President’s Page

When I started to prepare my first President’s Page several months ago, I initiated what appears to be a relatively long-standing tradition; I reviewed columns prepared by a number of my predecessors. As Dr. Michael Berry indicated, Brig. Gen. M. S. White, USAF, MC initiated the concept of having this page in 1958. Since then, a number of consistent themes have appeared in the initial president’s columns, they include the image of our association both within the medical community and beyond, increasing or maintaining our membership, better serving our membership through communications, and the importance of our annual scientific meeting. Often, these comments are followed by the proposed goals for the coming year.

Unfortunately, my noble intentions were scrapped, or at least paled by comparison, given the recent world events that we are experiencing. Without question, the tragic loss of the Columbia shuttle and all seven astronauts during reentry has left us deeply saddened, as two of the astronauts, Laurel Clark and David Brown, were AsMA members. Many of you were friends of Laurel’s and David’s and it is only fitting that we recognized their triumphs and courage during our May meeting. We often forget about the risks associated with advancing the frontiers of space. Our thoughts go out to the families, friends, and colleagues of the Columbia astronauts. As I’m certain Laurel and David would want, our association will continue to support space exploration and efforts to enhance safety in future missions.

More recently, the U.S.-Great Britain coalition became engaged in a war with Iraq. I realize that internationally there are many who feel that this action should not have been initiated. However, the conflict is ongoing as I write, and a number of our colleagues, aviators, flight surgeons, nurses and others have been deployed in support of this engagement. It is my hope, and I’m sure it is yours too, that all will return safely and that peace can be restored with a limited loss of lives.

Another area of concern is the post 9/11 decline in air travel and the subsequent financial difficulties of many air carriers in the U.S. and abroad. What impact will the cutbacks and loss of personnel have on medical departments and human factors-related programs within the various organizations? How will it impact the governmental organizations that regulate and support them? We need to be prepared to respond to any emerging concerns as the industry adjusts and reorganizes as a result of these financial challenges.

And let’s not forget about the emerging public health concern of the spread of severe acute respiratory syndrome (SARS). As I’m writing this column, an American Airlines flight from Tokyo to San Jose was held short of the gate after five passengers complained of the development of SARS-like symptoms. While this was a false alarm, an article in the NY Daily News reported that there was evidence from a recent China Air flight suggesting that SARS could be transmitted on airplanes. Who better to examine this emerging threat to passenger health than those within our own aeromedical community?

Even with the problems of the world constantly passing 24/7 across our TVs and computer screens, the affairs of the association must go on. That being said, the vice presidents and committees will again be responsible for generating association goals for the coming year. I want to personally thank Dr. Claude Thibeault for his cooperative efforts in planning for the initiatives presented during his presidency. I also want to thank him for his dedication and efforts to accomplish many of those objectives. In an effort to maintain continuity, we will continue to address the goals he identified that require medium to longer-term efforts to complete. This includes an emphasis on improving the quality of communications through our web site. Dr. Ron Hoffman, who supported the development of enhancements to our website this past year, should be commended for those efforts. With his assistance, our communications committee and the home office staff will continue to provide a truly world class approach to our web site and overall communications within the association.

We also had an opportunity to take a historical look at aviation during our celebration of the 100th anniversary of the first flight of the Wright Brothers in San Antonio. Our meeting in Anchorage, AK, will be the 75th anniversary of the association. I contacted Dr. Stan Mohler, chair of the History and Archives Committee, last year and asked that he and his committee initiate planning to develop a historical overview of our association for presentation at our annual meeting. Dr. Carol Manning, chair of the Scientific Program Committee for this year, will seek to incorporate historical information within the convention program. If you read Claude’s September President’s Page, you already know that the theme for the Anchorage meeting will be “Frontiers in...”

See President’s Page, p. 693.
2003-2004 Presidents of Constituent Organizations

Zanick to Lead AMDA

David C. Zanick, M.D., M.P.H., is the new President of the Airlines Medical Directors Association. He is the Medical Director of NorthWest Airlines, and a clinical Assistant Professor of Medicine at the University of Minnesota School of Medicine.

He received his medical degree from New York University School of Medicine and his masters of public health from the University of Minnesota School of Public Health. He is certified by the American Board of Preventive Medicine in Ophthalmology. He is an FAA Aviation Medical Examiner and Medical Review Officer (certified by AAMRO).

A Fellow of AsMA, Dr. Zanick has been a member since 1978 and a member of AMDA since 1974. He is a current member of the Committee of the Medical Transportation Association and a member of the following AsMA committees: Council, Air Transport Medicine Committee, and Scientific Program Committee. He is a former member of the Board of Directors of the American College of Occupational and Environmental Medicine (ACOEM). He is a Fellow of the American College of Preventive Medicine and ACOEM.

Dr. Zanick also chairs the Residency Advisory Committee of the Midwest Center for Occupational Health and Safety.

He has delivered nearly 50 presentations to professional groups and conferences concerning various aspects of fitness to fly for passengers as well as pilots, drugs, and alcohol abuse, and many other topics.

ASAMS new President is Warren Silberman

Warren Silberman, D.O., M.P.H., is the incoming president of the American Society of Aerospace Medicine Specialists (ASAMS). Dr. Silberman was originally from Philadelphia, PA, and now resides in Edmond OK. He has been the Manager of the Aerospace Medical Certification Division at the Civil Aerospace Medical Institute, Oklahoma City, OK, since June 1997. He came from the United States Army Medical Corps. His last assignment was as the Commander of Raymond W. Bliss Army Hospital, Ft. Huachuca, AZ.

Dr. Silberman received his BA from Temple University, Philadelphia, PA, in 1971 and his D.O. from College of Osteopathic Medicine and Surgery, Des Moines, IA, in 1974. He later received his M.P.H. from University of Texas Health Science Center of Houston, San Antonio, and in 1991, went on to the Residency in Aerospace Medicine at USAF-SAM from 1991-92.

Dr. Silberman is Board Certified in Internal Medicine and Preventive/Aerospace Medicine. He is a Fellow of the American Osteopathic College of Internists, American Osteopathic College of Occupational and Preventive Medicine as well as the Aerospace Medicine Association. He has given frequent lectures to the Aviation Medical Examiner community and pilot advocacy organizations such as the Airline Pilots Association, Aircraft Operators and Pilots Organization, Experimental Aircraft Association, National Agricultural Aviation Association, and National Warbirds Association. Dr. Silberman is a regular writer for the Federal Air Surgeons Bulletin.

In addition to his FAA job, he serves on the State Staff of the Oklahoma Air National Guard as the State Air Surgeon. He was a Flight Surgeon in the U.S. Army for 12 years.

Schneider is Incoming ANS President

Lt. Col. Virginia A. Schneider, USAF, NC, is the incoming president of the Aerospace Nurses Society. She is currently the Commander of the 142nd Aeromedical Evacuation Squadron (AES) in New Castle, DE. In this position she is responsible for the management and wartime training of over 100 individuals. Prior to assuming this role Lt. Col. Schneider worked at the Air National Guard (ANG) Readiness Center at Andrews AFB, MD.

Lt Col Schneider is a native of Upper Darby, PA. Her nursing education includes a Diploma from Lankenau Hospital School of Nursing in 1976, Bachelor of Science degree from Eastern College in 1986, and Masters degree in Nursing Administration from Widener University in 1989. From 1976 to 1983 she worked at Lankenau Hospital in Philadelphia, PA, as a staff nurse in the surgical intensive care unit (1976-1978), as a head nurse on a step-down intensive care unit (1978-1981), and as an evening nursing supervisor (1981-1983). From 1983 to 1994 she worked at Crozer-Chester Medical Center in Chester, PA, as an evening supervisor (1983-1985), as a clinical coordinator (1985-1992) and as the Director of Nursing for the Medical-Surgical Division (1992-1994).

In 1982 Lt. Col. Schneider joined the Delaware Air National Guard as an Aeromedical Evacuation Flight Nurse.

Throughout her career with the unit, duties included Officer in Charge (OIC) of Chemical Defense Training, Assistant OIC of Ground Training, OIC of Staff Development, and finally Chief of Aeromedical Evacuation Crewmember Standardization/Evaluation. As a member of the 142nd AES, Lt. Col. Schneider participated in multiple field exercises and deployed in support of JUST CAUSE (1989), DESERT SHIELD (1990) and DESERT STORM (1991). Her DESERT STORM experience included medical evacuation of enemy prisoners of war. In October of 1994 she joined the staff at the ANG Readiness Center as the Chief of Aeromedical Evacuation Planning and Operations. In 1998 she became the Chief of Medical Readiness and Plans Division and was responsible for the medical readiness capability of 89 ANG Medical Squadrons and 10 Aeromedical Evacuation Squadrons. In 2001 she returned to Delaware to become the Commander of the 142nd AES. She is a Chief Flight Nurse with over 1300 flying hours.

Her military decorations include: Meritorious Service Medal with two oak leaf clusters, Air Force Commendation Medal, Air Force Achievement Medal with three oak leaf clusters, Combat Readiness Medal, National Defense Medal, Armed Forces Expeditionary Medal, Southwest Asia Service Medal, Armed Forces Medal and Kuwait Liberation Medal. She received the 2000 Lt Gen Charles H. Roadman II Mirror Force Award. She was the 1997 ANG Medical Readiness Officer of the Year. She received the AsMA's Mary T. Klinker Award for significant contributions in the field of Aeromedical Evacuation in 1999.

Wiegmann to Head AsHFA

Douglas A. Wiegmann, Ph.D. is the newly appointed President of the Aerospace Human Factors Association. He is an assistant professor and associate head of the Aviation Human Factors Division within the University of Illinois' Institute of Aviation.

Dr. Wiegmann earned his B.S. in Psychology/Anthropology from the University of Wisconsin, La Crosse in 1988. He received his M.S. in 1990 and Ph.D. in 1992 in experimental psychology from Texas Christian University and received postdoctoral training in aviation psychology from the Naval Aerospace Medical Institute.

Prior to coming to the University of Illinois, Dr. Wiegmann served as an aviation See WIEGMANN, p.691.
murphy leads physiologists

CAPT Donna M. Murdoch, USN, is the newly appointed President of the Aerospace Physiology Society (AsPS). CAPT Murdoch is currently Officer in Charge, Naval Survival Training Institute Detachment, West, San Diego, CA. In this position, she supervises, manages and leads 70 military and 13 civilians in 3 geographically separated Aviation Survival Training Centers at NAS Whidbey Island, NAS Lemoore, and MCAS Miramar. She is responsible for high-risk aviation survival training including both aviation physiology and water survival, as well as for operational and administrative compliance of detachment.

She received her B.A. from Florida Technological University in 1977 and her M.A. from University of Florida in 1978. In 1985, she received her Ph.D. from Florida State University in Exercise Physiology with her dissertation in the area of hyperbaric physiology.

She was commissioned a LT and after training and designation as an Aerospace Physiologist was assigned to the Naval Aerospace Medical Research Laboratory as an Aerospace Physiologist conducting research in G-tolerance enhancement and sustained flight operations.

Her next assignment was as the Aeromedical Safety Officer, Commander Fleet Air Mediterranean, Rota, SP, where she provided operational aeromedical support to deployed aviators throughout the Mediterranean and European theaters. Following that, she reported to Commander Strike Fighter Wing Pacific, Lemoore, CA as the Aeromedical Safety Officer. While there, she established the night vision training laboratory, conducted lectures and training in all aspects of aeromedical issues, served as a consultant on several mishap boards and is a member of the Fleet project team for the Centrifuge-Based Flight Environment Trainer.

With her expertise in G-tolerance enhancement her next assignment was as the Department Head, Aviation Survival Training Center, Lemoore, CA, where she was responsible for conducting Aviation Water Survival and Physiology Training. During this time, she was instrumental in government acceptance of the Navy’s First Training Centrifuge. She next moved on to the Naval Air Systems Command as the Assistant Program Manager for Systems Engineering, Aircrew Systems (PMA 202).

Her following assignment was as the Executive Officer of the Naval Health Research Center, San Diego, Ca, and she is currently assigned as OIC, Naval Survival Training Institute, Detachment West.

CAPT Murdoch has been a member of AsMA and the Aerospace Physiology Society since 1985. She has held offices as Board Member at Large and Secretary of the Aerospace Physiology Society and has been the Chairman of their Awards Committee. She received the Fred A. Hitchcock Award for Excellence in Aerospace Physiology in 1993. She was Board Certified in Aerospace Physiology by the Aerospace Medical Association in 1999. CAPT Murdoch was elected a Fellow of AsMA in 2002. Her awards include the Meritorious Service Medal (2 Awards) and the Navy Commendation Medal (3 Awards).

Holland is Incoming IAMFP President

Capt. Dwight Holland, USAF, is beginning a 2-year term as the President of the International Association of Military Flight Surgeon Pilots. This AsMA constituent organization consists of pilots, flight officers, and other aircrew/scientists who are interested in medical issues in terms of optimizing human performance in the aviation environment. Capt. Holland is an instructor and curriculum developer in the crew systems interface area at the Navy Test Pilot School at Patuxent River, MD. Capt. Holland is also assigned to the USAF Office for Scientific Research as an International Program Manager in the Human Effectiveness and Space Systems areas. In addition, he serves as a USAF liaison to the Office of Naval Research for Internationally-related Bioterrorism issues.

Dwight is a graduate of USAF Test Pilot Training and is a commercial type-rated jet pilot with flight time in 30+ aircraft with over 2,000 hours of flight time including research flight test work. Capt. Holland is the first reserve instructor ever asked to work in the USN Test Pilot School.

Capt. Holland has B.S. degrees in Physics and Mathematics from Emory and Henry College, M.S. degrees in Geophysics and Systems Engineering, and Ph.D. degree in Human Factors and Systems Engineering, all from Virginia Tech. The Captain will receive a Masters of Arts in Liberal Studies in Political Science/International Relations from Hollins University in late summer 2003. Capt. Holland is the Technical Co-Chair for the largest Systems Engineering Conference in the world to be held in the summer of 2003 in Washington, DC area. In the past he has held the prestigious Cunningham Fellowship at Virginia Tech, and has been a NASA/Stanford Faculty Fellow. Also in the Summer of 2003, he will be attending a NATO-related French language training course in Bled, Slovenia. He participated on an Antarctic Expedition in the midnight 1980’s as a Geophysicist/pilot liaison responsible for the Gravity and Magnetics programs, and first use of Global Positioning system satellites for Antarctic field research. He was also involved with Glaciology and Seismic studies. Dr. Holland was awarded the Antarctic Service Medal by the National Science foundation for “valuable contributions to exploration and scientific achievement under the U.S. Antarctic Research Program.”

He is also an FAA Aviation Safety Counselor, and has participated in several working groups and committees related to long-duration spaceflight and aviation safety problems. During his academic training, Capt. Holland has been selected as a member of 8 Academic Honorary Societies including—Phi Kappa Phi, Tau Beta Pi, Sigma Xi, and Omicron Delta Kappa. He has served as a reviewer and co-editor for many different professional organizations in medicine, systems engineering, and human factors engineering. Dr. Holland’s dissertation on dynamic peripheral visual performance under workload won the Stanley Roscoe Award of the Aerospace Human Factors Association for the “best dissertation in an area related to Aerospace Human Factors.”

Dr. Holland has over 60 academic presentations and publications to his credit, including chairing over 20 scientific sessions at international scientific meetings. At various times, he has served within the AsMA Community in the Program Chair for the Associate Fellows Group, Space Medicine Branch, Aerospace Human Factors Association, and as the recent Vice-President and former Secretary-Treasurer of the Pilot-Physicians group. He has served as a Member-At-Large for the Aerospace Human Factors Association and Space Medicine Branch, and is currently elected Secretary-Treasurer of the Space Medicine Branch of AsMA.

Green to Lead SUSAFFA

Brig. Gen. Charles Bruce Green, USAF, MC, is the incoming president of the Society of U.S. Air Force Flight Surgeons. He is currently command surgeon, U.S. Transportation Command and Headquarters Air Mobility Command, Scott Air Force Base, IL. He is a director on the staffs of the commander in chief of USTRANSCOM, and commander of AMC headquarters. In this dual capacity, he ensures maximum wartime readiness and combat support capability of the worldwide patient movement and aeromedical evacuation system, the Global Patient Movement Environment Center, and AMC’s 12 community
GREEN, from p. 691.

based medical treatment facilities. This includes supervising and monitoring their
peacetime health care service. As command surgeon of DOD’s TRANSCOM, the
general advocates for the global patient movement system to include
developing, fielding, and sustaining the Transportation Command Regulating
and Command and Control Evacuation System.

The general was commissioned through the Health Professions Scholarship Program and entered active duty in 1978 after completing his doctorate of medicine degree at the Medical College of Wisconsin in Milwaukee. He completed residency training in family practice at Eglin Regional Hospital, Eglin AFB, FL, in 1981, and in aerospace medicine at Brooks AFB, TX, in 1986. He earned an M.P.H. from Harvard University, Boston, MA, in 1988. He is board certified by the American Board of Family Practice and the American Board of Preventive Medicine. The general has commanded three hospitals, and his served as command surgeon for U.S. Central Command and U.S. Space Command prior to assuming his current position.


He is a member of the American Medical Association, the American College of Physician Executives, the Uniformed Services Academy of Family Physicians, the Air Force Association, and Association of Military Surgeons of the United States, and a Fellow of the American Academy of Family Physicians.

Sobel is Newly Elected President of SMB

Annette L. Sobel, M.D., M.S., is the incoming president of the Space Medicine Branch (SMB). She is a distinguished member of the technical staff and systems analyst at Sandia National Laboratories, Albuquerque, NM. She has 13 years of advanced technology development and unconventional threat analysis expertise focused on applications of biotechnology and information technologies in support of chemical-biological countermeasures, and in the field of human factors/systems engineering (e.g., critical decision-making under stress) domains.

She is a Brigadier General and the Assistant for Homeland Security to the Chief, National Guard Bureau. Her work has emphasized information analysis, advanced systems for mission rehearsal and training, human performance enhancements, and technology transition to field operational environments. She has 11 years of military command experience including combat and CBW medical response unit commands.

Dr. Sobel earned her M.D. at Case Western Reserve University, OH, in 1983, with specialization in Family Medicine at Duke University Medical Center. She has an M.S. in Aerospace Medicine with an emphasis on Human Factors Engineering from Wright State University, Dayton, OH (1992), and B.S. in High Honors and a Founder’s scholar in Chemistry and Computer Science from Cook College, Rutgers University, NJ (1979).

From 1998 to 2000 she was the State Air Surgeon, New Mexico. Since 1992 she has been Clinical Assistant Professor in Preventive and Community Medicine, Residencies in Aerospace Medicine, Wright State University and University of Texas Medical Branch at Galveston, responsible for preparation and presentation of core curricula in Aerospace Human Factors Engineering, telemedicine, and applied Aerospace and biotechnologies. In addition, since 2000 she has been Research Professor, the University of New Mexico, Computer and Electrical Engineering. She is a member of the Defense Intelligence Agency’s Advisory Board, and has served on two Defense Science Boards addressing factors and national threats and Homeland Security issues and on a National Academies of Science panel addressing Army S&T requirements for Homeland Security. Dr. Sobel is Program Chair of an upcoming series of workshops addressing medical perspectives on environmental security. She has over 30 refereed publications and over 100 national/international presentations to her credit. Publications include three book chapters, including technology and clinical operational medicine references, and several papers on advanced mission rehearsal systems and CBW field medical operations.

She has numerous military decorations including the Joint Services Commendation (Joint Special Operations Command) and Meritorious Service Medals. She received the AsMA’s Julian Ward Award in 1996 for outstanding research in the field of Aerospace Medicine.

Dr. Sobel is a Fellow of the American Academy of Family Physicians and AsMA. She is Board Certified by the American Board of Family Physicians and the Board of Human Factors and Ergonomics.

Balldin is New LSBEB President

Ulf Balldin, M.D., Ph.D., is the incoming president of the Life Sciences and Bioengineering Branch (LSBE) of the Aerospace Medical Association. Dr. Balldin is currently Senior Scientist in Acceleration, Altitude and Thermal Physiology at Wyle Laboratories working for the Air Force Research Laboratory, Brooks City-Base, San Antonio, Texas. He has B.S.C., M.D., and Ph.D. degrees from University of Lund, Sweden, where he was made Associate Professor in Medical Physiology. He was a Naval Diving Medical Officer and then a Flight Surgeon in Sweden and Associate Professor in Experimental Clinical Physiology at the University of Linköping. As a part-time Professor in Aerospace Medicine he was Head of the Department of Aerospace Medicine at the Karolinska Institute Medical School in Stockholm. Simultaneously he was Director of the Institute of Aviation Medicine at the National Defence Research Establishment in Sweden. In these positions he participated in the development and was responsible for the centrifuge testing of a Tactical Flight Combat Suit for the Swedish Air Force’s fighter aircraft SAAB Gripen. He has published well over 200 scientific articles, reports, proceedings and abstracts.

In 1992 Dr. Balldin moved to Texas, where he recently became a U.S. citizen. Under a Memorandum of Agreement between USA and Sweden he served about 7 years as a Research Director and Liaison Scientist at the Air Force Research Laboratory, Brooks AFB, TX, primarily involved in acceleration physiology research. He is a Member of the Faculty of USAF School of Aerospace Medicine and Clinical Assistant Professor at University of Texas Medical Branch at Galveston.

Dr. Balldin has served two terms as Vice President of Aerospace Medical Association and is currently President of the International Academy of Aviation and Space Medicine. He was made Honorary Doctor at State Scientific Research Test Institute in Moscow, Russia, and he is elected a lifetime Academician in the Royal Swedish Academy of War Sciences. He has received several prestigious scientific awards including: AsMA’s Liljencrantz Award in 1989; Aerospace Physiology Society’s Paul Bert Award in 1993; the LSBEB Professional Excellence in 1995; the RAF IAM Stewart Memorial Award for distinguished contributions to Aviation and Hyperbaric Medicine and gave the Stewart Memorial Lecture in 1996; the Swedish Society of Aeronautics and Astronautics’ Thulin Medal in 2000, as well as the Royal Swedish Academy of War Sciences award and medal for his work in the development of the Tactical Flight Combat Suit for the Gripen aircraft.

He has been an active pilot since 1967 and holds a U.S. Commercial Pilot license with Instrument Rating and has logged about 1200 flight hours.

McGhee Serves 2nd yr as Army AvMed Group President

COL James S. McGhee, MC, USA is serving his second year as president of the U.S. Army Aviation Medicine Association for 2002-04. He is presently Dean of the U.S. Army School of Aviation Medicine, at Fort Rucker, AL, and has been Consultant to the Army Surgeon General for Aviation Medicine since 1984. (See Aviat Space Environ Med 2002;73:616.)

Bailey to Lead Naval Flight Surgeons

CAPT Dean A. Bailey, MC, USN, is the incoming president of the Society of U.S. Naval Flight Surgeons. A native of Pensacola, FL, CAPT Bailey received his B.S. in chemistry from UCLA in 1978 and went on to the United Services University of the Health Sciences, graduating with his M.D. in 1982. He has been a member of AsMA since 1985.
Aerospace Medicine. I encourage each of you to start thinking about presentations based on your research and developing presentations or panels that focus on the new technologies, procedures, and equipment available to the aerospace scientist and practitioner in the next decade. What are the innovations that will guide aeromedical decision making in the future? What are the tools that will allow human factors specialists to better understand human performance and make recommendations for improved displays, controls, and work environments? How will the new technologies and procedures change how physiologists, nurses, psychologists, physicians, engineers and other human factors specialists function in operational settings and as research scientists?

For instance, one potential significant factor is the development, and expanded use of, unmanned aerial vehicles (UAV). How will the introduction of UAVs alter the future operational environment for military flight surgeons? How will advances in genomics and nanotechnologies influence the diagnosis, treatment, and certification of airmen with various health problems? As an association, we also need to look and plan ahead so we can develop improved strategies to meet the needs of our membership. As part of this effort, the executive committee will initiate efforts to develop a strategic plan for the association that will include the development of an improved financial plan.

In closing, I want to again thank Claude for his work and the accomplishments made during his presidency. He has provided a sound basis for me to assume my term as president. I would also like to thank the many individuals who felt that I was worthy of the honor to lead this international organization. I am deeply honored by this responsibility and will work diligently with the executive committee, council, membership, and the home office to help the association achieve our vision of excellence in Aerospace Medicine. I also hope to represent fully the diversity within this association. However, since we are a voluntary organization, the establishment and accomplishment of our goals are ultimately in your hands. As I look back to when I first joined the association in 1972, my goals were not lofty, they were focused on finding ways in which I could assist in the advancement of the association and further enhance the role of human factors. I would request that each of you commit yourself to greater involvement this coming year, whether that is through making a scientific presentation, participation on a committee or the council, or by providing feedback to me or to home office personnel about areas of concern. If you desire involvement on a committee, please contact Dr. Rayman at the home office as soon as possible so your name can be given to the chair of the committee for inclusion on the list of members for this next year. If you have a recommendation regarding items that should be incorporated (even in these difficult times) in our strategic plan, please feel free to share those ideas with one of the members of the executive committee.

I would like to ask you all to plan ahead to attend the annual scientific meeting in Anchorage in May of 2004. The Alaska location provides an interesting venue for the meeting. After all, as is mentioned on the Anchorage web site and based on FAA estimates, in Alaska there are more aircraft (9,800) than pilots (9,749). When compared to the rest of the U.S., this represents 6 times as many pilots per capita and 14 times as many aircraft per capita -- a unique challenge for us all.

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Fifty Years Ago

A new aircraft seating configuration was introduced in 1953. Despite favorable response, this configuration is still rare today: "North American Airlines has become the first U.S. commercial airline to install rear-facing seats on a regular flight. A North American DC-4-equipped DC-6 began transcontinental coach service between Los Angeles and New York, May 31. Passenger response was surprisingly enthusiastic. Of sixty-six passengers who commented on the new arrangement, fifty-nine responded favorably, five were non-committal and two gave unfavorable answers. In addition to increased safety and visibility, passengers reported reduction in nausea. Fewer passengers became airsick than usual. The rear-facing seats cost a little more than the ordinary coach seats to install. Stressed in the back as well as the legs, they proved taller than regular coach seats. They fold forward for access to escape hatches." (3)

One of the prominent names in Aerospace Medicine became the 23rd president of the association: "Admiral Groebeck has been an active flight surgeon for thirty years. He was in a pioneer group of medical doctors who graduated in April, 1923, from the Army's School of Aviation Medicine at Mitchell Field, Long Island, when its commandant was Major Louis H. Bauer. In 1936, Admiral Groebeck received flight training at the Naval Air Station at Pensacola and was designated a naval aviator. He is the first Navy flight surgeon-pilot to head the organization." (4)

The U.S. Naval School of Aviation Medicine in Pensacola, FL, examined G-induced loss of consciousness: "There is a relatively high incidence of blackout and unconsciousness occurring in personnel engaged in routine flight training maneuvers... [A] lack of definitive data has been demonstrated as a major factor responsible in preventing a feasible solution at this time... [Data from this experiment show]: (5) The range in tolerance of the normal population is fairly large. (b) The tolerance of the average population is fairly low. (c) The individual tolerance fluctuations under 'normal' conditions are fairly large. (d) Critical symptoms (blackout and unconsciousness) are separated in the average individual by only small G-levels, and short time intervals... It has been pointed out that selection of pilots for G-tolerance cannot be done as yet on the human centrifuge although this machine can supply valuable practical training for certain selected individuals." (6)

The effect of blood donation on hypoxia was examined by Duke University School of Medicine in Durham, North Carolina: "Hematocrit and hemoglobin studies have been carried out for twenty-eight days post-hemorrhage in 16 subjects who made Red Cross blood donations. The average fall in hematocrit in this group was 11.7 per cent and the average hemoglobin fall was 13 per cent. The time at which the minimum values occurred varied among subjects, but was predominantly between the second and sixth day... From the standpoint of effect of blood donations on hypoxia tolerance, it is concluded that the change in hemoglobin by a given subject is usually less than the variation among subjects, such that as a group no impairment would be detectable." (2)

A long-standing debate in aerospace medicine regarding female pilots was addressed by the University of Pennsylvania School of Medicine in Philadelphia: "Attention is called to the belief of some authors that the ability of women to pilot aircraft may be adversely affected during their menses. The application of vestibular testing to fourteen normal women throughout their menstrual cycles and during menstruation is described. No significant differences were found in vestibular function tested during the first half as compared with the second half of the menstrual cycle, or during menstruation as compared with either the first or second half of the menstrual cycle." (7)

Twenty-five Years Ago

In 1978, the effects of acceleration on pulmonary blood flow were studied at the Mayo Clinic in Rochester, MN: "Vertical distribution of pulmonary blood flow (VDPBF) was studied, using radioactive microsphere emboil, in dogs without thoracotomy in the right decubitus position during exposure to lateral (CG) accelerations of 1, 2, 4, and 6 G. All at levels of force environment studied, an inverse linear relationship was observed between vertical height in the thorax and pulmonary blood flow (ml/min/ml lung tissue) with a decrease in flow to the most dependent region of the lung despite large increases in intravascular pressures at this site. Changes in blood flow were smallest at the mid-lung level, the hydrostatic 'balance point' for vascular and pleural pressures. These force environment-dependent changes in VDPBF are not readily explainable by the Starling resistor analog. Gravity-dependent regional differences in pleural and associated interstitial pressures, plus possible changes in vascular tone resulting from inadequate aeration of blood in the most dependent regions of the lung, probably also affect VDPBF." (1)

The University of California, Santa Barbara, CA, examined the effects of cigarette smoking on performance at altitude: "Six nonsmokers and six cigarette smokers, 22-34 years old, performed bicycle work (53% sea level VO2 max) for 30 min in an altitude chamber under four conditions: SL, simulated sea level (902 = 199 torr, P B = 523 torr) with 0.5% HbCO; SLS, simulated sea level with 4.2% HbCO; A, altitude (902 = 109 torr, P B = 523 torr) with 0.5% HbCO; and ACO, altitude with 4.2% HbCO. During work at altitude, heart rate (HR), minute ventilation and tidal volume increased and diastolic blood pressures decreased relative to SL. Cardiac output (Qc), stroke volume (SV), and arterial mixed venous oxygen differences (a-vO2), were similar in smokers and nonsmokers at SL, SLS, and A. At ACO, nonsmokers increased Qc and SV and decreased a-vO2, but these were not influenced in the smokers. Smokers showed a graded increase in HR when exposed to work in SL, SLS, and A. Increasing temperatures during A and ACO suggested vasconstriction in the extremities. Cigarette smokers may be partially adapted to hypoxia." (9)

The long-term effects of parachuting on hypoxia tolerance was studied by the Finnish Defence Forces, in Helsinki, Finland: "To investigate whether parachuting causes permanent changes in the spine, 50 military parachutists (mean number of jumps 490 per parachutist) and 50 matched controls were studied. In X-rays of parachutists and controls, the frequency of degenerative changes differed in the cervical spine (46 and 20%; p < 0.01), and in the thoracic spine (62 and 28%; p < 0.05) but not in the lumbar spine (44 and 56%; not significant). Parachutists suffered significantly more often from stiff neck, but the incidence of other neck and back symptoms was the same in the two groups. The increased frequency of degenerative changes in the spine in military parachutists is probably due to repairal trauma which parachutists sustain on landing and, possibly, during the training period before parachute jumps." (5)

References

3. Coughlin WJ. Nonskied rear-facing seats. Aviation Week, 1953 (June 8); 58(23):84-6.

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Reminder for Prospective Associate Fellows

The Chair of the Associate Fellows Group reminds prospective Associate Fellows that their applications must be received by August 1 each year in order to be considered for the annual selection. Update forms are available from the Home Office and on the Associate Fellows Website: www.homestead.com/ASMA/AFGHOME.html. These forms should also be used to update information for Fellowship. (Fellows are nominated and voted upon by active Fellows.) Fellows Policy is online at: www.asma.org/2002_asma_policy_manual (Section 5).
AEROSPACE PHYSIOLOGY REPORT

FAA / Civil Aerospace Medical Institute / Aeromedical Education Division / Airman Education Programs

The Aeromedical Education Division of the FAA Civil Aerospace Medical Institute (CAMI) has a team of six aerospace physiologists involved in the design, development, implementation, and evaluation of aeromedical training programs for FAA flight crews and U.S. civil aviation pilots. The objective of these training programs is to familiarize pilots with the physiological and psychological stresses of flight including the effects of self-imposed stress (illegal and legal drug use, alcohol consumption, smoking, fatigue, inadequate nutrition, sedentary lifestyle, excessive caffeine consumption, etc.) and their impact on aviation safety.

CAMI offers a one-day aviation physiological training course for civil aviation pilots, FAA flight crews, and FAA aviation medical examiners at our facility in Oklahoma City, OK. In addition to the basic academic content, this course offers practical demonstrations of rapid decompression (8,000 to 18,000 feet AGL) and hypoxia (25,000 feet AGL) using a hypobaric (altitude) chamber, and a safe, practical demonstration of "pilot's vertigo" using a Spatial Disorientation Demonstration.

A similar aviation physiology course is offered to civil aviation pilots at US Air Force and US Army physiological training units across the U.S. under the USAF/USAFA/FAA Physiological Training Agreement. This program has been very successful and is a good example of how government organizations can collaborate to promote safety in civil aviation.

In addition to a three day Global Survival Course for FAA flight crews CAMI offers a one-day post-Global Survival Course for general aviation flight personnel. It is designed to be an aviation discipline that will provide basic knowledge and skills for coping with various common survival scenarios. This course will teach students how to easily assemble and use a personal survival kit. The course examines survival in desert, arctic, jungle, and water environments from two points; preflight preparation and the skills needed to endure those extremes. Included in this course is discussion on the psychology of survival, aircraft egress procedures, search and rescue operations, signaling devices and their use, fire starting/building, personal survival kits, rafts and accessories, and helicopter pickup devices. Hands-on practice sessions are conducted, based on device/personnel availability, and may include: a fire starting lab, signaling lab, thermal (cold) chamber, ditching tank, underwater egress trainer, and an aircraft emergency evacuation (smoke) simulator. The principles and techniques taught in this course apply to the survival equipment that can be found or carried onboard most general aviation aircraft.

During the year, the six instructors take the Institute's spatial disorientation demonstrators to FAA Wings Weekends and several major US air shows, including the Experimental Aircraft Association's Sun 'n Fun in Orlando, FL., and Air Venture in Oshkosh, Wis. The disorientation demonstrators (Gyros and the VRSDDD) are portable spatial disorientation devices that are used to provide a practical, highly convincing demonstration of the human limitations to maintain spatial orientation during IFR conditions, as well as to underscore the importance of relying on cockpit instrumentation to fly safely under these conditions.

CAMI has produced an Aviation Physiology Videotape Series. This informative videotape is a must for anyone interested in high-altitude physiology. Each topic has an average run-time of 15 minutes and is a stand-alone presentation. The following topics are covered in the 13-part series: Physics of the Atmosphere, Respiration & Circulation, Hypoxia, Hyperventilation: When Flying Takes Your Breath Away, Self-Imposed Stress, Trapped Gas, Altitude-Induced Decompression Sickness, Understanding Aviation Oxygen Equipment, Fit For Flight, Motion Sickness, The Ups and Downs of Cabin Pressurization, Spatial Disorientation I: Why Not to Fly by the Seat of Your Pants, Spatial Disorientation II: Visual Illusions, An additional five subjects, Fittopulsion, Noise and Vibration, Fatigue, Heat Stress in the Cockpit, and Acceleration will be completed by October, 2003. A PowerPoint presentation that covers the review section for each topic is available on CD-ROM.

A Global Survival videotape series has just been completed. The eight subjects covered are: Will to Survive, Survival Medicine, Signaling, Survival Rafts and Rafts, Artic Survival, Jungle Survival, Desert Survival, and Water Survival. Each tape is an average run time of 30-40 minutes. To obtain these videotapes and learn more about the programs at CAMI, log on to the following web site: http://www.cami.jcebi.gov/aam400/AEP.html

AsMA Future Meetings

May 2-7, 2004
Egan Convention Center
Anchorage, AK

May 9-12, 2005
Kansas City, MO
Hyatt Regency Crown Center

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

AsPS WEBSITE

Visit us online at our website, www.aspsociety.org, where you can register for membership, update membership information, contact society officers and committee chairs, learn about certification in Aerospace Physiology, vote for society officers, read about society awards and more.
Welcome our new Publicity Chair: Dale Orford

Hi Everyone, Elina passed the publicity baton to me with the next issue of the Wing page, so get set to be interviewed, e-mailed, and otherwise badgered into reporting all that is new in your very busy lives. Also please, please send me lots of photos....I am not known for my expertise with the camera. Two years ago, we had the best wildflower display in years here in Scottsdale, so I grabbed my camera, jumped in the car with my husband Bob, and headed out to take a ton of photos. After spending the entire afternoon tramping through cactus, watching for snakes, and posing with spectacular backdrops, we returned home to discover that there was no film in the camera! So help me out girls!!!!!! You can contact me at dorford@cox.net or through regular mail at Dale Orford, 15516 E Acacia Way, Fountain Hills, Az 85268 Telephone 480-837-7919

I [Elina] would like to welcome Dale Orford as the new Publicity person. She will do a fabulous job. I have worked with her before on tours in Montreal. She is extremely organized and has great ideas. But of course without your input and help in sending news, this page would not exist. Please send her anything and everything.

Thanks

Many thanks to Grace Lee from Southampton N.Y. for providing flower money for our hospitality room in San Antonio. This is the third year she has done this and it is most appreciated.

In Memoriam Susanne Balldin

It is with deep sorrow and regret, I announce the passing of Susanne Balldin. I last saw Susanne in Australia, where she accompanied her husband Ulf at the International Congress. Susanne died April 6, 2003, after a long struggle with cancer.

She was born in Stockholm, Sweden and graduated from Skara Gymnasium [High School], Sweden followed by studies at the University of Stockholm and in Oxford, UK and in Lausanne, Switzerland. She was Head Administrator at the Department of Medical Physiology, University of Lund, Sweden and bank clerk in Stockholm. She moved with her family to San Antonio, TX in 1992, where she stayed until her death. She is survived by her husband, Ulf Balldin, M.D., Ph.D., Senior Scientist and their three sons, Carl, Christian and Fredrik, attending UTSA, UT Medical School, Houston and Texas Tech Business School, respectively. She is also survived by her two sisters in Sweden and France and her two brothers in Sweden. The funeral took place in the Swedish Church in Torekov, Sweden where she married her husband 29 years ago.

MEMBER NEWS

Fanancy and Debbie Anزالونowski's younger daughter Tracy was in a terrible accident Jan 15th, 2003. She and her older sister Tiffany and 3 student friends were on a street corner in Florence, Italy when a speeding car struck them. Tracy received injuries to both legs. In the recovery room after surgery, she suffered a cardiac arrest. She has an anoxic brain injury. Tracy was moved to the National Rehab Center in Washington, D.C. where she was in a coma. She turned 21 on Feb 26th. The news as of April, it appears she's making some slow improvement. The family is living in as executive apt. in Pentagon Row [Pentagon City], with rental furniture. Fanancy plans to return to D.C. for good on April 25th where he'll be in charge of operational medicine for the navy and marine corps. That was the job he was planning on going to in August, prior to Tracy's accident.

Tracy's sister Tiffany has set up a web site for her sister on which she is posting reports about Tracy's condition. The web site address is http://members.aol.com/tiffanyluv/myhomepage. Our thoughts and prayers are with the Anزالونowski family.

Our membership chair, Judy Waring, is still busy checking for address changes. In the April issue, I made an error on her e-mail address. Please send any changes or errors to judymikewaring@msn.com.
**Obituary Listing**

We have recently learned that former member Charles H. Sawyer, MD, MS, MPH, died at his home in Tucson, AZ, last October. He was a former USAF Colonel, a flight surgeon who was Board Certified in Aviation Medicine and a trained microbiologist who had commanded a USAF epidemiological laboratory in Manila. "Chuck" so loved his aerospace medicine patients and practice that he served as a civilian staff physician at David-Monthan Hospital for approximately 20 years after his military retirement in 1977.

**Charles A. Berry, M.D., Space Medicine Library Dedication**

The University of Texas Medical Branch's (UTMB) Moody Medical Library recently dedicated the Charles A. Berry, M.D., Space Medicine Library as part of its fourth-floor special collections.

Charles A. Berry, for whom the library is named, was the director of medical operations and research at the Manned Spacecraft Center during the Gemini and Apollo programs. He was later appointed director of life sciences at NASA Headquarters in Washington, DC.

In 1967 Dr. Truman G. Blocker Jr., UTMB's first president, appointed Berry as the first chairman of what was then the university's Department of Aerospace Medicine. Chuck Ross, a flight surgeon who has held several positions within the medical directorate for NASA's Johnson Space Center, recently made the first donation of books and other materials.

To celebrate the new collection, the Moody Medical Library has also recently purchased three rare titles dealing with the early history of air and space exploration. The first book, "La presion barometrique" (1878), was written by Paul Bert, the French physiologist considered to be the founder of modern aerospace medicine; the book is known as the greatest work in the history of altitude physiology. The other two recent additions to this collection are by Bert's partner, Denis Jourdanet, written just a few years earlier, were said to be the basis of Bert's work.

The library will serve as a resource for the UTMB/NAS-JSC Aerospace Medicine Residency Program and for physicians, investigators and historians who are involved with the space program.

**Shoor receives AMA Foundation Leadership Award**

The American Medical Association Foundation honored AsMA member Maj. Daniel Shoor, USAF, MC, at its inaugural Excellence in Medicine Awards ceremony in Washington, DC, in March, for being selected as one of this year's recipients of the AMA Foundation Leadership Award.

This annual award recognizes 25 medical students, 25 residents and fellows, and 25 young physicians from around the country who have demonstrated outstanding leadership skills in non-clinical and community service activities. The AMA Foundation, in association with Pfizer Medical Humanities Initiative, provided award winners with special training designed to improve their effectiveness as emerging leaders in medicine. Award winners also attended the AMA's National Advocacy Conference held later in the week.

Joseph Riggs, M.D., president of the AMA Foundation and an AsMA trustee, commented, "Through our committed efforts to advance health care in their community, these young men and women have shown tremendous potential for being part of the next generation of medical leaders. And if our past experience tells us anything, we'll need them!"

Dr. Shoor is currently assigned to the U.S. Air Force School of Aerospace Medicine as a resident in Aerospace Medicine and Occupational Medicine program. Serving during the Gulf War, Kosovo, and other deployments, Dr. Shoor has had the honor of providing medical support for American troops around the globe.

**ISAASM New Members**

The following AsMA members were elected to the International Academy of Aviation and Space Medicine:

- RDM Donald C. Arthurs, M.D., J.D., Ph.D.
- Leroy P. Gross, M.D., M.P.H.
- Masanobu Kaji, M.D., Ph.D.
- Akira Miyamoto, M.D., Ph.D.
- William M. Waring, M.D., M.P.H.

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