

President's Page

First, let me say that I am honored to serve as president of AsMA, and I hope I can justify the confidence placed in me. The friends I have made and the relationships I have developed within this association have enriched my life immeasurably. I have had the opportunity to exchange ideas and work with colleagues worldwide. I know of no other organization with the spirit and international camaraderie that exists within our association.

Those of you who attended business meeting in New Orleans know that we have ambitious plans for the coming year. Much effort was spent in hearing the voice of members in our survey and listening closely to the messages. I hope that 1 year from now we can look to some accomplishments that will demonstrate responsiveness to member needs. Let me see if I can give a flavor of our future direction.

Extensive discussions have taken place with the Fellows Group and its chair, George Anderson. Ideas discussed included involvement by the Fellows Group in current activities within AsMA, Fellow representation on the Council, liaison between the Fellows Group and the Associate Fellows Group, and critical review of the Fellowship selection process. George Anderson has worked hard and long on these issues. The fabric of our organization can only be strengthened by integrating the Fellows Group with its collective talent and wisdom into association activities and asking their assistance in developing future leadership.

Representation of both the Fellows Group and the Associate Fellows Group was deemed an important step in recognizing the need for involvement of both groups in association governance and leadership.

Inherent in most, if not all volunteer organizations, is what I will call "process problems." The Executive Committee meets twice yearly, as does the Council. Committees generally meet but once a year in conjunction with the annual scientific meeting. We return home from these meetings to busy jobs and personal lives, and well intentioned progress on committee work becomes difficult. Meaningful dialogue leading to important decisions and conclusions is difficult to accomplish by email. These "process problems" hamper the development of resolutions, position papers, association letters, and other instruments by which AsMA expresses its views and positions.

I have asked each committee chair to appoint a deputy chair, as proposed by past president Melchor Antuñano. I have also introduced an Action Item List for Council, Executive Committee, and Committee use. The list contains the action item, responsible entity or person, projected completion date, and current status column. I suggest the list be used at each meeting following reading of the minutes. I hope these measures will be helpful



John D. Hastings, M.D.

in the important work our committees do for AsMA.

Some survey responders perceived AsMA as a "U.S. organization." I feel it is highly important to emphasize and encourage our association's role as an international entity. Our membership and our interests are global, and we should strive to be a vehicle for worldwide fellowship and exchange. We are most happy to welcome the European Society of Aerospace Medicine as an Affiliate organization and are looking forward to working with our colleagues across the sea. The aerospace sciences have proven uniquely capable of transcending the separating influence of political, cultural, and geographical boundaries, and so it should be.

A frequent survey comment relates to a desire for greater presence of clinical material within AsMA. Indeed, the most frequently downloaded journal article is "You're the Flight Surgeon." A significant proportion of our members are involved in clinical aviation medicine.

Clinical aviation medicine physicians are small in number, and many are involved in full-time activities such as regulatory or administrative aspects of aviation medicine or other endeavors. It is difficult to gather good data for an evidence-based approach to regulation, policy development, policy review in light of new developments and technology, regulatory change, and aeromedical disposition in individual cases.

I have formed a six member Clinical Aerospace Medicine Committee composed of one U.S. and five international members. We met in New Orleans and began discussions toward the goal of addressing the clinical needs within AsMA and determining future direction. I look forward to the work of this committee.

So, this is what we are about. In every decision made in the coming year, we must ask if that decision is in the best interest of the member. The best interest of the member must be the association's guiding principal. We will work for that, and I ask each constituent, affiliate, and individual member to join in that effort. Until next month...

Medical News

AVIATION, SPACE, AND ENVIRONMENTAL MEDICINE

Executive Director's Column



Rayman

The Challenge of Policy (and Teddy Roosevelt)

In any moment of decision, the best thing you can do is the right thing, the next best thing is the wrong thing, and the worst thing you can do is nothing.--Teddy Roosevelt

Since 1992 your Association has published 71 position papers, resolutions, and policy letters that have been disseminated to interested agencies worldwide. This averages out to about five such policy documents per year. We can take great pride in this accomplishment, particularly when you look at the breadth of the issues we have addressed. Our very first position paper prepared by Hank Taylor was on Crew Resource Management, a revolutionary concept at the time (1992), that we fully supported and which, today, is conventional practice. From there we went on to a host of other issues including AEDs (automated external defibrillators), EMKs (emergency medical kits), space life sciences, alternative medicine, laser lights, etc. I recommend that you visit our website (www.asma.org) and click on Policy Compendium where you will find all 71 documents, each one individually downloadable. As you go through these documents, you can see we have given support to military aviation, civil aviation, and the space program over the years. I would also take special pride in our willingness to be resilient when there is a need. You may recall that we originally adopted a policy on HIV that was extremely restrictive. But then over the next several years when we had access to more scientific data, we saw that a more liberal policy was in order. Hence, we changed our policy liberalizing it consonant with the new data.

To prepare policy and publish it often takes courage in that many of the issues are surrounded by controversy. This becomes apparent if you peruse the list in our Policy Compendium. And the tide continues as we now face the vexing challenges of optimal cabin air pressure, periodicity, UAV standards, and a host of others. I have always held firmly to the belief that AsMA must be heard. And to do so, we must have an agile system of response.

Although we might take satisfaction in our 71 policy documents, the process at building consensus allowing us to act has

been very difficult, causing unacceptable delays. We must be able to act expeditiously as the media, as well as government agencies, often impose short suspense times. Consequently, our incoming president, Dr. Jack Hastings, plans to address the process we use in determining our policy statements. I'm hopeful that we will have this completed and implemented before the end of the year. Obviously, the more efficient we are, the quicker we can act. And it is vital that we do act untrammelled by unnecessary roadblocks. I hope you agree with Teddy Roosevelt.

This Month in Aerospace Medicine History-- June 2007

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

Seventy-five Years Ago

The importance of nurses in aviation: "The American Nurses Aviation Service Inc. is sponsoring a comparatively new idea, namely the introduction of the trained nurse as a necessary part of aeronautics.

"Flight surgeons' offices. There are at present over 800 physicians engaged in examining pilots for the Department of Commerce. Some of these are doing a large amount of work, some a moderate amount and some only a little. Many of them have nurses in their offices. A nurse can take visual fields with the perimeter, do urinalyses, test visual acuity and test depth perception, as well as assist with women applicants...

"Flight surgeons with air lines. Passenger carrying air lines are gradually taking on flight surgeons to supervise the physical welfare of their pilots and other medical matters pertaining to the line. Here, again we have not only the usual physical examinations for license but monthly checks of personnel. These checks consist in certain eye and nervous system tests and usually the Schneider Test for circulatory efficiency. This latter is a time consuming test and it can be done equally well by a nurse...

"Airports. Large airports are transportation terminals. There are ordinary industrial accidents, such as occur in connection with any mechanical industry. There are occasional airplane crashes with injury to personnel. The types of injuries received in airplane crashes are apt to be of a certain type and need certain special attention. Also there are passengers who may develop minor ailments, including air sickness, who should receive first aid. That all large airports have a fully equipped first aid station with a nurse in charge is most certainly going to be demanded by the public before long.

"Airplane factories. There are large industrial plants where any type of industrial accident may occur, and in the large ones there is definitely a place for a nurse and a first aid station.

"Air line hostesses. Some of the passenger lines now have hostesses as a part of their per-

sonnel. They look after the comfort of passengers and should be able to render first aid in case of illness or accident. One line will take no one but a trained nurse. All hostesses should be trained nurses, and they will be much more efficient if they know something about aviation medicine, such as air sickness, the effects of altitude, wind, cold, speed, disturbances of equilibrium and have some experience in flying before engaging on the first flight as a hostess.

"In the early part of this article the question was raised 'Are there in fact opportunities for nurses in aviation?' It is believed the question has already been answered in the affirmative" (5).

Fifty Years Ago

Hyperventilation and aviation mishaps (USAF School of Aviation Medicine, Randolph AFB, TX): "Hypocapnia resulting from spontaneous or voluntary hyperventilation usually produces a deterioration of psychomotor performance. Such a deterioration may become critical for the accomplishment of complex tasks.

Hyperventilation, therefore, was suspected as a possible factor in modern aviation contributing to incidents or accidents otherwise unexplainable at the time. The only affirmative evidence for such a suspicion seemed to exist in occasional reports by jet pilots who had observed 'high rates of breathing' while in flight. However, before hyperventilation could be classified as a major problem in aviation (like hypoxia), it was necessary to demonstrate by some objective means the existence of true overventilation in flight. If overventilation does exist, the intensity and frequency of occurrence possibly could clarify the importance of this problem...

"By laboratory experimentation it was shown that progressive hypocapnia caused by hyperventilation gradually impairs psychomotor performance. Medical practitioners occasionally observe complete loss of consciousness in patients very susceptible to the hyperventilation syndrome. Fortunately, healthy young persons in good physical condition seem to have a good resistance to even relatively severe degrees of hypocapnia. For these reasons there will continue to be much speculation about the possibility of aircraft incidents or accidents caused by hyperventilation. Further evaluation of more accurate observations of pilots experiencing 'near misses' may furnish more clues in this respect...

"The increasing number of unexplained jet aircraft accidents indicated a need for experimental investigations of possible physiologic factors leading to a pilot's incapacity for safe flying. In addition to hypoxia, hyperventilation was suspected as being a possible cause for a critical deterioration of flying performance. In-flight sampling of expired air during three phases of jet training in the T-33, F-86, and F-100 aircraft verified the existence of in-flight hyperventilation. Incidents of hyperventilation appeared to become more frequent

See HISTORY, p. 638.



Science & Technology Watch

Keeping You Informed Of The Latest Advances In Science And Technology

This month's edition of The Watch reviews the use of head-up tilt as both a clinical tool to treat severe orthostatic intolerance and as a potential low cost tool for aircrew acceleration training.

Head-Up Tilting - New Applications for a Dynamic Cardiovascular Challenge

Narelle M. Berry, Ph.D., Nutritional Physiology Research Centre, School of Health Sciences, University of South Australia, Adelaide, Australia, and David G. Newman, D.A.Med., Ph.D., Aviation Medicine Unit, Monash University, Melbourne, Australia

The tilt table has been used for physiological research since the 1940s. As a research tool, the tilt table is most commonly used to assess cardiovascular and neural responses to postural changes. Head-up tilt (HUT) is a commonly used technique for providing a dynamic orthostatic stimulus to the cardiovascular system, in order to determine its performance and functional integrity. It has been proven to be a useful technique for studying reflex control of the circulation. HUT has been used by several researchers to investigate the cardiovascular responses to postural and orthostatic challenges, and is also used in clinical situations to investigate patients who suffer from unexplained syncope. HUT has also found extensive applications in aerospace medicine research.

The physiological consequences of HUT are due to the imposition of a hydrostatic force on the closed-loop cardiovascular system and the system's responses to that force. The sine of the angle of tilt is directly proportional to the degree of hydrostatic force introduced, and as such determines the magnitude of the cardiovascular response. HUT generally involves tilting the subject (around a central axis usually located near the body's center of mass) to a near upright position, typically 60-80°. A full 90° tilt is used infrequently as this creates a sensation of falling forward in some subjects, which produces an alarm response.

The normal response to HUT is a decrease in cardiac output, stroke volume, pulse pressure and systolic pressure, while heart rate, diastolic pressure and peripheral resistance increase. Mean arterial pressure (MAP) generally remains constant. These changes reflect the application of hydrostatic force and the concomitant activation of cardiovascular compensatory mechanisms. Renal blood flow decreases by as much as 32% with 60° HUT, while 75° HUT leads to a 45% increase in splanchnic vascular

resistance. The physiological effects of HUT are comparable to those seen with upright posture. This is to be expected, given that the causative agent (hydrostatic force) is the same in both cases.

While the angle of tilt and the onset rate can be altered as required, HUT is typically a passive procedure, in that the subject is relaxed and does not use the lower limb muscles to assume the upright position. Passive HUT approximates the effects of exposure to elevated +Gz forces, as the effect of both is due to purely hydrostatic factors rather than actively-mediated postural changes. Since high performance aircraft maneuvers often invoke fast +Gz transitions, the use of rapid-onset HUT can mimic the in-flight stimulus. Passive HUT is a simple, reliable, reproducible stimulus that more closely mirrors the physiological effects of +Gz exposure than lower body negative pressure (LBNP) or abruptly standing from a seated position.

Recently, HUT has been applied to new applications. It has been used as a training tool to acutely improve the responses to orthostasis in a single training session, and has been particularly effective as a neurocardiogenic syncope and severe orthostatic intolerance treatment using single, daily 30-min tilts over a number of months (3). While this is a very useful regimen, there is also the intriguing possibility that HUT training may be used in the aerospace community as an alternative ground-based G-training tool.

Our recent work (1,2) involved subjects who were exposed to 10 +75° HUTs over a time course of 70 min. The results of this study showed that at the baseline position, their MAP had increased by the 10th HUT. The cardiovascular system thus started the 10th HUT in a physiologically different position from that of the 1st tilt. This shift in position is protective, in terms of maintaining MAP after a series of repetitive orthostatic challenges. The dominant underlying feature of this protective adaptation is an increase in vascular resistance. Overall, after 10 HUTs, the cardiovascular system is better able to defend itself against the adverse consequences of rapidly applied hydrostatic force.

Furthermore, this protective increase in MAP subsequently improved the responses to a different orthostatic challenge (the squat-stand test). While this has a number of clinical applications for those who suffer from orthostatic intolerance and autonomic dysfunction, a practical application of the results of these studies is for those who are exposed to extremes in gravitational conditions, such as astronauts and high performance aircraft pilots. These findings open the possibility that tilt training may be useful for improving tolerance to altered gravitational conditions.

It has been demonstrated that the cardiovascular system is adaptable to repeated exposures to high +Gz acceleration (G-training). However, G-training requires access to expensive, highly specialized equipment (a human centrifuge) or regular training flights, which may not be within the economic means of all potential users. Therefore, it would be useful to determine whether a repeated tilting protocol can be used as an inexpensive ground-based tool to improve +Gz tolerance. This would be of great benefit to those who wish to find an inexpensive alternative to high +Gz training. While it may not be truly practical to 'tilt train' pilots prior to flight, it may be a useful tool for astronauts upon returning from

long duration space flight to help counter the effects of cardiovascular deconditioning.

Before we can fully determine the benefits of this repeated tilting protocol, a number of factors need to be considered, such as: How long do the protective benefits of the repeated tilting last? Does the same number of tilts provide benefit at higher levels of +Gz acceleration, or are more tilts required? Will a different onset rate of tilt or different duration in the supine period alter the effects of the repeated tilting? The rate of onset of acceleration may affect the efficacy of the overall training response. The same principles may be applied to acute adaptation in repetitive tilting, where factors such as the speed of transition from supine to upright and back to supine, the length of either the supine period or the tilt period and the angle of tilt may alter the response.

In conclusion, the humble tilt table is now being used for new and interesting applications. The possible benefits of long-term tilt training as an easy, non-pharmacological means of eliminating the debilitating effects of syncope are potentially significant for those who suffer from such orthostatic intolerance. Tilt training may also hold a number of benefits in aerospace medicine as an inexpensive and simple replacement for those without access to centrifuges, although much more research into such applications is required.

REFERENCES

1. Berry NM, Rickards C, Newman DG. Acute cardiovascular adaptation to ten consecutive episodes of head-up tilt. *Aviat Space Environ Med* 2006; 77:494-9.
2. Berry NM, Rickards C, Newman DG. Squat-stand test response following 10 consecutive episodes of head-up tilt. *Aviat Space Environ Med* 2006; 77:1125-30.
3. Ector H, Reybrouck T, Heidbüchel H, et al. Tilt training: a new treatment for recurrent neurocardiogenic syncope and severe orthostatic intolerance. *Pacing Clin Electrophysiol* 1998; 21:193-6.

The AsMA Science and Technology Committee provides the Watch as a forum to introduce and discuss a variety of topics involving all aspects of civil and military aerospace medicine. Please send your submissions and comments via email to: barry.shender@navy.mil. Watch columns are available at www.asma.org in the AsMA News link under Publications.

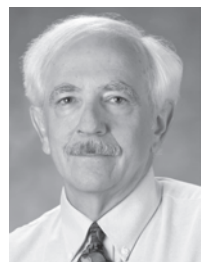
NEW IMPROVED WEB FEATURE: POLICY COMPENDIUM

Some of you may be aware that you can already access AsMA position papers and resolutions online. But we've just made it easier for you! Previously, you had to scroll through an extensive PDF file that contained all papers since 1992. You can now view and print each paper from the table of contents. Just go to our Home Page (www.asma.org) and click "About the AsMA". Then scroll down to "Downloadable Materials". Select "Policy Compendium" and you will have a table of contents from which you can choose the document you wish to view or print.

2007-08 Presidents of Constituent Organizations

Hoffman Chosen to Head AsHFA

Ronald B. Hoffman, Sr. Human Factors Engineer, is the 2007-08 incoming President of the Aerospace Human Factors Association (AsHFA). He graduated from the University of Maryland with a degree in Physics and entered the space program, working on design challenges at Douglas Aircraft in California for the Delta launch vehicle in 1962. In 1964,



he joined NASA at the newly formed Manned Spacecraft Center in Houston and managed the development of the innovative six-degree-of-freedom Apollo Reentry Simulation; a derivative was used for real-time calculations for the actual lunar returns. While developing emergency procedures for de-orbiting the Apollo Command Module, he was attracted to the human interface issues and subsequently entered a graduate program in experimental psychology at the University of Houston. He received a Master of Science in Experimental Psychology in 1971, and a doctorate in Biophysical Sciences with a neuroscience emphasis in 1974.

Subsequently Dr. Hoffman worked in each of the major areas of Space Life Sciences: research, payload development and operations, and space medicine in both federal and contract positions. With MITRE, as lead human factors engineer, he gained experience in a variety of domains: aeronautical, marine, space, highway, and postal service, tackling human-system design issues. He returned to the Houston area as a neurosciences discipline scientist with the Life Sciences Group of Wyle Laboratories in 2004, and recently accepted a position with MEI Technologies in the Usability Test and Analysis Facility at the NASA Johnson Space Center.

Dr. Hoffman's current projects include research in mechanisms of injury, countermeasures for EVA, and the design and usability of hands-free devices for conducting maintenance procedures in space habitats. He is a Fellow of the Aerospace Medical Association, an Associate Fellow of AIAA, an AsHFA Fellow, and is certified as a Human Factors Engineering Professional (CHFEP) in Human Interface Design and Assessment and in Human Factors in Aviation.

Beane to Lead SUSNFS and ASAMS

CAPT Richard A. Beane, MC, USN, is the incoming 2007-08 president of both the Society of U.S. Navy Flight Surgeons and the American Society of Aerospace Medicine Specialists. He currently serves as the Officer in Charge of the Naval Aerospace Medical Institute in Pensacola, FL.

Born in Key West, FL, CAPT Beane entered military service in 1973, serving as a Medical Services Specialist in the U.S. Air Force. Completing his enlistment in 1977, he enrolled in

the State University of New York at Potsdam, receiving his Baccalaureate Degree in 1980. He



received his Doctor of Medicine degree from Upstate Medical Center in 1984, and entered active service in the U.S. Navy as a General Surgery Intern at Naval Hospital Portsmouth. Following Flight Surgeon training at NAMI in 1986, he was assigned to Carrier Air

Wing ONE, Det Cecil Field, and embarked aboard USS America (CV-66), completed deployments to the Mediterranean Sea and Indian Ocean in 1986 and 1989. In 1990, CAPT Beane began training as an Aerospace Medicine specialist, completing a Masters Degree program in Public Health and Tropical Medicine at Tulane University. In 1993, he was assigned as the Senior Medical Officer for USS Independence (CV-62) and Battle Group Five in Yokosuka, Japan, completing two deployments to the Persian Gulf in support of Operation Southern Watch. In 1996, he transferred to Electronic Attack Wing Pacific Fleet in Whidbey Island, assuming duties as the Wing Surgeon. During that tour of duty, he also served as the Department Head for Aviation Medicine and Physical Exams at Naval Hospital Oak Harbor. In October 1999, he was assigned as the Wing Surgeon for Helicopter Anti-Submarine Light Wing Atlantic Fleet and Sea Control Wing Atlantic Fleet in Jacksonville, FL. He served as the Department Head for Aviation Medicine, Occupational Medicine, and Physical Exams at Branch Medical Clinic, Mayport. During that tour, he also served as the Senior Regional Flight Surgeon for the Southeast region. From July 2002 to July 2005, he served as the Wing Surgeon for 1st Marine Aircraft Wing in Okinawa, Japan.

CAPT Beane is board certified in Aerospace Medicine. He is an Associate Fellow of the Aerospace Medical Association. His personal awards include the Legion of Merit, Meritorious Service Medal (3 awards), and Navy Marine Corps Commendation Medal.

Robb to Lead Air Force Flight Surgeons

The incoming 2007-08 President of the Society of U.S. Air Force Flight Surgeons is Colonel Douglas J.



Robb. He is the Command Surgeon, U.S. Central Command, MacDill AFB, FL. He is responsible for all joint and coalition health service support activities in the USCENTCOM Theater of Operations, consisting of 27 nations on the Arabian Peninsula, the Horn of Africa, the Northern Red Sea, and Central Asia.

A native of Missouri, Col. Robb received his Bachelor of Science degree in biological sci-

ences, U.S. Air Force Academy, CO, his Medical Degree from the Chicago College of Osteopathic Medicine, IL, and his Masters in Public Health in Occupational Medicine from the Harvard School of Public Health. He completed Residency Training and Board Certification in Aerospace Medicine and Occupational Medicine at the U.S. Air Force School of Aerospace Medicine, Brooks City-Base, TX. He has spent 20 years in the practice of Aerospace Medicine in support of the Air Force, Joint, and Coalition aviation forces. Clinically he has held the positions of Chief of Flight Medicine, Aerospace Medicine Squadron Commander, and Hospital Commander. Additionally he has held staff positions as the Chief Flight Surgeon for U.S. Air Forces in Europe and currently as the Command Surgeon U.S. Central Command.

Col. Robb is a Chief Flight Surgeon with more than 1500 flying hours and has maintained additional crewmember status in the A-7, OV-10, F-16, C-9, T-43, C-130, and KC-135 aircraft. He is a member and Fellow of the Aerospace Medical Association. His awards include the Air Force Achievement Medal, the Joint Service Commendation Medal, the Air Force Commendation Medal with two oak leaf clusters and V device, the Meritorious Service Medal with three oak leaf clusters, and the Legion of Merit. He is board-certified in aerospace and occupational medicine.

Forster to Lead LSBEB

Estrella M. Forster, Ph.D., is the incoming 2007-08 President of the Life Sciences and Biomedical



Engineering Branch of the Aerospace Medical Association (AsMA). She graduated from the University of Houston, TX, with a B.S. and from Drexel University, Philadelphia, PA, with an M.S. and a Ph.D.

Her professional career has included serving at the USAF School of Aerospace Medicine, Brooks City-Base in Texas; USN NAVAIR in Pennsylvania and Maryland; and as USN Commander Third Fleet in California from 1984-2004. She also served as adjunct professor of statistics at the graduate departments of Drexel University and the Florida Institute of Technology from 1994-2002. She joined the FAA Civil Aerospace Medical Institute (CAMI) Aerospace Medical Research Division in Oklahoma City, OK, in November 2004.

Dr. Forster's experience encompasses 23 years of research, development, test, and evaluation efforts. Her technical and program management accomplishments have focused on aircrew systems, specifically life support equipment addressing acceleration, altitude, and thermal and chemical-biological environments. Her work is described in over 100 publications. She introduced and delivered USN Aircrew Integrated Life Support Systems for high performance rotor and fixed-winged aircraft. She also conceived, developed, and delivered the Collaborative

See FORSTER, p. 637.

FORSTER, from p. 636.

Operations and Responsive Technology Experimentation (CORTEX) facility, Third Fleet's Command Center.

Dr. Forster has been a member of AsMA since 1985 and currently serves on its Science & Technology and Scientific Program Committees. She is an AsMA Fellow, a NAVAIR Fellow, a National Research Council Adviser, and has served on the Naval Postgraduate School MOVES Institute Science Board. She is also a member of the IberoAmerican Association of Aerospace Medicine and the Life Sciences and Biomedical Engineering Branch (LSBEB) executive boards. Her most recent honors are the Naval Collaboration Award, granted by the Chief of Naval Research, the Outstanding Leadership Award, granted by the FAA's Federal Air Surgeon, and the A. Howard Hasbrook Award granted by the LSBEB.

Wheeler Is Incoming AsPS President

CDR Marva "Lynn" Wheeler, MSC, USN, CAsP, is the 2007-08 President of the Aerospace Physiology Society. She is currently the Deputy Director, Naval Survival Training Institute, Pensacola, FL. She received her Bachelor of Science degree in Secondary Education from Baylor University in 1978 and her Master of Science degree in Exercise



Physiology from the University of Oklahoma in 1984. She was commissioned a Lieutenant (junior grade) in July 1989 and designated a Naval Aerospace Physiologist in April 1990.

From April 1990 to 1993, she served as the Division Officer, Aviation Physiology Training Unit, Naval Hospital, MCAS Cherry Point. In July 1993, she reported to Marine Aircraft Group 36, Okinawa, Japan, as their first Aeromedical Safety Officer. While serving in Okinawa, she organized the first Night Imaging and Threat Laboratory in the Western Pacific. In 1995, she was selected as the recipient of the Sonny Carter Memorial Award from the Society of U.S. Naval Flight Surgeons, Aerospace Medical Association, for her contributions in operational aerospace medicine.

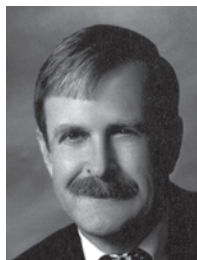
In September 1995, she reported to Marine Aircraft Group 11, MCAS Miramar, as the Group Aeromedical Safety Officer. During her tour, she was recognized for outstanding operational performance as the 1996 Navy Aerospace Physiologist of the Year. She was subsequently transferred to the Third Marine Aircraft Wing as Aeromedical Safety Officer, MCAS Miramar, CA, and then in 2001, sent to Navy Personnel Command, Millington, TN, as the Medical Service Corps Detailer until 2003. Upon completion of Air Command and Staff College in Montgomery, AL, in 2004, she was transferred to her current assignment.

CDR Wheeler is an active member of the Aerospace Physiology Society of the Aerospace Medical Association. She attained board certification in Aerospace Physiology in 1996, is past chair of the Aerospace Physiology Society Awards Committee, and is currently a

member at large on the Society's Board of Directors. She is this year's chair for the Society's Social Events Committee for AsMA 2006 in Orlando. She is an Associate Fellow of AsMA and serves on the Registration Committee.

Campbell Is Incoming Space Medicine Association President

Mark Campbell, M.D., is the newly elected President of the Space Medicine Association for 2007-08. He is a board certified general surgeon, a member of the Texas Surgical Society, and a Fellow of the American College of Surgery. He received a B.S. in Pre-Medical Biology at The University of Texas at Arlington in 1976 and received his M.D. from the University of Texas Medical School at Houston in 1979. He finished his surgical residency at St. Joseph's Hospital in Houston in 1984. He has been practicing general surgery for 23 years and is currently in private practice in Paris, TX.



Dr. Campbell has been a private pilot since 1984 (single and multi-engine ratings) and received his Air Force Flight Surgery wings in 1994. He began performing parabolic flight research with NASA Medical Operations at the Johnson Space Center in 1991 and was a NASA Flight Surgeon at the Johnson Space Center from 1994 to 1996, and was deployed to Star City, Russia, to support the Shuttle-Mir program.

Dr. Campbell has been a member of the Space Medicine Branch and the Aerospace Medical Association (AsMA) since 1989. He has authored or co-authored 25 published papers concerning surgical care during space-flight and surgical techniques in weightlessness. Of those articles, 10 were published in Aviation, Space, and Environmental Medicine. He was also the author for the surgical section of "Medical Guidelines for Air Travel" published by the Aerospace Medical Association. He is an Associate Fellow in AsMA and serves on several committees.

Belland Incoming President for IAMFSP

CDR Kris M. Belland, MC, USN, is the incoming 2007-08 President of the International Association of Military Flight Surgeon Pilots. He is a 1984 graduate of the U.S. Naval Academy. After graduating from Philadelphia College of Osteopathic Medicine on a 4-yr Navy Health Professions Scholarship in 1989, he completed a general surgery internship at Oakland Naval



Hospital. He then attended training at the Naval Aerospace Medical Institute in Pensacola, FL, where he was designated a Naval Flight Surgeon. This was followed by

two combat tours aboard the Aircraft Carriers USS Midway (CV-41), USS Independence (CV-62), and USS Carl Vinson (CVN-70) during Operation Southern Watch as the Flight Surgeon for Carrier Air Wings Five and Fourteen, respectively. During this time, he earned his Surface Warfare Medical Department Officer designation. He earned his Naval Aviator designation in 1997. He has accrued over 1200 hours of flight time in various aircraft including the F/A-18, F-14, EA-6B, and S-3 with over 112 arrested landings aboard aircraft carriers and 25 combat missions over Iraq. The Society of U. S. Naval Flight Surgeons has bestowed upon him both the Richard Leuhrs Flight Surgeon of the Year Award for the U.S. Navy and Marine Corps in 1994 and the Sonny Carter Memorial Award in 2000.

From 1997 to 2001, CDR Belland was the Senior Dual-Designated Flight Surgeon at Naval Strike and Air Warfare Center (NSAWC) and Navy Fighter Weapons School (TOPGUN) in Fallon, NV. There he was a co-investigator for USN/USAF photorefractive keratectomy (PRK) studies and groundbreaking classified battlefield laser experiments. He is a Navy subject matter expert in directed energy weapons (battlefield lasers), human performance maintenance during sustained/continuous operations, and human factors as they relate to mishap avoidance.

CDR Belland was the first Navy physician selected to attend the USAF Air War College, a senior service school at Maxwell AFB in Montgomery, AL, where he earned a Masters of Strategic Studies degree. During Air War College, he was awarded the USAF Historical Foundation's Research and Writing Award for the best aerospace report of major historical significance to the U.S. Air Force during the year 2001 for his paper entitled "Aircrew Performance Cutting-Edge Tech." CDR Belland then served aboard the USS Kitty Hawk as the Senior Medical Officer/Department Head and Battle Forces Seventh Fleet Surgeon, deploying in support of Operation Iraqi Freedom. In 2004, as Third Fleet Surgeon, he was medically responsible for over 45,000 sailors and marines, served as JTF/JFMCC Surgeon in HLS/D Roles, as well as managed the Biological Combat Assessment System (BCAS), a PACOM managed, DTRA sponsored, 80-million dollar, 4-year ATD. He then became Director for Health Services at Naval Hospital Charleston.

CDR Belland has been awarded the Meritorious Service (three awards), Strike Flight Air, Navy Commendation (two awards), and Navy Achievement (two awards) Medals. He is board certified in Family Practice and is board eligible in Aerospace Medicine. He has earned his Master of Business Administration degree from Western Governors University. He is a Fellow of the Aerospace Medical Association and serves on several of the Association's committees.

Dibiase Is New ANS President

Cathy Dibiase, RN, BSN, is the incoming 2007-08 President of the Aerospace Nursing Society. She is an aerospace nurse with Medical Operations, The Bionetics Corp, Kennedy Space Center, FL, where she has supported over 50 Shuttle missions. She earned a

See DIBIASE p. 638.

DIBIASE, from p. 637.

B.S. in Nursing from Bethune-Cookman University in Daytona Beach, FL, in 1983. In that same year, she accepted a position as a Staff Nurse in Orthopedics, then later Trauma/SICU, at Halifax Regional Medical Center in Daytona Beach. In 1985, she became Staff Nurse in Orthopedics, then Telemetry, at Boca Raton Community Hospital. From 1987 to 1989, she served as Staff Nurse, ICU, and Relief Charge Nurse at Jess Parrish Memorial Hospital in Titusville. In 1989, she returned to Daytona Beach, where she served as Staff Nurse, Telemetry/ICU, at Humana Hospital until 1990. In both 1989 and 1990, she was a Critical Care Nurse, CCU, at Delray Community Hospital in Delray Beach.

Ms. Dibiase accepted a position as a Nurse Case Manager/Home Health Nurse and IV Instructor at Paragon Home Healthcare in Daytona Beach in 1991. Later in 1991, she became a Critical Care Clinician, CCU/ISCU/MICU, and student preceptor at Bethesda Memorial Hospital in Boynton Beach, where she stayed until 1994, when she accepted her present position. She is a licensed RN in the state of Florida and holds accreditation/licenses in Basic Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, and has taken the Trauma Nursing Core Course.

Ms. Dibiase has over 35 presentations/publications to her name. She is a member and Associate Fellow of the Aerospace Medical Association, and an Honorary Member of the Society of NASA Flight Surgeons. She is involved in many committees and teams, including the LSSC Safety and VPP Committee; as a Space Life Sciences Training Program assistant and Med Ops project coordinator; the JCAHO Visit Planning Team; the Telemedicine Demonstration Team; and the Helicopter Thomas Kit development and review team. Her awards and honors include the Acme Award, LSSC, KSC; the Kudos Award, LSSC, KSC; the Leukemia Society Volunteer Service Award; the American Red Cross Appreciation award; multiple recognitions from Medical Education participants and various other groups; and the Space Flight Awareness Honoree Award.

Campbell Continues as Army Aviation Medicine Association President

COL John Campbell is starting the second year of a 2-year term (2006-08) as the President of the U.S. Army Aviation Medicine Association (see *Aviat Space Environ Med* 2006; 77:669). He is currently an Associate Fellow of the Aerospace Medical Association and serves as Command Surgeon at the U.S. Army Combat Readiness Center in Fort Rucker, AL.



HISTORY, from p. 634.

with the increase in high performance capabilities of the aircraft flown" (1).

Burdensome pressure suits (RAF Institute of Aviation Medicine, Farnborough, Hants, England): "Despite the recent advances in the field of pressure suit development no suit exists which, while giving adequate protection against the effects of exposure to low barometric pressure, does not seriously interfere with the functional efficiency of the wearer. Thus in high altitude military aircraft the cabin is generally pressurized, and pressure suits, if worn at all, are used for emergency purposes only. It is possible to envisage two different sets of conditions under which a pressure suit may be employed in the event of failure of the pressure cabin. The suit may be employed to give short term protection to the wearer, in order that he may descend to an altitude where protection is not required, either in his aircraft or following escape from it. Alternatively, the suit may be used to give protection for a long period to enable the airman to remain within his aircraft at a high altitude when the pressure cabin has failed..."

"Equipment which will maintain an absolute pressure in the lungs of 141 mm. Hg. In the event of exposure of aircrew to altitudes above 40,000 ft. will afford short term protection against those altitudes and enable emergency descent to be made. A compromise is dictated between the physiologic ideal of full body pressurization and the operational ideal of the fully efficient man. The degree of regional counterpressure required is dependent upon the magnitude of the pressure necessary to maintain an intrapulmonary pressure of 141 mm. Hg. And the length of time for which it is operative" (4).

The physician's role in human factors and ethics: "Two points which have been the subject of a difference of opinions in some circles should be raised. The first questions the logical basis for vesting in a physician the responsibility for the coordination and integration of a human factors group. It is suggested, however, that the medical officers' broad spectrum of training in the biological sciences especially equips him to appreciate the unique contribution which each of these sciences can offer. Furthermore, part of the training of a physician in the specialty of aviation medicine is intended specifically to acquaint him with the technological sciences and to appreciate the viewpoint of the engineer.

"The second point is one of ethics. One observes that the medical officer specializing in aviation medicine is directing energy to the development of an air weapon and the exploitation of man as a member of the aircrew. In this sense the medical officer comes closer to being an actual combatant than if he were to confine himself to the treatment of the sick and injured in the hospital. In fact, however, the aeromedical officer is practicing occupational or preventive medicine in a highly specialized environment. His efforts are intended to prevent injury to and loss of life of his compatriots by making the weapon-vehicle safe and striving to insure its operational superiority" (2).

Twenty-five Years Ago

Hepatitis B among commercial airline personnel (Swissair Medical Service, and University Hospital, Zurich, Switzerland): "Sera of 1126 flying personnel of an airline were tested for signs of ongoing or past infections with hep-

atitis B virus (HBV) or with hepatitis A virus (HAV). The prevalence of anti-HA antibodies was similar in all professional categories of flying personnel and the same or slightly lower than in Swiss blood donors. The frequency of immune markers identifying HBV immunity was similar in pilots, flight-engineers, and female flight attendants compared to Swiss blood donors. However, HBV immunity was clearly more prevalent in male flight attendants. Within 1 year, 13 of 2624 flying personnel had acute hepatitis. This higher-than-average incidence of hepatitis amongst flying personnel compared to the Swiss population was mainly due to a high incidence of hepatitis B amongst male flight attendants. Their special lifestyles might be responsible for the high prevalence of HBV immunity and for the high incidence of hepatitis B" (3).

REFERENCES

1. Balke B, Wells JG, Clark RT Jr. In-flight hyperventilation during jet pilot training. *J Aviat Med*, 1957; 28(3):241-8.
2. Coons DO. Human factors approach to the development of an air-weapons system. *Can Services Med J* 1957 (Jun).
3. Holdener F, Grob PJ, Joller-Jemelka HI. Hepatitis virus infection in flying airline personnel. *Aviat Space Environ Med* 1982; 53(6):587-590.
4. Roxburgh HL, Ernesting J. The physiology of pressure suits. *J Aviat Med* 1957; 28(3):260-71.
5. The nurse in aviation. *J Aviat Med* 1932; 3(2):116-8.

Articles of Aeromedical Interest

Here is the latest listing of journal articles published in other journals that may be of interest:

1. Cocks R, Liew M. Commercial aviation in-flight emergencies and the physician. *Emergency Medicine Australasia* 2007; 19:1-8.
2. Darby R. Is there a doctor aboard? *Aerospace Safety World* 2007; March:50-2.

MEETINGS CALENDAR 2007

June 26-27, 2007, London, UK. The Future for Helicopters in UK Public Service. Info: Marta Collins, Conference and Events Organiser, Royal Aeronautical Society, No. 4 Hamilton Place, London W1J 7BQ, UK; marta.collins@raes.org.uk; +44 (0)20 7670 4342.

October 29-31, Grand Sierra Resort & Casino Hotel, Reno, NV. SAFE Association 45th Annual Symposium. For more info, call (541) 895-3012, Fax (541) 895-3014, e-mail safe@peak.org, or visit www.safeassociation.org.

November 1-2, 2007, Holiday Inn Regents Park, London, UK. Second Annual Aviation Health Conference. For more information, visit www.quaynote.com. For sponsorship or speaking opportunities, contact lorna@quaynote.com or phone 44-20-8531-6464.

Postponed until 2008. Human Performance, Situation Awareness, and Automation (HPSAA III) Technology Conference. Info: Mustapha Mouloua, Conference Chair, 407-823-2910, mouloua@pegasus.cc.ucf.edu, <http://faculty.erau.edu/hpsaa/>.

Meet the new President-- Susi Bellenkes

May, 1993 – Can it really be 14 years since I accompanied my husband Andy to my first AsMA Annual Scientific meeting? Our son Christoph and I had moved to the United States from Austria only 2 years earlier, and our lives were now filled with the unknowns – a new culture, a new language, and all of the uncertainties that go with leaving one's homeland, now so very far away.

The first challenge was becoming accustomed to the American Military lifestyle. This sense of mobility, of having to remain ready for change at a moment's notice was so new and somewhat disconcerting for us Europeans. Still, this was going to be a marvelous adventure, and I was eager to commence this exciting new chapter in my life.

So it was off to Toronto, for my first AsMA meeting – a beautiful city, a center of culture, history and museums. I looked forward so much to exploring it with Andy. Little did I know that nothing of the sort was to occur.

From the moment that Andy registered, I knew that he would be extremely busy during that week. Well, I thought, until Andy could break away, I'll go and explore on my own, much as I would when visiting European cities.

What's this? Andy had taken me by the hand and we walked from AsMA Registration to another room, wherein there were three desks, each manned by several smiling ladies.

"Susi," said Andy, "This is the Wing of our organization, and you might consider becoming involved with this group. Sadly, I can see already that I will not have very much time to do any sightseeing with you, and I know that they arrange for tours at our meetings."

"I am not a groupie!" I said most indignantly, wounded by shattered dreams of romantic walks, sipping a glass of something at a local café, and sharing lovely moments in this new city, "and I definitely do not want to join any club. I'd rather not walk around in a group with people I don't know."

I fear that my words were less than charitable, and that I had made my point a bit too emphatically. In reality, I was covering up my nervousness at being a stranger in a still very new, and to me, strange land.

As we approached the desks, we were greeted by a very friendly young woman. Her informal description of the group's activities in Toronto immediately put me at ease – so much so that I found myself filling out a Wing membership form and handing her a check.

Here I was, a very shy (yes, believe it or not!), Tyrolean girl, my English still poor and absolutely not used to being thrust into conversation with people with whom I had not been previously formally introduced.

However, it took but a minute for all of this upbringing to be set aside as one of the Wing ladies kindly invited me into the hospitality room, offered me coffee and cake, and started to talk with me. She seemed so genuinely interested in me, where I came from, my Austrian family, and why I lived in the United



NEW PRESIDENT--Susi Bellenkes and husband Andy at Honors Night 2006

States. Her care and concern made me feel really welcome. Still others joined in our conversation, and in no time there was a discussion going on about Austria, the USA, cultures, and much more.

"Well", I thought, "These people seem quite nice indeed. I think I might enjoy spending a day or two with them."

The next day we departed on a tour to the majestic Niagara Falls. The Wing member sitting next to me on the bus was so charming, and I enjoyed the ride to the Falls very much. Indeed, with each subsequent Wing event, I found myself making acquaintances. By the end of the week, my nervousness had disappeared, to be replaced by a feeling of being part of something quite wonderful.

It was not long thereafter that President Ludy Rayman invited me to become the Chair of one of the Wing committees. I was honored and felt very flattered that my new friends would so quickly entrust me with such responsibilities. Thus began my very close and active relationship with the Wing.

As Andy and I attended AsMA meetings over the years, I found myself becoming more involved in Wing activities. These included Luncheon Chair, International Chair, Hospitality, Secretary, and Advanced Registration. In all these capacities, I learned something new, my computer skills by necessity improved. I was delighted to find that some of these assignments allowed me to use my talents as an artist.

Today, as an Austrian citizen married to an American Naval officer, I find myself living my life in two worlds, here in America and in Europe. We have a lovely home in Colorado Springs where Andy is a Navy exchange officer on the military faculty of the U.S. Air Force Academy. Still, with our children, grandson, friends and family thousands of miles across the Atlantic, our hearts are always drawn to our other home. Thus, I usually spend about 4 months each summer in Austria, seeing loved ones and restoring our beautiful old family home. It is hard work, but a labor of love as Andy and I will be retiring to this house in but a couple of years.

With our journeys to Austria, our ability to take vacations in the U.S. is limited. However, being a member of the Wing has allowed me to see some of the most wonderful cities and interesting sights of this beautiful country. I do

not know many of my fellow Europeans who can boast of having seen the Steamboat Arabia Museum in Kansas City, the salmon bedecked Seattle Fish Market, the Mount Steven's Club in Montreal, the glaciers and fjords of Alaska, the glitz and felt-covered walls of the one-armed bandit paradise of Reno, the San Antonio River Walk and the historic Alamo, Lake Tahoe in all its tranquil splendor, or the foreboding yet magnificent wilderness of the Florida Everglades!

And to think that but a few years ago I was loathe to consider joining this "club"! Well, tis no club, but a vital, dynamic group of dedicated friends representing many lands and cultures. Today, I look forward to exploring new cities, catching up on the latest news, renewing old friendships and making new ones. I pre-register for each meeting as early as possible to ensure my place on the tours, the luncheon and the reception.

So, having recounted all the wonderful things the Wing has given me, I ask myself yet again about how I can contribute to the organization in return. It is thus with the greatest humility and excitement that I greet the opportunity to serve you as your President. Allow me a moment to share with you some of my thoughts about the coming year.

As President, I want to concentrate on strengthening our membership, to continue to welcome new friends from all over the globe, especially from those countries currently under-represented in our organization.

I am very excited about our 2008 meeting which will be held in one of America's first great cities, Boston. This historic and colorful center of New England life will provide a fascinating backdrop for our Wing activities.

I will encourage our members to keep in contact throughout the year and most importantly, to become actively engaged in our organization. It was the invitation to such involvement that drew me closer into this marvelous group many years ago, and it is something I would likewise wish to extend to each and every member, new and old.

Finally, I look forward to helping maintain the close gregarious informality that is so characteristic of the Wing. It is the glue that binds us in friendship and allows us to remain so welcoming, even to this shy Tyrolean mountain girl who has, in the end, found that she loves to be a member of this group that has become so much a part of her family.

Join the Wing!

The Wing of the Aerospace Medical Association was formed in 1952 "to support the specialty of aviation, aerospace, and environmental medicine by facilitating cooperation among its practitioners and by increasing public understanding and appreciation of its importance." Dues are \$20 per year. For more information, contact: Judy Waring, 4127 Kenyon St., Seattle, WA 98136; (206) 933-0884; e-mail: judywaring@comcast.net

NEWS OF CORPORATE MEMBERS

AsMA Gains Two New Corporates

Eagle Applied Sciences, LLC, recently became a new Corporate Member of the Aerospace Medical Association. Eagle is an 8(a) Alaska native corporation that specializes in public health and epidemiology, medical and applied sciences, medical informatics, and biomedical research and development. They are a subsidiary of Bristol Bay Native Corporation and hold DoD contracts at Brooks City-Base, TX.

Andrews Space, Inc., is the newest Corporate Member. The company was founded in 1999 to act as a catalyst in the development, exploration, and commercialization of space. They develop space technologies, integrate aerospace systems, and are built around systems engineering and integration-focused design teams. They have provided solutions for government and commercial customers in space transportation systems, technologies, and components. Andrews Space is headquartered in Seattle, WA.

ETC Announces Olsen, Ansari to Participate in Inaugural Training

Environmental Tectonics Corporation (ETC) recently announced that the third private space explorer, Greg Olsen, and the world's first private female space explorer, Anousheh Ansari, have agreed to participate in the inaugural Space Launch Training program of the National Aerospace Training and Research (NASTAR) Center in Southampton, PA. Scheduled for Oct. 2nd through the 4th, the Center's first training program will commence operations to train both passengers and pilots for spaceflight.

The NASTAR Center's new training programs include space launch simulations with realistic G forces, real-world visuals, and authentic cockpit or cabin modeling. In addition to serving space launch customers, NASTAR Center will offer tactical flight training for military pilots, both U.S. and international; civilian pilot training in situational awareness and upset recovery; support to researchers in gravitational physiology, human factors, equipment validation, and other applications requiring a high-G environment; and "serious entertainment."

Greg Olsen was the third private citizen to orbit the Earth on the International Space Station (ISS). After training for five months (900 hours) at the Yuri Gagarin Cosmonaut Training Center in Moscow, he launched on a Russian Soyuz rocket TMA-7 on October 1, 2005, with Cosmonaut Valeri Tokarev and Astronaut Bill McArthur (Expedition 12). He then docked at the ISS on October 3, and returned to Earth on Soyuz TMA-6 on October 11 with Cosmonaut Sergei Krikalev and Astronaut John Phillips (Expedition 11). He performed more than 150 orbits of the Earth and logged almost 4 million miles of weightless travel during his 10 days in space.

On Sept. 18, 2006, Anousheh Ansari blasted off from Kazakhstan onboard a Russian Soyuz capsule to become the first astronaut of Iranian

descent, the first private female space explorer, and the fourth person to buy a ticket to space from Space Adventures. After 2 days orbiting the Earth, Ansari and her fellow crewmembers docked with the ISS. She spent the next 8 days onboard as an active member of the crew.

An active proponent of world-changing technologies, Ansari has been immersed in the space industry for years. She rallied her family to provide the title sponsorship for the Ansari X PRIZE. This \$10 million prize became the catalyst for a new era in private space travel. The prize was awarded to Burt Rutan in 2004 for the first non-governmental launch of a reusable manned spacecraft into space.

Mayo Clinic Finds New Approach to Immunosuppression

A new immunosuppression regimen for heart transplant patients can improve kidney function and prevent transplant coronary artery disease, according to two new Mayo Clinic studies reported in April at The International Society for Heart & Lung Transplantation Annual Meeting and Scientific Session in San Francisco.

Heart transplant patients are required to take daily immunosuppressive medication to prevent their body from rejecting the transplanted organ. Standard practice has been to treat patients primarily with calcineurin inhibitors. However, calcineurin inhibitors are a major cause of kidney dysfunction and do not prevent transplant coronary artery disease.

A team of Mayo Clinic researchers collaborated to study alternative options for immunosuppression using sirolimus, an anti-proliferative immunosuppression drug with potent anti-rejection properties. One study involving 78 heart transplant patients over 4 years found that gradually transitioning stable patients from calcineurin inhibitors to sirolimus showed consistent improvement of kidney function. There was no increase in rejection of the transplanted heart and no difference in heart function. A second study found gradual transition to sirolimus in 29 patients also greatly impaired the development of the proliferative changes found in transplant coronary artery disease.

Wyle's New Office Surpasses Growth Expectations

Wyle Laboratories Inc.'s Dallas, TX, office has surpassed initial business and staff growth projections less than a year after it was opened. The office provides engineering, test and evaluation services to the Department of Defense. Staff members include operational, instructor, and test pilots, aircrew, and flight test engineers. They are attached to the flight operations team, one of the world's largest independent flight test organizations.

One of 30-plus Wyle primary offices nationwide, the Dallas facility is the company's third in Texas. Wyle's Life Sciences Group provides life sciences and astronaut health sciences support to NASA in Houston and crew training and medical research services in San Antonio.

ALPA Holds First Pilot Assistance Forum

Nearly 300 pilots gathered in Denver last week to learn what it takes to help their fellow pilots in need during ALPA's first Pilot Assistance Forum, a measure of ALPA's efforts to explore, educate, and advocate pilot assistance. It represented the hard work of pilot assistance volunteers, the insight of medical professionals and the international pilot assistance community, the unique perspective of aviators dedicated to pilot assistance, and ALPA staff. Pilot volunteers representing 25 ALPA carriers, as well as representatives of more than 10 non-ALPA airlines and other unions, international representatives, and airline management were in the audience.

The 3-day forum was held in April and provided an impressive list of speakers who represented all aspects of pilot assistance. Notable speakers included FAA Federal Air Surgeon Dr. Frederick Tilton; NTSB Vice-Chairman Robert L. Sumwalt, III; Dr. Don Hudson, ALPA Aeromedical Office; and Dr. Gerhard Fahrenbrück, CISM-Clinical Director and ICISF Instructor, Stiftung Mayday.

Sanofi-Aventis' Acomplia® Is Approved in Brazil

Sanofi-Aventis announced that the Anvisa, the Brazilian Health Authority, has granted marketing authorization for Acomplia® (rimonabant) as an adjunct to diet and exercise for the treatment of obese patients or overweight patients with associated risk factors, such as type 2 diabetes or dyslipidemia.

Acomplia® is the first member of a new therapeutic class, the CB1 receptor antagonists. The marketing authorization is based on a thorough analysis of the extensive safety and efficacy results and the assessment of the pivotal clinical trial program. The results showed that Acomplia® at 20 mg per day (1 tablet) significantly reduced weight, waist circumference, HBA1c, triglycerides, while at the same time significantly improved the patients' HDL.

Baxter Presents Phase I Inhaled Insulin Study Results

Baxter Healthcare Corporation recently announced results of a Phase I study that evaluated pulmonary insulin administered using a small, standard dry powder inhaler. Baxter presented the Phase I data at the Respiratory Drug Delivery Europe 2007 Conference in Paris.

The study demonstrated that the insulin powder could be effectively administered to the deep lung using an off-the-shelf dry powder inhaler designed for upper airway drug delivery. A total of 30 subjects participated in the randomized, two-way crossover study conducted in Germany. Each subject received in randomized fashion a single dose of 10 International Units of insulin through subcutaneous injection (SC) in one period, and 6.5 mg of the inhaled insulin microspheres in the other period.

NEWS OF MEMBERS

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Focus on Members

Montaser Fayek El-khaldy

A native of Seychelles, Montaser Fayek El-khaldy, M.B.B.S., Dip.SMS, SF, earned his M.B.B.S. at J.S.S. Medical College and Hospital, Mysore University, India, in 1998. He served a 1-year Rotatory Housemanship at J.S.S. Hospital, then became Medical Officer in the Department of Obstetrics & Gynecology at Victoria Hospital in Mahé, Seychelles, in 1999. That same year, he transferred to the Department of Pediatrics. In 2000, he transferred to the Department of Casualty & Emergency, then back to Pediatrics. In 2001, he was promoted to Senior Medical Officer in the Pediatrics department and later transferred to the Primary Health Care Division at Glacis Clinic in Mahé. In 2002, he came back to Victoria Hospital and in 2003 became the Attending Daily GP at the Pediatric Clinic at Unicare Medical Centre in Dubai, U.A.E.

Dr. El-khaldy earned a diploma in Safety Management at the IATA Training & Development Institute in Montreal, Canada, in 2006. He is currently working on a diploma in Aviation Studies, also from the IATA Training & Development Institute. He is a member of the Seychelles Medical & Dental Association and the Flight Safety Foundation. Association. He has completed various courses with distinction including Management of Airside Safety, Airline Ground Operations Safety Audit, Airside Safety Awareness, and Safety Management Systems for Airlines.

Richard A. Scheuring

Richard A. Scheuring, D.O., M.S., FAAFP, MAJ, MC, FS, USAR, was recently selected as a NASA Medical Officer and is currently serving as the lead surgeon for the Constellation Program and Exploration Medical Capabilities. He will be assuming the role of lead for

the ISS Human Medical Systems.

Born in Illinois, Dr. Scheuring earned a B.A. in Psychology from Eastern Illinois University in 1987. He graduated from the Chicago College of Osteopathic Medicine in 1993. He served an internship at Presbyterian/St. Luke's Medical Center in Denver, CO. He finished a Family Practice residency there in 1996, and then served the Illinois Department of Public Health in Galena, IL, in family practice, sports medicine, and as an FAA Aviation Medical Examiner until 2002. He returned to residency training in aerospace medicine at Wright State, which he completed in 2004. During this time, he entered the U.S. Army Reserves and later entered U.S. Army Flight Surgeon training in 2003. He was then assigned to the U.S. Army Aeromedical Research Laboratory at Fort Rucker, AL. He earned his M.S. in aerospace medicine from Wright State in 2005.

Dr. Scheuring joined the University of Texas Medical Branch/Wyle Laboratories in Houston and also trained for the ISS Surgeon Console in the MCC. In 2006, he was project manager for the Apollo Medical Operations project and was also co-investigator for the first Lunar Medical Contingency simulation at the Haughton-Mars crater at Devon Island in the Canadian High Arctic, Territory of Nunavut.

Dr. Scheuring is a Fellow of AsMA, a member of the Space Medicine Association, the Society of NASA Flight Surgeons, and the United Martial Arts Society, and a member and Fellow of the American Academy of Family Physicians. His awards and decorations include the Army Achievement Medal (2), the Armed Forces Reserve Medal with M device, the Global War on Terrorism Service Medal, the Army Reserve Components Achievement Medal, the Army Flight Surgeon Badge, the National Defense Service Medal, and the Army Service Ribbon.

Col. Joseph B. Anderson, USAF, MC, FS, formerly the Chief of Physical Standards, Policy Development, at Bolling AFB, DC, is now the Commander of the 30th Medical Group at Vandenberg AFB, CA.

Fanancy L. Anzalone, M.D., M.P.H., CPE, FASMA, was recently designated a Certified Physician Executive by the Certifying Commission in Medical Management for educational achievements, demonstrated stature as a physician, and experience in medical management. He is the Medical Director for American Airlines, Miami area, and is Board certified in Medical Management.

Vicente Ciancio, has recently been designated the President of the Argentine Federation of Cardiology. He has been active in the field of aviation cardiology for many years. In 2004, he was appointed President of the new Symposium on Aerospace Cardiology sponsored by the Congress of the Argentine Federation of Cardiology.

Glenn W. Mitchell, M.D., M.P.H., was recently named Vice President of Clinical Safety by the Sisters of Mercy Health System. In this role, Dr. Mitchell will work with Mercy's hospitals, leaders, and physicians to cultivate safety, including the development of a Mercy Safety Center. Dr. Mitchell retired in 2005 with the rank of Colonel after 21 years in the U.S. Army Medical Corps. He served as Commander at William Beaumont Army Medical Center in El Paso, TX; Chief of Clinical Operations, Office of the Army Surgeon General, San Antonio, TX; Command Surgeon, U.S. Southern Command, Miami, FL; and Commander of the Army Aeromedical Center, Fort Rucker, AL. He holds a B.S. in Physics, an M.S. in Engineering, an M.D., and an M.P.H. He is a Life Fellow of the American College of Emergency Physicians, a past Vice-Chair of

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the American Board of Preventive Medicine, and a Fellow and Past President of the Aerospace Medical Association.

Anders Lassen Nielsen, M.D., MPA, who was serving as CMO at Simrishamn Hospital in Sweden, accepted the position of Senior Lecturer in Internal Medicine at the University of the West Indies, St. Augustine, Trinidad, in September 2006. He received his Masters in Public Health from the Scandinavian School of Public Health in Gothenburg, Sweden, in December 2006.

Makanjuola A. Owolabi, FWACP (Av. Med.), of Kaduna, Nigeria, recently received the first Grand Award for Productivity in Africa (GAPA Award) from People State & Resource magazine in consideration of his achievements in the practice and development of human medicine in Africa.

Obituary Listing

AsMA recently learned that **Robert H. Riordan, M.D.**, has died. He joined AsMA in 1961 and was an Emeritus Member and Fellow. Dr. Riordan earned a B.S. from Willamette University in 1954, an M.D. from the University of Oregon Medical School in 1958, and served an internship at D.C. General Hospital in 1959. He completed training in aerospace medicine at the U.S. Navy School of Aviation Medicine in 1961. He was a flight surgeon for the U.S. Navy from 1962-1967, a flight surgeon for United Airlines from 1967-1968, Chief of Medical Services, Western Region, at TWA from 1969-1972, and later Associate Director of Medical Services & Safety Engineering at TWA. He was a member of the Ad Hoc Committee for International Study of Airline Pilot Medical Disability, a member of the Airline Medical Directors Association, and a member of CAMA.

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INDEX TO ADVERTISERS

Aerospace Medical Association
Corporate Members 642
Information for Authors Cover III
Membership Application ii
ETC Cover IV

Thank You!

Corporate and Sustaining Members of the Aerospace Medical Association



The financial resources of individual members alone cannot sustain the Association's pursuit of its broad international goals and objectives. Its 78-year history is documented by innumerable medical contributions toward flying health and safety that have become daily expectations by the world's entire flying population—commercial, military, and private aviation. However, support from private and industrial sources is essential. The following organizations, who share the Association's objectives or have benefitted from its past or current activities, have affirmed their support of the Association through Corporate Membership.

Aeromedic Innovations	International SOS Assistance, Inc.
Air Canada	Japan Airlines
Aircraft Owners and Pilots Association	Kelsey-Seybold Clinic
Air Line Pilots Association	Korean Air Force Safety Center (AFSC)
AirSep Corporation	Lifepoint, Inc.
American Airlines	Lockheed Martin Corporation
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Autoflug Libelle GmbH	Mayo Clinic Aerospace Medicine
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Aviation Medicine International (AMI) Inc.	Oregon Aero, Inc.
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David Clark Company, Inc.	South African Airways
Eagle Applied Sciences, LLC	South African Civil Aviation Authority
Education Enterprises, Inc.	SpecPro, Inc.
Environmental Tectonics Corporation	Stereo Optical Company, Inc.
Essilor of America/Varilux	United Airlines
Federal Express	United States Aviation Underwriters
Gentex Corporation	Universities Space Research Association (USRA)
International Federation of Air Line Pilots Associations	Harvey W. Watt & Company
	Wyle Laboratories, Inc.