

President's Page

Last month I promised that I would give you some idea of plans for my Presidential year.

Past-President Antuñano left us with a well-developed and challenging Strategic Plan, which I hope you read when it was published in the journal and on our website. It was the culmination of much hard work by the Executive Committee and provides an essential framework for us to take the Association forward. Inevitably, the development of the plan involved some navel-gazing and re-view of process. It is now time to look outwards and not inwards, although it remains essential to keep the Strategic Plan on track.

The major challenge for this coming year is the decline in membership of our Association, particularly the relatively large number of members failing to renew. This is despite the outstanding efforts of the Membership Committee and the Home Office. The world is changing (when was it not?) and there has been a contraction in many areas of the aerospace medical and associated professions. It is easy to say "well so be it" and watch our Association gradually disappear around us - this is simply not acceptable.

Membership is directly related to member services. For people to join/renew they must perceive a benefit in the affiliation, which is the 'product' we offer. You are reading this in our journal, which implies that you are a member. (Have you managed to recruit one of your colleagues, or persuade a lapsed colleague of the benefits of continuing membership?). Are you content with what we offer, or do you have ideas of what you would like to change to improve the product? If so, let us know.

The heart of my plan is to expand the role of



Michael Bagshaw, M.B., B.Ch.

the Communication Committee. I am delighted that Dr. Ron Hoffman has agreed to continue his outstanding work on the web site development and maintenance, but I have asked Dr. Robert Weien to take on chairmanship of a much extended committee. I want membership of this committee to encompass a wide range of professions, experience, and expertise. The Communications and Membership Committees must work closely together to develop the concept of our product and how it is branded and marketed. Communication must pervade every other committee and every aspect of what the Association does, and ensure we meet the needs of all members, whatever their professional discipline.

AsMA is the major voice of aerospace medicine throughout much of the globe. We must all work together to ensure it continues that way.

For those of you on holiday, have a safe and happy time. For the rest of you, look forward to next time!

Richard Jennings voted President-Elect of AsMA; Michael Bagshaw installed as President

Richard T. Jennings, M.D., was elected president-elect of the Aerospace Medical Association at the Annual Meeting in Kansas City, MO, May 10, 2005. He will automatically succeed to the presidency next year at the 2006 annual meeting.

Dr. Michael Bagshaw, M.B.Ch., was installed as the 2005-06 president of the Association. As he is also the incoming president of the Airlines Medical Directors Association, his biography appeared in the June issue of the journal, p. 610. Dr. Bagshaw is currently Visiting Professor of Aviation Medicine, Kings College, London.

Dr. Jennings attended Oklahoma State University from 1967-1970 and graduated from the



University of Oklahoma School of Medicine in 1974. He completed residency in obstetrics and gynecology at the University of Oklahoma Tulsa Medical College and practiced ob/gyn in Stillwater, OK, while also serving on the teaching staff at the University of Oklahoma, Tulsa Medical College.

After practicing ob/gyn,

he completed a second residency in aerospace medicine at Wright State University, Dayton, OH. He is certified by the American Board of Preventive Medicine in Aerospace Medicine and American Board of Obstetrics and Gynecology.

Following the aerospace medicine residency in 1987, he began work as a flight surgeon at NASA-Johnson Space Center, Houston, TX, and as ob/gyn consultant and served as the Chief of the Flight Medicine Clinic and Chief of Medical Operations-Space Shuttle. During this time, he was the crew surgeon or deputy crew surgeon on 15 Shuttle missions and provided direct mission support to 45 Shuttle flights. In 1995, he transitioned to the University of Texas Medical Branch in Galveston with appointments in Preventive Medicine and Community Health, Ob/Gyn, and Family Medicine. He currently serves as residency director of the UTMB/NASA-JSC aerospace medicine residency program and director of the UTMB Aviation Medicine Center and Clinical Preventive Medicine. He provides astronaut gynecological care, selection examinations, and consultation services at the Flight Medicine Clinic at NASA-JSC. In addition, he supervises the Wyle Laboratories/UTMB physicians that work at the Gagarin Cosmonaut Training Center in Star City, Russia, Johnson Space Center, and International Artificial Gravity project on the UTMB campus.

He has published over 25 peer-reviewed articles, 10 book chapters (2 in press), and 10 abstracts, and has given nearly 100 presentations at meetings from the Ninth World Congress on Fertility and Sterility in 1977 to the 15th Humans in Space Symposium in 2005.

A Fellow of AsMA since 1995, he served as Program Chair of the AsMA Meeting in 2000. He has been on AsMA's Council since 1996 and was Vice President, Education and Research, from

2002-2005; he has also served on the Air Transport Medicine Committee, the Resolutions Committee, Scientific Program Committee, and Nominating Committee; he served on the editorial board of Aviation, Space, and Environmental Medicine from 1997-2000.

He is a former president of both the Space Medicine Branch and the Society of NASA Flight Surgeons, a founding member of the American Society of Aerospace Medicine Specialists, and was the 2000 Program Chair for the Civil Aviation Medical Association. He is on the Scholarship Committee of the International Academy of Aviation and Space Medicine. A Fellow of the American College of Obstetrics and Gynecology, he is also Vice Chairman on the Board of Directors of the International Council of Motorsport Sciences. He is the American Board of Preventive Medicine, Aerospace Medicine Representative for 2004-2007.

Dr. Jennings' awards and honors include the 1988 Julian E. Ward Memorial Award from AsMA for achievement during residency; Superior Sustained Performance Award, NASA-JSC, May 1987-88; Group Achievement Award (Medical Operations Group), NASA, Washington, DC, 1988; Group Achievement Award (Medical Sciences Group), Treatment of Space Motion Sickness, NASA-JSC, 1991; Silver Snoopy Award, NASA-JSC Astronaut Office, 1992; Group Achievement Award (Retinal Pathologies Telemedicine Consultation Team), NASA-JSC, 1994; and the 1997 Louis H. Bauer Founders Award from AsMA for contributions to aerospace medicine.

Dr. Jennings has been a private pilot since 1968 with over 2250 hours. He also holds instrument and commercial ratings. He is SCUBA certified. He was an astronaut candidate finalist in 1991 and 1994.

Other Officers :

The four Vice Presidents of AsMA are: **Andrew Bellenkes, Ph.D.** (completing his 2-yr term); **Daniel J. Callan, D.O.**, **James T. Webb, Ph.D.**, and **Robert W. Weien, M.D., M.P.H.**

The Members-at-Large with terms to expire in 2008 are: **James R. Devoll, M.D.**, **CAPT Gail L. Hathaway, MSC, USN**, **Dwight A. Holland, Ph.D.**, and **Warren S. Silberman, D.O.** To fill two vacant positions, Members-at-Large with terms to expire in 2006 are: **CAPT Vincent W. Musashe, MSC, USN**, and **David P. Gradwell, M.B.Ch.B., Ph.D., D.Av.Med.**

The secretary/treasurer is **Russell B. Rayman, M.D.**, who also serves as Executive Director of AsMA.

Council Highlights:

Sunday, May 8 and Wednesday, May 11, 2005

Dr. Antuñano made his opening remarks and encouraged everyone to support the Strategic Plan and to participate fully in the fulfillment of the Strategic Plan objectives.

It was noted that many Council members were absent. Although a number of them had

very valid reasons, there were a number that were unaccounted for. The issue will be discussed by ExComm.

On Wednesday morning, Surg. Lt.Cdr. S. S. Mohapatra from the Indian Coast Guard presented Drs. Antuñano and Bagshaw with tokens of appreciation.

The following highlights are not necessarily in chronological order:

Editor's Report: Dr. Nunneley stated there is a good flow of manuscripts. Reviewers receive papers within 5 days and revisions are done within 38 days. There is a 35% rejection rate. Dr. Nunneley is also looking for an Associate Editor to assist with soliciting clinical articles.

Managing Editor's Report: Ms. Day noted that there have been three supplements this year. We are now exploring costs for placing the journal on CD. Postage will be going up again in 2006. She announced the launching of the new Mentorship Program on the website. [The Executive Director noted that the expert list has been completed and will be placed on the website soon.]

Annual Meeting: The Executive Director announced that the advance registration was 1,001.

Scientific Program: Dr. Shappell recommended that Workshops be arranged next year on medical issues. He also feels strongly there should be onsite registration available for Workshops. There were 404 abstracts accepted and 25 rejected for this year's meeting.

Outreach: The Executive Director reviewed outreach activities during 2004 (see Business Meeting Minutes for details).

Education and Training Committee: Dr. David Rhodes has assumed Chair of the Education and Training Committee, since Dr. Van Syoc has been deployed. The Committee is working on enduring CME materials and is exploring CME for internationals. The MOC program will be under the management of the constituent organization, the American Society of Aerospace Medicine Specialists (ASAMS).

The process for selecting a student/resident for the Davis Scholarship is being

See COUNCIL, p. 816



Davis Scholarship--Jennifer Law received this year's scholarship from AsMA President, Melchor Antuñano.

Executive Director's Column



Rayman

Space Life Sciences Budget Crisis

There has been a great deal of alarm recently due to significant cuts proposed in the NASA budget. If the proposed budget becomes law, basic research, space biology research, and countermeasure research would be in great jeopardy.

It would seem paradoxical that President Bush would call for an ambitious space exploration program, including missions to the Moon and Mars, while at the same time serious consideration is being given to vitiate life sciences and medical research. We are very painfully aware that the countermeasures currently available are of marginal value in our low Earth orbit flights; they would, therefore, most likely be of dubious value for exploration missions. Furthermore, much needs to be accomplished to ensure adequate medical care in flight. One would think that with an ambitious space program, a very robust budget would be provided for life sciences and medical research in order to increase our certitude of astronaut health and safety.

In response to the proposed budget, a coalition was formed of several professional scientific organizations to which AsMA was invited to participate. Other organizations include the American Society for Gravitational and Space Biology, The American Institute of Aeronautics and Astronautics, and the American Society of Plant Biologists. There are also individual scientists and representatives from the commercial world who are part of the team. This coalition has taken the name Exploration Life and Medical Sciences (ELMS).

The ELMS coalition has been extremely active holding weekly telecons for the purpose of organizing an offensive with the objective of convincing our lawmakers as well as NASA officials of the critical need for an effective space medicine research budget. This offensive has four thrusts.

1. Grass Roots Campaign.

We have prepared recommended letters to Congress that have been distributed among the 10,000 members of the coalition organizations. (I passed out a large number at our recent meeting in Kansas City and posted it in the Members Section on our website.) The members of the coalition organizations have been asked to send these letters to Congress as recommended or to make any editorial changes as they deem necessary.

2. Dear Colleague Letter Campaign

These are letters prepared by the coalition sent to key members of Congress asking them to forward the letter on to their other colleagues.

3. Visits to members of Congress

This is an ongoing activity of the ELMS leadership.

4. Visits with NASA officials

A few days before this article was written, four of us met with Special Assistant to the NASA Administrator, Mr. Chris Shanks. We spent over 1 hour with him explaining the criticality of life sciences and medical research.

We will continue action in these four areas. We hope that we will be successful in getting our message through in order to repair a budget that is so vital to our space program. It was personally gratifying to me that the science community expressed their great interest in having AsMA as part of the team.

This Month in Aerospace Medicine History-- August 2005

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

Seventy-Five Years Ago

Appropriate methods of examining the eye (Medical Examiner, Aeronautics Branch, Department of Commerce, Long Beach, CA): "In reviewing the records of the examinations for Airplane Pilots, Department of Commerce, for the past two years, it was found that the number of rejections for all grades totaled (59) of which number (46) or 78 per cent, were rejected for some eye defect.

"As I am interested in ophthalmology, this article will have to do mainly with a few observations and comments relative to the eye examination. The procedure follows pretty much that as laid down in the 'Physical Standards for Airplane Pilots.'

"...I have had candidates rejected for visual acuity who on being intent on flying, visit an optical shop presumably for a course of muscle treatments, but have, unfortunately, improved their vision only to the extent of memorizing the usual Snellen's Test Type.

"...Eighty years have elapsed since Helmholtz has given us the Ophthalmoscope - one of the greatest contributions to medical science. The sad part of it is, the profession from what I have observed, fail to appreciate it. Doctors, as a rule, carry a stethoscope, but no ophthalmoscope. With the former they listen and surmise, with the latter they see and recognize. In other words, one could be more sure of himself if he could see rather than hear his pathology.

"It certainly is discouraging to try and point out vitreous opacities to an internist, and he, there straining his eyes through the aperture of the scope - the latter almost touching the orbit - of course, he can't see them.

"The instrument would be used more generally and with good results if the profession would spend a little time to learn something about it and how to use it.

"...The time element of the above eye procedures will vary somewhat; however, for the Student Pilot with 20/20 vision and normal color vision, from twelve to fourteen minutes are consumed. For the higher grades where fields are required thirty to thirty-five minutes, or longer, is necessary - depending on the alertness and intelligence of the candidate" (2).

Fifty Years Ago

Lieutenant Colonel Stapp's experiments in human tolerance: "Human experiments on a rocket propelled linear decelerator sled capable of higher than 25 g decelerations for longer

than one second durations have determined parameters for limits of reversible incapacitation of volunteer human subjects. These limits of human tolerance relate to decelerations experienced during escape from high performance aircraft by means of an ejection seat during wind drag deceleration at high ram pressures encountered in supersonic flight.

"A simultaneous study of windblast effect due to impingement of ram pressure against the exposed body of the subject indicates that 7.7 pounds per square inch, or 1,108 pounds per square foot of ram wind pressure has no significant effect on a subject whose head is shielded by a complete enclosure, and whose head and extremities are restrained against flailing. Indications are that decelerations exceeding one second for higher than 25 g can be a limiting factor requiring modification of the deceleration reaction of seat and occupant to supersonic ram pressures. On the basis of these and previously reported human experiments it is postulated that a refractory period of one-tenth second with respect to hydraulic displacement effects within the body determines very high impact tolerance.

"In this range tissues fail in the same manner as inert materials by exceeding physical characteristics of tensile, compression, or shear strength. Beyond this range, tolerance to mechanical forces is determined by reaction to hydraulic displacement of fluids. Hydraulic pressure rupture of blood vessels and pressure damage to cell membranes set the limit to tol

See HISTORY, p. 818.

Call for Papers Abstract Deadline: October 28, 2005

**"Spread the Word--
Share the Science"**
May 14-18, 2006, Orlando, FL
www.asma.org

Site available: August 2, 2005

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

Take advantage of this powerful tool!

Through the COS Research Tools/Workbench feature (located at the very top of the page), you can find funding opportunities and searches for colleagues, articles, meetings, and much more!

There are many other exciting features available through this site, including an **itinerary builder**.

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

Where's the Proof?

**Evidence Based Medical
Certification: an International
Challenge**

**Sunday May 14, 2006: 8:00AM-
Noon**

**CAMA Sunday, Orlando
Florida, with AsMA**

Don't miss it!

Opening Ceremonies of the 76th AsMA Annual Scientific Meeting, Kansas City, MO



OPENING CEREMONIES--The Jackson County Ritual Team (above, left), all veterans, presented the colors during opening ceremonies. The Tony Dipardo Band (top right) supplied the music, led by Tony Dipardo himself (inset center). Dr. Melchor Antuñano, (above right) looks on as members were treated to a PowerPoint slide show depicting the history of the AsMA.
All photos by Michael Doyle Photography.



BAUER LECTURE-- (Left) The crowd enthusiastically responds to the lecture given by Joseph Kittinger (right) concerning his influences and experiences as the fastest man alive (714 mph during freefall, exceeding the speed of sound without an aircraft!).



BAUER LECTURE--Joseph Kittinger (center) receives the award for his lecture from Drexel Smith, Sr. VP, (left) representing the sponsor Wyle Laboratories, and Dr. Antuñano.

ARMSTRONG LECTURE--Dr. James DeLaurier (left) receives the award for his lecture on the Ornithopter Project from Dr. George K. Anderson, representing the sponsor ETC, as Dr. Antuñano looks on. The lecture was given on May 12.

Honors Night Reception, Banquet, and Afterglow



PAST PRESIDENT'S PIN AND PLAQUE--
 (Upper left) Sandi Antuñano pins her husband with the Past President's pin as incoming president Dr. Michael Bagshaw looks on.
 (Lower left) Dr. Bagshaw presents the Past President plaque to outgoing president, Dr. Antuñano. (Above) Dr. Michael Bagshaw and his wife Penelope at the banquet.

All photos by Michael Doyle Photography.



HONORS NIGHT RECEPTION--(Top photo) AsMA president, Dr. Melchor Antuñano greets Dr. Eric Donaldson, at the reception as his wife Sandi looks on. (Center photo) Dr. Daniel Lestage, Dr. Antunano, Nevonna Schroeder, and Helen Lestage. (Bottom photo) ICAO members enjoy the reception.



2005 FELLOWS--The following Fellows were selected during the 76th AsMA Annual Scientific Meeting: David L. Brown, M.D.; Miguel Cima, M.D.; Rhonda L. S. Cornum, M.D.; William D. Fraser, M.Sc.; Michael C. Jones, M.D.; Benjamin Z. Kallner, M.D.; Wolfgang D. Linnenbach, M.D.; James S. McGhee, M.D.; Verba A. Moore, M.D.; David F. Neri, Ph.D.; James R. Phelan, M.D.; David M. C. Powell, M.D.; Robert W. Rigg, M.D.; Dr.med. Kirk M. Rose; Farhad Sahiar, M.D., M.S.; and Nicholas L. Webster, M.D.

Those present are pictured above with AsMA president, Melchor Antuñano (back row, far left) and Fellows chair, Daniel Lestage (back row, far right).



HONORS BANQUET--(Top photo) Dr. Lestage, chair of the Fellows Group, tells Sandi Antuñano a fish tale. (Bottom photo) At the head table, Dr. Antuñano addresses the audience as Sandi and the Lestages look on.



AFTERGLOW--A jazz combo from the Tony DiPardo band played dance tunes into the wee hours as members enjoyed the music, Irish coffee, and dancing, unwinding after a week of learning, networking, and camaraderie.

Minutes of the Aerospace Medical Association Annual Business Meeting

Tuesday, May 10, 2005, Hyatt Hotel, Kansas City, MO

1. Call to Order

Dr. Antuñano called the meeting to order at 12:45 P.M.

2. Recognition of Past Presidents

3. In Memoriam

4. Report of the President

Dr. Antuñano reviewed the highlights of his year as President and extended his thanks to everyone.

5. Report of the Executive Director, Secretary Treasurer, General Chair of Annual Scientific

Ladies and gentlemen, it is my pleasure to report to you our activities during the preceding calendar year.

a. Undoubtedly the highlight of 2004 occurred in July when the National Aviation Hall of Fame conferred upon AsMA the Milton Caniff Award. This is certainly a tribute to every member of the Aerospace Medical Association since its birth in 1929. In attendance were many dignitaries from the aerospace community, as well as a sizeable attendance of members of our Association. The Award was presented by Neil Armstrong.

Of great significance during the preceding year was our publication of a number of very important position papers that attracted attention not only from the media and sister international organizations, but also from the U.S. Congress. These papers addressed the SARS epidemic, the Age 60 Rule, and the use of SSRIs. The U.S. Congress was particularly interested in reviewing existing laws regarding age limits for workers. Your Association was called upon to testify before the U.S. Senate on Aging regarding such laws applicable to airline pilots. With an AsMA Position Paper in hand, our testimony reflected our approved policy as written in the document. The paper on SSRIs has also attracted great interest in that we have proposed that pilots with mild depression who are on SSRI maintenance medication might be considered for aviation duties. This paper in part prompted the FAA to form a Working Group to examine their own policies.

During the past two years ICAO has reviewed their Medical Standards Annex I. Participating in this review were a number of AsMA members. It was recently announced that the revised Annex I was just approved by the ICAO General Assembly. Particular credit for this initiative goes to Dr. Claus Christiansen, Chief Medical Officer at ICAO, and Dr. Jarnail Singh, who chaired the Working Group.

I particularly want to congratulate and thank Marian Sides, who practically single-handedly organized an AsMA meeting in Bellagio, Italy, addressing the cardiovascular aspects of spaceflight. In attendance were a number of international experts who reviewed cardiovascular changes in microgravity, many of whom are presenting their papers here in Kansas City. A supplement containing the papers is also in the works. Thank you Marian.

AsMA continues to be represented in a number of outside organizations including the Air Transport Association of America, the Commission on the Accreditation of Medical Transport Systems, (thanks to James Stewart), the NASA Aerospace Medicine and Occupational Health Advisory Committee, the European Civil Aviation Conference (Thanks to Nigel Dowdall), and the National Academy of Sciences Committee on Aerospace Medicine and Medicine in Extreme Environments.

At this time, we have approximately 11 position papers in various stages of preparation addressing major issues in aerospace medicine. Your committees are now hard at work preparing these position papers that, if approved, will become AsMA policy. I sincerely hope that I will be able to report to you next year in Orlando that most, if not all, of these papers have been completed.

I will conclude by drawing your attention once again to an urgent matter. And that is our membership. It continues to go in a downward direction. I am asking again that everyone in this room, or better yet, everyone in AsMA get 1 new member before this year is out.

Membership is our life blood. It not only enhances our professionalism, but it also enhances our revenue flow. Without funding we cannot do many of the things we would like to do particularly in the area of member services.

These are our major outreach initiatives for 2004-05. Thanks to all of you who have given your time and energy to a most productive year.

b. Report of the Secretary-Treasurer

As of December 31, 2004, our total income was \$ 1,186,000, and total expenses were \$1,171,000 for a net gain of \$ 15,000.

During the year we paid half of our mortgage leaving us with a balance of approximately \$170,000 to be amortized by 2009. Our Merrill Lynch Portfolio at the end of the year was valued at \$730,000.

c. Report of the General Chair of the 76th Annual Scientific

Meeting: Advance registration was 1,001; on site registration as of 11 a.m. today was 237, giving us a total registration of 1,238. There were 36 Exhibits.

6. GOVERNANCE - (BAGSHAW)

- Bylaws - Nailling: Two proposed Bylaws changes were published in the February issue of the journal.

The first proposed change was to allow the Finance Committee Chair to select his/her Committee members. A motion to this effect carried unanimously. A second proposed Bylaws change would define a quorum at the Business Meeting as the number of members that were in attendance. A motion to that effect did not carry very much based on the argument that there would be the possibility of only a few individuals empowered to make AsMA policy.

- Finance - Weien: Dr. Weien gave a brief overview of the Association finances indicating that for 2004 we were a little over \$15,000 in the black. He reminded everyone that convention income is extremely important in maintaining a healthy financial state. In addition, he informed the attendees that his investment policy had been approved.

- Nominating - Thibeault: Dr. Thibeault reviewed the slate of proposed new officers as follows: President, Dr. Bagshaw, President-Elect, Richard T. Jennings; Vice Presidents, James Webb, Dan Callan, Robert W. Weien; Members-At-Large with terms to expire in 2008 - James DeVoll, Gail Hathaway, Dwight Holland, Warren Silberman; Members at Large with terms to expire in 2006 - Vince Musashe, David Gradwell; and Secretary/Treasurer, Russell B. Rayman. A motion to approve this slate carried.

7. REPRESENTATION AND ADVOCACY - (HASTINGS)

- Resolutions - Dervay: Dr. Dervay presented proposed resolution 05-01 Prevention of Controlled Flight Into Terrain (CFIT) Mishaps in Aircraft with Electronic Flight Controls. The resolution states, Therefore Be It Resolved: That all aircraft with digital electronic flight controls should incorporate completely automated systems that prevent collision with the ground. A motion to approve the resolution carried. (The senior ranking USAF Medical Officer in attendance recused himself and asked other USAF officers in attendance to do the same.) The Executive Director will consult with members to determine where this resolution should be sent.

- Air Transport Medicine- Wolbrink

- Communications - Hoffman: Dr. Ron Hoffman stated that the new Website is now up and running and that we have about 2 months to make any changes.

8. EDUCATION AND RESEARCH - (R. JENNINGS)

- Aerospace Human Factors - Nesthus: Dr. Nesthus stated that the Committee is sponsoring 3 panels and is currently working on a Fatigue Countermeasure position paper for the Association.

- Aviation Safety - DeJohn: Dr. DeJohn stated that the Committee is working on several position papers on Optimal Cabin Pressure, UAV Medical Standards, Airport Disaster Preparedness.

- Education and Training - Rhodes: Dr. Rhodes stated that the Committee is working on the MOC Program and is preparing a compendium of aerospace medicine educational programs. He also stated that the ACCME has approved AsMA for 4 more years of accreditation of our Annual Scientific Meeting. The \$1,000 Scholarship for this year was awarded to Jennifer Law, who is a medical student at USC.

- History and Archives - Mohler: Dr. Mohler stated that his Committee is sponsoring a panel at this meeting and has four very interesting historical movies being shown each day over the lunch hour.

- Science and Technology - Goodman: Dr. Goodman has resigned his position as Chair. The new Chair will be Dr. Barry Shender.

9. MEMBER SERVICES - (TAYLOR)

- Awards - Moore: There will be a recipient for every AsMA award on Honors Night.

- Corporate and Sustaining - Sides: Dr. Sides has successfully solicited three new Corporates. She also gave an overview of her Bellagio Report.

- Membership - Bellenkes/Silberman: Membership as of January 05 was 3,009, which is continuing a downward slide. Dr. Bellenkes made a plea for everyone to get new members this year.

10. INTERNATIONAL SERVICES - (BELLENKES)

a. - Committees

- International Activities - Navathe: Dr. Bellenkes reminded everyone of the International Reception to be held Wednesday evening.

11. UNFINISHED AND NEW BUSINESS

There was no unfinished business.

12. ADJOURN

The meeting adjourned at 2:00 P.M.

Respectfully submitted, Russell B. Rayman, M.D., Secretary



Dr. Antuñano

AEROSPACE MEDICAL ASSOCIATION HONORS NIGHT AWARDS--2005

Melchor J. Antuñano, M.D., 2004-2005 President of the Aerospace Medical Association, presented awards to 16 outstanding physicians, nurses, and researchers during the Honors Night ceremonies at the 76th Annual Scientific Meeting at the Westin Crown Center, Kansas City, MO. Robert Weien, M.D., read the citations because the Chair of the Awards Committee, Verba Moore, could not be present. The names of the awards' sponsors and representatives, when present, are printed in parentheses. Ray King, M.D., (not shown) accepted the Raymond F. Longacre Award for Joseph D. Callister, M.A., Ph.D., who could not be present.

Two President's Citations were also presented during the ceremonies.

All photos by Michael Doyle Photography.



JOHN PAUL STAPP AWARD
Susan P. Baker, M.P.H., Sc.D. (Hon.)
(George K. Anderson, M.D., Environmental Tectonics Corp.)



WON CHUEL KAY AWARD
Dwight A. Holland, M.S., M.S.E., Ph.D
(Dr. Oh Jung-Hyub, Aerospace Medical Association of Korea)



LOUIS H. BAUER FOUNDER'S AWARD
David P. Gradwell, B.Sc., Ph.D., M.B.Ch.B., D.Av.Med., FRCP, FRAes
(Jefferson C. Davis Wound Care and Hyperbaric Medicine Center)



MARY T. KLINKER AWARD
Penny Pierce, M.S.N., Ph.D.
(Colleen Morissette, Aerospace Nursing Society)



ERIC LILJENCRANTZ AWARD
Dr.med. Peter W. Frank
(Aerospace Medical Association)



HARRY G. MOSELEY AWARD
Lt. Col. Donald J. White, USAF, BSC
(Lockheed-Martin Corporation)



THEODORE C. LYSTER AWARD
John D. (Jack) Hastings, M.D.
(Lockheed-Martin Space Operations)



BOOTHBY-EDWARDS AWARD
Ralph G. Fennell, M.D., M.S.
(Harvey W. Watt & Company)



ARNOLD D. TUTTLE AWARD
Micheal B. Russo, M.D.
(Bob Ellis, Wyle Laboratories)



SIDNEY D. LEVERETT, JR., ENVIRONMENTAL SCIENCE AWARD
Jan Risberg, Ph.D.
(George K. Anderson, M.D., Environmental Tectonics Corp.)



KENT K. GILLINGHAM AWARD
Angus Rupert, M.D., M.Sc., Ph.D.
 (Gerhard Emsenhuber, AMST)



JOHN A. TAMISIEA AWARD
Graeme Maclarn, M.B., B.S., D.Av.Med., M.Eng.Sci., FRAeS
 (David Millett, M.D., Civil Aviation Medical Association)



JULIAN E. WARD MEMORIAL AWARD
Kimberley R. Bradley, M.D., M.P.H.
 (Charles Fisher, Jr., M.D., Society of U.S.
 Air Force Flight Surgeons)



MARIE MARVINGT AWARD
David M. Lam, M.D., M.P.H.
 (Marie-Paul Charetteur, 2nd from left, and Jean P. Crance, far right,
 French Aerospace Medical Association)



President's Citations

The 2005 President's Citations were awarded to Drs. Jeffrey R. Davis (above) and Luis Amezcua (right photo).



COUNCIL, from p. 808.

worked on. The scholarship provides \$500 for any AMSRO or UTMB student to attend any medical conference including AsMA.

Intellectual property guidelines prepared by Dr. Falkenheimer were approved by Council and will be published in the journal.

CME/MOC/ACCME: The Executive Director announced that we had passed our ACCME inspection and have been accredited for 4 more years. This year's meeting has been approved for 24 hours by the AMA, 24 hours by the AOA, and 21 hours by AAFP. There are 24 hours accredited for MOC at this meeting (including the Workshops).

History and Archives Committee: Dr. Mohler announced there will be 4 historical movies at this meeting and a Howard Dolman apparatus would be on display. He also obtained a rare film, *Fit to Fly*, which will be shown in Orlando.

Science and Technology Committee: Dr. Goodman is unable to continue as Chair and Dr. Barry Shender is currently acting. The Committee continues to publish science and technology articles in the journal and the Committee is sponsoring a panel at this meeting.

Corporate and Sustaining Membership Committee: Dr. Sides reported that the Corporate Directory has been updated and that she has just enlisted three new C&S members. She is also doing a needs assessment of our Corporate members. The Bellagio report has been sent to Council for information. It is anticipated that a supplement will be published in the near future. Her Committee also recently published a newsletter.

Awards Committee: Dr. Antuñano informed Council that ExComm had voted to allow only 1 Award per person per year. Dr. Antuñano also proposed a Mentor-of-the-Year Award. A motion to that effect carried. The criteria for this award is to be established by the Awards Committee. It was also suggested that Fellows points be given to those individuals who serve as mentors. This will be referred to Dr. Lestage. Due the deployment of Dr. Moore, Dr. Weien filled in at Honors Night.

Membership Committee: Drs. Bellenkes and Silberman noted that there is clearly a decreasing membership from 3,106 in January 2003 to 3,009 in January 2005. This drain continues despite aggressive attempts by the Membership Committee to get new members and also to reduce delinquents. A plea was made for everyone to do their very best in getting new members.

Resolutions Committee: Dr. Dervay reported that Resolution 05-02, Restore Funding NASA Aeronautics Research, is currently being worked on by the Committee and will be presented at the next Council meeting. Resolution 05-01 Prevention of Controlled Flight Into Terrain Mishaps in Aircraft With Electronic Flight Controls was presented to Council. A motion to approve the resolution carried. (USAF and FAA personnel were recused from voting.) Dr. Mapes gave a technical description of the resolution and provided background information. The resolution will be presented to the Business Meeting this week.

Communications Committee: Dr. Hoffman announced that the new Website went live on April 20 and we have until June 20 to take care of any bugs. He stated that we will undoubtedly want to have additional features which can be added in the future as required. The Committee is going to have sub-committees for website, mechanisms of

communication, and rapidly emerging issues.

Air Transport Medicine Committee: There are two policies in the works-- one on "go-no-go pills by ANG/RES who also fly commercially;" and one on "biohazard decontamination of aircraft."

Finance Report: The Executive Director gave an overview of the 2004 finances. There was a net gain of approximately \$15,000 with a deficit of \$147,000 in General Operations, a gain of \$37,000 in the journal and a gain of \$124,000 for the Alaska meeting. In October we paid off half of our mortgage, which was \$355,000. We now owe approximately \$170,000 with a 5.75% mortgage interest rate, which will amortize by April 2009. The Merrill Lynch Portfolio value at the end of 2004 was \$732,000. Equities at the end of the year was approximately \$1,400,000. The Executive Director emphasized the importance of membership which is a major financial support of general operations. Because we had a deficit in general operations, it is imperative that all of us work hard to get new members in order to liquidate that deficit or at least decrease it as much as possible.

Finance Committee: Dr. Weien announced that the investment policy that he had written was approved by Executive Committee and will be implemented. The next step for the Finance Committee is to determine how our assets will be apportioned between equities and government securities, apportionment between mutual funds and stocks, and the selection of a portfolio manager. The Executive Director will also explore portfolio managers in the Washington, DC area. This will be discussed at the September Executive Committee meeting.

Bylaws Committee: Mr. Nailling reported that two proposed changes to the bylaws would be presented during the Business Meeting-one concerning the membership of the Finance committee, bringing it in line with other committees; and one concerning the definition of quorum at our business meeting.

There was a discussion whether or not Constituent Constitution and ByLaws (C&BL) changes must be reported to Council. A motion was made and carried that all Constituents will send their current C&BLs to the Bylaws Committee for review to ensure that there are no conflicts with the AsMA Bylaws. If not, they will be grandfathered in. If there are future C&BL changes, they will be brought to the attention of the Executive Director, who will bring it to Council.

The Executive Director will also suggest that all Constituents have a policy/procedure manual similar to that of AsMA in order to facilitate Bylaws changes and to avoid Council approval in the event of a change.

Dr. Antuñano announced that the Brazilian CAA wants to become an Affiliate although this is not a medical organization and he asked if this would be acceptable. The matter was given to the parliamentarian Dr. Royce Moser who said that admitting the Brazilian CAA as an Affiliate would not be in conflict with AsMA Bylaws.

Nominating Committee: Dr. Thibeault announced the slate for the coming year. The slate will be presented to the Business Meeting for approval. Dr. Thibeault also expressed great exasperation because of the poor cooperation he received from many of the Committee members, which caused added difficulties to providing a slate of new officers. He asked that all Constituent Organizations ensure that

their representative to the Nominating Committee is available and willing to do the work as needed.

Report of Representative to Aerospace Physiology Certification Board: Gail Hathaway is the new Council representative to the Aerospace Physiology Certification Board. LTC Richard Jehue is the new Chair of the Board. Col. Hathaway announced that 3 individuals sat for the examination this year and all 3 passed. A motion to certify Deborah White, Greg Ostrander, and Paul Hauerstein carried.

AMSRO: Dr. Westphall reported that the membership in the student organization had nearly disappeared, but now they are gaining members. Their website should be active again soon. The new representative is Robin Chase.

ACPM Report: Dr. Davis reported that Jud Richland retired as EVP. Mike Barry (not Mike Berry) replaced him. There is a major effort in Congress to get more funding for preventive medicine residents.

Fellows: Dr. Lestage reported that at the Fellows' meeting it was decided that nominees for Fellow who are not elected can be carried over for 2 more years. This requires approval by Council. Dr. Lestage made a motion to approve which carried.

Other Reports: Reports of Constituent and Affiliate Organizations, if submitted, are on file at the Home Office.

The Constituent Representatives to Council are: AMDA-Jack Hastings; IAMFSP-David Hiland; ASAMS- Dan Van Syoc; Space Medicine Branch-Jon Clark; Aerospace Nursing Society-Dan Roper; Society of U.S. Naval Flight Surgeons-Mark Edwards; Society of U.S. Air Force Flight Surgeons-Chuck Fisher; LSBEB-Estrella Forster; Human Factors-Tom Nesthus; Army-Joseph McKeon; Physiologists-Russell Lawry; Students (AMSRO)-Robin Chase.

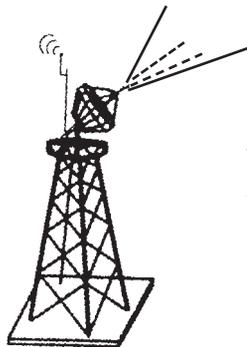
Members of Executive Committee: Dr. Bagshaw selected Jack Hastings, David Gradwell, and Susan Richardson as the three Executive Committee Members from Council. A motion to approve these nominations carried. Other members of the Executive Committee are the President, President-Elect, the four Vice Presidents, and the Secretary-Treasurer.

New committee chairs: Dr. Bagshaw announced the following new committee chairs: Awards-Andy Bellenkes; Communications-Bob Weien; Finance-Jim DeVoll; International Activities-Chris Kleinsmith; Resolutions-Joe Dervay; Science and Technology-Barry Shender. For the 2006 Annual Scientific Meeting the chairs are: Scientific Program Chair-Jeffrey Myers; Workshops-Scott Shappell; Panels-Pete Mapes; Posters and Arrangements-Phil Scarpa; Registration-Larry Wilson. It was noted committees need to be sure to have a co-chair.

The next Council meeting will be in Alexandria, VA, November 16. The Executive Committee will meet September 15.

Remember!

Council Meetings are open to all members of the AsMA. Your input and attendance are always welcome. Our next meeting will be November 16, 2005, in Alexandria, VA.



Science & Technology Watch

Keeping You Informed Of The Latest Advances In Science And Technology

This month's edition of the Watch describes the development of a device that allows for realistic computerized testing of mechanical anti-G valves.

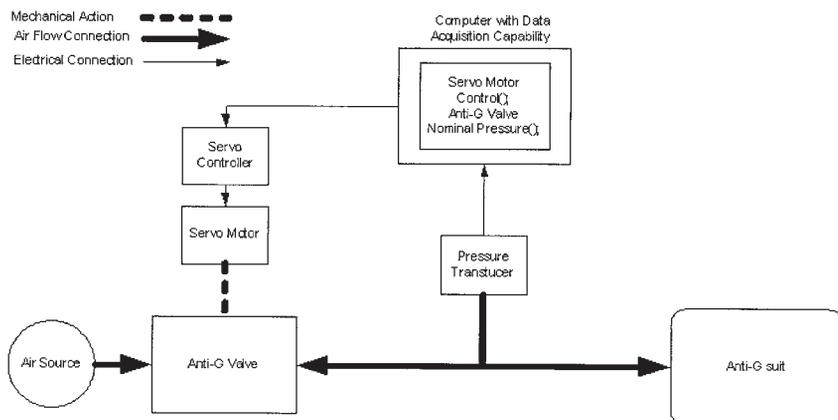
A Quick and Simple Alternative for Electronic Anti-G Valve Control

Edgar Khachatryan
Athena ISG/GTXtreme, Inc.

During normal operations in a high performance fighter aircraft, the anti-G valve reacts to aircraft acceleration in the Z or axial direction by applying a mechanical force to the anti-G valve plunger. This in turn causes pressurized bleed air from the aircraft to flow into the anti-G suit. The relationship between the force applied to the plunger and the pressure added to the G-suit is based on the applied +Gz load and is described by existing performance specifications for the valve.

Athena ISG / GTXtreme, Inc. has been working with the U.S. Naval Air Warfare Center Aircraft Division Patuxent River, MD, to develop a closed-loop electronic pressure control system that, when integrated with the standard anti-G valve, controls the pressure inside the anti-G suit by adding or subtracting pressure based on the needs of the pilot. The Aircrew Integrated Life Support System (AILSS) program (funded by the U.S. Office of Naval Research) is currently demonstrating closed-loop control of the anti-G system based on changing physiologic state of the aircrew. AILSS has been tested over the last 3 years on 36 human centrifuge volunteers, and was flown in an F/A-18B at NASA Dryden Flight

Figure 1.



Research Center (DFRC) in the summer of 2004.

To facilitate the development of the AILSS control system, a method to electronically control the depression of the plunger on the standard anti-G valve had to be created to test and evaluate the system in a laboratory setting. In particular, a means needed to be developed that would allow qualification of the control algorithm to respond to simulated aerial combat maneuver +Gz profiles.

How it works:

In experiments completed in 2004, acceleration forces on the anti-G valve plunger were simulated with a load applied by a servomotor mounted to the surface of the anti-G valve. This downward force is controlled by an electrical input from the AILSS computer. Air pressure inside the suit is directly proportional to the force applied to the plunger. Using empirical methods and nominal G-valve performance specification values, a computer algorithm was developed to match the servo arm depression of the anti-G valve plunger with desired G-valve output pressure ultimately simulating the function of the standard anti-G valve in the aircraft.

Feedback control of the system is attained by monitoring the pressure downstream of the anti-G valve. A pressure transducer at the outlet of the anti-G valve is connected to an analog input of the AILSS data acquisition card and an analog output of the card is connected to the servomotor. The design allows for the AILSS control system to be tested during development, in the laboratory, before full-scale testing takes place at the centrifuge. A block diagram of the system is shown in Fig. 1.

In the past the AILSS full system dynamic response testing was only possible in an actual centrifuge environment. With the electronic anti-G valve control system described above it is now possible to simulate +Gz inputs to the standard mechanical G-valve and control these inputs via the AILSS computer. The next step will be to develop a set of physiological data that can be used in conjunction with this test setup that will further enhance the full system dynamic test capabilities in a laboratory setting. This type of test setup will not replace a centrifuge test, but will allow for many of the bugs to be worked out earlier in the development process and save system safety check-out and debug time at the centrifuge prior to the start of human test runs. If you want more information or would like to comment, please contact us at AthenaISG/GTXtreme, Inc.

www.athenagtx.com, Tel: (909) 476-0385,
email: edgark@atenagtx.com.

The AsMA Science and Technology Committee provides this Science and Technology Watch Column as a forum to introduce and discuss a variety of topics involving all aspects of civil and military aerospace medicine. The Watch can accommodate up to three columns of text, which may include a figure or picture to illustrate your concept.

Please send your submissions via e-mail to: barry.shender@navy.mil

MEETINGS CALENDAR 2005

August 28 - September 1, 2005.

Warsaw, Poland. 53rd International Congress of Aviation and Space Medicine. Sponsored by the Polish Medical Association, Civil Aviation Office of Poland, and Polish Air Force Institute of Aviation Medicine. Info: www.icas2005.org.

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

September 26-30, 2005, Orlando, FL.

Human Factors and Ergonomics Society 49th Annual Meeting. For more information, write to info@hfes.org or visit hfes.org/Meetings/05annualmeeting.html.

October 7-8, 2005, Oregon, OH. 2005

Hyperbaric Medicine Update. Sponsored by ProMedica Health System Continuing Medical Education Department and The Toledo Hospital Department of Hyperbaric Medicine in a Joint Sponsorship with the Undersea & Hyperbaric Medical Society, Midwest Chapter. Info: The Toledo Hospital Department of Hyperbaric Medicine at 419-291-2072; the Continuing Medical Education Department at 419-291-4650; or e-mail Diane.Monaghan@promedica.org.

October 19-22, 2005, Playa del

Carmen, Q.R., Mexico. XXII International Meeting of Aerospace Medicine. Sponsor: Mexican Association of Aviation Medicine, A.C. General Theme: Advances in Clinical Aerospace Medicine. Info: Luis A. Amezcua G., M.D., Tel./Fax: (52-55) 55-15-68-84; lamezcua@att.net.mx

October 24-26, 2005, Salt Lake City,

UT. SAFE Association 43rd Annual Symposium. Info: Jeani Benton 541-895-3012; safe@peak.org; www.safeassociation.com.

October 31 - November 4, 2005, San

Francisco. International Congress of Nanotechnology Info: The Event Coordinator, International Association of Nano-technology Sacramento, CA 95825 USA; email: info@ianano.org; Web site: www.ianano.org; www.nanotech-congress.com.

HISTORY, from p. 809.

erance. Hydraulic pressure values, on the other hand, tolerable to living tissues but lasting more than three seconds can produce a secondary hypoxia due to circulatory stasis. Such hypoxia in nervous tissue can reach a duration limit for uninjured survival. These responses represent a continuous spectrum of reaction to mechanical force related to rate of application, magnitude of force, duration of application, and its direction" (4).

The theory of ebullism and its prevention: "The effect of decreased ambient pressure on water balance in the human being is a question of major importance to physiologists. McCutchan and Taylor have recently published a report which goes far toward the elucidation of this problem. Their results show that there is an inverse relationship between the barometric pressure and evaporation from the skin, and furthermore that an increase in evaporation rate is followed by a corresponding increase in the perspiration rate.

"If the barometric pressure is lowered to a value equal to or lower than the vapor pressure of body liquids, then theoretically these liquids should boil since the boiling point is defined as that temperature at which the vapor pressure of the liquid equals the barometric pressure. It is well known that the vapor pressure varies directly with the temperature and therefore the ordinary method of boiling a liquid consists in heating it until the vapor pressure is raised to a value which is equal to the barometric pressure...

"There is, however, another method of causing a liquid to boil. This consists of lowering the barometric pressure until it reaches a value equal to or lower than the vapor pressure of the liquid concerned at the existing temperature. If this is done it is possible to produce boiling without bubbling.

"[W]e should like to point out that animals and men may be protected from the serious effects produced by the boiling of blood and

body liquids by the application of pressure on the outside of the body such as is applied by both the U. S. Air Force partial pressure suit and the U. S. Navy full pressure suit. Direct evidence that such boiling occurs in the absence of adequate protection has been obtained by means of x-ray and fluoroscopic studies. The swelling of the body and circulatory arrest described in this paper constitute indirect evidence in support of this conclusion" (3).

Twenty-five Years Ago

Distortion of sound localization under water (Department of Psychology, University of Stirling, Scotland): "Sounds should be localized at more medial positions under water than in air, because the values of the interaural temporal and intensity differences are reduced in water. Thirteen blindfolded divers were required to move a pointer toward the apparent location of a sound source under water, and they showed significant errors toward the median plane. In a second experiment, five divers were tested in air before and after underwater training at swimming towards a sound source. The search patterns of these divers showed systematic errors towards the median plane. A comparison of the first and second air tests showed some evidence of an aftereffect away from the median plane, discounting the most lateral angles (80° left and right) where little effect would be expected. It is concluded that both a distortion of localization and some adaptation to the distortion occur under water" (5).

Effect of alcohol ingestion on heat loss (School of Human Biology, Department of Human Kinetics, University of Guelph, Ontario, Canada): "Alcohol has been found to inhibit hepatic and muscle carbohydrate metabolism and, in combination with cold air exposure, has been associated with increased heat loss. Despite these risks, the information on exercise, alcohol, and cold is extremely limited. Young male volun-

teers (n=6) ingested on different occasions water, water and alcohol (2.5 ml/kg), or water, alcohol (2.5 ml/kg) and dextrose (50 g/150 ml water). The three treatments were administered by a balanced design. Following fluid ingestion, the subject performed intermittent bicycle work (40% VO₂max) with a 20-min work: 10-min rest pattern for 2 h in a -5°C environment. The water-alcohol condition resulted in peak blood alcohol levels of 11.4-16.2 mM; with dextrose, the peak was lower and delayed 30 min. In the control condition, core temperature (T_R) increased 0.4°C, skin temperature (T_{SK}) decreased 3.7°C and mean body temperature (T_B) decreased 1.1°C. Alcohol lowered T_R 0.4°C (p<0.05), lowered T_{SK} 4.6°C (p<0.05) and lowered T_B 1.9°C (p<0.05). With dextrose, T_R did not differ significantly from the control and the T_{SK} and T_B were higher than in the alcohol treatment, but lower than the control condition. Blood glucose levels were lower than control (p<0.05) with alcohol ingestion, and hypoglycemia was found in two of the subjects. Thus, alcohol ingestion prior to exercise in a cold air environment can produce hypoglycemia and increased heat loss. When dextrose is also ingested, no hypoglycemia occurs and the heat loss is less" (1).

REFERENCES

1. Graham T, Dalton J. Effect of alcohol on man's response to mild physical activity in a cold environment. *Aviat Space Environ Med* 1980; 51(8):793-6.
2. Hertzog FC. The eye examination. *J Aviat Med* 1930; 1(3):234-6.
3. Hitchcock FA, Kempf J. The boiling of body liquids at extremely high altitudes. *J Aviat Med* 1955; 26(4):289-97.
4. Stapp JP. Effects of mechanical force on living tissues: I. Abrupt deceleration and windblast. *J Aviat Med* 1955; 26(4):268-88.
5. Wells MJ, Ross HE. Distortion and adaptation in underwater sound localization. *Aviat Space Environ Med* 1980; 51(8):767-74.

AEROSPACE NURSING SOCIETY NEWS

President's Message

I would like to start by thanking Major General Bruce Green for his remarks on the value of nursing at our annual nursing luncheon. It is important to recognize our own worth, and it is appreciated to be valued by our colleagues.

It has been a busy few months. I am in the process of validating our members by survey and in conjunction with the parent organization. An e-mail survey went out to 82 members with a valid e-mail address. So far we have a 25% response rate. Respondents overwhelmingly identify the value of our meetings as the opportunity to communicate among like-minded professionals. Further, the promotion of aerospace nursing through communication to all medical professionals is being identified by the survey participants. If you haven't completed the survey yet, please do so as soon as possible.

The time to submit abstracts for the scientific meeting is drawing closer. Let's be sure

to get those in on time. There are numerous mentors for this process in the society. If you are having a difficult time, please contact me



IVERSEN AWARD-The Edward R. Iversen Sr. Allied Health Professional of the Year Award was presented to SSgt. Angel L. Zabel (2nd from left) by Maj. Gen. Bruce Green (left) as her parents look on. The award is sponsored by the Iversen family. SSgt. Zabel is an Aeromedical Technician from the 86th Aeromedical Evacuation Squadron at Ramstein Air Base, Germany.

Send information for publication on this page to: **Daniel Roper**
2827-B Quay Loop
Holloman AFB, NM 88330
e-mail: rsqcfm@earthlink.net
www.aerospacenursingsociety.org

and I'll put you in touch with a resource. I do have the standardized slide layout for nursing presentations. I am happy to e-mail this to any of you.

Let's get the word out about who we are and how to join our organization. I have a flyer I can e-mail or post mail to take to other conferences. I am also looking into advertising next year's scientific meeting in other aerospace journals.

Start thinking about 2007. We have had generous offers to put a nursing tract together. Please e-mail me your suggestions for an aerospace nurse tract. Ideas so far have included: a physiology review, aerospace assessment tools, a board certified flight nurse (CFRN) review, and offering the Trauma Nurse Core Course (TNCC).

As always, the future is up to us. Let's make our actions today the history that will be talked about in the organization for years to come.

Dan Roper, PhD, RN, CEN, CFRN
2005-06 ANS President
rsqcfm@earthlink.net

Send information for publication on this page to: LCDR Joe Essex, MSC, USN
BLDG 2272 Suite 345
47123 Buse Rd
Patuxent River, MD 20670
joseph.essex@navy.mil

AEROSPACE PHYSIOLOGY REPORT

CAPT Gail Hathaway's Farewell Remarks

2004-2005 was a very successful year for the Aerospace Physiology Society. During the past year, our members and colleagues have continued to be involved in Operations Iraqi Freedom, Enduring Freedom, and Unified Assistance, as well as other deployments and exercises around the world in support of global stability operations. Unfortunately, this also made it difficult for a number of our members to join us in Kansas City. The Aerospace Medical Association's annual scientific meeting, did, however, allow us the opportunity to re-group, renew acquaintances, enjoy fellowship, recognize professional achievements, celebrate milestones, and share common interests in Aerospace Physiology and overall flight safety. I consider myself very fortunate, and indeed, blessed that over the past year I was allowed to be President of such a well-organized, focused, and driven organization!

This year in Kansas City, we "Charted a course for the future." Our training and education seminar focused on feeding the modern and future warfighter and nutritional performance enhancement strategies. This year's program was a sequel to last year's program on complex supplementation.

In the next few upcoming issues of the Journal, we will officially recognize the outstanding talent in our midst, the winners of our three Society awards, and also congratulate our newly certified members, now able to display the initials "CAsP" behind their names.

I wish to personally thank the AsPS Board of Governors for their support over the past year. We held a number of on-line meetings in advance of the annual meeting and were able to bring a fresh and updated look to our Society's by-laws in time for an annual meet-

ing vote of the membership...great job to everyone! Also thanks to the committee chairs and members for their unselfish dedication to the Society events this year. We enjoyed well-organized social functions, guest speakers, and informative educational presentations...none of it happens by itself, and the Society is grateful to you for your efforts. Finally, I wish to thank our Society sponsors: David Clark Company, Inc., Gentex Corporation, International ATMO, Inc., and NTI, Inc. Your generous contributions have made a lasting impression on the success of the AsPS over the years and it is greatly appreciated.

Lastly, it was with great optimism that I handed over the gavel to the society's new president, Col. Jim Dooley, USAF, BSC. Jim is a committed member of the society and will take the organization to the next level of excellence.

Best wishes to all for 2005 and thank you for the opportunity you gave me to serve as your President this past year. Aloha.

Message from the Incoming President, Col. Jim Dooley

As I assume the office of Society President, I express my appreciation to the excellent job of my predecessor, CAPT Gail Hathaway. Gail's efforts were remarkable, especially considering her heavy responsibilities of heading up U.S. Navy relief efforts to the tsunami victims in the Indian Ocean region. From any perspective, under her leadership, the Society had a sterling year in 2004-05. Well done, Gail.

Other Society members assuming offices on the Board of Governors for 2005-06 are: Mr. Joe Zellers - President-Elect; Maj. Tom Morrison - Treasurer (2-yr term); and Lt. Col.

Valerie Martindale - Secretary (2-yr term). Continuing to serve on the Board of Governors are: Capt. Nereyda Sevilla, Bibliographer; CDR Russ Lawry, LT Rich Folga, CDR Lynn Wheeler, and LT Tony Artino - Members at Large; CAPT Gail Hathaway - Immediate Past President; and CAPT Donna Murdoch - One-year Past President. Present and future Society members can monitor the nomination and election of officers for 2006-07 and other Society issues at www.aspsociety.org.

The Society added 27 new members in the past year, and contributed to and participated in several significant events at the Annual Scientific Meeting of the Aerospace Medical Association (ASMA), co-hosted by the Hyatt Regency and Westin, Crown Center, in downtown Kansas City, MO. On Sunday, before the meeting officially opened, three of four applicant candidates sat for the Aerospace Medical Association's Aerospace Physiology Board Certification exam. All examinees passed the rigorous exam and were ratified by the AsMA Council.

Among the week's highlights, the Society successfully sponsored a diverse and informative educational panel session on Performance Nutrition (chaired by Maj. Andy Woodrow). The Wednesday morning panel session was attended by 130 AsMA members, who were treated to a variety of expert speakers on the topic of enhancing operational performance through nutrition. Next year's topic will be incorporation of emerging technologies to counter operational physiology threats.

At Wednesday's annual Aerospace Physiology Luncheon, over 100 Society members and guests gathered for and enjoyed an excellent meal (really) and witnessed the presentation of the Society's Partnership in Education Award to the well-deserving Ms. Lavon Kimminau of the Summit Lakes Middle School and were treated to the superb presentation of the Smith W. Ames Lecture by Maj. Kathryn Hughes, an A-10 pilot/physician from the 190th Fighter Squadron, Idaho National Guard. Maj. Hughes energetically and eloquently elaborated on human factors in close air support missions. Also at the luncheon, Society awards were presented to winners of the Wiley Post Award, Fred A. Hitchcock Award, and Paul Bert Award. Detailed accounts of the awards and award winners will be published in a future issue of this Journal. Not to be forgotten, the annual Society social, also held on Wednesday, was organized to perfection by CDR Tom Wheaton (thanks, Killer). Society members and guests enjoyed incredible barbeque at the acclaimed Kansas City Masterpiece BBQ & Grill in the downtown Country Club Plaza district. Excellent!

Next year's AsMA meeting will be in Orlando, FL, 14-18 May 2006. I encourage all Society members (and those who desire to be) to attend next year's meeting and participate in all the Society events. I hope to see you there!



Aerospace Physiology Annual Symposium at USAFSAM, 1995-- Back Row, left to right: Bob Shaffstall; Britt Marlowe; Roger Stork; Nick Carter; Don Choisser; Ellis Aboud; Bill Sears; Paul Sheffield. Front Row, left to right: Jay Howard; Bob Sherman; Susan Richardson; George LaHood.

WING NEWS & NOTES

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

Message from our President - Trish Trifilo

This issue of the journal will tell you about the wonderful time we had in Kansas City in May. A huge thank you and "good on ya" to Harriet and all of her board. The tour of KC and the walk in the gardens was beautiful. It gave us a good chance to catch up on news, and meet new members. The paddlewheel museum was Awesome! The reception and luncheon were delicious and noisy and fun! If you were unable to attend the meeting, hopefully you can experience it vicariously through the pictures and words.

This year I am focusing on mentoring and membership. For the Wing to remain active and viable we will have to work to keep members and recruit new ones. I ask that each of you contact at least one Wing member this month and say "hi." Most of us have e-mail or phones, but cards can be a nice touch, too. Along this note, please remember Doris Miller. Her husband, Bill, passed away in May. We have sent a memorial in his name to the International Women's Air and Space Museum in Ohio.

Kansas City Round-Up

What a fantastic time we all had in Kansas City! Harriet Hodgson and her team are to be congratulated for the outstanding job they did in providing Wing members with interesting tours, fabulous luncheons, and a very well run meeting. Although our numbers were somewhat depleted this year over last, our enthusiasm in meeting and reconnecting with friends from around the globe more than made up for the decline.

On Tuesday, Wing members enjoyed a visit to the Powell Gardens, a lush and lovely botanical area about a forty-five minute ride outside of Kansas City. We were able to stroll leisurely through the perennial beds of flowers, around water features, and along the "longest living wall," a stone retaining wall planted with flowers growing right out of the rock structure. The wall was truly "alive" as we witnessed the struggle of two grass snakes fighting over their lunch of a most unfortunate frog!



POWELL GARDENS--(upper photo). Wing members enjoy the tour of the Gardens.
LUNCHEON--(right photo) AsMA President Melchor Antuñano and his wife Sandi (seated in the center) join the Wing for a group photo during their annual luncheon.



RED HATS--Wing members of the Red Hat Society show off their hats.

At our annual business luncheon on Wednesday, we were joined by Dr. Melchor Antuñano and his wife, Sandy, our Honorary President. Dr. Antuñano enjoyed our meeting so much that he was thinking of joining our group! Several Wing members, led by Helen Lestage, came wearing the purple dresses and red hats of the "Red Hat Society," and Harriet was presented with the book, "The Red Hat Society's Laugh Lines," as a memento.

Thursday our tour took us to the Steamboat Arabia Museum, Kansas City's number one attraction. This fantastic museum tells the story of the discovery and excavation of the Steamboat Arabia, which sank in the Missouri River in 1856. Subsequently covered by tons of silt and earth as a result of a shift in the river's course, the steamboat lay undisturbed until 1988. When it was finally unearthed, a virtual time capsule of frontier life emerged. Perfectly preserved samples of everything from buttons to farm implements to still fresh jars of produce are on display. It gave us all a feeling of what life must have been like for those hardy souls carving out new towns across the American plains.

Our next stop on Thursday's itinerary was to the Webster House. Once a school, the building now houses the Webster House Antiques and Webster's Restaurant where we enjoyed a delicious luncheon and a most sinfully decadent chocolate gateau. The antique shop was filled with 18th and 19th century pieces, including that essential for every Wing member's home--an individual, carpet lined chicken cage! Alas, there was no room on the bus for such purchases. We did, however, enjoy viewing the elegant furniture, china, and accessories. In all, our tours provided us with

a view to the past and to our history, while we reconnected and strengthened our friendships with long term Wing members, and looked to the future with the many new members who have just joined our organization.

Thank-You: Thank-you once again to Grace Lee for providing a beautiful bouquet of flowers for the Wing's hospitality room. Her generosity is greatly appreciated, and the lovely blossoms provided just the right touch of spring to brighten our room.

News from the Membership

Congratulations to **Harriet Hodgson** on the publication of her latest book, "Smiling Through Your Tears: Anticipating Grief," written in collaboration with Lois Krahn, M.D. The book deals with the feelings of loss before a dreaded event or loss occurs. It is filled with steps to lead one on the path to healing. Available at bookstores across the nation, this book is a balm for the wounded soul.

Susi Bellenkes has recently added porcelain painting to her repertoire of works in oils, pastels, charcoal, and graphite pencils. Her subjects range from people at work, at play, or those deeply lost in thought. As well, she has continued her line of favorite pet portraits and landscapes. She has also expanded her selection of prints and "frameable" cards. Visit her new web site at www.susifineart.com.

Val Nicholson reports that she and Brent have moved to Georgetown, KY. Brent is the new occupational medicine director of Toyota, Kentucky, while Val is practicing and teaching emergency medicine at the University of Kentucky.

Jane and Glenn Mitchell have moved from Fort Bliss and are now living at Fort Defiance, AZ, right in the middle of the Navajo Nation. Glenn, who retired from the Army in March, is working for the Indian Health Service as an emergency physician and Jane hopes to be hired as an administrator for a mental health center. She is also enrolled in an on-line MBA program. Says Jane, "We are living at 7700 feet of altitude (roughly the same air pressure as aircraft cabins) and enjoying the remote beauty of the high elevation desert and red rock formations. Glenn and I feel very lucky to be able to serve in such a beautiful place where the help is so clearly needed."



NEWS OF MEMBERS

Send information for publication on this page to: **News of Members**
Aerospace Medical Association
320 S. Henry Street
Alexandria, VA 22314-3579
pday@asma.org

MG Lester Martinez-Lopez, MC, USA, of Valrico, FL, formerly the Commanding General, United States Army Medical Research and Materiel Command at Fort Detrick, MD, has retired from active duty. He is now the Executive Vice President for Medical Solutions, Sytel. He was recently awarded the Defense Distinguished Service Medal.

Maj. Dan H. Murray, USAF, MC, previously a flight surgeon for the 16th Operations Support Squadron/Operations Support Medical (OSS/OSM), was promoted to Major in May and is now flight surgeon for the 353rd OSS/OSM and 320th STS Medical Director. He recently became a Howard Payne University Outstanding Graduate.

New Members

Acosta, Joseph M., Lt.Col., PAF, MC, Pampanga, Philippines
 Ahmed, Nomy, M.B., Ch.B., Nottinghamshire, United Kingdom
 Al-Khazaleh, Nawaf Salem, Al-Mafraq, Jordan
 Aqqad, Samih Sami, M.D., Ammam, Jordan
 Barkley III, Henry C., Huntersville, NC
 Chu, Hsin, M.D., Ph.D., Xizhi City, Taipei County, Taiwan
 Clark, Richard A., B.S., Silver Spring, MD
 Dulkadir, Zeki, M.D., Eskisehir, Turkey
 Evora, Humberto, M.D., Macau, Macau
 Friedrichs, Paul, Lt.Col., USAF, MC, Colorado Springs, CO
 Frundle, Thomas C., MBAC., Smyrna, TN
 Honeycutt, Amber D., Sgt., USAF, Edwards AFB, CA
 Jackson, Walter O., M.D., M.P.H., Augusta, GA
 Kapetsonis, Mario, M.D., Portage, WI
 Kousoulis, Panagiotis, M.D., Kalamata, Greece
 Lepola, Janne I., Ph.D., Loviisa, Finland
 Lewandowski, Beth E., Lorain, OH
 List, Raymond C., Ph.D., Sheppard AFB, TX
 Liu, Chun-Cheng, M.D., Taipei County, Taiwan
 Manning, Angela, R.N., APO, AE
 May, Joyce A., B.S., New York, NY
 McGrath, Braden J., Ph.D., Pensacola, FL
 Nullmeyer, Robert T., Ph.D., Tempe, AZ
 Paige, Christopher T., APO, AE
 Pfliederer, Elaine M., M.A., Oklahoma City, OK
 Riccittello, Jon M., LT, MC, USNR, Galveston, TX
 Salmans, Nancy L., Capt., USAF, NC, APO, AE
 Shiu, Jian, M.D., Taipei, Taiwan
 Sutton, Jeffrey P., M.D., Ph.D., Houston, TX
 Symond, Michael, M.D., St. George, UT
 Takei, Eriko, M.D., Tachikawa, Tokyo, Japan

In Memoriam

Edwin P. Hiatt

Edwin P. Hiatt, M.D., Ph.D., of Cape May, NJ, died in June at the age of 93. Hiatt was an AsMA Fellow. He became chief of the biophysics branch at Wright-Patterson AFB, OH, in 1957, at the start of the man-in-

space program and worked with the first group of astronauts. He was in charge of the centrifuge and other test facilities in the AeroMedical Laboratory.

In 1960 he went to the Ohio State University Medical School as a professor of physiology and director of the Aerospace Physiology Laboratory, and he remained there until his retirement in 1977.

Obituary Listing

We have just learned that Roy H. Adams, D.O., Minford, OH, has died.

5K Fun Run, AsMA 2005 Annual Scientific Meeting, Kansas City, MO

The AsMA Fun Run was held early Sunday morning on the grounds of the Liberty Museum of World War I. The weather was clear and cool with a light breeze blowing – ideal conditions!

The race course was set up and supervised by the Kansas City Track Club, and 27 of the 40 registrants for the race mustered at the Memorial to participate. The rolling course gave the participants an opportunity to view the Kansas City skyline throughout the race.

Results of the race:

| Place | Name | Time |
|-----------------|-------------|-------|
| Men | | |
| 1 st | Roger Hill | 22:33 |
| 2 nd | Norman West | 22:35 |



| | | |
|-----------------|----------------|-------|
| 3 rd | Tom Hoffman | 23:05 |
| Women | | |
| 1 st | Marlene Grenon | 31:05 |
| 2 nd | Emily Stoneham | 32:37 |
| 3 rd | Tracy Smart | 42:11 |

These results were announced at the Opening Ceremonies and the participants were recognized. Hope to see you all next year in Orlando!

Home Office Information

Phone: (703)739-2240
 Fax: (703)739-9652 or
 (703)739-9875

These are the phone extensions and e-mail addresses of your Home Office staff:

Russell Rayman, Exec. Dir.
 Ext. 103; rrayman@asma.org
 Jackie Carter, Admin. Assistant
 Ext. 104; jcarter@asma.org

Membership Department

Gloria Carter, Membership Dir.
 Ext. 106; gcarter@asma.org
 Sheryl Kildall, Assist. Membership
 Ext. 107; skildall@asma.org

Journal Department

Pamela Day, Managing Editor
 Ext. 101; pday@asma.org
 Rachel Trigg, Editorial Assistant
 Ext. 102; rtrigg@asma.org

INDEX TO ADVERTISERS

| | |
|-------------------------------|--------------|
| Aerospace Medical Association | |
| Call for Papers | ...iii |
| Information for Authors | ...Cover III |
| Membership Application | |
| 53rd ICASM | ...ii |
| ETC | ...Cover IV |



FUN RUN IN KANSAS CITY--Top: A view of the rolling course with the Kansas City skyline in the background. Bottom left: Roger Hill, the first-place winner in the men's race, crosses the finish line. Bottom right: Marlene Grenon comes in first in the women's race. The event was sponsored by Aerospace Life Sciences, Inc. and Richard Trumbo. Photos by Dick Trumbo.