President's Page

Each new President of our Association takes office with a vision of how he or she wishes to steer the organisation through the year and influence its future direction. My predecessor, Dr. Melchor Antuñano, certainly made an impact with his dynamic energy and left us with a well-structured and visionary strategic plan which we are taking forward.

You may recall that my vision is to improve communication, both within the Association and in the way the Association interfaces with the media, politicians, and fellow-professionals. Your Executive Committee and the Home Office staff have been working hard to assist me in this goal, and there has been much internal communication and discussion on how we can improve the way we work and support you, the members. Progress is being made.

We know from the literature on human factors that in communicating a message, the words used contribute only 7% to how the sense of the message is picked up. How the words are said contributes around 38%, while body language contributes the remaining 55%. In these days of communication overload and the constant exhortation to use the internet and consult the web site, this gives us a problem. I see very little body language on a web site, which means that more than half of the message delivery component is missing.

Another problem is that almost every organisation these days has a well-planned and well-developed web site. The modern mantra is 'Please see our web site'. AsMA has recently completed a major revamp of our web pages, which are now much more user-friendly, as well as serving your needs more efficiently.

But tell me honestly, when did you last have time to visit the AsMA web site? I calculated that if I were to visit the web site of each organisation to which I belong or am associated with, I would have to devote a full day a week just to this activity.

Is that a good use of my time? Does it enhance



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

my membership experience? Does it help me to contribute to the greater good of our profession and our Association?

And of course, we can ask the same question about the web sites of CAMA, AMDA, IAMFSP, IAASM, FAA, CAA, JAA, AAME, GMC, MDU, AOPA, etc, etc.

So that brings us back to the printed page and to word of mouth.

One of the surprises of my presidential interaction with members has been how many have admitted that they never read this page. I actually don't know how many of you I am communicating with.

At the end of the day, does it matter? Well I think it does. Our Association exists to enhance the profession of aerospace medicine and all its related disciplines, and we must have a common vision to achieve common goals.

If we don't communicate with each other, how can we communicate with the media and the politicians and our fellow professionals?

So that is my thought for this month. I hope you have started your planning to attend the scientific meeting in Orlando – see you there. *Michael Bagshaw January*, 2006

Aviation, Space, and Environmental Medicine • Vol. 77, No.4 • April 2006

Medical News

FAA Names Tilton Federal Air Surgeon/Jordan Retires





Frederick Tilton

Jon Jordan

The Administrator of the U.S. Department of Transportation's Federal Aviation Administration (FAA), Marion C. Blakey, recently announced that Frederick B. Tilton, M.D., M.P.H., a long-time member of the Aerospace Medical Association (AsMA), has been selected to be the new Federal Air Surgeon. Dr. Tilton has served as Deputy Federal Air Surgeon for the past six years and replaces Jon L. Jordan, M.D., J.D., who retired.

Prior to joining the FAA in 1999, Dr. Tilton was the corporate medical director for The Boeing Company in Seattle. Under his leadership, his department received the American College of Occupational Medicine's prestigious Corporate Health Achievement Award as one of the best industrial medicine programs in the nation. From 1988 to 1991, Dr. Tilton was the regional medical director at Boeing's Wichita, KS, facility.

During a 26-year career with the U.S. Air Force, Dr. Tilton logged 4,000 hours as a command pilot flying trainers, transports, reconnaissance aircraft, and fighters. He flew a wide variety of aircraft, including the F-15, T-38, RB-57F, C-141, and the B-47. He spent 11 years in the medical corps where he commanded a clinic, was an F- 15 physician-pilot and technical consultant, and held key positions such as Chief of Flight Medicine in the Surgeon General's Office. He retired from the Air Force in 1988 with the rank of colonel.

A graduate of the U.S. Military Academy, Dr. Tilton received both an M.S. and an M.D. degree from the University of New Mexico and an M.P.H. from the University of Texas. He is board-certified by the American Board of Preventive Medicine in both Aerospace and Occupational Medicine. He is a Fellow of AsMA and the American College of Preventive Medicine. In the AsMA, he has also served on the Constitution and Bylaws Committee, the Corporate and Sustaining Membership Committee, and the Aviation Safety Committee, and also served as the Publicity Chair for the Annual Meeting for one year.

Jon Jordan, the retiring Federal Air Surgeon, is also a long-time member of the AsMA. He is a Fellow and has won both the John A. Tamisea Award and the Theodore C. Lyster Award. He earned his M.D. at the Medical College of Virginia in 1963 and later attended the University of Cincinnati as a resident in Occupational Medicine. After a general practice at Highland Clinic, Williamson, WV, he went on to earn a J.D. at the University of Virginia in Charlottesville in 1967.

He has been licensed by the Medical Licensing Board, WV; the State Board of Health, KY; and the Virginia State Board of Medical Examiners. He was admitted by the Virginia Board of Bar Examiners (Virginia Supreme Court of Appeals) and was also admitted to the DC Bar (DC Court of Appeals).

He is a member of the International Academy of Aviation and Space Medicine. His awards include: the FAA Superior Achievement Award; Award of Merit from the Civil Aviation Medical Association; Presidential Rank Meritorious Executive Award; and the Airlines Medical Directors Award.

Executive Director's Column



Rayman

Potpourri

Your Home Office has been engaged in a number of activities over the past several months that I thought would be of interest to you. First, our participation in the Exploration Life and Medical Sciences (ELMS) Coalition has been very active. The Coalition has grown considerably with a membership in excess of 10,000 and continues to grow. Besides letters and visits to Capitol Hill to persuade our lawmakers to maintain a reasonable budget for space medicine and life sciences research, we participated in a Forum held in the Russell Building in early March. A number of members of Congress including staff were in attendance. We were fortunate to have several astronauts participate as well.

We will soon launch a CME/MOC program in the journal. Articles will be selected and will be accompanied by a number of questions. The responder will be asked to read the article, answer the questions, and submit the answer sheet form to the Home Office for grading and archiving. Credit will be for CME and for MOC since the American Board of Preventive Medicine agreed to recognize this CME feature for MOC credit as well. If we can select 3 articles per issue and a responder answers all the questions throughout the year, a total of 33 MOC hours could be approved. (That's assuming that 3 articles per journal are accredited.) More information will be forthcoming. I hope to get this program off and running by midsummer at the latest.

The FAA has recently published an NPRM

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on Human Space Flight Requirements for Crew and Space Flight Participants (Docket Number: FAA – 2005 – 23449, Notice Number 05-17). This NPRM can be found on the FAA website (faa.gov). AsMA responded to this NPRM by stating there should be different standards for suborbital and orbital flight as the stresses are quite different. We agreed to an FAA Class II Medical Certificate for suborbital flight, but strongly recommended that there be more stringent requirements for orbital flight to include screening recommendations published by the U.S. Preventive Services Task Force. More details will follow in the next issue of the journal.

AsMA currently has a 10-member Tiger Team that is studying membership issues in an effort to increase the size of the Organization. Forty-one action items have been assigned and most at the time of this writing have been completed. The Team has been meeting monthly by telecon and plans to wrap up its deliberations by the May Annual Scientific Meeting. Details regarding the accomplishments of this Team will be published in a later issue of the journal.

As part of the Tiger Team effort, a readership survey was sent randomly to our current membership, the results of which will be analyzed by the Executive Committee. By the time you read this column, you will probably have already received a second membership survey. We plan to use this information to enhance our services to members.

We have just received an application from the Romanian Aerospace Medical Association for affiliate status. At the present time we have 29 Affiliates from around the world and this number is expected to grow in the near future.

Planning for the Orlando meeting continues and our gut feeling is that it will be very well attended as we are receiving a large number of calls and enquires. Furthermore, we have received over 600 abstracts, which is the second highest that we have ever received for an Annual Scientific Meeting. Our Bauer Lecturer will be Ms. Polly Vacher who is an aviatrix from the U.K. with an international reputation. Our Armstrong Lecturer will be Air Commodore A. J. Batchelor of the RAF who will speak on aviation cardiology.

I hope to see you soon in Orlando for our 77th Annual Scientific Meeting.

The online version of Aviation, Space, and Environmental Medicine is now available to Members for FREE. Simply go to www.asma.org, log into the Member Home page, and follow the link to the online journal, available through Ingenta.

This publication is available in microform from ProQuest 300 N. Zeeb Rd, PO Box 1346, Ann Arbor, MI 48106-1346. www.proquest.com; 1 800-521-060.



Keeping You Informed Of The Latest Advances In Science And Technology

This month's edition of the Watch reviews Radio-Frequency Identification (RFID) technology, its evolving use in medicine and aviation, and some future potentials and caveats.

RFID and Aviation Medicine

James R. De Voll, MD, MPH Director, Physician Leadership and Provider Innovation, The Advisory Board Company,

Washington, DC

RFID: headlong into the ubiquity: Surreptitiously, Radio-Frequency Identification (RFID) technology is becoming a ubiquitous part of the daily environment. Anytime there is a need to identify something or someone in the classic five "W's" of who, what, where, when and why, RFID is finding a role. In a world where there is increasing demand to collect and use massive amounts of data, RFID provides an automated way of providing an instantaneous data stream that does not rely on human input. That data can then be assembled into a knowledge base useful for intelligent decision making. Already, RFID is a factor in aviation generally and aerospace medicine more narrowly. The critical issue at hand is to assess both the opportunities and threats presented by this technology.

Identifying RFID: RFID is only one of a number of identification technologies in use today. The simplest identification technology is the simple written label. Barcode labeling has become the gold standard for auto-identification technology over the last 20 years, but can only be used to scan individual items and is limited to line-of-sight. RFID holds the promise of doing the same things that barcoding does, but without the same limitations and with higher reliability.

RFID definition and review: An RFID system consists of basically two parts: a tag containing coded information and a reader to collect the information. The tag portion can contain data ranging from a simple, unique identifier that only becomes meaningful when related to information already in a database, or it can contain more complex information on the object. The amount of information stored depends on the potential use for the tag; from a simple identifier of fixed equipment inventory within a healthcare facility to actual tracking and environmental data measurement (location, time and temperature). Even health record data (medications, allergies, diagnoses) can be stored

on the tags, as is the case for implantable RFID devices increasingly used to track livestock or as an FDA-approved onboard medical record marketed as VeriChip TM (Applied Digital Solutions; VeriChip Corporation, Delray Beach, FL).

Standard bearer: However, for cost and security purposes, RFID tags by and large are used as unique identifier labels that link to item information in a larger database. Like the Universal Product Code (UPC) on a barcode that identifies manufacturer and item number, RFID tags are designed to carry 96 bits of information, though the general range is considered to be 32 to 256 bits. The electronic product code (EPC) protocol and data structure has been developed for RFID. While barcodes can accommodate some 100,000 numbers, the EPC can be used for millions of trillions of items.

Many choices: The tags themselves come in two major categories: passive and active. Passive tags are designed to be interrogated by a reader that broadcasts radio-wave energy to the tag. The tag is essentially an antenna bonded to a silicon chip inside some type of protective encapsulation (usually glass or plastic). The broadcast energy field interacts with a magnetic coil in the tag, inducing a current that powers the chip and data transmission back to the reader. Passive tags are not battery-life limited and are inexpensive. Active tags are battery-powered and can transmit either continuously or periodically. Active tags can be read at larger distances but are 1-2 orders of magnitude more costly.

Bottom of the information technology food chain: Tags and readers are just the beginning. The complex information management problem that RFID is meant to solve is to handle what is potentially a torrent of data. For example, consider the situation in which there is a system of thousands of active tags, each reporting data every few milliseconds. The approach is to morph data into knowledge and then into intelligence to assist in timely decision-making. For simple inventory applications using passive tag technology and periodic scanning, the scope of the problem is small. For real-time, highvolume applications, processing the information requires the use of remote sub-servers, filtering algorithms, and even artificial intelligence applications which feed a manageable knowledge base to sustain an actionable intelligence decision support system.

RFID and medicine: In non-aviation medicine, RFID has a large number of potential uses, many of which are already being explored. More specifically, RFID is being used to track patients (facility throughput), staff, equipment, consumable supply chain, laboratory supplies and specimens, patientcentric care design, and management of facilities, medications, and patient safety (especially newborns, elderly or cognitively impaired from abduction, misplacement, or confinement). The most compelling clinical use is in the area of medications and patient safety, both in terms of supply chain management of pharmaceuticals to the hospital or pharmacy (e.g., ensuring medication quality and preventing introduction of counterfeit medications) and avoiding medication administration errors. However, the most compelling value proposition is in facility and equipment management, where a definitive return on investment is demonstrated

through inventory tracking and management of high-value mobile devices.

RFID first up for departure: To the real heart of the issue, whither RFID in the aviation world? Potentially everywhere. It is clear that RFID has tremendous potential for advancing safety and efficiency. But the answer to the key question, "Is there a down side to RFID?" is "Of course!" RFID presents the same concern for potential interference with critical aircraft electronic systems associated with other portable electronic devices. So naturally, the FAA would like to have policies in place regarding RFID and its application to aviation. The issue of prime focus is RFID tags integrated into the manufacture of aircraft maintenance parts.

Maintaining part control: One of the critical issues facing aircraft manufacturers and airlines is the ability to manage maintenance and repair histories. Given the complexity of aircraft design and the cost of maintenance, ensuring efficiency and cost-effectiveness is more critical than ever. Boeing and Airbus began joint sponsorship in September 2004 of an internet RFID intelligence portal for aviation standards as a precursor to adopting RFID for maintenance parts. Under the direction of a FAA team created to examine RFID technologies, Boeing conducted tests aboard a FedEx MD-10 Freighter to ensure that passive devices did not interfere with aircraft systems. In June 2005, it was reported that the FAA was about to publish a policy allowing use of "passive-only" tags on aircraft, citing that the technology poses no risk to airplanes in flight. Specific conditions for use included interrogating/reading the tags only when the aircraft was on the ground and not in operation. In October 2005 Boeing announced its intention to use passive RFID to tag line replaceable units, life-limited parts, on-board emergency equipment, and other serialized end items. To date, however, the FAA has not released the final policy for publication.

At a loss for baggage: Over the past few years, airlines such as British Airways and Delta have experimented with using passive RFID in baggage handling operations. Cost constraints have hampered adoption in the cash-strapped industry, but falling prices for RFID and increased penalties for lost baggage in the European Union are stimulating adoption. In December 2005, the International Air Transport Association adopted a new standard for RFID for airline baggage. RFID may improve reading accuracy over barcode technology from 85% to over 98%. Given the cost for handling baggage, use of RFID seems to beat a tipping point.

RFID and alternative flight plans: The number of potential applications of this technology to aviation and aerospace medicine are huge, and it is not practical in this forum to catalog them all. But to give a few examples:

Personnel security: RFID embedded in personnel identification for flight crew and maintenance personnel. Aeromedical evacuation: DoD has already experimented with this for tracking patients and critical medical information. Passenger security screening: RFID embedded in boarding passes and passports. RFID and aircraft mishap investigation: assist location of flight crew and aircraft parts. *See SCI-TECH, p. 470*

This Month in Aerospace Medicine History--April 2006

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

Seventy-five Years Ago

Flight safety and the physical examination (Opening Address of a Symposium on Aviation Medicine, King County Medical Society, Seattle, WA, April 6, 1931): "Although we are yet only in the dawn of the Air Age, a journey by airplane is as safe as crawling over the ground by the rails or gliding over the water by ships; and by miles travelled [sic], is five times as safe as by automobile. There were ten million accidents in the United States last year in which there were 32,500 persons killed and 960,000 more injured due to auto-vehicles along; in contrast to but a few dozen by air travel, the latter of which never escape the press in bold headlines. There have been 1365 killed by bullet wounds in the attempted enforcement of the ignoble experimental amendment to Constitution alone. It is safer to fly than to take a drink nowadays!

"Safety in the air, however mainly depends upon the pilot. The licensed inspected planes are safe – less than 20 per cent of crashes being due to structural defects and more than 60 per cent to the pilot...

"For the army and navy services, a very exhaustive elimination examination is now required in all countries...

"The requirements of the Department of Commerce are not as rigid as those of the services, for civilians are not supposed to indulge in acrobatics and flight formations, and with the exception of transport pilots, not to do night flying...

"Practically all applicants for civilian flying come up for examination thinking themselves physically fit, but 20 per cent are rejected at once.

"In the case of the services, all candidates have passed the physical examination for admission to the Army or Navy but only one in ten survives contact with the flight surgeon and the attention of the instructor.

"The primary physical examination by the flight surgeon eliminates 30 per cent immediately; 40 per cent are 'washed out' during the course of primary field instruction, and half of the remainder fail through developed physical or mental defects or by reason of inability to rate as 'good' in the advanced training. In 1930, there were 230 cadets examined for flying training at the U. S. Naval Academy. Of these, 173 passed the flight surgeon; 40 per cent being rejected of these otherwise exceptionally qualified young men" (4).

Fifty Years Ago

Prediction of accident-prone pilots (U.S. Naval School of Aviation Medicine, Pensacola, FL): "An inadequate response of man enters into about 70 per cent of the military aircraft accidents. How can we whittle down this expensive and elusive problem? The potential modes of attack are those which are available for the reduction of any undesirable behaviors; e.g., murder, robbery, or prostitution. Efforts may be made (1) to eliminate the circumstances under which the behavior occurs, or (2) to train persons to make other responses than those that are performed, or (3) to select and eliminate those who make these undesirable responses... "Only faint relationships, if any, have been obtained between measures of the individual pilot and his subsequent accident records. Measures of his proficiency while he is learning to fly, measures of his aptitudes most relevant to success in learning to fly, and of his accident performance itself have been found to be only slightly related or not related at all... What then are the implications of this limited relationship?...

"This report raises the question of selecting and eliminating the individuals who are going to have accidents. The studies reviewed indicate that such selection is not possible on the basis of existent aptitude or performance measures, nor possible on the basis of aircraft accident histories. These findings would suggest that the present procedures of selection and training are effectively performing this job. No additional selection aimed at accident reduction is possible with these types of measures.

"It was noted that attempts to predict aircraft accidents from more transitory individual variables such as moods, inattentiveness, temporary physiological states, or changing levels of training had not been sufficiently explored to reject their potentialities as determinants of aircraft accidents.

"It is concluded that a portion of the 'pilot error accidents' remain unpredictable. These would be accidents resulting from conditions imposed on the individual and to which he could not respond adequately. These accidents would be unpredictable from individual measures in that all individuals would be equally incapable of adequate responsivity and hence no measurable differences between individuals would obtain. A further portion of these type accidents would be due to inadequate responses related to the pilot's 'state of readiness' to respond. These 'states of readiness' would be transitory and related to moods, physiological states, conditions of attention, and levels of training. If this reasonably describes the 'pilot error situation,' the pertinent problem of this area is the determination of the extent to which these individual 'states of readiness' enter into accident production and to what extent such states are predictable" (3).

Warning civilian passengers of barotraumas: "It is not unfair to inquire who has the responsibility of warning prospective passengers under what circumstances flying is hazardous to the ears. It cannot be denied that the medical departments of the airlines are well aware of the effects of pressure changes in the ears. Why should not this and other related information be imparted to the public?... Though the subject of aerotitis has been reviewed many times in recently published articles, it is noteworthy that the prophylactic aspect has been accorded only meager space. It is difficult to reconcile especially why civilians are not shown the same consideration in the prevention of ear complications as military and professional flight personnel... With the co-operation of airlines whose obligation it should be to issue appropriate regulations for the passengers' welfare, the incidence of aerotitis could be reduced to a negligible figure" (1).

Hazards of pure oxygen in spacecraft: "The use of a pure oxygen atmosphere in a spaceship has a few known disadvantages, and some that can be only conjectured at. The main problem is the high fire hazard. Material that would merely smoulder if ignited in air will burn like a torch in oxygen... Humans are also very inflammable, especially their hair. There are a number of igniting agents, such as short circuits, accidents with chemicals, static electricity, cooking, meteorite impacts, heating by radios and electrical equipment, focussing of sunlight by observation instruments, and friction in motors, etc. While these lists are frightening, let us remember that the average hospital deals with the same problem almost continuously with very little trouble. The best procedure is to eliminate all possible inflammable materials" (2).

Twenty-five Years Ago

Review and prediction of human error (Air Force Inspection and Safety Center, Norton Air Force Base, CA): "The USAF has had an impressive record of improvement in its accident experience during the past three decades. This has been reflected in markedly lower rates in accident experience, aircraft destroyed, and fatal accidents. As the historic experience line comes closer to the ultimate zero goal, improvement becomes more difficult. The trends during the 1970s suggest that a bottom, at least temporarily, was reached so that, unless additional effort is exerted, an actual increase rather than a continuing decline will occur. Experience does show that, regardless of future overall accident trends, the proportion of the accidents which result in fatalities will almost certainly increase. There is also a clear indication that, unless crewmen in ejectionseat-equipped aircraft improve their emergency perception and decision-making abilities, the proportion of successes in airborne escape may not increase but could well decline still further. Accidents will almost certainly maintain the trend of being associated with in-flight rather than takeoff or landing activities. One kind of flight mishap or particular concern remains that of USAF planes with civilian aircraft. On the basis of past experience, these kinds of accidents can continue to be anticipated. Their prevention represents a focal point of real concern. One feature of future mishaps which will become increasingly prominent will be the involvement of women crewmembers. Both a distressing and heartening feature of the review of mishaps is that even a cursory review indicates that most, if not all, are preventable by the use of well-known and well-established principles of accident prevention. Improvement in the selection, training, and use of people, and improvements in hardware, both in terms o reliability and man/machine compatibility, can all lead to increased efficiency and a continuation of the historic down trend in accident losses. This defines the direction for the eighties" (5).

References

1. Editorial. Eye, Ear, Nose & Throat Monthly 1956 (April).

2. Grant LJ Jr. Fire hazards in space ships. J Space Flight 1956 (April).

3. Webb WB. The prediction of aircraft accidents from pilot-centered measures. J Aviat Med 1956; 27(2):141-7.

4. Wurdemann HV. Physical examination of aviators: Including notes on psychiatry and personality tests. J Aviat Med 1931; 2(1):23-8.

5. Zeller AF. Human error in the seventies – reviewed and projected through the eighties. Aviat Space Environ Med 1980; 52(4):241-6.

NASA's Challenges Program Seeks Input

NASA's Centennial Challenges Program, which promotes technical innovation through novel prize competitions, has released draft rules for six new prize competitions. NASA is seeking external comments and collaborating organizations to help finalize criteria and to initiate these challenges. A Request for Comments has been released, asking potential competitors and interested parties for comments about the detailed rules and achievability of the competitions.

The six prize competitions encompass a range of capabilities and technologies. The competitions are: Human Lunar All-Terrain Vehicle Challenge; Fuel Depot Demonstration Challenge; Low-Cost Space Pressure Suit Challenge; Lunar Night Power Source Challenge; Micro Reentry Vehicle Challenge; and Station-Keeping Solar Sail Challenge. NASA also re-issued an Announcement of Partnership Opportunity recently that solicits collaborating organizations that can administer one or more of the competitions or contribute to prize purses.

The Exploration Systems Mission Directorate manages the program. For more information about the program on the Web, visit: http://centennialchallenges.nasa.gov.

ASMA MENTORSHIP PROGRAM

AsMA has a Mentorship Program for our younger members. Go to our website and click on "Members Login." At the Member Home page, click on Mentorship Program. You can sign up as a Mentor or Mentee, or view Participating Mentors.

ISAP 2007 Call for Proposals

You are invited to participate in the continuation of the International Symposium on Aviation Psychology to be held in Dayton, OH, April 22-26, 2007. The theme for this symposium is "Airspace as a Cognitive System." Proposals are sought for papers, sessions, workshops, panels, or posters to be presented in any of the major topics in the field including cockpit and air traffic control design, crew management, cognitive processes, physiological factors, stress and fatigue, communication, cultural factors, simulation, pilot selection and/or training, etc. We are also interested in proposals for a small number of sessions directed at human performance in domains other than aviation, to the extent that generalizations from or to the aviation domain are relevant (e.g., medicine, highway safety, supervisory control, etc.).

One-page proposals describing your presentation should be e-mailed to Richard Jensen, Program Chair, at rjensen@core.com. Panel or full session proposals should include a one-page description, plus a list of potential contributors and the e-mail address for each. Your proposal must include the title, your name, full postal address, phone number, and email address (and that of all authors). Please check our website at www.wright.edu/isap for the exact format for proposals. The deadline for proposals is July 31, 2006.

AsMA RESOLUTIONS/POSITION PAPERS/LETTERS

SUBJECT

- 1. Policy on Interval for Flight Physical Examinations
- 2. Policy on Countermeasures and Medical Care Moon l Mars Mission
- 3. Policy on Medical Standards for Flight Attendants
- 4. Policy on Emerging Infections
- 5. Policy on Fatigue Countermeasures
- 6. Policy on UAV Medical Standards
- Policy on Optimal Cabin Pressure
 White Paper on Aerospace Medicine
- 1 1
- 9. Policy on Go-No-Go pills
- 10. Policy on Biohazard Decontamination
- 11. Resolution on CFIT
- 12. Letter to NASA asking for restoration of aeronautics R&D
- 13. Reply to DOT NPRM supporting use of portable sieve oxygen for commercial passengers

AsMA Future Meetings

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

May 13-17, 2007 Sheraton and Marriott Hotels New Orleans

May 11-15, 2008 Sheraton and Hilton Hotels Boston, MA

Russian Affiliate Issues Call for Papers: 5th International Scientific and Practical Congress

The Association of Aviation, Space, Naval, Extremal and Environmental Medicine of Russia has issued a call for papers for the 5th International Scientific and Practical Congress "Man in extreme conditions: health, reliability, and rehabilitation," to be held on the 16-20 of October 2006 in Moscow, Russia. The Congress will be conducted in Russian with simultaneous translation in English.

The application to participate and all the materials for publication should be sent to the following address: 109017 Moscow, Bolshaya Ordynka street 22/21, attention – Professor Vlasov V.D., head of the Department of Aviation Medicine of IAC. Please indicate in your letter if you wish to make a speech (up to 15 minutes) on any particular subject.

Details of the submission process were printed in the February issue of ASEM (p. 169). Further information can be obtained at the following phone numbers: (095) 953 58 42 (Mr. Valentin Vlasov) or at phone/fax number: (095) 239 98 51 (Mrs. Dina Valeeva, Mrs. Natalia Mitrokhina), or by e-mail: medic@mak.ru (attention Mr. Vlasov V.D.) or infan.ltd@relcom.ru (attention Mr. Gabbasov I.Z.), fax number: (095) 953 35 08. Speeches for publication should be sent by 30th of June 2006.

<u>STATUS</u>

In progress

- In progress
- In progress
- In progress
- In progress
- In progress
- In progress
- Completed. Published Oct. 2005 issue of
- Journal In progress
- In progress
- Completed and forwarded to Congress and DOD
- Completed

Completed

Where's the Proof?

Evidence Based Medical Certification: an International Challenge

CAMA Sunday, Orlando, Florida, with AsMA

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

Speakers: ICAO, JAA, UK, Transport Canada, FAA, New Zealand

MEETINGS CALENDAR 2006

September 10-14, 2006, Bangalore, India. 54th International Congress of Aviation and Space Medicine. This meeting is being hosted by the Indian Society of Aerospace Medicine. A preliminary registration form may be found at http://www.isam-india.org/ conference44/newreg.php.

October 16-20, 2006, Moscow, Russia. 5th International Scientific and Practical Congress. For more info, please call Mr. Valentin Vlasov at 095-953-5842, or Mrs. Dina Valeeva or Mrs. Natalia Mitrokhina at phone/fax 095-239-9851; or e-mail medic@mak.ru, attn: Mr. Vlasov V.D. or e-mail infan.ltd@relcom.ru, attn: Mr. Gabbasov I.Z.; or by fax at 095-953-3508.

November 9-12, 2006, Eilat, Israel. Air Travel and Health. This symposium will deal with flight physiology and a wide array of health issues in air travelers. For more info, visit www.palexconventions.co.il/ath2006.

April 22-26, 2007, Dayton, OH. International Symposium on Aviation Psychology: "Airspace as a Cognitive System." For more info, visit www.wright.edu/isap.

Send information for publication on this page to: Susan Northrup, M.D. snorthrup63@earthlink.net

CAMA News

Welcome to the first CAMA News page in *Aviation, Space, and Environmental Medicine!* Since this is new, a little background is in order.

The Civil Aviation Medical Association (CAMA) is an organization dedicated to civil aviation safety.

CAMA, working on behalf of physicians engaged in the practice of aviation medicine espouses the following objectives:

• To promote the best methodology for assessment of the mental and physical requirements for civil aviation pilots;

• To actively expand our scientific knowledge;

• To advocate, through continuing education, both basic and advanced civil aeromedical knowledge;

 To promote professional fellowship among our colleagues from allied scientific disciplines;

• To bind together all civil aviation medical examiners into an effective, active medical body to promote aviation safety for the good of the public.

We would like to invite all attendees of the Aerospace Medical Association's 77th Annual Scientific Meeting to attend our 3rd Annual CAMA Sunday, May 14, from 8:00 a.m. to noon at the Caribe Royale. The title of the session is Evidence-Based Medical Certification: An International Challenge. The projected speakers are listed in the box to the right.

In addition, CAMA hosts an annual scientific meeting in October dedicated to current civilian aviation medicine clinical topics. The October 2005 meeting in Charleston, SC, was

SCI-TECH, from p. 467

Caveat emptor RFID. Reflecting on the preceding, the inevitability of RFID in aviation should be abundantly clear. But a couple of intuitive questions regarding RFID remain. First, the pending FAA policy to avoid potential RFID interference with aircraft systems seems not to address uncontrolled presence of RFID tags and readers aboard aircraft in baggage, carry-ons, freight, or even on persons. Second, a non-aviation concern is the potential environmental impact from billions of RFID tags ending up in refuse. Are there potential untoward effects of the cumulative ambient electromagnetic noise created by discarded RFID tags? While previously hard to imagine, environmental threats from discarded computer equipment and cell phones were not anticipated and the pressure to fund studies of the potential adverse impacts from nanotechnology is building. Answering these questions for RFID will ultimately need to be addressed.

The AsMA Science and Technology Committee provide 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

Evidence-Based Medical Certification: An International Challenge

<u>Speaker</u>	<u>Topic</u>	Hours/minutes
lack Hastings	Introduction	0:06
Dave Bryman	Moderator/Introduction	ns 0:14
CAMA President	(2 minutes per speaker t	0
	open/close each present	ation)
lorg Siedenburg	JAA	0:25
Sally Evans	UK	0:25
Dougal Watson	New Zealand	0:25
ГВА	Australia	0:25
Hugh O'Neill	Canada	0:25
Fred Tilton	FAA	0:25
Tony Evans	ICAO	0:25
Panel Discussion	All Speakers	0:40
Questions	1	
Interactive		
Audience Participation		
Closing Statement	Bryman/Hastings	0:05
0	, 0	

attended by over 100 people. The emphasis of this meeting was on cardiology. The October 2006 meeting will be in Ottawa, Canada. There will be over 20 hours of CME with an international flavor and opportunities to see some of the local sites. Meeting details will be available as they develop at the CAMA website: http://www.civilavmed.com/

CAMA welcomes questions about our organization and stands ready to assist with

may include a figure or picture to illustrate your concept.

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

You can retrieve your favorite copies of previous Watch columns at the AsMA website (www.asma.org). Open the link under *Publications* for the *Aviation, Space and Environmental Medicine* page and click on *AsMA News*.

Important Notice

I would urge all attendees at the May Annual Scientific Meeting in Orlando to please stay at the AsMA contracted hotel-the Caribe Royale. This is important because the Association contracts for a block of rooms, which, if we don't fill, results in a fiscal penalty. Normally when we fill our room block, the hotel gives us lecture halls and exhibit room space gratis. But when we fall short, we are obligated to pay for the space we use. Last year in Kansas City, even though we had an excellent attendance, we fell short of our contracted room block and had to pay the hotel \$10,000. Please keep this in mind when you make your reservations.

> Russell B. Rayman, M.D. Executive Director

civilian aviation medical issues. Feel free to contact us via our web site or at: CAMA Headquarters P.O. Box 23864 Oklahoma City, OK 73123 Phone: (405) 840-0199 Fax: (405) 848-1053 Email: Jimlharris@aol.com

We look forward to seeing you in Orlando!

ABPS Announces American Board of Disaster Medicine

For the first time in the history of medicine, physicians may earn board certification in disaster medicine. The American Board of Physician Specialties (ABPS), the official certifying body of the American Association of Physician Specialists, Inc. (AAPS), recently announced the American Board of Disaster Medicine. This certification in disaster medicine was formed after 2 years of intense focus on the subject because of the need for responders to effectively organize and coordinate disaster planning. The board will be accepting applications from physicians of various specialties on May 1, 2006, and plans to administer the first examination in the fall of 2006. For further information, contact Shaz Powell at 404-885-9596 x 25.

The American Board of Physician Specialties (ABPS) is the nation's third largest recognized physician multi-specialty certifying body, advancing the art and science of medicine by providing medical specialty board certification for allopathic (M.D.) and osteopathic (D.O.) physicians. The ABPS monitors the adherence to approved standards related to certification and recertification and addresses examination construction, administration, scoring, reliability, and validity.

Space Medicine Branch Has Exciting Annual Luncheon Speaker Scheduled For Orlando

Last September, Dr. Greg Olsen became the third "space tourist" after a long personal quest to travel into space. He rode a Russian rocket from Kazakstan to the orbiting International Space Station and returned safely to the Earth. At the upcoming Annual Business Meeting and Luncheon on May 18, 2006, the Space Medicine Branch of AsMA will host Dr Olsen as our Keynote Luncheon Speaker. We are delighted that he has accepted our invitation, and we hope you will be able to attend. Richard Jennings and Genie Bopp helped secure Dr. Greg Olsen as our luncheon keynote speaker, and we thank both of them for that assistance. We have asked for an extra-sized room to handle what we expect to be a largerthan-usual crowd. Please be sure to get your tickets soon, as we expect this talk to be a sellout. No ticket scalping allowed -- Nina Johnston and our other members-at-large ticket volunteers will on the lookout!

Dr. Jeff Myers has asked to be contacted if any of our members wish to help his Young Investigator Award Committee evaluate abstracts. This is a great way to be of service to the Aerospace Medicine community, and help our brightest Young Investigators be formally recognized. Jeff's email is: Jeffrey.Myers-1@ksc.nasa.gov. As you may recall, Dr. Myers is also the Scientific Program Chair for this year's AsMA Annual Meeting, and he and his committee (including Deputy Chair Dr. Joe Dervay) have done a super job handling what I believe is a very large number of submissions. Thanks to all of the SMB members that helped out with the review process this year in November.

I am also pleased to announce that our newest and older members have teamed up for an interesting session that relates to matters on deciding what surgical skill set(s) might be needed for a very long duration space mission. Drs. Aly Calder, Vic Wykes, and others have teamed up with veteran surgeon Dr. Mark Campbell to provide an interesting session led by our younger International Members-- many of whom were key players for the very successful October 05 UK Space Medicine Day. This is a part of our general strategy to try to better support not only our younger and dynamic newer members, but our internationals as well. Drs. Karen Breeck and Aly Calder have been Co-Chairs of our SMB International efforts, and we appreciate their input and support.

Dr. Mark Campbell has been hard at work on the new Space Medicine Branch website, and we continue to applaud his very substantial behind-the-scenes efforts. We hope you will visit the site soon, and appreciate its complexity and growth potential.

Treasurer Genie Bopp and I have just received a notification from the IRS that our 501 (c)(3) application for not-for-profit status is under review-- I hope to report in another month that the application was successful. We have a few more wickets to wade through with the IRS first, however. Genie also tells me that we are in great shape financially, with more major contributions set to flow in from our stalwart contributors (Wyle Laboratories and several individuals). Our "business model" for better financial operations is working really well, and we will report record dollars in the kitty as we develop what might be termed a "safety net" and "endowment" for our operations -- including the Young Investigator Award. Please write Treasurer, Genie Bopp, if you have any extra bucks you want to contribute to the Space Medicine Branch. It is tax-deductible, and you can specify that a gift be used in a certain way if you so desire-- we will honor such requests. Dr. Jeff Myers has already contributed \$1,000 of his personal money to kick-start our "endowment" for the Young Investigator Award, and we have over \$2,500 in that special set-aside already! Thanks, Jeff!

Dr. Smith Johnston-- our last year's President of SMB-- is now serving as a fine immediate Past President, and the current NASA Society of Flight Surgeon's President. He is working with his Strughold Award Committee as this note is penned to find a winner from many excellent nominations this year. He will report on the winner at the Annual Business Meeting, and honor them accordingly. His wife, the lovely Nina, is still the "First Lady" of SMB. Thanks for staying on, Nina!

Dr. Jon Clark, our SMB President-elect, and his SMB Nominations Committee have been checking on nominees to run for SMB offices in the upcoming election. PLEASE VOTE-- by the time this Journal hits your mailbox, we expect that the election will be almost/already underway. We are asking for as many members to vote by EMAIL if possible to save on postage. That money can be invested and later used to fund really good speakers/expenses, scholarships, or any of our various operations.

Our Secretary **Dr. Alan Moore** will be very busy during this time keeping up with all of these emails, ballots, and bounced messages-and I thank him in advance for his service and time during this busy period. Alan, we could not do this without you (Go VT Hokies!).

Dr. Phil Scarpa and I have been serving on the AsMA Nominations Committee, and we-with input from many others-- have submitted and seconded the names of several candidates for AsMA-level office. We wish all of the candidates good luck in the AsMA Elections!

Last but not least-- we are delighted that a former SMB President, Dr. Richard Jennings, is now AsMA President-Elect and doing a great job supporting President, **Dr. Mike Bagshaw**. Another very active and dynamic AsMA Vice President is **Dr. Jim Webb**-- also an SMB member-- and Jim is doing a fantastic job, we hear!

That's about all from here-- Godspeed to all for a fine Spring and a safe trip to Orlando. **Dwight Holland, Ph.D. President, Space Medicine Branch**

<u>In Memoriam</u> Roger Ireland

Roger G. Ireland, M.D., who was Space Medicine Branch President in 1972, died last September at the age of 80.

A native of Denver, he received his M.D from the University of Colorado in 1948. The



next year he was commissioned as a naval medical officer, trained at the Naval Aerospace Medical Institute, and was designated a naval flight surgeon. Dr. Ireland earned his MPH from Johns Hopkins in 1960 and also graduated from the USAF Course in triad. AEP. EU

Space Medicine at Patrick AFB, FL.

He was a combat veteran of both the Korean and Vietnam wars. He later directed the crew systems division at Naval Air Systems Command NAS Patuxeunt River.

From 1969 to 1986 he was a panelist for NATO's Advisory Group for Aerospace Research and Development.

He served as assistant to the chief of naval operations for medical and allied sciences at the Pentagon. He received the Presidential Unit Citation and the Meritorious Service Medal, among other decorations. He retired from the Navy in 1986 after 44 years of service and became a public health physician in Northern Virginia.

A Fellow of AsMA, in 1969 he received the AsMA's Eric Liljencrantz Award for his research into problems of acceleration and altitude. In 1972 the American Institute of Aeronautics and Astronautics presented him with the John Jeffries Award for contributions to aerospace medical research. He was named a Fellow of the American College of Preventive Medicine in 1962.

Aerospace Nursing Society 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: A copy of the paper following the prescribed format (contact the committee chair for format) must be submitted to:

Awards Committee Chair/ANS 2326 Blue Shutter Road Edisto Island, SC 29438-6620

2006 Aerospace Physiology Society Education and Training Day Panel: Incorporation of Science and Technology to Counter Physiological Threats in Operational Environments

The Aerospace Physiology Society is very excited to announce this year's Education and Training Day program, titled "Incorporation of Science and Technology to Counter Physiological Threats in Operational Environments."

Since scientists began to explore the atmosphere and the first manned balloon flights in the late 1700s, humans have been challenged by the physiological stresses of reduced barometric pressure, acceleration, thermal stress, and maintenance of situational awareness. Contemporary physiologic research has sought to expand the operational envelope through physiologic support strategies and implementation of what we now call aviation life support systems.

This panel presentation will highlight the work being done in the areas of spatial orientation, night vision, hypoxia recognition and recovery, and nutritional intervention effects on cognitive performance and stress management. Presentations will include:

1. Technological Approaches to Improving Pilot Orientation:

This topic will address training aircrew about Spatial Disorientation (SD) in the classroom, in some flight simulators, and now in-flight, helping reduce the Class A mishap rate by using a Spatial Orientation Retention Device (SORD) and the evaluation of another technological approach to eliminating SD in the cockpit called SOES, or the Spatial Orientation Enhancement System. Both systems incorporate multisensory integration of auditory, tactile, and novel visual display symbology.

2. The Use of Multimedia and Non-Motion Based Simulation to Combat Spatial Disorientation in Naval Aviation:

This presentation will focus on the evaluation of an experimental spatial awareness training system aimed at teaching aircrew how to avoid, recognize, and recover from SD-related problems. The experimental system is based upon a three tiered approach consisting of instructor-led multimedia presentations, flight simulation, and self-paced DVD and web-based materials. Additionally, use of flight simulator software, with high-fidelity visualization of real world environments, has been incorporated into a first generation prototype capable of providing hands-on training for avoidance of select SD scenarios. The current prototype provides head-tracking for demonstration of sensory spatial reflexes and is also linked to an instructor operator station (IOS) for data storage. The IOS can be linked directly or indirectly to the simulator and is now capable of providing near real time graphs that allow instructors to closely monitor and debrief pilot performance.

3. Simulator Physiology (SIMPHYS) in Naval Aviation: the evolution of hypoxia

training in the Naval Aviation Survival Training Program:

Since 2004, the Naval Survival Training Institute (NSTI) has investigated the efficacy and utility of normobaric hypoxia training in combination with flight simulators to enhance training realism and reduce altitude exposure risks. Previous work by investigators at the Naval Aerospace Medical Research Laboratory (NAMRL) and the Naval Operational Medicine Institute (NOMI) has verified that using the Reduced Oxygen Breathing Device (ROBD) is highly effective for refresher jet aircrew.

4. The Effectiveness of Spatial Disorientation Training using Flight Simulators:

UK spatial disorientation (SD) training provides pilots with experience of typical "illusions" that can be experienced in flight. However, these demonstrations lack reality, primarily because the environment of the disorientation device is so far removed from that of the aircraft cockpit. Recent surveys of UK military pilots and military aviation accidents have shown that the vast majority of significant SD incidents and accidents occur when the pilot is not aware that he is disorientated. This underlines the need for SD training where aircrew can fly themselves into a situation engineered to produce this type of disorientation, and this can be safely and readily achieved in the flight simulator.

5. In-flight Hypoxia: Measurement Technology - the Old and the New:

The flight environment is fraught with physiological hazards. One of the most prevalent of these is hypoxia, including hypoxic and stagnant hypoxia. The ability to monitor blood or brain oxygen levels during flight may be useful from a tactical planning perspective. Historically the measurement of blood oxygen content was accomplished using invasive techniques. Today, however, these data can be acquired using a non-invasive approach called pulse oximetry. The researchers will explain the ability to measure cortical oxygen levels that can provide valuable pieces of information to the pilot on a key component of the weapon system: pilot physiological state.

6. Acute Effects of Stress and Sleep Loss on Cognitive Performance: Nutritional Interventions for Aviators:

Reports from military conflicts suggest cognitive performance is rapidly and severely degraded by combat stress. However, little objective information to confirm these observations is available. Recently, these researchers had several opportunities to study cognitive function in warfighters engaged in exercises designed to simulate the stress of combat and test nutritional interventions to mitigate these deficits. Their results are extremely interesting.

Night Vision Goggle Mishap Lessons Learned: Turning Tragedy into Training:

The proliferation and widespread employment of advanced technology night vision devices (NVD) has not resulted in dramatic decreases in NVD related mishaps. In fact, even with the dramatic increase in performance of NVDs, the same types of mishaps keep occurring. Why? To find out, please attend this session!

The panel will be held Wednesday, 17 May 2006, from 8:30-12:00 with the annual Aerospace Physiology Society luncheon immediately following at 12:00.

The Aerospace Physiology Society Social

Wed, 17 May from 6-9 pm at Fridays Front Row Restaurant, 8126 International Dr., Orlando, FL.

Further information will be available at the AsPS table in the Registration area.

AsPS 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 acheivement in the field of aerospace physiology. There are three Society awards presented each year.

The charce 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, or write to:

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

WING NEWS & NOTES

Message from Our President-Trish Trifilo

Where did the year go? It seems just a few months ago Mitzi and I were cruising the Caribe Royale planning for a meeting in the distant future...and the future is now! I started the year asking you to think about mentoring and membership. It is important to continue to bolster our membership. There are many jobs to be done to get ready for the meeting. When several people with diverse strengths and backgrounds do those jobs, it makes the meetings very fun and interesting. I am always amazed at the richness and depth of our meetings. We are not just a group who sits and visits. We exchange ideas, bring solutions to problems, support our spouses, and support AsMA.

Mentoring is a must. When we only meet once a year it is easy to lose contact with each other. It is easy to forget how wonderful the meeting was, and to forget who was who. After my first meeting, when I came back for a second year I wasn't sure anyone would really care who I was; maybe they would not even recognize me. But that was NOT the case. It was "glad you're here, can you do this for us"? I was so honored to be asked to participate! Do that for our returning members again this year. Introduce them to a job, ask their opinion, and include them in the planning. It will strengthen our membership and enrich our lives.

Now I turn the helm over to Conoly. She is so talented I have no doubt the Wing will thrive under her leadership. And with Susi close behind, the Wing has a great future. I want to thank all the executive board for their steadfast support. Thanks to Peggy and Jenifer for doing those time-consuming jobs that are so vital to our continued existence. Thanks to the members-at-large for their recruiting efforts in getting the word out about the Wing. Thanks to Judy Waring for keeping track of everyone through membership, especially in helping us become more electronic; and to Jennie for keeping us all informed. Now, to my arrangements chair Mitzi...I could never have done all the planning without her outstanding work, her friendship, her advice, and that of her committee. To Nevonna, Judy, Betty Jo, Dianne, and Josie a huge "good on ya." The registration gurus of Conoly, Els, and Jackie will have us all in the right places with our names on straight. It's a job that has a short turn-around time in the few weeks before the meeting. Thanks for putting all your efforts into that. I have Harriet to thank for the marketing push that we have rolling. Thanks for all the ideas put into action. Finally, the magician who brings the Wing page to life: Dale, you are a master at publicity. Thanks for staying with me and supporting the Wing in so vital a function.

I guess if I have to sail off into the sunset, Orlando is a pretty nice place to do it. It has been an honor to serve you. I hope I have made a worthwhile contribution. I wish the next board a blessed and successful year. Adios!

Robert's Rules and the Role of the Parliamentarian

Have you ever wondered how organizations both large and small are run? Do questions like "How can I get an item on the agenda for the next meeting?" or "How do I get my name on the slate of officers?" plague you? Do quorum requirements keep you awake all night? If so, just ask Helen Lestage, our expert on Robert's Rules of Parliamentary Procedures. Helen served as the Wing's Parliamentarian for 15 years or so, and has a wealth of knowledge of both the Wing's history and the rules which govern it. She says that she needed no special training for the position, just an interest in the procedures of running a club smoothly. This is why Robert's Rules of Order is the official handbook of a well organized club and of meetings that run smoothly. The object of the "Rules" is to help establish an organization, keep the rules simple, and keep the meetings running on topic and in an orderly fashion.

Says, Helen, "Over the years the Wing, or as we were originally known, The Wives Wing, has modernized and changed the Bylaws to a more simplified form. This alleviates the need to vote on every function of the organization, for instance setting the dues amount or meeting venues. The everyday workings of the organization are thus controlled by Standing Rules that are set or changed by the Board. Our early document was named "Constitution and Bylaws", and was streamlined to be called simply "Bylaws", in keeping with a revised Robert's Rules, which suggested the term "Constitution" was probably unnecessary unless the group was a country! The Wing is incorporated under the laws of the District of Columbia, and should the need ever arise, the Bylaws also provide us with the means of "dissolving our organization."

It is the Parliamentarian's task to remind the President when an issue needs to be voted on by the entire membership and when it can be dealt with at the executive committee level. For example, reports from the various committee members, purchasing of supplies such as ribbons, or the selection of gifts can all be handled by the executive board, while changes to the Bylaws or a change in the name or purpose of the organization must have a full membership vote. And while we are on the subject of voting, Helen reminds us that under the Robert's Rules, the correct terminology for presenting an issue on which to vote is for a member, "To Move" - one does not "Make a Motion.' As Helen says, "Otherwise, you would be doing the Hula!" Under the Rules we have also changed our name from the original "Wives Wing" to simply "The Wing." Under the old name, membership was restricted to female members only, and as our membership has continued to decline over the years, it was felt that the old name did not accurately reflect upon modern society and was too exclusionary. We now welcome several male members to our group.

Robert's Rules has served us well. The Wing is well run, and performs a vital function in bringing together its members from around the world, and supporting the activities of the Aerospace Medical community. We would like to thank Helen Lestage for her many years of service, for her leadership in keeping us on the right track, and for sharing with us her extensive knowledge of Robert's Rules of Parliamentary Procedures.

Crocodile Rock

Elton John sang about them, the Egyptians revered them, and the American Indians considered them a staple food source, but the crocodile, or more correctly, the American alligator, is now a major tourist attraction in Florida. Once considered an endangered species, the giant lizard has made an amazing comeback and can be found throughout the state's waterways. Adult alligators can reach up to 18 feet in length, and on average, weigh from 450 to 600 pounds. They will eat just about anything including snakes, fish, small mammals, birds, and even other smaller alligators. They have also been known to attack humans, so take care in their habitat.

Another of Florida's unique animals is the Manatee. These large walrus-like creatures can be found primarily along Florida's coastal waters, as well as in the warm waters of shallow rivers, bays and estuaries. The average adult weighs in at about 1500 to 1800 pounds and measures 10 to 12 feet in length. These giants are surprisingly gentle and have been known to body surf or barrel roll when playing. Manatees are herbivores and eat a variety of marine and freshwater plants. Still an endangered species, manatees face a number of threats - mostly from human encounters. They are often the victims of collisions with boats, drownings, or being crushed in flood-control gates, as well as from the effects of pollutants, and from the loss of their habitats.

Join us in Orlando for our annual meeting and experience Florida's unique wildlife. We will be offering our members and their guests the opportunity of seeing some of these "upclose and personal" through our tours - please see the AsMA Journal, January 2006 issue for details. We look forward to welcoming you to this exciting venue.

By-law Change

Second Notice

A motion was made and passed by the Board to remove section 4 of Article II in the By-Laws: "Honorary members shall be individuals who have provided significant contributions to aviation, aerospace, and/or environmental medicine research, education, operations, or in related life sciences activities. They shall be approved and elected by the Executive Board and shall not vote, hold office, or pay dues." This motion will be brought to the membership for a vote during the May meeting.

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

NEWS OF MEMBERS

Marvin A. Bowers, M.D., of Crossville, TN, has been promoted to the position of Director of Wood Medical Clinic in Crossville, TN.

Maj. Stacey L. Branch, USAF, MC, FS, of Enid, OK, formerly a resident in aerospace medicine at USAFSAM, Brooks City-Base, TX with the rank of Captain, has graduated from residency and been promoted to the rank of Major. She is now the Chief of Aeromedical Services, 71st Medical Operations Squadron, Vance AFB, OK.

CDR James M. Chimiak, MC, USN, who previously served as Chief, Anesthesiology Department, Naval Hospital, Camp Lejeune, and Commander of the "Devil Docs," has retired from the U.S. Navy. He is now serving as Staff Anesthesiologist, Grace Hospital, Morganton, NC. He has been honored with the Global War on Terror Expeditionary and Service medal.

CAPT (N) Cyd E. Courchesne, previously the Head of Medical Assessment and Training at Canadian Forces Environmental Medicine Establishment and DRDC Toronto, was promoted to her current rank and is now serving as Medical Advisor to the Chief of Air Staff and Director of Aerospace Medicine for the Canadian Forces at National Defence Headquarters in Ottawa, Ontario, Canada.

Lt.Col. Paul S. Doan, USAF, MC, formerly a resident in aerospace medicine at Brooks City-Base, TX, has been transferred and is now the Chief of Aerospace Medicine and Flight Commander, 2nd Medical Group, Barksdale AFB, LA. He was a 2005 Yale University and Johnson & Johnson International Health Physician Scholar.

Dr. Moira B. Flanagan, former Research Associate at both the National Biodynamics Laboratory and Tulane University Medical School, was awarded her Ph.D. in August of 2005 from the University of New Orleans. She currently serves as a Post-Doctoral Associate at the Human Factors Research Laboratory, University of Minnesota.

LTC Monica B. Gorbandt, MC, USA, of Madison, AL, has assumed duties as Dean of the U.S. Army School of Aviation Medicine at Fort Rucker, AL.

Lt.Col. Thomas W. Greig, MC, USA, of Oakton, VA, previously the Director of U.S. Aeromedical Activity at Fort Rucker, AL, is now serving as Program Director, Office of the Secretary of Defense for Health Affairs in Falls Church, VA.

Lt.Col. James L. Jablonski, USAF, MC, of O'Fallon, IL, is currently Associate Program Director of Saint Louis University's Belleville Family Medicine Program.

James R. Phelan, M.D., of Friendswood, TX, previously the Head of the Department of

Otorhinolaryngology, Naval Aerospace Medical Institute, Pensacola, FL, has retired from the U.S. Navy and is now serving as a Flight Surgeon at Wyle Laboratories in Houston, TX. He will be supporting NASA's astronauts in training in Star City, Russia. He received the Meritorious Service medal at his retirement ceremony.

MAJ Richard A. Roller, MC, USA, recently completed the Naval Aerospace Medicine Residency at Pensacola, FL, where he was Chief Resident last year. He also passed his Aerospace Medicine Boards in November 2005. He is now serving as Chief of the Injury Biomechanics Branch, Aircrew Protection Division, at the U.S. Army Aeromedical Research Laboratory, Ft. Rucker, AL.

CAPT Daniel H. Serrato, MC, USN, of LaGrange, GA, has been promoted to his current rank and is serving as Senior Flight Surgeon, VAW-77, NAS Atlanta, Carrier Air Wing 20.

COL Warner D. (Rocky) Farr, MC, USA, has been selected to be the combatant command surgeon at U.S. Special Operations Command at MacDill AFB, FL. He will report in June after 7 years as Deputy Chief of Staff, Surgeon, at U.S. Army Special Operations Command at Fort Bragg, NC.

CAPT Nicholas L. Webster, USNR (Ret.), who was serving at the Naval Safety Center in Norfolk, VA, has retired from the U.S. Navy after 20 years of service and has taken a position at the FAA in CAMI, Oklahoma City, ŌK.

New Members

Adrian, Andreas H., Dr.Med., Welver, Germany

Afrasiabi, Shirin, M.D., Costa Mesa, CA Andrews, Robert B., MAJ, MC, USAR, Harlem, MT

Athanasiou, Anastasia, M.D., Athens, Greece Backus, Christopher E., Capt., USAF, Spanaway, ŴA

- Booker, Edward H., M.D., West Union, SC Buelthoff, Heinrich H., Prof. Dr., Baden
- Wurttemberg, Germany
- Choi, James, B.S., Cleveland, OH
- Clifford, Heath M., LT, USN, Havelock, NC Crow, Charles B., III, M.D., Birmingham, AL

DeVries, Christine D., M.D., Schiphol, Netherlands

- Elliott, Sarah, M.B., Ch.B., Vale of Glamorgan, S. Wales, UK
- Epelman, Slava, M.D., Ph.D., Beachwood, OH Fechko, Amber, Seattle, WA
- Friedman, Ronald J., M.D., Tarzana, CA
- Fung-Schwarz, William A., Ph.D., Salt Lake City, UT
- Gillihan, Jason R., CPT, ANG, Springfield, IL
- Gillmore, Trevor, M.D., Maple, ON, Canada
- Gleespen, Martin P., M.D., Chelsea, MI Hall, Redita, WG CDR, RAAF, MBBS,
 - Merewether, Australia

Hoberg, Glenn, D.O., River Falls, WI Hufnagel, Irene M. E., Dr., Oestrich-Winkel, Germany

- Hutchinson, Mark, Wg.Cdr., RAF, MBBS, San Antonio, TX
- Jacques, Mark L., CPT, MC, USA, FS, Troy, NY
- Klein, Dale A., M.D., Mandan, ND
- Kojewski, Thomas E., M.D., Zanesville, OH
- Kyff, Jeffrey V., D.O., Traverse City, MI Lambiaso, Marlene K., M.D., Winter
- Springs, FL
- Lassiter, Paulette, M.D., Santa Maria, CA
- Lennox, Peter A., Silver Spring, MD
- Lewis, Helen J., Capt., USAF, NC, Canon City, CO
- Litzner, Brandon R., Antioch, TN
- Luhman, Christopher W., M.D., Roseville, MN Lussenhop, Daniel H., M.D., M.P.H.,
- Minneapolis, MN
- Malpica, Diego L., M.D., Miami, FL
- Mathews, Karen M., M.D., Tipp City, OH
- Mekler, Alan, M.D., Gilford, NH
- Novy, Donald S., M.D., Flemington, NJ O'Connor, J. Andrew, M.D., B.S., B.A., Carmel, IN
- O'Rangers, Eleanor A., Pharm.D., Flushing, NY
- Owen, John D., M.D., Liberty, MO
- Pace, Joseph N., M.D., Bradenton, FL
- Pachman, Joseph S., M.D., Norwalk, CT
- Paloski, William, Ph.D., League City, TX Parvus, Dirk F., M.D., Vero Beach, FL
- Porter, William, MAJ, MC, USA, Fort Hood, TX
- Reddy, Subash C., M.B., B.S., Huntingdon Valley, PA
- Regnier, Chris A., Capt., USAF, MC, Fort Lauderdale, FL
- Rivera, Enrique, Maj., USAF, MC, Bradenton, FL
- Sen, Ayan, M.B., B.S., Lancashire, UK
- Sheehan, James, MAJ, MC, USA, Lawton, OK
- Sullivan, Bobbie, Kamuela, HI
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