraft accidents in that Command and found SD was a factor in 9% of all accidents and in 26% percent of fatal accidents. He published the results of his study in his first peer-reviewed article in Aerospace Medicine (now Aviation, Space, and Environmental Medicine) in 1969.

Almost 40 years later, the Secretary of Defense authorized a study of SD accidents. In spite of multiple efforts involving training procedures, simulators, and other efforts, the rate of SD accidents approximated that which Dr. Moser documented decades earlier. As a result, the Secretary directed installation of the Automatic Ground Collision Avoidance System which will help prevent SD accidents in Air Force aircraft. Dr. Moser was commended for his study that “will contribute to saving hundreds of lives and billions of dollars in equipment.”

Dr. Moser accomplished other efforts to help prevent SD accidents. As director of the Air Force Residency in Aerospace Medicine in a later assignment he worked with Dr. Gillingham to develop SD training kits. The kits had a script, slides, and articles, and were distributed to all Air Force flight surgeons’ offices world-wide to be used by flight surgeons in flying safety meetings. He also made presentations and published additional articles on SD.

Dr. Moser is a graduate of Harvard College, Medical School, and School of Public Health. He served 23 years in the U.S. Air Force, with assignments as hospital commander; Chief, Aerospace Medicine, Office of the Command Surgeon, Aerospace Defense Command; Medical Officer, Special Weapons Defense, NORAD; Director, Base Medical Services, Phan Rang, Republic of Vietnam; and Chief, Clinical Sciences Division and Education Division–both at the USAF School of Aerospace Medicine. His final Air Force assignment was Commander, USAF School of Aerospace Medicine, at the time the School was a 900-member or-

See MOSER, p. 762.
organization with over 80% of its $60 million budget (excluding military salaries) devoted to research and development.

On retirement from the Air Force, Dr. Moser became a Professor at the University of Utah School of Medicine. In addition to serving as Deputy Director of the Department of Family and Preventive Medicine, he served as Director of the Department’s Rocky Mountain Center for Occupational and Environmental Health. During his time at the University Dr. Moser also developed graduate courses in health and safety management and in aerospace medicine. He authored the textbook, “Effective Management of Health and Safety Programs — A Practical Guide,” now in its 3rd edition. He continues to teach in the management and aerospace medicine courses, the latter for U.S. Air Force Residents in Aerospace Medicine at the University as a Professor Emeritus.

Dr. Moser has been a member of the Aerospace Medical Association (AsMA) since 1965, and served as president of AsMA, is immediate past president of the Harvard School of Public Health Alumni Association, was Selector of the International Academy of Aviation and Space Medicine, is past Vice President for Medical Affairs of the American College of Occupational and Environmental Medicine (ACOEM), and was Regent of the American College of Preventive Medicine (ACPM). He is a Fellow of AsMA, ACOEM, and ACPM. He has numerous awards from the Air Force, national and international aeromedical groups, and occupational health organizations.

CDR Richard V. Folga, MSC, USN, was the recipient of the 2013 Walter and Sylvia Goldenrath Award from the Aerospace Medical Association during Honors Night Ceremonies, May 16, 2013, at the Sheraton Hotel and Towers, Chicago, IL. He was recognized for the direct, positive impact his applied research has had on education and training in aerospace physiology worldwide. He led the U.S. Navy’s Reduced Oxygen Breathing Device (ROBD) Training Development Team and created, from scratch, the ROBD simulator training concept. His team also conducted empirical studies to examine the impact of device modifications on ROBD training which resulted in evidence-based improvements to that training. Those findings also yielded six Aerospace Medical Association (AsMA) presentations and three journal articles. Two of those articles won the Ellingson Award from the Associate Fellows Group.

CDR Folga was commissioned in 1997 and completed Aerospace Physiology Training on June 26, 1998, in Pensacola, FL. His follow-on tours included Intern and assistant department head at ASTC Miramar; Aeromedical Safety Officer at Marine Aircraft Group 16, MCAS Miramar; Aeromedical Safety Officer and Night Imaging and Threat Evaluation Lab Program Manager, Marine Aviation Weapons and Tactics Squadron One, MCAS Yuma, AZ; Director, Human Performance and Training Technology, Naval Survival Training Institute in Pensacola, FL, and Director, Aviation Survival Training Center, Whidbey Island. His current assignment is Department Head, Acceleration and Sensory Sciences, Naval Medical Research Unit Dayton.

CDR Folga completed board certification in aerospace physiology in May 2006 and served as the Chair of the AsMA Exam committee for board certification in aerospace physiology. He is the President of the Society of U.S. Naval Aerospace Physiologists, At-Large Member of the AsMA Aerospace Physiology Society, and is an AsMA Fellow. He was the Naval Aerospace Physiology Program 2001 Aerospace Physiologist of the Year. In 2007, he was selected as the recipient of the Aerospace Physiology Society’s Wiley Post Award for Operational Aerospace Physiology. In 2010, he was part of the SAFE Team Achievement award, recognized for his work in introducing the ROBD to the fleet.

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.

Prof. Dr. Hans A. Pongratz (Col. Ret., GAF, MC), received the 2013 Won Chuel Kay Award from the Aerospace Medical Association for his expert and significant contributions to the field of spatial disorientation and situational awareness. He is renowned for his research into the physiological, aeromedical, and ergonomic problems of the man-machine interface, human factors, and human engineering. In addition, he is the link between the German Society of Aviation and Space Medicine, the European Society of Aerospace Medicine (ESAM), and the Aerospace Medical Association (AsMA). He has served for more than 30 years, striving for the improvement of international cooperation in aerospace medicine.

A native of Munich, Germany, Prof. Dr. Pongratz earned a Diploma in Engineering from the Technical...
Chiaki Mukai, M.D., Ph.D., was the recipient of the Aerospace Medical Association’s 2013 Joe Kerwin Award for her prominent leadership in space medicine and human research not only for research in her native Japan, but also for Spacelabs, Spacehubs, and International Space Station (ISS) missions. With notable dedication, along with her experience as a cardiovascular surgeon, two-time Space Shuttle crewmember, and International Space University professor, she continues to lead ISS life science research at the Japanese Space Agency (JAXA). She has completed numerous microgravity medical experiments, was the first Asian woman to fly in space, contributed to ground preparation and real-time support of Space Shuttle Neurolab experiments, and coordinated and integrated medical science Spacehub payloads at NASA Johnson Space Center.

Currently, Dr. Mukai directs space biomedical research at JAXA and became the first head of the newly organized JAXA Center of Applied Space Medicine and Human Research in 2012, is the principal investigator of three ISS experiments, and was appointed by the World Meteorological Organization to be a member of a high-level task force on the global framework for climate service from 2010-2011.

Dr. Mukai was born in Tatebayashi, Gunma Prefecture, Japan. She decided she wanted to become a doctor while still a child. As a doctor in Japan, she has worked on the medical staffs of the Keio University Hospital, Shimizu General Hospital, Saiseikai Kanagawa Hospital, and Saiseikai Utsunomiya Hospital. In the United States, she served in the Division of Cardiovascular Physiology at NASA’s Space Biomedical Research Institute. She was affiliated with the Baylor College of Medicine’s Department of Surgery. She worked as a professor at the International Space University (ISU) in Strasbourg, France. She is currently a visiting professor in the Department of Surgery at Keio University School of Medicine in Tokyo.

A veteran of two Space Shuttle flights, Dr. Mukai has spent more than 566 hours in space. In addition to being the first Japanese woman to fly in space, she is also the first Japanese astronaut to fly twice in space. In fact, she had more spaceflight time than any other Japanese astronaut during the 20th century. Her Space Shuttle flights include NASA’s second International Microgravity Laboratory flight. During this extended duration orbital mission, Dr. Mukai conducted a vast duration orbital mission, Dr. Mukai conducted a vast

See MUKAI, p. 764.
array of medical experiments focusing on the cardiovascular system, the autonomic nerve system, and bone and muscle metabolism. Particularly historic, her next mission paired her with pioneering astronaut John Glenn, the first American to orbit the Earth. Relying upon her medical expertise, she worked with the 77-year-old Senator Glenn to study spaceflight and its relationship to the aging process.

Dr. Mukai’s honors and awards include the Prime Minister’s Special Citation, the Minister of State for Science and Technology’s Commendation, Gunma Prefecture’s Honored Citizen Award, Honorary Citizen of Tatebayashi City, National Space Development Agency of Japan’s “Outstanding Service Award,” the Space Flight Medal for STS-65, Honorary Doctor of Science from the University of Maryland, Special Congressional Recognition from the U.S. Congress, Prime Minister’s Special Citation for Contributions to Gender Equality, The Federation Aeronautique Internationale “De La Vaux Medal,” Space Flight Medal for STS-95, Special Space Flight Achievement Award from the NASA Life Science Directorate, and a Citation of the Foreign Minister on the 50th Anniversary of the U.S.-Japanese Relationship from the Ministry of Foreign Affairs of Japan. She is a member of the Japanese Society of Biological Science in Space, the Japan Society of Aerospace and Environmental Medicine, the Japan Surgical Society, the Japanese Association for Thoracic Surgery, the Japanese Association of Telemedicine and Telecare Association, and AsMA.

Lt. Col. Kimberly L. Barber, USAF, NC, received the 2013 Mary T. Klinker Award from the Aerospace Medical Association for her demonstrated training abilities and dedication to the execution of flawless patient care while she coordinated and flew patient validation for U.S. Transportation Command (USTC). She successfully coordinated the movement of thousands of patients from all the Joint Services and has extended her nursing experience with research at Wyle Labs. Her career highlights her as a flight instructor, squadron scheduler, flight clinical coordinator, and senior trainer for aeromedical evacuation (AE). She outshines her peers in providing direction and oversight to AE teams and exercise support staff.
Prof. Ola Eiken, M.D., Ph.D., was the 2013 recipient of the Aerospace Medical Association’s Sidney D. Leverett Environmental Science Award. He was honored for his substantial contributions to environmental physiology and for his 30 years of work in that field. He is one of the few who regularly publish scientific papers on practical and basic high G, simulated microgravity, and spatial disorientation problems. He developed techniques to manipulate blood flow in the leg muscles of exercising humans by applying lower body negative and leg positive pressure during cycle ergometry. This was subsequently adopted and developed as a countermeasure against deconditioning in microgravity. He also, along with Prof. Mekjavic, initiated a research program, which is still active, concerning how non-thermal factors impinge on human thermoregulation. He developed and was the head of the Swedish Acceleration Physiology research program, a task that was expanded to include the development of a research program for spatial disorientation in aviation. In 2001, with Prof. Mekjavic, he started a research program on physiological deconditioning responses to prolonged bed rest (simulated weightlessness). This program now includes a multinational European team investigating the combined effects of hypoxia and unloading/inactivity.

Prof. Eiken earned an M.D. at the University of Lund, Sweden, in 1983 and a Ph.D. at Karolinska Institute, Stockholm, Sweden, in 1987. From 1982-1983, he was a physician at Karlstad Central Hospital in Sweden. He then spent another year as a physician at the Swedish Marine Diving Centre. In 1983, he took a position as a Researcher in the Department of Aviation Medicine and Baromedicine at the Karolinska Institute. Then, in 1989, he became a Research Associate at the School of Kinesiology at Simon Fraser University in Canada. In 1990, he served as a physician again at the Södertälje and Huddinge Hospitals in Sweden. In 1996, he took a position as a Senior Research Officer in Acceleration Physiology at the Swedish Defence Research Agency, which he held until 2002, when he became Director of Research in Environmental Physiology. In 2009, he took his present position as Head of the Department of Environmental Physiology and Head of the Swedish Aerospace Physiology Centre at the School of Technology and Health, Royal Institute of Technology, in Stockholm, Sweden, and in 2012, he also became Medical Supervisor for the Flight Physiology Centre at the Swedish Defence Materiel Administration and QinetiQ in the UK.

Prof. Eiken has been a reviewer/referee for 10 international periodicals and an invited keynote speaker at eight international science conferences. He was an Adjunct Professor at Simon Fraser University from 1990-1996 and has been a senior or co-supervisor for 15 graduate students as well as being an external examiner/member of the examining committee at 16 Ph.D./M.Sc. dissertations. He served as Science Secretary at the Regional Human Ethics Committee at Karolinska Institute from 1994-2000. He was a member of the Organizing Committee and co-editor of the proceedings of the 23rd Scientific Meeting, and Science Secretary at the 24th Scientific Meeting of the European Underwater and Baromedical Society. From 2005-2009, he was Medical Supervisor for the Flight Physiology Center at the Swedish Defence Materiel Administration in Malmslätt. He is a member of the European Space Agency Steering Committee for Bed-Rest Studies, was an adjunct member of the Swedish Accident Investigation Board and Adjunct Director of Research at the Swedish Defence Research Agency, and was a reviewer for the European Space Agency announcement for Research Opportunity on three occasions. He has published 100 articles in international peer-reviewed journals and has written 60 book chapters, international reports, and conference papers.

Col. David B. Rhodes, USAF, MC, was the recipient of the Aerospace Medical Association’s 2013 Eric Liljencrantz Award for his significant contributions to aerospace medicine education during his 23 years of active service in the U.S. Air Force. Col. Rhodes has played a vital role as Director of the U.S. Air Force Aerospace Medicine Residency and Aerospace Medicine Primary Course. His innovative efforts made the training of military flight surgeons of the highest quality, enhancing their performance of military duties. He was responsible for updating curricula and has organized resident panels for the AsMA’s Annual Scientific Meeting. As an Assistant Editor of Aviation, Space, and Environmental Medicine, he has encouraged and shepherded the publication of 40 articles by residents. He has also contributed by teaching the Aerospace Medicine Primary Course for 8 years and organized the active duty component of the AMSUS meeting. He has served as an excellent role model and his interest and enthusiasm for aerospace medicine has See RHODES, p. 766.
RHODES, from p. 765.

provided a perfect atmosphere for learning.

Col. Rhodes is a residency trained aerospace medicine physician and has just recently retired from the USAF School of Aerospace Medicine, where he served for 4 years as the Program Director for the USAF Residency in Aerospace Medicine, also known as the "RAM Daddy." He entered the Air Force in 1988 after 5 years as a private practice family physician in Louisiana. After completing the Aerospace Medicine Primary Course at Brooks AFB, TX, he went to Little Rock AFB as a Squadron Medical Element flight surgeon with a C-130 squadron. Shortly thereafter, he deployed with his squadron to Operation Desert Shield/Storm for 8 months as the director of base medical services. He was then accepted to the Residency in Aerospace Medicine, which he completed in 1994. As part of this program he completed a master’s degree in public health and tropical medicine at Tulane University, where he graduated at the top of the class. He spent the next 4 years assigned to the Aeromedical Consultation Service teaching both RAMs and Aerospace Medicine Primary physicians. He then went to Misawa Air Base, Japan, for 3 years as the Chief of Flight Medicine. From Misawa, he was handpicked to go to Bolling AFB, Washington, DC, as Deputy Chief of Physical Standards. He later became Chief of Physical Standards and served in that capacity until he departed Bolling in 2004 to become the AMDS Commander at Keesler AFB. In 2006 he was selected as the Medical Group Commander at Hurlburt Field, where he served until he moved to his current position. As a flight surgeon, he has deployed to the Middle East on multiple occasions, including a deployment to Iraq where he served as commander of an AF Expeditionary Medical Support Unit (EMEDS).

In his current position as RAM Daddy, Col. Rhodes has shepherded four classes of RAMs through the residency and served during an unprecedented series of dramatic changes to the Residency in Aerospace Medicine. These changes included a BRAC-directed move of the residency from Brooks AFB in San Antonio to its new location at Wright-Patterson AFB in Dayton, OH. In addition to this change, the Accrediting Council for Graduate Medical Education (ACGME) made sweeping changes in the structure of the residency that necessitated revamping the 1-year practicum to 2 years. He ensured that the new faculty and administrative staff members supporting the residency were well qualified to carry out this change in the face of multiple personnel changes. All of this was done without losing any residency time.

Col. Rhodes’ awards include the Air Force Achievement Medal, the Joint Service Achievement Medal, the Aerial Achievement Medal with one oak leaf cluster, the Air Medal with one oak leaf cluster, the Air Force Meritorious Service Medal with five oak leaf clusters, and the Legion of Merit Medal. He is rated as a Chief Flight Surgeon with over 1400 hours flying time in various aircraft. He is board certified in three specialties including Family Practice, Aerospace Medicine, and Occupational Medicine. He is a Fellow in the Aerospace Medical Association (AsMA) and has served on the Council and on the Education and Training Committee. He is a member of the American Society of Aerospace Medicine Specialists and currently serves on the Awards and Scientific Program Committees.

RAYMOND F. LONGACRE AWARD
Christophe F. Flynn, M.D.

Christopher F. Flynn, M.D., was the 2013 recipient of the Aerospace Medical Association’s Raymond F. Longacre Award. He was honored for his significant and instrumental leadership in establishing the Behavioral Health and Performance Group at NASA Johnson Space Center, including behavioral health care for astronauts and their families, and formalizing in-flight monitoring of behavioral health for astronauts onboard the International Space Station (ISS). He was Chair of the Spaceflight Human Behavior and Performance Working Group, which resulted in the framework for operations for all ISS partners. He made significant contributions toward identifying work-rest scheduling and fatigue management as critically important issues needing mitigation for ISS astronauts. He also was a leader in implementing the private psychological conference, which today remains one of the most important activities for monitoring the behavioral health of crewmembers and teams on board the ISS. Additionally, he was the driving force behind development of the Spaceflight Cognitive Assessment Tool for Windows, which is used to monitor the cognitive health of ISS crews.

In October 2011, Dr. Flynn joined the Menninger Clinic as Director, Assessment Service, serving a proud tradition of providing psychiatric diagnostic evaluations to those seeking a brief, thoughtful, multidisciplinary review. From July 2010-2011, he was Director, Mental Health Services, for the U.S. Department of State, where he advised senior Department officials on the mental health needs of 37,000 foreign service officers and their families. He also served overseas, caring for those officers and families when he was deployed in the Middle East and West Africa from 2005-2008 before assisting as Deputy Director from 2008-2010. Prior to joining the Department of State, he was the Chief, Psychiatry, and a NASA flight surgeon at the Johnson Space Center (1996-2005). There he helped develop NASA’s operational behavioral health program for long-duration spaceflight, cared for astronauts (and families), and was Crew Surgeon for two space station missions (NASA-MIR 6 and ISS Expedition 4). While at NASA, he led a collaborative team that developed and implemented the Spaceflight Cognitive Assessment Tool (Win-SCAT), a neurocognitive self-assessment tool that continues to fly on long-duration space missions for U.S. astronauts.

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

See FLYNN, p. 767.
Dr. Flynn is currently serving in his 26th year of military service as a Senior Flight Surgeon and Lieutenant Colonel in the USAF Reserves, having experience working with aircrew in five different military aircraft (C-5, C-130, C-26, F-16, T-38). He served as Commander, 147th Medical Group, Texas Air National Guard (2003-04); Chief, Neuropsychiatry Branch of the USAF Aeromedical Consultation Service (1993-95); and deployed as Chief, Mental Health, at a forward operating base in Operation Desert Shield. He is a Board Certified Psychiatrist, a Fellow of the American Psychiatric Association, and an Associate Fellow of the Aerospace Medical Association, where he serves on the Scientific Program Committee. In February 2013, he received the high honor of being invited to be a member of the American College of Psychiatrists.

Modesto M. Garay, M.D., was the recipient of the Aerospace Medical Association’s 2013 Theodore C. Lyster Award. He was recognized for his 52 years of service to the aerospace medical community. He is a founder of the practice of aviation medicine in Guatemala and his contributions have been essential to aviation safety in his country and in the Iberoamerican community at large. His dedication to the practice of aviation medicine and education is notable for its altruism, professionalism, and service. He has led the Iberoamerican Association of Aerospace Medicine (AIMA) and, as President, realized its goals. He continuously shares his knowledge and experience with residents and aeromedical colleagues and can always be counted on. His support in realizing aviation safety goals and his outstanding achievements in aviation medicine make him an international leader in aerospace medicine.

Dr. Garay earned a medical degree at the University of San Carlos in Guatemala in 1959 and took the Primary Course in Aviation Medicine at the U.S. Air Force School of Aerospace Medicine (USAFSAM) at Brooks AFB, TX, in 1960. In 1962, he furthered his education by taking the Advanced Course in Aerospace Medicine, also at USAFSAM. He became the Chief of Medical Services in the Guatemalan Air Force in 1963 and served in that position until 1988. He is a Senior Aviation Medical Examiner of the FAA and was the founder and is Chief of the Civil Aviation Medicine Department in the Civil Aviation Authority of Guatemala.

Dr. Garay has been a member of the Aerospace Medical Association since 1960 and was made a Fellow in 2006. He has been a member of AIMA since 1974 and was its Vice President from 1996-1998 and then President from 1998-2000. He is also a member of the International Academy of Aviation and Space Medicine.

Harriet Lester, M.D., was the 2013 recipient of the Aerospace Medical Association’s Marie Marvingt Award for her contributions to a number of significant aerospace medicine programs and initiatives that have improved safety and promoted organizational excellence. She has pioneered new approaches and programs, and her experiences have led her to use creative approaches to a variety of aerospace medicine safety challenges with significant positive impact. International peers and aviators across many agencies, sectors, and internally within the Federal Aviation Administration (FAA) rely on her for solid guidance in aerospace medicine, including ophthalmology. She has a track record of making safe decisions that permit pilots to fly and air traffic controllers to work whenever possible. Noting that nearly half of FAA Aviation Medical Examiners (AMEs) are pilots, she created new collaborations between Aerospace Medicine and the Flight Standards general aviation safety team (FAASTeam). To increase the reach, efficiency, and cost effectiveness of designee site visits, Harriet “piloted” a new “virtual” site visit initiative in her region. She also brings the industrial discipline of being a certified ISO 9001 lead auditor to her work.

Dr. Lester attended Cornell University for her undergraduate degree and went on to New York University School of Medicine, receiving her Doctor of Medicine degree in 1984. She did her residency training at St. Lukes-Roosevelt/Columbia-Presbyterian Medical Center, for General Surgery, and New York University Medical Center for her Ophthalmology residency. She had a Fellowship with Montefiore Medicine Center, Department of Ophthalmology and Visual Sciences. She is a Diplomate of both the American Board of Ophthalmology and the National Board of Medical Examiners.

Dr. Lester is the Eastern Region Flight Surgeon (RFS) for the Federal Aviation Administration (FAA) Office of Aerospace Medicine, part of the Aviation Safety (AVS) line of business. As such, she is responsible for approximately 66,000 pilots, 370 Aviation Medical Examiner de-
LESTER, from p. 767.
signees, and 2700 FAA Air Traffic Controllers in the FAA Eastern Region, which is comprised of 7 states and the District of Columbia. She is a member of the FAA Regional Management Team and has served as the Eastern RFS since 2001. Six months after being hired, the 9/11 attacks occurred, and one of her first major taskings was to help coordinate the early phases of the Federal Marshall ramp up.

Prior to working for the FAA, she developed and managed departments in the academic and private sectors, with a range of research and publications, including Vernier hyperacuity. She has an abiding interest in early aviation which started with trying to determine what happened to Dr. John Jeffries’ dog on his 1784 balloon flight. This has led her to investigate how the contemporaneous Laki volcanic emissions might have impacted the early balloonists.

Dr. Lester has received many FAA and Federal Executive Board awards, including several for management, innovation, and safety. She has received the FAA Special Achievement Award every year since 2003. And she received Innovator of the Year as well as Office of the Year, Office of Aerospace Medicine awards in 2011.

A Fellow of the Aerospace Medical Association (AsMA), she is also a member of the Space Medicine Association, a Fellow of the American Academy of Ophthalmology, and recently completed a 2-year term as FAA OSHA Regional Committee Chair. Dr. Lester serves on the Wings Club History and Education Committee, the AsMA Scientific Program Committee, is an Associate Member of the Federal Executive Institute Alumni Association (FEIAAA), and a member of the Civil Aerospace Medical Association (CAMA).

HARRY G. MOSELEY AWARD
Nicholas L. Webster, M.D., M.P.H.

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.

Nicholas L. Webster, M.D., M.P.H., was the recipient of the Aerospace Medical Association’s 2013 Harry G. Moseley Award for his work with the Federal Aviation Administration (FAA). He co-founded and currently manages the FAA’s Aircraft Accident Medical Case Review and Hazard Analysis Program in conjunction with the Medical Research and Autopsies Program Teams, and evaluates all civil aviation fatal accidents and high-profile incidents that occur in the United States for aeromedical hazards. He also provides ongoing aerospace medical support to the FAA, the National Traffic Safety Board (NTSB), and the General Aviation Joint Steering Committee Safety Analysis Team. He works to develop interventions to mitigate common hazards identified in general aviation accidents and he has made multiple contributions to aviation safety.

Though born in Canberra, Australia, Dr. Webster considers Memphis, TN, to be his hometown. He became a naturalized U.S. citizen at the age of 18. He received a Bachelor of Arts degree in Microbiology from the University of Tennessee at Knoxville in 1981; a Doctorate in Medicine from the University of Tennessee Center for the Health Sciences at Memphis in 1985; and a Masters of Public Health from Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD, in 1996. He attended medical school on a Navy scholarship from 1981 to 1985. He then underwent postgraduate medical education in Family Practice from 1985-1986 at Naval Hospital Charleston, SC. He completed 6 months of aeromedical training at the Naval Aerospace Medical Institute in Pensacola, FL, and became a Naval Flight Surgeon in 1987. He was stationed at NAS Lemoore, CA, then NAS Fallon, NV, with the Pacific Fleet Advisory Squadron VFA-127 from 1987-1990. He then became Flight Surgeon for Helicopter Mine Counter Measures Squadron 15 in NAS Alameda, CA, from 1990-1992.

Following that tour, he was transferred to Naval Air Warfare Center, Aircraft Division in Patuxent River, MD, where he served as Strike Aircraft Test Squadron Flight Surgeon then senior Flight Surgeon for Test Wing Atlantic from 1992-1995.

After obtaining his M.P.H. from Johns Hopkins in 1996, he was stationed at the Naval Operational Medicine Institute in Pensacola, FL, where he completed the Navy’s Aerospace Medicine Residency in 1998. He reported aboard the PCU Harry S. Truman (CVN 75) in 1998 as Senior Medical Officer and was a member of the commissioning crew. Following completion of his tour, he transferred to the U.S. Naval Safety Center in Norfolk, VA, where he served as Assistant Command Surgeon from 2000 to 2003. He became the Command

Meetings Calendar
September 12-15, 2013; XXVI National Congress of AIMAS, held jointly with the European Low Gravity Research Association’s (ELGRA’s) biennial symposium; Vatican City, Italy. For more information, please contact Maj. Paola Verde or visit http://www.aimas.it or www.elgra.org.

September 19-22, 2013; Flying Physicians Association Northeast Chapter meeting; Radisson Hotel, Corning, NY. Please visit http://www.fpadrs.org for details and registration information.

October 6-10, 2013; 61st International Congress of Aviation and Space Medicine (ICASMI); Jerusalem, Israel. For more information, please visit http://www.icas2013.org/.

October 10-13, 2013; Flying Physicians Association Great Lakes Chapter Fall Meeting; Morris Inn, University of Notre Dame, South Bend, IN. Please visit http://www.fpadrs.org for details and registration information.

October 14-16, 2013; SAFE Association 51st Annual Symposium; Grand Sierra Resort and Casino, Reno, NV. Info: http://www.safesociety.com; Email: safe@peak.org

October 17-20, 2013; Flying Physicians Association Dixie Chapter Fall Meeting; Perdido Beach Hotel, Orange Beach, AL. Please visit http://www.fpadrs.org for details and registration information.

October 31 - November 3, 2013; Flying Physicians Association Western/Southwest Chapters Joint Fall Meeting (tentative); Fort Worth, TX. Please visit http://www.fpadrs.org for details and registration information.
Dr. Webster is a member of the American Medical Association, the Society of U.S. Naval Flight Surgeons (Life Member), and the Aerospace Medical Association (AsMA). He was elected a member of Delta Omega, Alpha Chapter, Honorary Public Health Society, in May 1996; was awarded two Meritorious Service Medals; two Navy Commendation Medals; two Navy Achievement Medals; the National Defense Medal; the South West Asia Service Medal; and the Navy Expert Pistol Medal. He was given the FAA Office of Aviation Safety – Safety Innovation Award and the FAA Office of Aerospace Medicine Outstanding Team Award in 2010. He was named FAA Flight Surgeon of the Year and received the FAA Outstanding Customer Service Award in 2012.

Robert Billings, B.S., M.A., was the recipient of the Aerospace Medical Association’s 2013 John Paul Stapp Award. He was recognized for his 33 years of significant contributions to promoting pilot protection from injury resulting from ejection from aircraft. He has promoted the use of modern ejection seats in 25 countries and 5000 aircraft worldwide, saving the lives of over 600 pilots. He has developed a reputation throughout his career as a steadfast defender of pilot safety and an international expert in crew escape systems. He was responsible for the development of survival kits, including the ACES II, along with other survival equipment and provisions. He has provided overall technical direction to over 40 different programs for developing equipment to protect and sustain aircrew lives. The corrective actions and design changes implemented by him have saved millions of dollars and continue to save aircrew lives today.

Mr. Billings was born in Portland, ME, and attended the U.S. Air Force Academy, where he received a B.S. in Engineering Mechanics in June 1971. In 1978, he received an M.A. in Industrial Management from Central Michigan University. After graduating from the Air Force Academy, he began his career with an active duty assignment at Eglin Air Force Base, FL, as a project engineer. In November 1974, he was assigned to Wright Patterson AFB, OH, as a project engineer in the Life Support System Program Office (SPO). In June 1978, he left active duty and joined the Air Force Reserves while he continued his career within the USAF civil service. In recognition of his leadership abilities, he was assigned as the lead project engineer for the ACES II ejection seat as it first entered service and production. In June 1982, he continued his work in the crew escape area as a Crew Systems Engineer in the F-16 SPO, responsible for all areas involving the aircraft crew escape system and aircrew personal equipment. He was then assigned as a group leader for the Crew Station and Escape Branch within the Engineering Directorate, and later as the lead Crew Systems Engineer in the Aeronautical Equipment SPO. In August 1985, he was promoted to Chief Systems Engineer in the Life Support SPO. He then moved to the Advanced Tactical Fighter (now F-22) SPO in June 1987, as the Chief Support Systems Engineer responsible for the entire cockpit design and equipment, as well as maintenance and training systems. In February 1988, he moved back to the Engineering Directorate, first as the Crew Station and Escape Branch Technical Specialist, and then later as the Crew Systems Branch Technical Advisor and Branch Chief.

Following the Space Shuttle Challenger disaster, Mr. Billings was selected to participate on a Presidential Commission to assess crew escape system options. Mr. Billings helped negotiate a first ever $50M cooperative military development program with the Japanese Air Force for an ACES II ejection seat modification program. He retired from USAF civil service in 2004 and formed a consulting company that provides services to United Technologies Aerospace Systems (UTAS), Gentex Corp., and Cobham/Conax Corp.

Mr. Billings’ tenacity, expertise, and accomplishments in aircrew safety earned him an Exceptional Civilian Service award in 1998, as well as an Exemplary Civilian Service Award in 2000. He has also received numerous awards from the SAFE Association recognizing his work. He was the SAFE Association President in 2009.

Carlos Staff, M.D., was the 2013 recipient of the Aerospace Medical Association’s John A. Tamisiea Award. Dr. Staff was recognized for his exemplary service to aerospace medicine education, particularly in human factors, aircrew and cabin crew training, physiology, and accident investigation. He has been recognized for his indefatigable efforts by the University of the 

See STAFF, p. 770.
Dr. Staff was the Chief of the Aviation Medicine and Human Factors Unit of the Civil Aviation Authority of Panama for 15 years and conducted a Human Factors Investigation course for physicians at the Center for Aviation Accident Investigation of the Brazilian Air Force in Brasilia. He holds a Masters in Higher Education from the University of the Americas in Panama and is a consultant in aeronautical medicine. He is one of three founders of the Iberoamerican Association of Aerospace Medicine (AIMA) and still guides that association with his experience and passion to excel. His numerous contributions to world aviation safety during the last 40 years have made him an international leader in aviation medicine.

Dr. Staff is a native of Panama City, Republic of Panama, and earned his Surgeon-Medical title from the Universidad Nacional Autónoma de Mexico (UNAM). He completed the Basic Aviation Medicine Course at the Civil Aviation International Center of the Secretary of Communications and Transportation in Mexico City. He then earned a specialist title in Orthopedics Surgery and Traumatology from the Mexican Army and Air Force University Graduate School of Military Health and later gained a degree in Hand Surgery from the Department of Advanced Studies of UNAM. He then became a medical officer at the Social Security Institution of the Republic of Panama, where he established an Orthopedics Specialty practice. He has continued to advance his education with advanced courses in aviation medicine and is a delegate medical examiner of the Civil Aviation Authority of Panama, the U.S. Federal Aviation Administration, and Transport Canada.

Dr. Staff was the Chief of the Aviation Medicine and Human Factors Unit of the Civil Aviation Authority of Panama for 15 years and conducted a Human Factors Investigation course for physicians at the Center for Aviation Accident Investigation of the Brazilian Air Force in Brasilia. He holds a Masters in Higher Education from the University of the Americas in Panama and is a consultant in aeronautical medical aspects at the Compania Panamena de Aviacion (COPA Airlines). He is currently an ICAO Technical Advisor for the implementation and development of the CAPSCA program in the Americas. He is a founding member of AIMA, where he was also President, a founding partner of the Panamanian Society of Aviation Medicine, a member of the College and Mexican Society of Aviation Medicine and Space, an Academician of the International Academy of Aeronautics and Space Medicine, and a Fellow of AsMA.

CAPT Matthew Rings, MC, USN, was the first recipient of the Aerospace Medical Association’s newest award, the Thomas J. & Margaret D. Tredici Award. CAPT Rings was recognized for his leadership in the study of operational color vision testing and qualifications for U.S. Navy and Marine Corps aviation. He has been the lead agent in research comparing and validating various computerized color vision testing programs for screening and testing aviation applicants and designated personnel. The computerized color vision testing that was validated by CAPT Rings for Navy and Marine Corps screening allows both detection of subtle color vision deficits of all three photoreceptor types (red, green and blue), and also quantifies the degree of the deficit (mild, moderate, or severe). Increased accuracy of color vision status in aviation applicants will ensure the highest level of safety and performance with modern aircraft visual systems. CAPT Rings’ research in computerized color vision testing has led the Department of the Navy toward the requirement for objective, computerized color vision testing, ensuring accurate diagnoses of color vision deficiencies.

CAPT Rings earned a B.A. in Chemistry at the University of Nebraska in 1985. From 1986-1989, he conducted Gastroenterology Biochemistry Lab research at the University of Nebraska Medical Center, where he earned an M.D. in 1993. He served a Surgical Internship at the Naval Medical Center, San Diego, from 1993-1994. He was assigned to the USS Shreveport as Flight Surgeon, Operations Deny Flight, Provide Promise, and Joint/ Decisive Endeavor. He also served as Flight Surgeon, MCAS New River, and Flight Surgeon, NAS Oceana, during that time. In 2001, he became an Ophthalmology Residency at the Naval Medical Center, San Diego, and then served as Head of the Ophthalmology Department at Naval Hospital, Pensacola, FL. While he was there, he also served as Chair of the Medical Records and Medical Ethics Committees, and as a member of the Informatics and Credentials Committees, and the Executive Committee of the Medical Staff.

In 2009, CAPT Rings became Department Head at Naval Hospital Okinawa, where he also served as Chair of the Medical Staff Quality Committee and as a member of the Executive Committee of the Medical Staff. In 2011, he took the position he currently holds as Color Vision Research Director at the Naval Aerospace Medical Institute, where he is also a Flight Surgeon and a Lecturer for Residents, Flight Surgeon classes, and Aviation Technicians. Additionally, he is an ECOMS.
Michael J. Cevette, Ph.D., was the 2013 recipient of the Aerospace Medical Association’s Arnold D. Tuttle Award. He was recognized for his role as lead author of “Oculo-vestibular recoupling using galvanic vestibular stimulation to mitigate simulator sickness” (Aviat Space Environ Med 2012; 83:549–555). The article explored using galvanic vestibular stimulation (GVS) to synchronize the vestibular system with a moving visual field in order to lessen the mismatch of sensory inputs that is thought to result in simulator sickness. Dr. Cevette and co-authors (J. Stepanek, D. Cocco, A. M. Galea, G. N. Pradhan, L. S. Wagner, S. R. Oakley, B. E. Smith, D. A. Zapala, and K. H. Brookler) used a multisite array of electrodes to deliver optimal combinations of GVS. An algorithm based on that data was then used in a flight simulator to synchronize visual and GVS-induced vestibular sensations. The authors found that when virtual head signals produced by GVS are synchronized to the speed and direction of a moving visual field, manifestations of induced simulator sickness in a cockpit flight simulator are significantly reduced.

Dr. Cevette and his colleagues have been instrumental in quantifying vestibular perception as well as modifying and inducing sensations of movement using galvanic vestibular stimulation (GVS). The outcome of several years of work in this area has led to a GVS algorithm that can produce virtual head movements in pitch, yaw, and roll and when synchronized with a moving visual field is effective in reducing the effects of simulator sickness. The technical applications stemming from flight simulation can be transferred to interventions combating the debilitating effects of vertigo and imbalance. A modification of the GVS technology is now being investigated as an intervention to mitigate motion sickness. Beyond spatial disorientation, AMVRL has several active protocols geared toward rapid assessment and intervention of cognitive impairments due to acute states of hypoxia. These studies span from the laboratory at Mayo Clinic Arizona to the highest peak in Arizona, Mt. Humphreys (over 12,000 ft). In addition these efforts, Dr. Cevette and the research team of AMVRL have worked extensively at using measures of central vascular pressure as an index of an effective M-1 anti-G straining maneuver.

Dr. Cevette received his Bachelor’s degree in Psychology at the University of Nevada in 1972, his Master’s degree in Audiology from Utah State University in 1976, and his Doctor of Philosophy degree in Speech-Language pathology and Audiology from the University of Utah in 1987.

Dr. Cevette is currently Head of Audiology and Co-Director of the Aerospace Medicine and Vestibular Research Laboratory (AMVRL) for Mayo Clinic Arizona. He is a Distinguished Mayo Educator (2006) and a Fellow of the American Speech-Language-Hearing Association. Prior to joining Mayo Clinic Arizona, he was, for 8 years, Director of Audiology at Primary Children’s Medical Center in Salt Lake City, UT. During his Salt Lake years he also held adjunct instructor positions at the University of Utah, Utah State University, and Brigham Young University. His current academic ranks include: Associate Professor, Mayo Clinic College of Medicine; Adjunct Professor, Arizona State University; Adjunct Associate Professor, University of Arizona; Affiliate Professor, University of Northern Colorado; and Adjunct Faculty, University of Texas at Dallas.

James C. McEachen II, M.D., M.P.H., was the recipient of the Aerospace Medical Association’s 2013 Julian E. Ward Memorial Award, for his superlative academic work and his unique accomplishments. As Mayo Clinic’s inaugural aerospace medicine resident, he went above and beyond leading the first ever F-22 pilot physiologic monitoring flight test study which directly supported its return-to-flight status. He expertly directed the multifaceted test team, whose results were lauded by the F-22 Safety Investigation and Safety Advisory Boards, USAF leadership, and Lockheed-Martin. He has authored or co-authored peer-reviewed publications and national/international aeromedical conference presentations, and achieved a 4.0 GPA during his M.P.H. studies. His Deployment Availability Working Group was cited by the U.S. Air Force Health Service inspectors as a “model for the Air National Guard” and was rated ‘outstanding’ during a recent inspection.

Dr. McEachen is a board-certified physician with specialized training in interventional radiology and informatics. He completed medical school at the University of Illinois, where he was selected as a James Scholar. He underwent residency training at the Yale School of Medicine with subsequent fellowship training at the Mayo Clinic. He is also a flight test engineer and graduate of the U.S. Air Force Test Pilot School. He has more than 20 years of combined experience in the areas of developmental flight test, program management, and national security. He has directed developmental flight test efforts in over 30 different military and civilian airframes.
Dr. McEachen completed his undergraduate education in electrical engineering at the University of Notre Dame. He holds additional graduate degrees in electrical engineering and public health from the University of Virginia and the University of Minnesota, respectively. He has authored or co-authored 30 peer-reviewed publications/presentations in the fields of engineering, developmental flight test, medical imaging and aerospace medicine. In 2011, he led a select team of physicians and physiologists conducting the first-ever in-flight physiologic monitoring of F-22 pilot health during high performance flight as part of a SECAF-directed root cause analysis effort. Currently, he serves as the Chief of Aerospace Medicine flying F-16s with the 132nd Fighter Wing (Iowa Air National Guard).

Nominate a Colleague for an AsMA Award!

The nomination form and rules are on our website at: www.asma.org, under “About AsMA” under Downloadable Materials For more information, you can contact the Chair, at: awards@asma.org

New Members

Abdullah, Ghada, Dr., Dhahrani, Saudi Arabia
Aleardo, Del Torso, Dr. med., Faido, Switzerland
Andrews, Russell J., M.D., Los Gatos, CA
Baidya, Nihanta B., M.D., Columbus, OH
Ballard, Peter K., Lt., USAFR, Washington, DC
Buratynski, Theresa J., Dr., Kailua, HI
Campbell, Jr., Charles W., M.D., Marietta, GA
Cann, Rachel J., Dr., M.B., B.S., Caulfield North, Victoria, Australia
Chumbley, Eric, Maj., USAF, Klamath Falls, OR
Cocco, Daniela, M.D., Scottsdale, AZ
Cook, Tara, Maj., USAF, JBER, AK
Dashevsky, David, B.S., Cleveland, OH
Fu, Zhaqi, Beijing, China
Kanerman, Ian J., M.D., Calala, New South Wales, Australia
Kwon, Young Hwan, M.D., Seoul, South Korea
Lo, Michael C. K., M.D., Lantau, SAR, Hong Kong
Ma, Honglei, Royal Oak, MI
Mathew, Tripathi M., M.D., West Orange, NJ
Miller, Andrew H., Bedford, TX
Petrassi, Frank A., Maj., USA, Enterprise, AL
Pradhan, Gaurav N., Dr., Fountain Hills, AZ
Rouvier, Nicolas, Montebello, CA
Wylie, Robert D. S., SURG CDR, Royal Navy, Helston Cornwall, UK

Senate Passes CAP Congressional Gold Medal Bill

A bill to honor Civil Air Patrol’s (CAP’s) World War II veterans with a Congressional Gold Medal passed the U.S. Senate May 20 under unanimous consent after gaining the necessary co-sponsors needed for consideration.

The bill, S. 309, recognizes the contributions of CAP’s pilots and other members who served during the war. Predicting the U.S. Air Force, CAP’s services included flying combat and humanitarian missions under hazardous conditions. Maj. Gen. Chuck Carr, CAP’s national commander, credited members’ and other supporters’ hard work and expressed his thanks not only to leaders throughout the organization but also to the 82 senators -- 15 more than the minimum required -- who have signed on as co-sponsors for S. 309. Carr reports to the CAP Board of Governors, which consists of 11 members representing the organization, the U.S. Air Force and private industry. An identical bill, H.R. 755, is under consideration in the U.S. House, where it now has 159 co-sponsors. The measure needs a total of 290 to be acted on in the House Financial Services Committee, where it has been assigned. CAP hopes to gain the additional co-sponsors over the next several months.

Civil Air Patrol, the official auxiliary of the U.S. Air Force, is a nonprofit organization with 61,000 members nationwide, operating a fleet of 550 aircraft. Visit www.gocivilairpatrol.com or www.capvolunteer.com for more information. For more information on this story, please see the press release at http://www.capvolunteer.com/todays-features/?senate aproves_cap_congressional_gold_medal_bill&show=news&newsID=16616.