

# President's Page

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Dear Colleagues and Friends;

Some of you may wonder whether or not AsMA has any impact on the Aeromedical community as a whole; whether there is anything more to our organization than our annual meeting, networking, and our monthly journal. I can tell you that due to the efforts of so many of you who serve on committees, working groups, and in a host of leadership roles, AsMA continues to be recognized as the voice of international aerospace medicine. Here are but a few examples.

There are a number of programs and 'tools' that are employed by the airlines and military that are designed to proactively identify and control those behaviors that have the potential to contribute to or directly cause mishaps. Several of these programs involve the voluntary and anonymous reporting by aircrews and ground personnel of such behaviors via various means. This type of reporting is founded on the principle of non-attribution and is theoretically non-punitive. One of these, the Aviation Safety Action Program (ASAP), has been used by airlines for some time. It recently came to AsMA's attention, however, that several airlines had opted to terminate the use of ASAP in the course of their operations. AsMA quickly responded. The AsMA Aviation Safety Committee (Dr. Arnold Angelici, Chair) was tasked to explore this issue and provide a response to this action. They created a letter strongly recommending that the ASAP program be retained. This letter was sent to the airlines in question, and the responses to date have been promising.

There are other recent examples of AsMA's impacts on flight safety. Dr. Russell Rayman, our Executive Director, attended recent National Transportation Safety Board (NTSB) hearings in Washington, DC, on helicopter medical evacuation transport safety. It was noted that there are unique man-made and environmental hazards associated with aeromedical evac operations (e.g., poor weather, power lines, limited space landing zones, etc.), as is suggested by the mishap/fatality rates for civil medevac units. There are many reasons for this, including a desire to help patients even if to do so requires flying in marginal hazardous conditions. AsMA responded to this by tasking the Air Transport Medicine (ATM) Committee (Dr. Nigel Dowdell, Chair) as well as the AsMA home office to prepare a letter addressing these issues. The letter was approved by AsMA leadership and has been forwarded to the NTSB.

Finally, you may recall that some time ago, AsMA



**Andrew H. Bellenkes, Ph.D.**

released a point paper concerning medical standards associated with civilian passengers who will be on board commercial sub-orbital flights. As a follow-up to this effort, AsMA Home Office has been working with both our Space Medicine Association (Ms. Genie Bopp, President) and Society of NASA Flight Surgeons (Dr. J. Michael Duncan, President) as well as an Ad Hoc group to help define aeromedical standards for the crews of these flights. This point paper is currently under review.

In addition to these examples, AsMA representatives actively participate on dozens of panels, committees, and represent our Association at many other professional society meetings. We are highly recognized by government, civil, and commercial bodies that create plans and policies and control budgets for present and future implementation. We are frequently sought out as the principle resource for aerospace medicine and human factors expertise by professional and lay news organizations and publications, especially when there is a 'hot topic' issue to be addressed. In other words, we have over these past decades become that voice of aerospace medicine to whom others first turn.

As you can see, AsMA is indeed much more than an annual meeting and the Blue Journal; it is a means by which all of us in the plethora of specialties that define the umbrella term "aerospace medicine" are able to help make policy, provide expert guidance, and, as per our mission, to "apply and advance scientific knowledge to promote and enhance the health, safety and performance of those involved in aerospace and related activities."

I look very much forward to seeing you next month at our annual scientific meeting in Los Angeles!

# Association News

## Executive Director's Column



Rayman

### Three Issues

In recent months, AsMA has been studying three important aerospace medicine issues: medevac helicopter accidents, the Aviation Safety Action Program (ASAP), and Commercial Space Pilot Medical Certification. At the time of this writing, position statements are in various stages of preparation. As is customary, once approved, each will be posted on our website, published in the Journal, and forwarded on to appropriate agencies in government and the civil sector.

In recent years, there has been an unacceptable loss of medevac helicopters. Although this has been noted by the aviation safety community as well as regulators, it really came to a head recently when a medevac helicopter in Maryland went down, killing three crewmembers and the patient. It is believed that some of these crashes are due to crewmembers who are so anxious to help injured or ill individuals that they willingly take off in marginal conditions. In some cases helicopter transport may not even be necessary when ground transportation is available. In any event, the National Transportation and Safety Board (NTSB) held a meeting in Washington in February to discuss this issue. In the meanwhile, CDR Bellenkes has asked our Air Transport Medicine Committee, chaired by Dr. Nigel Dowdall, to formulate a position paper for AsMA with consideration being given to establishing medical guidelines in determining the need for air evacuation.

It recently came to our attention that three airlines (Delta, American, and Comair) have discontinued their Aviation Safety Action Program (ASAP). This is a program whereby crewmembers and ground personnel can report anonymously any safety infractions. Clearly, its purpose is to enhance aviation safety. The three airlines had planned to discontinue the program mainly because of the perception that those who file a report might be subject to disciplinary action. Aerospace safety organizations in the U.S. are currently arguing that ASAP is an excellent program and should be continued. Subsequently, CDR Bellenkes requested the Aviation Safety Committee chaired by Dr. Arnie Angelici to prepare a letter accordingly. The Committee has prepared an excellent letter that was approved by Executive Committee and sent to the above three airlines, Federal Aviation Administration (FAA), the NTSB, and the

Airline Pilots Association (ALPA). (The letter is posted under Policy Compendium on our website.) At the time of this writing, the CEO of Delta Airlines, Mr. Richard Anderson, sent a letter to your AsMA Home Office stating that Delta has reinstated ASAP.

The third issue was medical standards for commercial space pilots flying suborbital missions. It was strongly recommended to Executive Committee by one of our members that AsMA prepare a policy statement. Subsequently, CDR Bellenkes assigned this to an ad hoc committee in the Home Office. The Ad Hoc Committee met in October 2008 and prepared a position statement. At the time of this writing, the position statement is under review.

These three issues are of great interest to our Association. As a professional organization, we have an obligation to speak our mind. By doing so rationally and timely, AsMA reaffirms its leadership in aerospace medicine and sustains our credibility to outside organizations, institutions, and governmental agencies.

### AsMA Future Meetings

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

May 9-13, 2010  
Sheraton Hotel; Phoenix, AZ

May 8-12, 2011  
Egan Convention Center  
Anchorage, AK

### SAFE Call for Papers Deadline June 19, 2009!

The SAFE Association 2009 Annual Symposium will be held October 19-21 at the Town & Country Resort and Convention Center, San Diego, CA. The SAFE Symposium is the premier international showcase for professionals, inventors, equipment, and systems shaping safety in aviation, space, land, and military disciplines.

Please consider submitting papers, panels, workshops, briefings, demonstrations, and forums. All abstracts must be submitted electronically in MS Word to the SAFE Office at [safe@peak.org](mailto:safe@peak.org). Please contact SAFE for a complete Call for Papers form so that your entry is properly formatted and contains the necessary information: SAFE, PO Box 130, Creswell, OR 97426-0130; (541) 895-3012; [www.safeassociation.com](http://www.safeassociation.com).

Please note that a manuscript or PowerPoint presentation will be required for publication in the SAFE Proceedings.

### MEETINGS CALENDAR 2009

**April 26-29, 2009; American Occupational Health Conference; Manchester Grand Hyatt, San Diego, CA.**

For more information: [www.acoem.org](http://www.acoem.org); e-mail: [education@acoem.org](mailto:education@acoem.org).

**May 3-7, 2009. 80th Annual Scientific Meeting of the Aerospace Medical Association, Westin Bonaventure Hotel, Los Angeles, CA.** [www.asma.org](http://www.asma.org)

**June 2-4, 2009; 4th International Conference on Whole-Body Vibration Injuries; Hilton Montreal Bonaventure Hotel, Montreal, PQ, Canada.** Info: Institut de recherche /Robert-Sauvé en santé et en sécurité du travail (IRSST), <http://www.irsst.qc.ca/en/home-vibrations-2009.html>

**June 11-12, 2009; XX1st Annual International Occupational Ergonomics and Safety Conference 2009; Hilton Garden Inn DFW, Dallas, TX.** International Society for occupational Ergonomics & Safety; <http://www.iso.es.info/conference.htm>  
**June 25-27, 2009; Undersea & Hyperbaric Medical Society Annual Scientific Meeting; Crowne Plaza Los Cabos Grand Faro Beach Resort, Mexico.** Info: Lisa Tidd/Stacy Rupert [uhms@uhms.org](mailto:uhms@uhms.org); [www.uhms.org](http://www.uhms.org)

**June 29-July 2, 2009; 8th USA/Europe Air Traffic Management Research & Development Seminar; Napa, CA.** FAA and EUROCONTROL, [www.atmseminar.org/](http://www.atmseminar.org/)

**July 19-24, 2009; HCI International 2009—13th International Conference on Human-Computer Interaction; Town and Country Resort & Convention Center, San Diego, CA.** <http://www.hcii2009.org/>

**August 9-14, 2009; IEA 2009—17th World Congress on Ergonomics; Beijing Jihua International Conference and Exhibition Center, Beijing, China.**

International Ergonomics Association, <http://www.iea2009.org/>

**October 18-19, 2009; Seventh Annual Meeting of the Society for Human Performance in Extreme Environments; Grand Hyatt, San Antonio, TX.** <http://www.hpee.org/>

**October 19-23, 2009; 53rd Annual Meeting of the Human Factors and Ergonomics Society; Grand Hyatt, San Antonio, TX.**

<http://hfes.org/web/HFESMeetings/09annualmeeting.html>

**October 19-21, 2009; SAFE Association 47th Annual Symposium; Town and Country Resort & Convention Center, San Francisco, CA.** Info: Jeani Benton (541)895-3012; [safe@peak.org](mailto:safe@peak.org); [www.safeassociation.com](http://www.safeassociation.com)

**This publication is available in microform from ProQuest**  
[www.proquest.com](http://www.proquest.com); 1 800-521-060.

# AEROSPACE PHYSIOLOGY REPORT

Send information for publication on this page to: **Lt. Col. Andrew Woodrow, USAF, BSC**  
**Chief, Aerospace Physiology Formal Programs, Brooks City Base, TX 78235**  
**210-536-6441**  
**Andrew.Woodrow@brooks.af.mil**

## AsPS Call for Award Nominations

by Paul R Gardetto, LtCol, USAF, BSC, CAsP,  
Awards Committee Chair

The Aerospace Physiology Society (AsPS) presents three major achievement awards to recognize individuals who perform extraordinary work within the Aerospace Physiology Community. Awards will be presented at the Aerospace Medicine Association's 80th Annual Scientific Meeting, held in Los Angeles, CA, May 3-7, 2009. Society Awards will be presented at the annual luncheon, Wednesday, 6 May 2009.

The AsPS presents three awards. These awards are presented for outstanding achievement in all areas of aerospace physiology: operational support, training, research, and leadership. The descriptions of each award are as follows:

The Paul Bert Award recognizes outstanding research contributions in aerospace physiology. This award was established in 1969 and was originally given for achievement in operational physiology. It is named in honor of the famous French physiologist,

Paul Bert, the "Father of Pressure Physiology." Nominees will be considered for research covering the previous 5-yr period. Limit the nomination to 2 or 3 major research contributions. The Award committee considers unrecognized nominations from the three past years, though it is strongly recommended that those nominations be updated annually in writing. Research areas may range from basic science to research in highly applied areas of aerospace physiology. Wyle Labs currently sponsors the Paul Bert Award. The 2008 winner was LCDR G. Merrill Rice, MC, USN.

The Fred A. Hitchcock Award recognizes career contributions of senior aerospace physiologists for excellence in either operational aerospace physiology or aerospace physiology research. The award was established in 1972, and is named in honor of Fred A. Hitchcock Ph.D., co-translator of Paul Bert's classic work, "Barometric Pressure". International ATMO of San Antonio, TX, sponsors the Fred A. Hitchcock Award with an honorarium, a plaque, and an edition of Paul Bert's classic work, "Barometric Pressure". The Award committee considers unrecognized nominations from the three past years, though it is strongly recommended that nominations be updated annually in writing. Nominees for the Fred A. Hitchcock Award must be members of AsPS. The 2008 winner was Col. Donald J. White, USAF, BSC.

The Wiley Post Award recognizes outstanding contributions in direct operational physiology and aeromedical training and education. In 1972, the Wiley Post Award replaced the Paul Bert Award for Operational Physiology. It is named in honor of the aviation pioneer Wiley Post. The Wiley Post Award is presented for exceptional service and achievement in operational physiology, including education and physiological support of Department of Defense, FAA, NASA, or civilian aircrew. The Gentex Corp. of Carbondale, PA, sponsors the Wiley Post Award with an honorarium and a plaque. Nominees will be considered for the previous 12-month body of work in operational physiology. Unrecognized nominations from past years will not be considered. The 2008 winner was LT Heath M. Clifford, MSC, USN.

### AWARD SUBMISSION CRITERIA DEADLINE: 17 April 2009

The standard Aerospace Medical Association Awards form shall be the format. The nomination should include the following:

- 1) a citation of 80 words or less;
- 2) a bulletized list of significant accomplishments of less than 300 words;
- 3) a one page professional biography of the nominee; and
- 4) a portrait photograph of the nominee.

Standard award forms may be downloaded from the AsPS website ([www.aspsociety.org](http://www.aspsociety.org)), or obtained by contacting the Award Chair via email. Digital

email submission of the award package is preferred. MS-Word for documents and GIF or JPEG files for graphics are the preferred file formats. Hard copy nominations will be accepted by mail. Awards not submitted on the AsMA form will not be accepted. Nominations should specify the time interval over which the nominee's contributions were made.

Society and Association members are strongly encouraged to nominate and recognize outstanding contributions by professionals within the aviation scientific community. Nominations may be submitted by anyone, regardless of AsMA or AsPs membership. Chain of command endorsements are not required for military nominations, but may be considered by the committee.

Award nominations are due no later than 17 April 2009. Late nominations will not be considered or carried over to the next year.

Send nominations to the Award Chairman at:

Lt.Col. Paul R Gardetto  
9209 Mabry Ave. NE  
Albuquerque, NM 87109  
[Paul.gardetto@kirtland.af.mil](mailto:Paul.gardetto@kirtland.af.mil)

## Aerospace Physiology Society Member Benefits

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

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

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

The chance to contribute to the success and quality of the annual AsMA conference. The Society's Education and Training Day has been one of the most widely attended sessions during the annual conference.

Membership is only \$10. For more information, please contact Joe Essex at [joseph.essex@navy.mil](mailto:joseph.essex@navy.mil), or write to:

LCDR Joe Essex, MSC, USN  
BLDG 2272 Suite 345  
47123 Buse Rd  
Patuxent River, MD 20670

## SPACE MEDICINE ASSOCIATION MEETING ANNOUNCEMENTS

1) Dr. Joseph Kerwin and Owen Garriott, Skylab astronauts, will be available prior to the SNFS luncheon May 6, and the SMA luncheon May 7th in Los Angeles to sign their newly released book "Homesteading Space."

2) The Space Medicine Association Luncheon will feature The Wyle Invited Lecture by Christian Otto, who will talk about medicine at the South Pole and on Mt. Everest and how the lessons learned can be applied to Space Medicine.

The SMA luncheon is Thursday, May 7, at noon. The business meeting and awards ceremony will also be held during the luncheon.

## Corporate Member News Online

Visit our website: [www.asma.org](http://www.asma.org) and go to the Journal page, AsMA HTML News Online ([http://www.asma.org/journal/html\\_news\\_index.php](http://www.asma.org/journal/html_news_index.php)) to view this month's News of Corporate Members.



## AEROSPACE NURSING SOCIETY NEWS

### Colleagues...Friends,

I can hardly believe it is already April and the conference is just one month away. I am very excited about the upcoming Scientific Meeting in Los Angeles: "The Future is Not What It Used to Be". As our distinguished President Dr. Bellenkes mentioned in February's journal, this phrase originated as the title of a brief given by the late Arthur C. Clarke, author of science fact and fiction classics read worldwide. I think he was alluding to the perception that even though we diligently plan our futures, there are innumerable factors that affect and change the paths on which we find ourselves. Our colleague LCDr Christine Cloutier also referred to this fact in her article "The Future is Not What It Used to Be: In the Aerospace Nursing Society!" With the changes in space exploration and aerospace medicine, coupled with continued globalization, we are only beginning to explore what we envisioned; indeed the Aerospace Nursing Society is changing to meet these demands. Now more than ever, we are a multi-faceted group of nursing and medical professionals ready to create new and exciting futures.

This excitement and commitment are apparent in the presentations you will see and hear in Los Angeles in May. We will again

have members presenting new dimensions that will lead the way into the future by using present knowledge to challenge future unknowns. The Aerospace Nursing Society will carry on this theme through our speaker, Dr. Marian Sides. Dr. Sides has been a stalwart member of the AsMA as well as the Aerospace Nursing Society for many years. Her experiences in both the military and civilian sectors will be invaluable to us as we continue our journey toward change in aerospace medicine. Like so many of our predecessors, our attempts to tackle the unknown will ironically lead to our followers being participants in unforeseen but stimulating challenges. Indeed, our future in aeromedical nursing, medicine and travel is not what it used to be.

Kim Barber, MSN, MBA/HCM, RN  
ANS President, 2008-2009

### Join the Aerospace Nursing Society Today!

Dues are just \$10 (\$5 allied health professionals). For further information, contact:  
Diane Fletcher, ANS Treasurer; 7401 Salem Dr., Columbus, MS 39705;  
diane.fletcher@columbus.af.mil or  
Fletcher4@charter.net

### Aerospace Nursing Section Garrecht Award Information

The Brig. Gen. Claire Garrecht Award honors an ANS member for the best scientific paper presented during the Annual Scientific Meeting of the Aerospace Medical Association. This award, sponsored by Educational Enterprises, Inc., consists of a plaque and honorarium.

**Criteria:** Membership in the AsMA and ANS. Abstract must be submitted and accepted for presentation.

**Procedure:** Five hard copies (or a Word document) of the paper following the prescribed format (contact the committee chair for format) must be submitted to the Chairperson, Aerospace Nursing Section Scientific Program Committee by **April 15, 2009:**

Col. Charles Tupper  
2326 Blue Shutter Rd.  
Edisto Island, SC 29438  
charles.tupper@gmail.com

### Space Researchers Developing Tool to Help Disoriented Pilots

Not knowing which way is up can have deadly consequences for pilots. This confusion of the senses, or spatial disorientation (SD), is responsible for up to 10% of general aviation accidents in the United States, with 90% of these being fatal, according to the FAA. Although there have been no SD accidents in space, it is a major concern for astronaut pilots. A National Space Biomedical Research Institute (NSBRI) study is tackling the issue by developing a tool that will assist pilots in real-time to overcome SD.

The project involves specially designed software that monitors the flight of the vehicle—speed, heading, pitch, and altitude—and the actions of the pilot. The system will use audio and visual cues to alert pilots of problems before things get out of hand. The researchers are also looking at the option of testing a vest with pager-like vibrators distributed throughout that vibrate in a sequence to alert the pilot when an orientation correction is needed.

To better understand the problems facing astronauts, the researchers are building on information from previous SD studies for the U.S. military and analyzing data from aircraft accidents and space missions. They have consulted with experts such as former astronaut Dr. Thomas Jones and have tested the software's ability to detect SD incidents. They are now working to better understand the differences in craft movement in the atmosphere and in space and how the human inner ear functions in both environments.

The inner ear helps control the sense of orientation.

The researchers are putting emphasis on lunar landings due to the challenges of reduced gravity and the unfamiliar, dusty terrain. Data collected from helicopters will play a large role in the research since the rotary-propelled aircrafts' movements are most like a spacecraft touching down on the Moon. Low-gravity flight experiments and lunar lander simulations are slated to begin next year.

The project team members believe the on-board aids developed for spaceflight will be an essential tool for pilots of medical emergency helicopters, who often respond to auto accidents on dark, rainy nights when it is easy to become disoriented. Military and civilian pilots are also likely to benefit from the research. Additionally, the NSBRI Sensorimotor Adaptation Team is developing pre-flight and in-flight training countermeasures so that astronauts can adjust more rapidly to weightlessness, to other gravitational environments, and upon return to Earth's gravity.

Full release and photos can be found at: [www.nsbri.org/NewsPublicOut/Release.ep1?r=114](http://www.nsbri.org/NewsPublicOut/Release.ep1?r=114)

### Pennsylvania U. Awarded Grant for Study of Space Radiation

The University of Pennsylvania School of Medicine has been awarded \$10 million over a 5-year period from the National Space Biomedical Research Institute (NSBRI). The grant establishes an NSBRI Center of Acute Radiation Research (CARR) studying the acute effects of space radiation. Crafts orbit-

ing Earth, like the International Space Station, are better protected from space radiation by Earth's magnetic field. However, astronauts traveling to and living on the moon will run the risk of exposure to dangerous bursts of solar radiation, known as solar particle events. The radiation dose received will vary depending on whether the crew is inside the spacecraft or outside doing a spacewalk or moonwalk. These exposures can cause immediate effects, called acute radiation sickness. Reactions to this type of exposure include early symptoms, known as prodromal syndrome, characterized by nausea, vomiting, and fatigue, followed by potential skin injury and changes to white blood cell counts and the immune system.

The research team will assess the acute effects of radiation exposure from solar events, better define the risks, and develop and test methods to protect astronauts. The CARR will consist of five focused research projects that will require the use of proton facilities located at University of Pennsylvania, Loma Linda University Medical Center, and the NASA Space Radiation Laboratory at Brookhaven National Laboratory.

In addition, NSBRI projects address other space health concerns, such as bone and muscle loss, cardiovascular changes, neurobehavioral and psychosocial factors, remote medical care, and habitability and performance issues such as sleep cycles. Research findings will also impact the understanding and treatment of similar medical conditions experienced on Earth.

-- Full release available at:  
<http://www.nsbri.org/NewsPublicOut/Release.ep1?r=113>

## WING NEWS & NOTES

Send information for publication on this page

to: **Jennie Bendrick**  
8825 Redwood Blvd  
California City, CA 93505  
760-373-810; butljenn@aol.com

### From the President's Desk...

By Peggy Trumbo

Our work during this busy year on the Wing board is about to reveal itself in Los Angeles on May 3-7 with an exciting and diverse week of touring, learning, eating, visiting, and shopping. Maybe we'll get some sleep, too.

Our Monday Welcome Reception greets us with the panorama of Los Angeles and the hills beyond. We'll tour all of the great sites of the Los Angeles area on Tuesday and the remarkable Getty Museum on Thursday. The luncheon on Wednesday will be a lovely experience at the historic LA Athletic Club, and shopping is everywhere in Los Angeles – the jewelry district, the fashion district, shopping centers within walking distance of our hotel, the Farmers' Market, Olvera Street. Bring your walking shoes.

For me, personally, as your Wing president this year, I have worked toward several goals



THE KODAK THEATRE--Site of The Oscars.



DOWNTOWN LOS ANGELES SKYLINE. (Used with permission LAINc.)

## HOLLYWOOD



BETTE MIDLER'S STAR on the Hollywood Walk of Fame.

to move the Wing toward even better support of you, our members. First, the coming week in LA will hopefully have an increased Wing membership with many of you finding a new member for our group in spite of the economy. Second, will we be ready with a new website for the Wing? It is still in creation as of this writing, and in May we will find out where we are in that process. Thankfully, Harriet Hodgson has agreed to be our website mistress. Third, I have tried to bring the Wing into the thoughts of the AsMA Executive Committee, telling them of our important role in the wider picture of AsMA (and how they really need us to support their members.)

In looking ahead to the first week of May, I know the efforts of so many of you will make this a fabulous experience for everyone. Seeing **you** there will make everything perfect! **It is not too late** for you to pre-register for the tours if you do it right away. In May I will be in The Wing Hospitality Room as much as possible to greet you. Hooray for Hollywood and for all of the happy days we'll be together in Los Angeles.

**Average Temperature in LA in early May during the last few years has been a high in the mid to upper 70s, low at night in the mid 50s.**

**PRE-REGISTRATION** for the May 3-7 meeting is more likely to guarantee you the opportunity to join our tours. Forms can be found in the AsMA Journal, on the AsMA website, or in your February mailing from The Wing. Mail yours in right away.

**THE VOLUNTEER FORM** in the February Wing mailing gives you a chance to get to know other Wing members even better, plus helping things run smoothly. No experience needed! Please mail yours in ASAP.

### In Memory of Lillian Billings

A former Honorary President of the Wing has died. Lillian Billings, wife of Dr. Charles Billings of Columbus, OH, died on December 4, 2008, at her home. She was 89.

Lillian was a member of the U.S. Nurse Corps during WWII, followed by various nursing positions, including at the VA Hospital in Tupper Lake, NY, where she met her future husband, Dr. Charles E. Billings, a resident in medicine at the VA Hospital. They were married in 1955 in Waterloo, NY, and moved to England, where Dr. Billings was a flight surgeon in the USAF.

They also lived in Vermont, Ohio, and California. Lillian was an active volunteer throughout her life, working for the Royal Sea Bathing Hospital in Great Britain, the American Red Cross, the American Cancer Society, and the El Camino Hospital in California, where she received an award for contributing 5,000 hours as a volunteer. The Ohio State University, where she was chief nurse in the Occupational Health Center, awarded her and her husband its Will Rannells Service Award for her 10 years of volunteer work.

**REMINDER:** Please bring a small gift to be exchanged at our Wing Welcoming Reception on Monday, May 4. The favor should be inexpensive and reflect your home-geographic area. I treasure those from over the years: pineapple candles from Florida, a small steer in an astronaut suit from Houston, an English teacup, a book of poems signed by the author, lovely notecards from Cape Cod. Too many to list them all here.--Peggy



### Join the Wing!

The Wing of the Aerospace Medical Association was formed in 1952.

Dues are \$40 per year. For more information, contact:

Jackie Bohnker  
2253 Riverside Dr. S.  
Clearwater, FL 33764  
727-812-4868  
e-mail: jpbohnker@juno.com



## 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

### Focus on Members:

#### Richard G. Snyder

Richard G. Snyder, M.A., Ph.D., DABFA ret., a Fellow and Life Member, has donated a large portion of his aviation medical library to



Embry-Riddle Aeronautical University's Aviation Safety and Security Archives in Prescott, AZ. The archives was founded in 2004 and promotes research in aviation and aviation/aerospace safety and security by making available primary,

unique records, manuscripts, and other materials to the academic and aviation communities. Dr. Snyder's unique collection includes 3200 books and 17,100 scientific papers, reports, crash and impact tests and films. Topics include crashworthiness studies and crash tests, human impact and deceleration tolerances, restraint, crash fire, survival, free-falls, ejection, accident reports, forensic and biomechanics. Many studies and test reports relate to biomedical research including vertebral or brain trauma. This collection will be housed in new library facilities under construction at Embry-Riddle Aeronautical University. Previously, the University of Northern California established the "Richard G. Snyder library collection for physical anthropology" for some 2200 books contributed. In 1966 the USAF School of Aviation at Brooks had recognized Dr. Snyder for his foresight and efforts to obtain an acceleration bibliography "which would make the library at USAFSAM the largest repository of acceleration literature in the world." Dr. Snyder has had 50 years of aviation research experience focusing on human tolerance and crash protection, resulting in some 400 publications and reports, and over 2000 crash investigations (himself surviving 6 aircraft crashes, including a helicopter crash and a ditching, and 100 combat missions). He is Professor Emeritus of (Biological) Anthropology and Research Scientist Emeritus, the University of Michigan, Ann Arbor. In 2006 the University of Michigan established a Named Professorship, the "Richard G. Snyder Distinguished University Professor of Industrial and Operations Engineering."

### News of Members:

**Col. Joseph B. Anderson, USAF, MC, FS**, who was the Commander, 30th Medical Group, Vandenberg AFB, CA, has transferred and is now the Command Surgeon, Combined Security Transition Command-Afghanistan.

**David Canton, D.O., M.P.H., J.D.**, has retired from the U.S. Public Health Service and has assumed the position of medical director for the Emanuel Physician Group in Turlock, CA. The Group has partnered with Emanuel Medical Center to spearhead a growth and de-

velopment program for the group that will include several new sites and additional services for the families of agricultural central valley of California.

**Col. Christopher S. Williams, USAF, MC**, formerly the Commander, 10th Medical Operations Squadron at the USAF Academy, CO, is now Senior Executive Director for Traumatic Brain Injury at the Defense Centers of Excellence in Washington, DC.

**Lt.Col. Randy P. McCalip, USAF, BSC**, is currently serving at 14 MDOS at Columbus AFB, MS, and was promoted to Lieutenant Colonel in March. He was recently awarded USAF Aerospace Physiology Field Grade Officer of the Year.

### New Members

Al-Zaidi, Jamil H., Bethany, OK  
Clapson, John B., M.D., FRCS(C), Saskatoon, SK, Canada  
Duda, Kevin R., Ph.D., Cambridge, MA  
Feuillie, Vincent, M.D., Roissy CGD Cedex, France  
Gaither, Jessica M., BSN, MSN, Titusville, FL  
Kouyomdjian, Camile B., Braganca Paulista, Brazil  
Levin, Dana R., Philadelphia, PA  
Lim, Jeongku, M.Sc., Beaver Creek, OH  
Luther, David J., Lt.Col., USAF, MC, APO, AE  
Maertens, Nathan B., Capt., USAF, Champagne, IL  
Maher, Declan, M.B., B.Ch., Dublin, Ireland  
Masson, Angela, M.A., M.P.A., Ph.D., Saint Augustine, FL  
Maus, Lisa A., FLT LT, RAAF, M.B.B.S., Carrington, Australia  
Moe, Jacob, M.D., Sola, Norway  
Muhlecke, Kimberly L., TSgt. USAF, Panama, FL  
Myden M., Meer Ahmad A., M.B., B.S., Petaling Aya, Malaysia  
Nesheim, Geir B., M.D., Oslo, Norway  
Nooij, Suzanne, Ph.D., Amersfoort, The Netherlands  
Oakes, Margaret A., M.A., M.Sc., Fleet, Hampshire, UK  
Reda, Abdelhamid, M.B., B.Ch., FRCS, Dubai, United Arab Emirates  
Ross, Donald E., M.B., Ch.B., D.Av.Med., Henlow, UK  
Swanson, John D., IV, M.D., Coeur d'Alene, ID  
Wahl, Patrick D., LCDR, CN, MC, Winnipeg, MB, Canada

### In Memoriam: Former AsMA President Earl T. Carter Has Died

Earl T. Carter, M.D., Ph.D.(Ret.), AsMA President from 1973-74, died in February at the age of 86. He is best known for his nearly 30 years of research and teaching at the Mayo Clinic in Rochester, MN. Born in Baltimore, MD, Dr. Carter served in the

Navy from 1941-1943, then received a B.S. in Zoology from Northwestern University in Evanston, IL, in 1944 and earned his medical degree at Northwestern University Medical



School in Chicago in 1947. He interned at Chicago Wesley Memorial Hospital from 1947-1948, and then remained as a resident until 1949, and then was a resident again, this time in internal medicine, from 1955-1956. In 1950, he received an M.S. de-

gree in physiology from Northwestern University Graduate School in Chicago and earned a Ph.D. in physiology in 1955 from the University of Texas Medical Branch in Galveston after 5 years of duty in the U.S. Air Force. He was assigned to the Air Force School of Aviation Medicine (USAFSAM) as a USAF captain in 1951 and enrolled in the primary course in aviation medicine to receive his flight surgeon rating. Until 1955, Dr. Carter served as an instructor and research physiologist at USAFSAM and was the officer in charge of the altitude chamber training unit. During this time, he acted as Deputy Chief of the Department of Physiology for 3 years, and assumed the responsibilities for the department during the absence of the department chief. He also participated in the field testing of a new full-body respirator in conjunction with USAFSAM and the Military Air Transport Service.

In 1956, he became Assistant Professor of Physiology and Preventive Medicine at Ohio State University College of Medicine. His responsibilities there included development of the residency program for training civilians for certification by the American Board of Preventive Medicine in Aviation Medicine and Occupational Medicine. In 1956, he became a Research Consultant at the Ohio State Tuberculosis Hospital in Columbus. From 1955 to 1959, he also served as an Aviation Medical Specialist, Consultant, in the Department of Engineering at North American Aviation, Inc., in Columbus, OH, and was a Research Supervisor at the Research Foundation, Ohio State University. In addition, he served as a Clinical Instructor in Medicine at University Hospital in Columbus from 1955-1960.

In 1960, he joined the Mayo Clinic, where he continued his research in areas such as altitude acclimatization, hypoxia effects, and explosive decompression. During his time at the Mayo Clinic, he served as Chairman of the Division of Preventive Medicine and as Professor of Medicine at the Mayo Graduate School of Medicine of the Mayo Foundation and the University of Minnesota. He retired from the Mayo Clinic in 1987.

Dr. Carter was awarded the Walter M. Boothby Award from AsMA in 1965 for "outstanding research directed at the promotion

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of health and prevention of disease in professional airline pilots." He was also a Fellow of the Association and served in numerous ways, including as Chairman of the Education and Training Committee, as an elected member of the Executive Council, as a member of the editorial board for the Journal for 10 years, and as President of the Airlines Medical Directors Association, a constituent group of AsMA, from 1976-1977. He presented papers at the Annual Scientific Meeting regularly and served on the Registration Committee, the Scientific Program Committee, and the Technical Exhibits Committee. Part of his activities as a member of the Aviation Sub-Committee of the Committee on Standards of the American Board of Preventive Medicine was to revise and prepare questions for the examination for certification. He served on the Research Advisory Council to the Civil Air Surgeon of the Federal Aviation Administration. He was also a Diplomate in Aviation Medicine of the American Board of Preventive Medicine, a Fellow of the American College of Physicians and the American College of Preventive Medicine, and a member of the American Physiological Society, the American Medical Association, the American College of Chest Physicians, the American Rheumatism Association, and the Civil Aviation Medical Association.

## Emmett B. "Bud" Ferguson, Jr.

By Jeff Myers, M.D.

Dr. "Bud" Ferguson passed away Tuesday, January 27, 2009. A long-time AsMA member, Dr. Ferguson became a Fellow in 1984 and received the Space Medicine Branch



Hubertus Strughold Award in 1994. He was one of the modern pioneers in the field of Aerospace Medicine, having served as Director of Bioastronautics for the USAF Eastern Test Range and later as Director of Occupational Medicine

and Environmental Health Services at the Kennedy Space Center where he personally served as Triage Physician for over 50 Space Shuttle Launches. Emmet B. Ferguson, Jr., was born in Augusta, AR. He received his M.D. from the University of Oklahoma School of Medicine in 1959. He completed his internship at Orange Memorial Hospital in Orlando, FL, in 1960. He then joined the U.S. Air Force where he served for 23 years, including the following assignments: 1960-1962 – Director of Flight Medicine, 861st Medical Group (SAC), Glasgow Air Force Base, MT; 1962-1964 – Director of Preventive, Aerospace and Occupational Medicine Services, 861st Medical Group (SAC) Andersen Air Force Base, Guam; 1964-1965 – earned the MPH degree from Johns Hopkins University School of Hygiene and Public Health; 1965-1967 – USAF Aerospace Medicine Residency; 1967-1969 – Deputy Director and Director Bioastronautics, USAF Eastern Test Range, Cape Canaveral Air Force Station and Patrick

Air Force Base, FL, responsible for medical support to NASA tracking and recovery stations across the Atlantic; 1969-1972 – Internal Medicine Residency, USAF Medical Center, Keesler AFB, MS; 1972-1973 – Chief of Hospital Services, USAF Hospital, Ramey AFB, Puerto Rico; 1973-1974 – Chief of the Evaluation function at the USAF School of Aerospace Medicine, Brooks Air Force Base, TX; 1974-1977 – Commander (CEO), USAF Hospital, Homestead Air Force Base, FL; 1977-1980 – Commander, USAF Hospital Wiesbaden, Germany, where he was in charge of the evaluation services for hostage and prisoner return from the Tehran, Iran-U.S. Embassy episode November 1979-January 1981; and 1980-1983 – Commander, USAF Medical Center, Wright Patterson AFB, OH.

During these military assignments he flew more than 2300 hours in 37 different types of aircraft as a Flight Surgeon, including 11 combat missions in Southeast Asia. Even when he had risen to the position of hospital commander, Dr. "Bud" continued to respond to Flight Line Emergencies and worked shifts in his hospital Emergency Departments.

Dr. Ferguson then served at the Kennedy Space Center as Associate General Manager, Director, Occupational Medicine and Environmental Health Services (EG&G) and Medical Director of Emergency Medical Services from 1983-1996. From 1996-2009 he was the Medical Director of ALS services for the Cape Canaveral Fire Dept. From 1996-1998 he was manager for the NASA Occupational Health Program for Bionetics Corporation. And from 1998-2009 he was the Regional Medical Director and Senior Advisor for Comprehensive Health Services at Cape Canaveral, FL, where he also served as Medical Director for the Raytheon Polar Services U.S. Antarctic Program.

Dr. Ferguson was a member or Fellow of some 36 professional organizations (including AsMA, SMA, and SNFS), Boards, and advisory committees. He was an FAA Medical Examiner. His publications and contributions to the medical literature number over 100 documents. He was board certified in 5 medical specialties including: Family Practice, Internal Medicine, Emergency Medicine, Aerospace Medicine, and Occupational Medicine. His awards included: The President's Award for Outstanding Service, American College of Occupational and Environmental Medicine (2001); The President's Award, American College of Occupational Medicine and Environmental Medicine (1997); The Hubertus Strughold Award, Space Medicine Branch, Aerospace Medicine Association (1994); The NASA Public Service Medal (1991); The NASA Headquarters Occupational Health Program Award (1990); The Air Force Legion of Merit (1977 & 1983); The Air Force Meritorious Service Medal (1969 & 1980); The National Aeronautics and Space Administration Award (1969); and The Florida Occupational Physician of the Year by the State of Florida Occupational Health Nursing Association (1986).

As is apparent from the enormous scope and depth of his life experience, Dr. "Bud" was indeed a unique individual even among the unique individuals who have come to epitomize the field of Aerospace Medicine.

Dr. "Bud" was a mentor to many of us and was instrumental in helping us form the

foundations of our careers. We shall greatly miss his kind guidance and thoughtful wisdom, and forever appreciate the many contributions he made to our specialty and the foundations he helped to build.

## Isao Kuroda

AsMA has learned that Isao Kuroda, M.D., Lt.Gen., JASDF, died recently. Born in Hokkaido, Japan, Lt.Gen. Kuroda received his M.D. in 1951 from Hokkaido University Medical School. Before entering the Japan Self-Defense Force (JASDF) in 1957, he worked at both Hokkaido University and at the Institute of Public Health. He graduated



from the primary course in aviation medicine in 1959 and the advanced course at the USAF School of Aerospace Medicine (USAFSAM) at Brooks AFB, TX, in 1966. From 1952 to 1953, he was an Assistant in the Department of Physiology at

Hokkaido University, then served as a Technical Official in the Nutritional and Biochemical Branch at the Institute of Public Health until 1957.

After joining the JASDF in 1957, he became the Chief of the Aeromedical Branch, Medical Division, Air Staff Office, in 1962. From 1966-1969 he served as Chief of the Flight Safety Section at the Aeromedical Laboratory in the JASDF. During this period, in 1967, he was a member of the Survey Group of Aptitude for Civilian Pilots from the Japan Civil Aviation Bureau to the United States and Europe.

From 1969-1970, Kuroda served as Chief of the 2nd Branch at the Aeromedical Laboratory. From 1969-1977, he also served as a Technical Official on the Accident Investigation Board of the Ministry of Transportation and was promoted to Colonel in 1970. From 1970-1977, he was the Chief of the 1st Branch at the Aeromedical Laboratory. In 1977 He was promoted to Major General and became Director of the Medical Department at the Air Staff Office, the JASDF equivalent of the USAF Surgeon General. He was promoted again, to Lieutenant General, in 1980, and became the Commander of the Aeromedical Laboratory.

Lt.Gen. Kuroda was awarded the Raymond F. Longacre Award in 1981 from the Aerospace Medical Association (AsMA) for "outstanding accomplishment in the psychological and psychiatric aspects of Aerospace Medicine" and "for contributing significantly to aviation safety in Japan" and was also a Fellow of AsMA. He held the Distinguished Service Medal of the National Defense Medical Society and the 3rd Degree Commendation for Aviation Safety of the Chief of the Air Staff, JASDF. He was President of the Japan Society of Aerospace and Environmental Medicine, Secretary General of the National Defense Medical Society, and Councilor of the Japan Ergonomics Research Society, and a member of the Medico-Legal Society of Japan and the Organization Committee of the 8th International Congress of Ergonomics. He

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was also an Honorary Member of the Korean Medical Association and the Korean Military Medical Association, and in 1978 was made an Honorary Flight Surgeon for the Republic of Korea Air Force. He spent 7 years systematically researching in-flight visibility and look-around patterns to prevent mid-air collisions and presented the results of that study in 1978 as a special lecture at the International Ergophthalmological Symposium. That same year, he also presented a special lecture on impact injuries and their analysis at the annual meeting of the Japanese Counsel of Traffic Science. He was the author of seven books, including "Flyer's Mind," an in-depth psychological study of the pilot with the goal of improving flight safety. He was personally involved in 55 aircraft accident investigations for the JASDF and 8 for civil authorities and was widely published with over 80 papers to his credit.

## Obituary Listings

**Stanley Diamond, M.D.**, Davis, CA, died in July 2008 at the age of 91. A native of Portland, OR, he was a former AsMA Fellow, Emeritus member, and author. He joined AsMA in 1957 and was active on many committees during the 1960s and 70s. An ophthalmologist, Dr. Diamond published many articles on pilot vision, including the review article, "Excimer Laser Photorefractive Keratectomy (PRK) for Myopia—Present Status: Aerospace Considerations" (*Aviation, Space, and Environmental Medicine* in July, 1995). Dr. Diamond remained in private practice of ophthalmology in California for many years. He enjoyed a lifetime of aerospace medicine and his grandson is pursuing a career in aerospace engineering.

**A. Russell Kempton, M.D.**, Toronto, Ontario, Canada, died recently at the age of 77. He was a former Emeritus member of AsMA, having joined in 1970. Dr. Kempton received his M.D. from Dalhousie University in 1952 and became a Regional Medical Officer, Civil Aviation Medicine, in Toronto in 1970.

**William Ross Adey, M.B.B.S.**, Redlands, CA, died recently at the age of 76. A native of Australia, he received his medical degrees from the University of Adelaide in 1949. He emigrated to the United States and became Professor of Anatomy and Physiology at the University of California at Los Angeles School of Medicine and Director of the Space Biology Laboratory, Brain Research Institute. He published over 100 papers in brain research and related fields. He joined AsMA in 1962 and became an Emeritus member in 1997.

**Dick Cason, M.D.**, Hillsboro, TX, has died. He received his M.D. degree from University of Texas, Galveston in 1945. He joined AsMA in 1961 and became an Emeritus member in 1996.

**Joseph P. Pollard**, of Arlington, VA, has died. A native of Virginia, he attended the College of William and Mary and received his M.D. from the University of Virginia in 1939. He joined the U.S. Navy in 1941 and attended the Naval School of Aviation Medicine in Pensacola. He joined AsMA in 1947.

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- Update your address, phone number, and e-mail address
- Access the Blue Journal online
- View Association news
- Renew your membership
- View the Job Fair and online classifieds
- and much more!

### Aviation Space and Environmental Medicine Seeks New Editor in Chief

The Aerospace Medical Association (AsMA) is seeking applicants for the position of Editor in Chief of the Association's journal, *Aviation Space and Environmental Medicine* (ASEM). The Editor in Chief should be someone with a breadth of experience in research and a substantial number of journal publications. The ideal applicant will possess a doctoral degree (M.D., D.O., or Ph.D.), have published in peer-reviewed journals, and be familiar with the AsMA (examples: member for several years, attended/presented at multiple meetings, active in Committees or Constituents). Major responsibilities, a position description, and other information are available via the Announcements section at [www.asma.org](http://www.asma.org).

This is a part-time position that will not require relocation, but will require high-speed internet access. Salary and benefits will be discussed as part of the applicant evaluation process.

Applications should include a 1- to 2-page narrative describing interest, professional qualifications, and a vision for the future of ASEM. A current CV is also required. The application deadline is 31 March 2008. If invited, applicants must be available for interview during the next Annual Scientific Meeting, Los Angeles, CA, May 3-7, 2009.

Email completed applications (as PDF attachments) to the Search Committee Chair, Dr. James Webb, at [jwebb.asma@swbell.net](mailto:jwebb.asma@swbell.net).

### Aviation Medicine Scholarship

The International Academy of Aviation and Space Medicine has a well-established Scholarship Program, the aims of which are to enable young physicians who are starting on a career in aerospace medicine to either attend a formal course of instruction in aerospace medicine or to work in a recognized aerospace medicine training or research institute for instruction, and for research experience in the discipline. This scholarship is for \$15,000 US. The deadline for application for the current scholarship is June 30, 2009.

**Scholarship Application Form** - Individuals wishing to apply for this Scholarship may print a copy of the Scholarship Application Form in English or French from the IAASM website at <http://www.iaasm.org>

## CLASSIFIED ADS

### POSITION AVAILABLE

**PATIENT SAFETY PHYSICIAN**--The VA National Center for Patient Safety, Ann Arbor, Michigan, is seeking a Patient Safety Physician. The successful candidate will be involved in the development, implementation, operation, and evaluation of many patient safety programs, including patient safety training for physicians, nurses, and others; special clinical projects related to patient safety; human factors engineering analysis of adverse events and close calls; and information tool development. Board certified/eligible physicians with a current, unrestricted license to practice medicine in any of the 50 U.S. states may apply. Occasional overnight travel. EOE.

For additional information and application instructions, see:  
[www.patientsafety.gov/jobs.html](http://www.patientsafety.gov/jobs.html)

### Aerospace Medical Association Seeks Executive Director

The Aerospace Medical Association (AsMA) is seeking applicants for the position of Executive Director. The Executive Director serves as the chief operating officer responsible for all management, administration and professional activities of the Association. Applicants should possess a doctoral degree and be familiar with the AsMA. Major responsibilities include membership services, planning and conducting an annual scientific meeting, publishing a scientific journal, and conducting liaison with related national and international organizations. Salary will be commensurate with these responsibilities and the experience of the applicant. Applications should include a 1- to 2-page narrative describing interest, professional qualifications, and vision for the Association. Also include a professional resume, salary history, and salary requirements. A position description may be obtained by calling (301) 469-5461. Mail applications to: Robert R. McMeekin, M.D, Chair, Search Committee, 7435 Arrowood Road, Bethesda, MD 20817-2822.

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