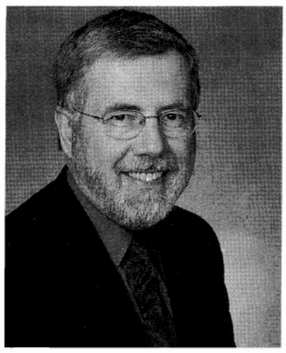
President's Page



David J. Schroeder, Ph.D.

One of the important issues facing this association and many other scientific and professional organizations is the overall aging of our membership and the need to continually attract new members. During the 2002 AsMA council meeting in Montreal, Dr. Antuñano provided an overview of the aging of many medical organizations and the lowered enrollment in most of the United States (U.S.) medical schools. He also illustrated the overall aging of the FAA's aviation medical examiners. Within the human factors community we have often discussed the fact that we do not see as many young professionals attending, presenting and, in general, becoming involved with the association. I know that within both the medical and human factors areas this can be attributed, in part, to an ever-increasing opportunity to participate in smaller scientific/professional organizations that are more closely aligned with a particular area of interest.

Robert Putnam, in his book *Bowling Alone*[*] describes the general decline in social capital in the U.S. over the past three decades (Thanks to Dr. Nunneley, who told me about this book). The term "social capital" refers rather broadly to the social networks we maintain along with the reciprocity and trustworthiness they require. Across the last 30 years, he reports that there has been a steady decline in the involvement of individuals in various social and political organizations. Putnam does make a distinction between those groups and a number of professional societies where, across the same time frame, we have seen significant increases in membership. However, at the same time, the percentage of the total professional community who are actively involved in professional organizations has declined significantly. He attributes this to the general decline in connectedness in the U.S. I don't know if the same changes are evident in the international community. Undoubtedly, this general change in involvement in social, political and professional organizations poses a challenge for AsMA as well as other scientific societies.

What strategies can the AsMA develop to ensure that we are able to maintain the interdisciplinary nature of our association both nationally and internationally? Dr. Moser, in his January 1990 president's column reported that 975 or approximately 23% of our membership was international. At last count in 2003, 906 (approximately 28%) were listed as international members. These numbers suggest that while we have fewer overall members in 2003, international membership has been better maintained. While we need to continue to explore opportunities for increasing our international membership, additional emphasis is required to increase the number of U.S. members.

As part of this overall effort we need to identify the aspects of our AsMA that are most likely to attract and maintain our membership. Typically, in most organizations the journal and the annual scientific meeting are crucial. Only by emphasizing the more relevant aspects of the association and ensuring that those needs are met, will we be able to maintain and grow our membership. Since assuming her role as editor, Dr. Nunneley has brought about some marked changes in our journal. We now have electronic submission and review of the manuscripts, which has significantly reduced the delay from submission to publication. The notice you received in the July issue of the journal indicated that in August members would have an opportunity to see what the "Online Journal" can provide. This feature makes it easier for the membership to gain immediate access to articles and abstracts and for us to further promote aerospace medicine to a broader spectrum of the scientific/academic community. Each year we attempt to improve on the overall quality of our annual scientific meeting. Are there features that we could add to the journal or scientific meeting that would enhance the attractiveness of the association to practitioners and others? We will attend to these issues as part of our strategic planning.

Overall, for me, one of the significant attractions of AsMA is the opportunity for scientists and practitioners to avail themselves of up-to-date information and research within a broad spectrum of aerospace medicine. As a member of AsMA, you have the opportunity to interact with scientists/practitioners who are the leading national/international authorities within their area of expertise, including all aspects of civilian and military aerospace medicine. Personally, I have often found that questions generated during or following a presentation, as well as the countless hallway conversations with colleagues, has helped me shape my own research and ideas. This often came about, in part, due to the multidisciplinary nature of the meeting. Often, the perspective of someone who looks at the question through the eyes of a different discipline provides new insights and strategies to address important questions. This multidisciplinary interaction is generally not seen in smaller more specialized societies. While this is clearly a strength of the association, it also makes it more difficult for us to focus our scientific meeting and journal to meet the needs of each of the multidisciplinary members, the aviation medical examiners, flight surgeons, flight nurses, aerospace physiologists, psychologists and other human factors specialists.

So, how do we reach out to individuals (particularly stu-

See PRESIDENT'S PAGE, p. 1012.

[*]Preston, RD. Bowling Alone. New York: Simon & Schuster; 2000.

PRESIDENT'S PAGE, from p.1011.
dents) in medical school, nursing schools, and other graduate academic institutions to become involved in our association? One way is to involve the student association of AsMA. They have already been working on developing new and innovative approaches to attracting additional student members. But what else can we do? If you have any ideas please contact Drs. Andy Bellenkes or Warren Silberman, Co-Chairs of the Membership Committee.

After all, the bottom line resides with each member. Members are most often attracted to AsMA when one of their colleagues invites them to participate. Therefore, I would like to encourage each of you to look for an opportunity to invite a colleague or friend to attend and become involved in the association. If each of us invited a single individual to join and only 10% of those actually became a member, our membership would increase by more than 300 members, provided we maintain our current members. Of course, at the same time we need to focus attention on our colleagues and encourage them to remain involved in the association. Let's all work together and make retention and recruitment a high priority during 2003-4.

On a different note, this past week I returned home from Anchorage where a group of us met with representatives from the hotel and convention bureau to tour the convention facilities and to identify space available to accommodate our 2004 meeting. The team from Accurate Image Marketing, Inc. is already actively laying out rooms that can handle the luncheons, committee meetings, scientific sessions, and exhibits. At this point in time, it looks like the meeting rooms will include functions at the Hilton Hotel, the Eagen Convention Center and the Captain Cook Hotel. The opening session will be held in the Center for the Performing Arts. All of the locations are within 3-4 blocks of each other and should pose little problem for attendees. The accommodations at the hotels are good and if your gastronomic interest involves seafood, I can attest that the salmon and halibut entrees provided at several Anchorage restaurants are excellent. Even though Anchorage is one of the smallest cities to host our convention, I must say that the hotel and convention personnel are extremely interested in supporting our needs and that the food at the nearby restaurants will not be disappointing. There are also numerous opportunities for attendees to travel by automobile, motor coach, and train to the mountains or glaciers that surround Anchorage. Additionally, those interested in walking and jogging can access the Tony Knowles Coastal trail just two blocks from the Hilton Hotel.

"Lady B" (Ms. Mary Baird, president of the Wing) and Ms. Ludy Rayman, arrangements chair, also participated in the meetings and have made initial plans for a number of activities for the Wing membership. Dr. Bob Riggs was also in attendance, and he and his Arrangements Committee have initiated plans for the meeting. We hope to have a Tuesday evening function at the Anchorage History and Art Museum. Finally, I can't close without passing on a big thumbs up for the Fly by Night Club. While in Anchorage we had the opportunity to take in a show entitled the "Whale Fat Follies." This musical revue/satire, while somewhat risqué for some, provided an excellent evening's entertainment, along with good food. As part of the show I learned that Alaskans are second only to Hawaii in consumption of SPAM. I understand that reservations for this show are required and that you typically need to reserve your place some 3 weeks in advance. In May, the show will focus on "Springtime in Spenard." I can only imagine what this one will be like.

Plan now to attend the annual scientific meeting, the call for papers has just gone out.

This Month in Aerospace Medicine History--September 2003

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

Introduction

As usual, there is fascinating history this month in aviation medicine. Fifty years ago our nation was involved in a police action half-way around the world, later to be known as the Korean War. The development and use of rotary-wing aircraft, including use in medical evacuation, was closely related to this event in world history. An article in the September 5, 1953 issue of the Journal of the American Medical Association discussed potential future progress in this arena, some of which has come to fruition, and some of which has not.

Two of our current topics of today - aircraft cabin ozone and spatial disorientation - were discussed seriously in the September 1978 issue of our own journal. Some old news is still new. And the news of today will be the history of tomorrow.

Fifty Years Ago

The second Interim Meeting of the Aero Medical Association was held in Brussels, Belgium from September 24-27, 1953. It was conducted under the auspices of the French Speaking Branch of the Association, and chaired by Dr. Andrew Allard, secretary of the French Speaking Branch and medical director of Sabena Airlines. (2)

Regarding the use of helicopters in medical evacuation: "One of the most challenging developments in air transportation has been rotary wing aircraft, the helicopters. These have the unique capability of taking off and landing from virtually any surface, although research is in progress which will make future fixed wing aircraft capable of similar take-off and landing performance... Now, as with all new drugs, equipment, or procedures in medicine, we must follow the first flush of enthusiasm with an appraisal of the actual capabilities of this new form of air carrier… The system of casualty evacuation used by the military services - from battalion aid station to central hospital or convalescent center - was designed by Maj. Jonathan Letterman 100 years ago. It is still valid. If complete use were made of the air carrier, casualties would receive first-aid treatment and then be evacuated to an emergency treatment site by helicopter or other light aircraft. (Evacuation here is an extra service obtained from aircraft whose primary function is transporting blood, supplies, personnel, or equipment to the front.) After appropriate treatment, the majority of the patients would be transferred to larger aircraft, which also had brought troops or supplies forward. These air carriers would by-pass the present medical care stations of the combat zone, depositing casualties at well-equipped and well-staffed hospitals in rear areas. In some instances, casualties could be evacuated directly from forward areas reached by certain types of assault aircraft… If air transportation were developed to its maximum potential, there would be even greater economies. Large airliners could be converted to aerial hospitals of 100 beds, instead of serving only as ambulance planes. These hospitals would be complete, possessing wards, operating and treatment rooms, kitchens, laboratories, and morgues." (8)

The discussion of the safety of forward versus aft-facing aircraft seats continued with this interesting mishap review: "Had aft-facing seats been installed in the National Airlines DC-6 that crashed at Elizabeth, N. J., in February 1952, the toll still would have been about 27 killed and 23 injured. This conclusion is reached in a complete analytical report on the crash soon to be released by Crash Injury Research, Cornell University Medical College.

"It is not a question of the direction in which the seats were facing, but of the direction of forces imposed on the aircraft. In this case the forces were lateral.

"Seats pulled out because of the excessive side load. All seats are designed to withstand a minimum of 6 g from front or rear, but only 1 ½ g sideways. Side-load factors are not sufficient. Under present conditions, forward-facing seats have twice the retention strength of aft-facing seats. Rearward-facing seats might be conceivable if 35 G loads ever should be reached." (6)

The aging pilot was already an aging topic in 1953: "What is the age at which human beings become undependable pilots? Or is there a measurable age and, if so, how is it determined?… The general concensus [sic] is that flying can roughly be divided into three main categories, military, commercial, and personal. The age brackets of the military airman lie between eighteen and forty-five, those of the airline pilot between eighteen and sixty-five, and those of the private pilot between sixteen and seventy-five. Of course, there are numerous exceptions to this bracketing… As a general rule, it is found that the 40 to 80 age group have arrived at a sensible philosophy of flying. They are more cautious, and relative values are weighed with greater judgment. The one temptation Grandpa runs is to over-sell himself on his ability or on the capability of various pilot aids to keep him out of trouble." (1)

Twenty-five Years Ago

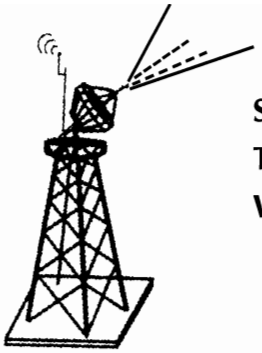
The Philips Research Laboratories and Eindhoven University of Technology from The Netherlands had this to offer on cabin ozone: "Ambient and cabin-air ozone concentrations were determined with an adapted commercial ozone analyzer installed in a KLM DC-10 from Amsterdam to Toronto and back. Cabin levels were detected directly and almost continuously; ambient levels were measured using a sampling system in which the ambient samples were converted to the cabin pressure at intervals of 13 min. A correlation is demonstrated between the ambient level, the cabin level, and the tropopause height. It was found that 70% of the ambient ozone concentration enters the cabin through the ventilation system, and about 50% of this concentration was measured 1.20 m above the cabin floor. For about 50% of the total flying time, the ozone level exceeded 200 parts per billion, by volume (ppb) in the cabin, with peak concentrations of about 600 ppb (TLV levels of 80-100 ppb apply in most IATA countries)." (7)

The Civil Aeromedical Institute in Oklahoma City reviewed one of the leading causes of fatal mishaps: "Spatial disorientation (SD) was the third highest 'cause' of fatal accidents in small, fixed-wing aircraft and closely related to the second highest 'cause' - 'continued VFR flight into adverse weather.' SD was a cause or factor in 16% of all fatal accidents. When SD was ascribed as a cause or factor in an accident, 90% of the time that accident involved fatalities. Small, fixed-wing aircraft under 12,500 lb (570 kg) accounted for 97.3% fo all SD accidents. Inclement weather was associated with 42% of all fatal accidents, and SD was a cause or factor in 35.6% of these. Flight was initiated into and continued into adverse weather in 19.7 and 68.7%, respectively, of SD weather-related fatal accidents. Fog (56.8%) and rain (41.8%) were the most prevalent adverse weather conditions. These and other data attest to the importance of this psy-

See HISTORY, p. 1015.

AsMA Resolutions/Position Papers/Letters

Subject:	Status:
1. Position Paper on SSRIs and Flying	1. In final. To be presented to Council in Nov.
2. Position Paper on Age-60	2. In final. To be presented to Council in Nov.
3. Medical Guidelines for Airline Travel, 2nd edition	3. Published in May 03 as supplemental issue; on AsMA website
4. Position Paper on Night Vision Goggles	4. Published in journal
5. Letter Recommending Anti-Convulsants in Airline Emergency Medical Kits	5. Sent to regulatory agencies and airlines worldwide
6. SARS Task Force	6. Paper in initial draft
7. Letter to USAF Chief of Staff and Secretary of Defense in Support of Go-No Go Pills	7. Sent to USAF Chief of Staff, USAF Surgeon General, and Secretary of Defense
8. Position Paper on Medical Guidelines for Space Passengers (II)	8. Published in journal and sent to various commercial space travel companies.



Science & Technology Watch

Keeping You Informed Of The Latest Advances In Science And Technology

Monitoring changes in physiology under extreme environmental conditions has always been a challenge. One often has to contend with large muscle and motion artifacts that obscure data. Non-invasive monitoring of cardiac function has often been susceptible to this problem. This month's column describes a technique tested in high performance automobiles that may provide some help.

The Use of Impedance Cardiography in Dynamic Motion Environments

Richard J Mallows,[1] BAppSci (Hons), and David G Newman,[1,2] MB, BS, DAvMed, PhD

[1]Aerospace Physiology Laboratory, RMIT University, Melbourne; [2]Aviation Medicine Unit, Monash University, Melbourne, Australia

The cardiovascular responses of humans to various factors and environments are an important component of modern biomedical research. This is particularly so in the aerospace environment, where researchers are interested in how human physiology responds to differences in such things as altitude, acceleration and thermal loads. While much of this research can be done in the laboratory, there are times when the experiment dictates that the data collection is done under real-world conditions. This requires specialized and portable physiological monitoring and data acquisition equipment that must be able to function properly in the environment being tested.

Cardiovascular parameters such as heart rate and blood pressure are relatively easy to measure in conditions outside the laboratory. However, other parameters such as stroke volume (SV) and cardiac output (CO) pose more difficulties. While there are a number of ways of measuring SV and CO, most are invasive and the equipment involved is cumbersome. As such, these techniques are not readily transferable to the non-laboratory environment such as the aircraft cockpit.

Impedance cardiography (IC) is an inexpensive, reliable and non-invasive method for determining SV and CO. Since its development in the 1950's, IC devices have become more widespread and are now gaining their place in critical care environments and in research laboratories. The use of IC has largely been limited to use within such hospital and research environments, since the apparatus was usually large, heavy and required mains power for its operation.

In recent years, much smaller IC devices have been produced for ambulatory purposes. These devices are primarily designed for clinical indications, for use in patients who are not hospital-based but who need ongoing monitoring. These ambulatory IC devices, by virtue of their smaller size and ease of use, are also gaining prominence in the equipment suite of cardiovascular laboratories.

The IC technique has been described previously (1). It is based on measurement of changes in thoracic electrical resistivity caused by ejection of blood into the aorta with each cardiac cycle. A small electrical current is passed across the chest via a superior and an inferior electrode arrangement, and a separate pair of electrodes measures the resultant voltage drop. Current, voltage and impedance (resistance) are all related in accordance with Ohm's law. The voltage-sensing electrodes are effectively monitoring the changes in thoracic resistivity (impedance) due to changes in thoracic content (which are due to changes in thoracic blood volume). The thoracic impedance waveform is then subjected to a mathematical analysis. This process takes into account other factors such as the electrical resistivity of the blood, the distance between the voltage-sensing electrodes, and ventricular ejection time. The end result is a calculated value for stroke volume for that particular cardiac cycle.

Impedance cardiography has been validated in numerous scientific trials against invasive measures such as thermodilution (1). Much of the debate related to its validity concerns its ability to accurately measure absolute values of SV and CO. However, the balance of opinion is that IC is capable of accurately determining the relative changes in SV and CO over time. This ability to track a change in a dependant variable such as SV or CO makes IC a particularly useful technique for applied physiology research.

In aerospace physiology research, determining changes in SV and CO in dynamic motion environments is of great importance, particularly during exposures to high +Gz flight. These environments pose great challenges in relation to the accurate and reliable collection of cardiovascular data. Invasive techniques have obvious methodological problems.

There are some significant methodological considerations for using ambulatory IC in such extreme conditions. Excessive motion of the subject may lead to inconsistent data acquisition or dislodging of the electrodes. High ambient temperatures (such as may occur in an aircraft) may cause excessive sweating and interfere with electrode contact. The close proximity of the device with aircraft avionics may lead to unforeseen and potentially deleterious electromagnetic interference (either with the IC device or the avionics). The IC device may interfere with the normal movement of the subject, making operation of the aircraft difficult, uncomfortable or even unsafe.

Recently we conducted an experiment in which the cardiovascular responses of racing car drivers under conditions of lateral (+Gy) acceleration were measured. This gave us the opportunity to explore the usefulness and suitability of ambulatory IC in the dynamic motion environment of competitive car racing. The experiment involved five drivers recruited from the V8 Supercars Australia category. These cars generate approximately 620 horsepower and reach speeds of up to 280 kph (168 mph). Drivers are exposed to a multitude of stressors - acceleration (both +Gx and +Gy), heat, vibration, and the physical exertion required to operate the car under race conditions. The apparatus we used was the AIM-8 ambulatory impedance cardiograph (Bio-Impedance Technology, Inc, Chapel Hill, NC).

Two dot electrodes were placed on either side of the lower chest with a third placed on the right mastoid process. Two conductive band electrodes were placed around the lower neck and lower chest, respectively. Five electrical leads connecting the subject-mounted electrodes to the IC device were placed through an opening in the subject's protective driving suit. The IC device was positioned on the front of the subject's chest, with a strap to keep it in position. Once strapped into the car in the normal driving position, the IC device was checked to ensure that its position was not uncomfortable and that it did not restrict normal driving activities. The IC device was then activated in data acquisition mode via a laptop computer. 10-second ensemble averages of SV and CO were measured for this experiment. Ensemble averaging suppresses random noise in the electrical signals, and gives a more accurate view of cardiac events.

The drivers completed 10 race-equivalent laps (as determined by current competitive lap times). Information from the IC device was then downloaded to the laptop computer. Cardiovascular data from the trial were taken back to the laboratory for further analysis.

Inspection and analysis of the data revealed that the IC device was able to produce clear, reliable data in what was an extremely dynamic motion environment. Indeed, the quality of the data was of an equivalent standard to that achieved in passive situations in the laboratory with resting subjects. The electrodes remained in position despite the hot conditions and the sweating of the subjects, and there was no evidence of any electromagnetic interference between the car and the device.

The results of the trial demonstrated many advantages in the use of ambulatory IC, which included the device's ease of operation and its ready acceptance by the subjects. The drivers commented on the non-restrictive characteristics of the device, and that the electrode assemblies placed on the skin did not adversely affect their ability to control the car or to physically move around. The device's configuration, particularly the low weight (approx 200gms) and small dimensions, made it ideal for use in the racing environment. Weight and size are important considerations when it comes to car racing - any additional weight in the car might alter car balance and race set-up.

Ambulatory IC, therefore, has tremendous applications in research where measurement of cardiovascular parameters such as SV or CO in a non-laboratory based setting is required. It is a technique that is readily able to provide accurate and reliable determination of SV and CO in dynamic motion environments.

REFERENCE

1. Newman DG, Callister R. The non-invasive assessment of stroke volume and cardiac output by impedance cardiography: a review. Aviat Space Environ Med 1999; 70:780-89.

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

Please send your submissions via e-mail to: ShenderBS@navair.navy.mil.

HISTORY, from p. 1013.
chophysiological phenomenon in flight safety." (3)

The now-famous 1000 Aviator Study of the Naval Aerospace Medical Research Laboratory in Pensacola, FL, summarized mortality: "The 37-year nonmilitary mortality rate for initially healthy aviators was determined in a followup program on the U.S. Navy's '1000 Aviator' cohort. Of the 800 survivors of World War II and the Korean conflict, 95 were found to have died from nonmilitary causes over this followup period. This is markedly less than the 208 that would be expected from a random sample of white American men over a similar period ($p<0.005$). It is also significantly less than the 143 that would have been expected from a group of men who had passed an initial insurance physical ($p<0.005$). Lower-than-expected death rates occurred in all three major categories of cause of death in this age group: cardiovascular, neoplastic, and accidental. The generally good socioeconomic background, the positive genetic influence of long-lived parents, and the above average intelligence, and the health and fitness orientation of the military aviator are all thought to be factors contributing to this increased longevity." (4)

A new affiliate (with inexpensive dues!) was announced in 1978: "The Society of NASA Flight Surgeons, a new organization and a new affiliate of the Aerospace Medical Association, will hold its first formal meeting, its first formal election, and give its first annual award next year… First-time membership fee is $5, including $3 dues. Life membership is an additional $30." (5)

References

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2. Interim meeting in Brussels, September 24-27, 1953. J Aviat Med 1953; 24:355.
3. Kirkham WR, et al. Spatial disorientation in general aviation accidents. Aviat Space Environ Med 1978; 49:1080-6.
4. MacIntyre NR, Mitchell RE, Oberman A, et al. Longevity in military pilots: 37-year followup of the Navy's '1000 Aviators.' Aviat Space Environ Med 1978; 49:1120-5.
5. Medical news: NASA flight surgeons form new organization, affiliate with ASMA. Aviat Space Environ Med 1978; 49:1140.
6. Shea F Jr. CIR calls for stronger cabins. Aviation Week, 1953; 59(16):98-9.
7. Van Heusden S, Mans LGJ. Alternating measurement of ambient and cabin ozone concentrations in commercial jet aircraft. Aviat Space Environ Med, 1978; 49:1056-61.
8. White MS, Merkle RW. Evacuation and care of casualties in aircraft. JAMA 1953 (Sep 5); 153(1):20-2.

MEETINGS CALENDAR

September 15-18, 2003, Hamilton Island (tropical island off the coast of Queensland, Australia). Aviation Medicine Society Australia & NZ (AMSANZ) annual conference and scientific meeting. Contact: Jodie Parker, Iceberg Events, P.O. Box 780 Mt. Ommaney Q 4074 Australia; Phone: 61-7-37155000; e-mail: jodie@icebergevents.com.au.

September 17-19, 2003, Catania, Italy. 2nd International Conference--The Impact of Environmental Factors on Health: Environmental Health Risk 2003. Organized by Wessex Institute of Technology, and University of Catania, Italy. Info: www.wessex.ac.uk

September 18-20, 2003, Berlin, Germany. 5th Congress of Medicine and Mobility and 41st Annual Meeting, German Society of Aerospace Medicine. Info: www.rg-web.de; www.dglrm.de.

September 22-24, 2003, Jacksonville, FL. 41st Annual SAFE Symposium, Adam's Mark Hotel. Dedicated to ensuring personal safety and protection in land, sea, air and space environments. Info: e-mail safe@peak.org; www.safeassociation.com;

October 5-9, 2003, Madrid, Spain. 51st International Congress of Aviation and Space Medicine. Organized by The Spanish Society of Aerospace Medicine under the auspices of the International Academy of Aviation and Space Medicine. Info: Viajes Vie-Congresos. Hermosilla 30, 28002 Madrid, Spain; 34-914264750; icasm03@vie.es.

October 8-11, 2003, Seattle, WA. Civil Aviation Medical Association Annual Meeting. Theme: Neuropsychiatric Issues in Aviation. Info: Jim Harris (405) 840 0199; JimLHarris@aol.com.

October 16-17, 2003, London, UK. International Aviation Conference: Air Quality in Passenger Aircraft, sponsored by the European Commission and Royal Aeronautical Society Aviation Medicine Group. Info: BRE Events, www.bre.co.uk/aviation. e-mail: events@bre.co.uk.

October 18-19, 2003, Houston, TX. Wings Over Houston Airshow Festival. Info: www.wingsoverhouston.com; (713) 266-4492.

October 22-25, 2003, Mexico City, Mexico. XX International Meeting of Aerospace Medicine, Gala Hotel and Resorts, Playa del Carmen, Q.R., sponsored by the Mexican Association of Aviation Medicine. Theme: Medical And Sugical Therapeutics Of The Modern Medicine ; Its Application In Aviation. Info: Grupo Destinos, attn: Claudia Palomeque, (52-55) 55-75-18-60; cpalomeque@grupodestinos.com.mx.

October 24-25, 2003, Perrysburg, OH. 3rd Annual Hyperbaric Medicine Conference Sponsored by The Toledo Hospital and the Undersea & Hyperbaric Medical Society, Midwest Chapter. Holiday Inn French Quarter, Perrysburg, OH. Contact: Linda Bueno (419) 291-4649; e-mail: linda.bueno@promedic.org.

November 20-22, 2003, Bangalore, India. 44th Annual Meeting of the Indian Society of Aerospace Medicine. Institute of Aerospace Medicine. Info: Secretary, Indian Society of Aerospace Medicine (ISAM), Directorate General Medical Services, Air HQ (RK Puram), West Block 6, RK Puram, New Delhi 110066, India; Phone 11-26190645; Fax 11-26168098;email: isam@vsnl.in; www.isamindia.org

Civil Aviation Medical Association Annual Scientific Program October 8-11, 2003, Seattle, WA

The theme for the 2003 annual scientific meeting will be neuropsychiatric issues in aviation. The exact order of speakers and times will be announced in the finalized meeting brochure. The tentative program, essentially in place schedule follows:

Introduction
Speaker: Robin Dodge, M.D., President, Civil Aviation Medical Association

Neuropsychiatric Issues In Aviation Accidents
Speaker: Mitchell Garber, M.D., National Transportation Safety Board

Neuropsychiatric Issues In Aviation Accidents—FAA Perspective
Speaker: Alex Wolbrink, M.D., FAA, Civil Aerospace Medical Institute

Fatigue In The Cockpit
Speaker: Captain Bruce Forbes, United Air Lines Captain and Check Airman

Fatigue In The Cockpit In The Healthy Aviator—Aeromedical Perspective
Speaker: Virgil Wooten, M.D.

Flight Time And Duty Requirements—Airline Perspectives
Speaker: Thomas Bettes, M.D., American Airlines Medical Department

Sleep Apnea And Other Sleep Disorders
Speaker: Virgil Wooten, M.D.

Operation Homecoming: 30th Anniversary
Speaker: Russell Rayman, M.D., Executive Director, Aerospace Medical Association

Human Factors In Aviation Accidents
Speaker: Dr. Curtis Graeber (or Other Boeing Representative)

ADHD—Diagnosis, Misdiagnosis, Treatment, And Aeromedical Implications
Speaker: Gary Kay, Ph.D., Georgetown University, Washington, D.C.

ADHD—FAA Perspectives
Speaker: Barton Pakull, Chief of Psychiatry, FAA (Retired), FAA Consultant

SSRI Use—Cognitive Effects
Speaker: Gary Kay, Ph. D., Georgetown University, Washington, D.C.

SSRI Use—Psychiatric Perspective
Speaker: Don Hudson, M.D., Air Line Pilots Association

SSRI Use—Canadian Perspective
Speaker: Marvin Lange, M.D.,Ottawa, Canada

SSRI Use—Australian Perspective
Speaker: Graeme Maclarn, Frenchs Forest, NSW, Australia

SSRI Use—FAA Perspective
Speaker: Fred Tilton, M.D., Deputy Federal Air Surgeon

Historical Developments In Aerospace Medicine
Speaker: Clayton Cowl, M.D., Mayo Clinic, Rochester, MN

Panel Discussion (1.5 Hours) Selected Topics

AEROSPACE NURSES SOCIETY NEWS

Send information for publication on this page to: **Eileen Hadbavny**
1266 Merton Rd,
Charleston SC, 29407-3317
e-mail: hadbavny@usit.net

News from the ANS Board Member, Dona Iversen, from the Front Lines

I received this via email from Dona round July 4th. Our thoughts continue to be will all the folks continuing to provide the best Care in the Air wherever they are.

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From somewhere in the Middle East:

Greetings!

"Hope this finds you well & relaxed this holiday. No complaints HERE. Flew a combat mission to Iraq, like 911, unless you see it with your own eyes-the media does it no justice! It was an emotional roller coaster. The locations we flew into to pick up our wounded warriors are one of the 'hot spots' for the terrorists. It was very exciting yet depressing to see where our troops are 'living.' Prior to landing @ the first location we hung the AMERICAN flag inside the aircraft, so that was one of the first sites our 'kids' saw besides our smiling faces! We cared for them, served them COLD water (rare commodity) & freshly made sandwiches & sweets…thought we served them surf & turf! So appreciative, told I made the skies friendly (of course, I teared up). Here are these young folks putting their lives in harms way for our Freedom & I get the thanks?!? We welcomed them to their first leg of their FREEDOM FLIGHT HOME!!

"This flight was another defining moment in my life; the impact of this operation will affect our lives/emotions forever. The care & compassion these brave troops have for one another is contagious, inspiring and heart breaking.

"I consider myself lucky to have this opportunity to do what I want & truly fortunate to be with folks that do what they are meant to do! It is my privilege to serve with such an outstanding diverse group of folks. These 'kids' are sick, wounded /injured, we care for them to the best of our ability & their pride never falters."

Dona Iversen

Wanted: Nurses and Allied Health Professionals

If you are a member of AsMA, join ANS by sending dues $10 (Nurses) and $5 for Allied Health Professions to the ANS Treasurer: Diane Fletcher, 3104 Stonewood Drive, Ocean Springs MS. 39564. As a Constituent Organization all ANS members must also be members of AsMA.

Reflections of Flight Nursing

ANS member Dr. Patricia Ravella still needs submissions for "Reflections of Flight Nursing". She has edited that section in the Journal in the past, but needs your stories and experiences. I received the following communication from Pat recently "Sorry to admit - I haven't received any reflections articles in a while and am very disappointed about that with so much going on."

If you would like to have your experiences published, Pat will help edit and get the article published. She makes it 'painless,' but she needs your input. Let us get our experiences, lessons learned, and document the many challenges we face on a daily basis as we deal with the stresses of flight while we transport patients placed in our care. For more information contact Pat Ravella, 1229 Harrow Drive, Woodstock, MD 21163; Phone: 410 480-1584; Email: ravel711@comcast.net .

Wanted: AsMA Presenters for 2004

Abstracts due October 29,2003. Need help? Colleen Morissette (FLYICURN@aol.com) or Diane Fletcher (diane.fletcher@keesler.af.mil) will be glad to give you information about the process. Both of them are on the Scientific Committee and are usually present at the fall meeting in Alexandria when abstracts undergo peer review.

Remember, if you wish to organize a panel or submit individual slide or poster, abstracts must be submitted following the guidelines listed on the AsMA's home page: www.asma.org. If you are organizing a panel, be advised that abstracts from each presenter must be included in the panel submission and there are special instructions for panels. Any ANS member(nurse or technician) presenting a paper of scientific nature are also encourage to submit for the ANS Claire M. Garrecht Award-best scientific paper presented at the annual meeting by a ANS member.

Stories from the Past

ANS will be commemorating 40 years as nursing organization in AsMA in 2004. I would very much like to include a little bit from the past in these pages over the next year. However, I need your help! I welcome any and all information you would like to include about your recollections of the past of AsMA and the Flight Nurse Section (1964-1992) Aerospace Nursing Section (1992-2002) and Aerospace Nursing Society since 2002. Send any information to ANS Page Editor: Eileen Hadbavny: hadbavny@usit.net or 1266 Merton Rd, Charleston SC, 29407.

Aerospace Nurses Society Logo Design Contest

Creative minds unite! It is time to design a new logo. The new logo should incorporate symbols which reflect our purpose, to enhance and improve patient care in the air through education and international collaboration. The logo should not be limited to any particular set of wings or symbol and should show the scope of our operations (earth to space). It should be simple, yet impressive; recognizable, yet unique.

Please provide your idea in a sketch format (use color or monochrome ... on an 8 12 x 11 sheet) with a narrative description of what you think your design communicates. The design selection will be made by the ANS Executive Committee, the logo design will be managed through the Awards Committee.

The logo design winner will receive a unique numbered ANS Coin (to be designed based on the selected logo) and a special ANS shirt.

Please submit your design to:
Charles R. Tupper
2326 Blue Shutter Road
Edisto Island, SC 20438-6620
e-mail: chatupper@comcast.net

Your design must be in no later than 31 October 2003 so we can select the design and incorporate into the ANS 40th Anniversary meeting in Anchorage, Alaska, in 2004.

HONORS NIGHT PHOTOS--Left photo (Left to right) Eileen Hadbavny, ANS Past President and AsMA Fellow, Col. Virginia Schneider, current ANS President, Lt. Col. Diane Fletcher, Past ANS President and 2003 Mary T. Klinker Award recipient. Right photo (Left to right) Lt. Col. Kirk Nailling, AsMA Fellow, past ANS President, and AsMA Bylaws Chair, with Col. Martha Stowe ANS Secretary 2001-2003.

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

Message from Mary

"Sleeping in Barway----- Luggage in Seattle"

It was the longest 4th of July celebration. Leaving London at 2 pm and arriving in Seattle two hours later(!),we spent the rest of the day with dear friends in the delightful town of Gig Harbour. It was good to have the weekend to gird our loins for the next and main phase of the trip to Anchorage for the site visit.

For those of you who have not had the Alaskan experience, I can assure you that you have much to look forward to. Anchorage is a sheer delight. A small city with a big heart. The Alaska Team was hugely helpful and extremely generous in catering for our every need.

Ludy Rayman and I set about our tasks to find the most suitable places for our program in May 2004 and I'm sure that everyone will enjoy the venues we have chosen.

The AsMA conference hotel is the Hilton and is only a few minutes walk from the Egan Convention Center. The Chart Room with its walled windows gives a superb, panoramic view of the city and that has been booked for our Business Meeting and Lunch. We also chose the menu!!

The Egan Center is a modern spacious facility where we will have Registration and the Hospitality room. It is one floor above the main concourse and easily accessible by stairs or elevator. It will suit us well.

Then, on to the sumptuous Captain Cook Hotel where we chose the Crows Nest for the Reception on Monday. This is a truly splendid establishment and, again, the room provides wonderful views of Anchorage.

Pause for relaxation on the deck of the Snow Goose Pub to enjoy the sun (temperature 84°F and the hottest on record). There is a very strong anti-smoking policy in Anchorage, but your intrepid reporter "sniffed out" this establishment to satiate her withdrawal symptoms.

The following day was organizing tours and thanks to input by Terri Ireland and Ludy's knowledge of the area we decided on a trip to Alyeska on the Tuesday, a journey of about an hour, where a tramway ride takes you to a restaurant on the mountain with stupendous views of Cook Inlet below. For the Thursday there will be a short outing to the nearby Alaska Native Heritage Center, and then on to the Sourdough Mining Company restaurant and Alaska Wild Berry Products - home of world famous jams, jellies and chocolates, where you "chocaholics" will drool over a waterfall of liquid chocolate!!---- returning to Anchorage in time for the Armstrong Lecture.

The details of our arrangements will be forwarded to the Chairs responsible for registration, hospitality, reception, luncheon and tours by Ludy Rayman, Arrangements Chair.

It was a very busy time, extremely productive and, although tiring for the old bones, a great experience and I can't wait to get back to see more of this beautiful state.

Oh, yes, a late flight left our luggage in Seattle on the homeward trip, but at least I didn't have to think about unpacking and laundry for another 48 hours!

Your intrepid President,
MaryB

ICASMadrid

This year the ICASM meeting will be held in Madrid, Spain, and several of our members will be enjoying all that this vibrant, historical city has to offer. From its famous art galleries and museums, to high fashion and exotic local boutiques, to its infinite variety of culinary treats - this is a city made to explore and to delight every sense. Not to be missed are:

For the Art Lover:

The Prado - Madrid's most famous museum features the works of Goya, Velazquez, El Greco, and Murillo as well as works from the Flemish school. Several other museums, including the National Museum of Reina Sofia, and the Museum of Contemporary Art are highly recommended.

For the Fashionista:

An abundance of apparel from both International and Spanish designers fill the shops in and around the streets of Almirante and Conde Xiguena, as well as in the district of Salamanca. For a more traditional array of goods such as espadrilles, fabrics, hats, and religious articles, check out the many shops in the Plaza Mayor.

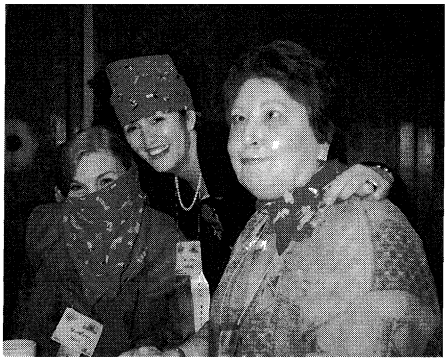
For the Epicurean:

Sample the local fare of Cocido Madrileno - a traditional stew combining chickpeas, vegetables and pork, chicken or beef. Sopa de Ajo (garlic soup), Caracoles (snails), and Tortilla de Patatas (potato omelet) are favorites of the locals. And no visit to Spain would be complete without "going out for Tapas" at any one of the hundreds of bars scattered throughout the streets.

For the Late Night Afficionado:

Madrid is Europe's "Capital of Night Life," so join the "Nomades of the Night" and cruise the city's many and varied night spots. Between Puerta del Sol and Plaza de Santa Ana, and especially on Calle Huerta, you will find many pubs, taverns, theatre-cafes and fashionable bars.

Or for the more energetic, a trip to Madrid's most famous discoteque, Pacha, may be just the ticket. And for that late-night drink, try one of the many beautiful terraces lining the Paseo de la Castellana or along Cuzco or Paseo del Prado. A perfect spot to kick back and people watch.



GIRLFRIENDS--Three friends share a moment of frivolity. Marilyn Brath, Susi Bellenkes and Mary Baird at the Wing luncheon and Board meeting in San Antonio.

GIRLFRIENDS

(author unknown)

Friendships are like aged wine, the longer you hold them, the more flavourful and robust they become.

I sat on the porch overlooking a beautiful mountain lake on a summer day, enjoying a glass of wine with my Mom. Older than me, mother of four, experienced and wise. "Get yourself some girlfriends," she advised, swirling the wine in her glass. "You are going to need girlfriends. Go places with them, do things with them." What a funny piece of advice, I thought.

Hadn't I just got married? Hadn't I just joined the couple-world? I was a married woman, for goodness sake, not a young girl who needed girlfriends. But I listened to my Mom and I got back in touch with my old girlfriends of years long gone. As the years tumbled by, one after another, gradually I came to understand that Mom knew what she was talking about. Here is what I know about them:

Girlfriends bring casseroles and scrub your bathroom when you are sick.

Girlfriends keep your children and keep your secrets. Girlfriends give advice when you ask for it. Sometimes you take it, sometimes you don't. Girlfriends don't always tell you that you're right, but they're usually honest. Girlfriends still love you, even when they don't agree with your choices. Girlfriends might send you a birthday card, but they might not. It does not matter in the least. Girlfriends laugh with you, and you don't need canned jokes to start the laughter. Girlfriends pull you out of jams. Girlfriends don't keep a calendar that lets them know who hosted the other last. Girlfriends will give a party for your son or daughter when they get married or have a baby, in whichever order that occurs! And girlfriends are there for you, in an instant and truly, when the hard times come. Girlfriends listen when you lose a job or a husband. Girlfriends listen when your children break your heart. Girlfriends listen when your parents' minds and bodies fail. My girlfriends bless my life. Once we were young, with no idea of the incredible joys or the incredible sorrows that lay ahead. Nor did we know how much we would need each other.

Send information for publication on this page to:
Corporate News
Aerospace Medical Association
320 S. Henry Street
Alexandria, VA 22314-3579

Herlitz Company to Handle AsMA Exhibits

At future AsMA meetings, the Herlitz Company will be responsible for exhibit management. The company has a 68-year history, and has handled hundreds of national and international meetings, some having as many as 28,000 registrants and displaying more than 1,000 exhibit booths.

After founding member Steve Herlitz retired, his son, Bruce became the sole proprietor. Steve Herlitz was also a founding member of the Professional Convention Management Association (PCMA), as well as the Association for Medical and Allied Publications (AMAP) and Audio Visual Medical Marketing (AVMD). As the Herlitz Company has evolved, many advancements have been made, the most notable being the establishment of three different medical tabloids specializing in psychiatry, oncology, and orthopedics.

Kristofer Steven Herlitz, who will be the AsMA's representative, joined the company in 1992 as the Meetings and Special Projects Manager and offered exposition management knowledge on several medical industry-related meetings and conferences.

Kristofer now holds the position of Vice President and supervises new business development. As a Past-President of the New York Chapter of PCMA and Chairman of the Sponsorship Committee, Kristofer looks forward to developing new industry expositions and conferences.

The members of the Herlitz Company remain active in both advertising and medical convention management, and have added medical specialty conferences, special projects and video production to its activities. Further information can be viewed at www.herlitz.com.

FOCUS ON CORPORATE MEMBERS:

Kelsey-Seybold Clinic Joins AsMA

Kelsey-Seybold Clinic is our most recent new corporate member. The Clinic began over 50 years ago when Drs. Mavis P. Kelsey, William D. Seybold and William V. Leary decided to leave the Mayo Clinic and start their own group practice. Fifth-generation Texan, Dr. Mavis Kelsey arrived first, opening an office near the fledgling Texas Medical Center. In January 1949, he saw his first patient. Within two years, Dr. Seybold and Dr. Leary formed the Kelsey, Seybold and Leary partnership, which lasted in various forms for more than 30 years.

Today, Kelsey-Seybold Clinic combines the expertise of over 300 physicians in 39 specialties and subspecialties and offers a full range of diagnostic, testing services and treatments. Kelsey-Seybold Clinic operates more than 20 neighborhood locations in the Houston area, serving over 300,000 patients, including members of managed care plans, employer groups and the U.S. Department of Defense and the National Aeronautics and Space Administration (NASA).

With its unique network of more than 20 clinics, the Kelsey-Seybold Clinic cares for local families as well as international patients who have made the company a family tradition. In 1966, NASA selected Kelsey-Seybold Clinic to provide medical services to its astronauts and employees. This partnership continues today, with Kelsey-Seybold physicians on site with astronauts in Moscow and at Johnson Space Center.

The Clinic is owned and operated by Kelsey-Seybold Management Services, L.L.P. (d.b.a. Kelsey-Seybold Clinic), a member of the St. Luke's Episcopal Health System.

Note: *The articles in this section were compiled and edited by Jenessa Kildall as part of an internship.*

Baxter Healthcare Corporation

The Baxter Healthcare Corporation is one of the companies that support the Aerospace Medical Association through corporate membership. Baxter International Inc. is a global health care company that, through its subsidiaries, provides critical treatment for people with life-threatening conditions. The corporate headquarters for the company is located in Deerfield, Illinois, and operates in more than 110 countries at more than 250 facilities worldwide and has 48,000 employees worldwide.

The company's key businesses are in the areas of bioscience, medication delivery and renal products and services, and are used to treat patients with some of the most challenging medical conditions. Some of these include cancer, hemophilia, immune deficiencies, infectious diseases, kidney disease and trauma. Baxter has become a global leader in developing innovative medical therapies that improve the quality of life for people living around the world.

The BioScience business provides healing proteins derived from human plasma or recombinant technology to treat blood-related disorders. It also provides biosurgery products and vaccines for the prevention of certain infectious diseases, in addition to manufacturing blood-collection containers and automated blood-cell separation and collection systems. These blood systems are utilized by hospitals, blood banks and plasma-collection centers throughout the world to collect and process blood components for therapeutic use, or for processing into therapeutic products.

Baxter's Medication Delivery business creates a range of products that deliver fluids, drugs and medications to patients. Baxter is celebrated worldwide as a leading manufacturer of intravenous (IV) solutions. Baxter also is known for its medication delivery that comes from specialty products that include anesthetic agents, premixed drugs and reconstitution devices, nutrition products and certain delivery devices.

The Renal business of Baxter Healthcare serves the needs of people with chronic kidney disease and end-stage renal disease (ESRD). Baxter was one of the first companies to introduce products and services for peritoneal dialysis (PD). Currently, Baxter is the only company that offers a complete and complementary portfolio of dialysis-related products, including equipment, disposables and pharmaceuticals, along with services designed to improve medical outcomes for renal patients.

Baxter plans to accelerate its growth through technological advancement, global expansion, and meeting the needs of the aging population. The company is also partners with leading scientific, technical, pharmaceutical and biotechnology experts outside the company to complement internal capabilities. Baxter continually pursues breakthrough technologies in all businesses through research facilities around the world, and their investments reflect that commitment.

For further info: www.baxter.com.

The FirstCall

TheFirstCall organization has provided support for the AsMA through corporate membership since 2002. TheFirstCall delivers expert medical advice and support throughout the world to anyone at any time. The company provides an instant analysis with world-class knowledge and proven experience, backed by the most up-to-date research available. They have affirmed that advanced medical assistance can be delivered instantly. Using telemedicine has transformed the way in which advice, support and life-saving skills are delivered.

See FIRSTCALL, p. 1019.

FIRSTCALL, from p. 1018.

TheFirstCall offers a unique cross-sectoral service. Its medical staff has been providing remote healthcare to the remote and rural communities in Scotland, the fishing and offshore industries and the British Antarctic Survey for over 50 years.

This service can save medical related diversions because all of the company's doctors are trained and experienced in remote diagnosis, selecting treatments appropriate to the environment of the patient, and assisting non-medical personnel to provide medical assistance. TheFirstCall also has access to a database of global medical facilities that allows its emergency physicians to provide informed advice on the need for and defined benefit of a diversion on medical grounds.

For the network to operate in practice, each call to the remote medical network is answered by a highly trained operator, who takes the flight number and position details before transferring the call to an experienced remote medicine specialist. Flight crews deliver passenger symptoms to doctors using a simple in-flight medical advice call form. TheFirstCall's doctors can then diagnose the condition and give fast and practical advice on how to handle the situation.

Using today's communications, TheFirstCall serves companies committed to the well-being of their customers and staff. They offer a total service solution for routine and emergency medical needs, drawing on the skills and experience of experts in UK teaching hospitals. Their state of the art technology means that TheFirstCall can deliver fast, efficient and effective healthcare, however remote the location.

Aeromedic Innovations Selected for Medical Kit Replacement

Aeromedic Innovations is a UK-based company that specializes in providing and servicing on-board medical and first aid kits for aircraft. The corporation has been jointly selected by Monarch Airlines Limited and Monarch Aircraft Engineering Limited (Monarch) for a total fleet replacement of the existing first aid kits and doctors' boxes that are carried on board Monarch Airlines fleet of Airbus and Boeing aircraft. They have also won a major contract to supply low-cost carrier easyJet with first aid kits and kit mountings (stowage) for its new fleet of 120 Airbus A320 family of aircraft.

This new contract with easyJet is a continuation of the program under which Aeromedic has supplied and continues to supply first aid kits for the airline's fleet of new Boeing 737-300/700 aircraft. In addition, Aeromedic is supplying easyJet purser kits for senior crewmembers and ship sets of two kits and mountings for each Airbus (A319/A320).

Under a new five-year contract with Monarch, Aeromedic will progressively replace the airline's kits that have been produced for many years in-house by Monarch Aircraft Engineering Limited. A total of 120 first aid kits and 50 Doctor's boxes will be supplied.

Supplying medications and equipment specified by Monarch, the Doctor's box, in particular, will be equivalent to Aeromedic Innovations' own Enhanced Medical Kit.

Additionally, Aeromedic will supply a complete maintenance, refurbishment and recertification program for all the newly supplied kits over the duration of the contract with both Monarch and easyJet throughout the five-year period. Aeromedic is also carrying out a harmonization program to standardize the kits that are fitted on board ex-Go Boeing 737-300s that are now absorbed into the easyJet fleet. The kits fitted on the ex-Go aircraft will be re-stocked with the same medical supplies and equipment that easyJet has on its current fleet.

Aeromedic Innovations is one of three Buyer Furnished Equipment (BFE) suppliers to Airbus for on-board medical equipment, while Monarch has become the first customer to take advantage of Aeromedic Innovations' lease purchase program. The Monarch airline is a customer for Aeromedic Innovations' Zero Two Plus on-board supplementary oxygen program, and has bought 12 units for use by passengers with pre-existing medical conditions and who request in advance the availability of oxygen on board the aircraft.

Aeromedic Innovations has been producing and servicing on-board medical and first aid kits since 1984. Over 4,000 kits are in use with some of the world's leading airlines, while many major airframe suppliers have chosen Aeromedic as their preferred supplier. [Source: Aeromedic Innovations Press Releases, 15 July 2003; www.aeromedicgroup.com.]

Paxil CR(TM) Reduces Symptoms of PMDD, Menopausal Hot Flashes; Helps Social Anxiety Disorder

Analysis of three placebo-controlled studies demonstrates that Paxil CR (paroxetine HCl) Controlled Release is effective in treating the emotional symptoms of premenstrual dysphoric disorder (PMDD), including irritability, tension and depressed mood, as well as the associated physical symptoms. Data from three multicenter, double-blind, placebo-controlled, fixed-dose studies of Paxil CR in treating PMDD were evaluated. Across all studies, 1,030 patients were randomized to receive Paxil CR at either 12.5 mg per day, or 25 mg per day, or placebo, for up to three cycles. The lowest dose of Paxil CR, 12.5 mg per day, was shown to reduce overall symptoms and was well-tolerated with a low rate of patient drop outs. Similar results were seen with 25 mg per day dose. Paxil CR is currently under review by the U.S. Food and Drug Administration as a treatment for PMDD.

One study conducted illustrates that Paxil CR reduces hot flash symptoms and is well tolerated in women suffering from menopausal hot flashes, according to a study published in the *Journal of the American Medical Association* (JAMA). In a randomized, double-blind, placebo-controlled multi-center study, 165 menopausal women meeting a clinical definition for menopause who experienced at least two to three hot flashes daily, or at least 14 bothersome hot flashes per week, were randomized to receive Paxil CR 12.5mg/day, Paxil CR 25mg/day or placebo for six weeks. The participants were screened for and excluded if an active psychiatric disorder or substance abuse disorder was detected. Findings from this trial showed that women taking Paxil CR experienced more than a 60% reduction in hot flashes, compared to 38 percent for the placebo group. This is the first large-scale, placebo-controlled study to look at the efficacy of an antidepressant, like Paxil CR, as a treatment for hot flashes in a general cross-section of menopausal women.

Another trial tested social anxiety disorder patients treated with Paxil CR. These patients showed significant improvements in the symptoms of the condition and in the three domains of functional impairment: work, social and family life, according to one study. In a 12-week multi-center, double-blind placebo-controlled trial, 370 patients with social anxiety disorder were given a flexible dose regimen of Paxil CR (12.5 mg-37.5 mg per day), or placebo. The two primary efficacy variables were the mean change from baseline in the Liebowitz Social Anxiety Scale (LSAS) and percent of responders defined by a CGI-Global Improvement score of one (very much improved) or two (much improved). The Sheehan Disability Scale (SDS) was also utilized to measure functional impairment. Paxil CR resulted in statistically significant improvement in symptoms from placebo in the efficacy scales.

Furthermore, other results from this study demonstrated that Paxil CR achieved high remission rates. In addition, Paxil CR was well-tolerated, with low patient drop outs (3% vs. 2%). Paxil CR is currently under review by the U.S. Food and Drug Administration as a treatment for social anxiety disorder. These results are encouraging because they suggest that Paxil CR may help treat the symptoms of social anxiety disorder as well as helping patients lessen the impact on their lives.

About Paxil CR

Paxil CR (paroxetine HCl Controlled-Release tablets) is approved by the U.S. Food and Drug Administration for the treatment of major depressive disorder and panic disorder. Most common adverse events (incidence of 5% or greater and incidence for Paxil CR and at least twice that for placebo) in studies for major depressive disorder and panic disorder include infection, trauma, nausea, diarrhea, dry mouth, constipation, decreased appetite, somnolence, dizziness, decreased libido, tremor, yawning, sweating, abnormal vision, abnormal ejaculation, female genital disorders and impotence. Patients should not be abruptly discontinued from antidepressant medication, including Paxil CR. Concomitant use of Paxil CR in patients taking monoamine oxidase inhibitors (MAOIs) or thioridazine is contraindicated.

[Source: GSK Press Releases, 22 May 2003 and 3 June 2003; www.gsk.com.]

AsMA Future Meetings

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

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

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

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

Gregg A. Bendrick, M.D., M.P.H., California City, CA, is currently the Medical Director of the NASA Dryden Flight Research Center, and has recently published a novel entitled, "The Making of a Flight Surgeon."

Peter R. Cavanaugh, Ph.D., Cleveland, OH, is currently the Virginia Lois Kennedy Chairman, Department of Biomedical Engineering, Lerner Research Institute as well as Academic Directory, Diabetic Foot Care Program, The Cleveland Clinic Foundation. In addition, Dr. Cavanaugh is Chairman of Science Council, Universities Space Research Association, Division of Space Life Sciences, an AsMA corporate member.

New Members

Bowers, Marvin A., M.D., Johnson City, TN
Chuong, Moncia C., M.A., Houston, TX
Ferrell, Tim A., M.D., Poplar Bluff, MO
Ranck, Amoreena E., Charlottesville, VA
Ruck, Hendrick W., Ph.D., Centerville, OH
Sendejas, Reuben R., Modesto, CA
Sliman, Joseph A., LT, MC, USN, Baltimore, MD
Wiechetek, Walter J., M.D., M.P.H., Bayonne, NJ

International New Members

Nolevaux, Guelove, Troyes, France
Odagiri, Shuhei, Tokyo, Japan
Rodd, Peter M., M.D., Edmonton, AB, Canada

In Memoriam
Warren Carpenter

Warren L. Carpenter, Col. USAF(Ret.), affectionately known as "Doc", passed away on July 7, 2003, in Colorado Springs, CO.

Warren was born August 12, 1931 in Little Rock, AR. He attended Virginia Military Institute and earned a BS in Geology from the University of Arkansas. After working as a geologist, he returned to school to study medicine at the University of Arkansas. In 1965, he received his Doctor of Medicine degree and interned at St. Vincent's Infirmary, then entered private practice in Little Rock. He completed a Masters in Public Health from Tulane School of Public Health and Tropical Medicine, then completed his residency in Aerospace Medicine at Brooks AFB, TX.

Warren served as a Sergeant in the Marine Corps during the Korean War. During the Viet Nam War, he was stationed in Thailand as Chief of Flight Surgeons. He often said the highlight of his 37 years of military service occurred during this time, when he was one of five original Aerospace Residents who were selected to fly on medical evacuation planes to bring home our Prisoners-of-War from North Viet Nam.

Upon completion of the residency, Dr. Carpenter was assigned to Elmendorf AFB, AK, where he served as Command Surgeon Alaskan Air Command and Commander, USAF Hospital Elmendorf. In 1983, he was appointed Vice-Commander of the School of Aerospace Medicine. In 1985, he was promoted to Command Surgeon of the United States Space Command, Air Force Space Command, and North American Aerospace Defense Command. Col. Carpenter's last assignment was as Director of Defense Medical Examination Review Board located at the USAF Academy.

His military training also included Air War College, Industrial College of the Armed Forces, Interagency Institute for Federal Health Care Executives, and Advanced Training in Health Care Administration.

"Doc", who had held a private pilot's license since college, was a Chief Flight Surgeon with more than 3200 flying hours. His military decorations include two Department of Defense Superior Service Medal, Legion of Merit, Bronze Star Defense Meritorious Service Medal, two Meritorious Service, three Air Medals, the Joint Service Commendation Medal, and two Air Force Commendation Medals. He earned the Air Force Excellence in Competition Medal for Rifle and Pistol.

Warren was a member of the following organizations: Arkansas State Medical Board, Association of Military Surgeons of the US, Society of USAF Flight Surgeons, Aerospace Medical Association, Mercedes-Benz Club of America, Sigma Alpha Epsilon Fraternity, Life Member University of Arkansas Alumni Association, Sigma Gamma Epsilon Geological Honor Society, Alpha Omega Alpha Medical Honor Society, and Colorado State Shooting Association.

"Doc" will be remembered for his love of God, family, country, friends, travel, golf, and telling a good joke. He made this world a better place.

Electronic Journal Archive: We Need Old Journals

The Aerospace Medical Association seeks UNBOUND copies of the *Journal of Aviation Medicine* (1930-1959) and *Aerospace Medicine* (1960-1975) for scanning into a searchable data base. The purpose is production of an archival CD to provide all members with access to complete articles in all back issues either on line or through a personal copy of the CD.

Please contact us if you can provide unbound journals for this historic project. We need complete sets journals for 1930-1943 and certain later issues. To learn more, please contact Dougal Watson at watsondb@caa.govt.nz, or Pam Day at pday@asma.org;(703)739-2240, ext. 101.

Remember!

Council Meetings are open to all members of the AsMA. Your input and attendance are always welcome. Our next meeting will be on November 19, 2003 in Alexandria, VA.

CLASSIFIED ADS

POSITIONS AVAILABLE

AEROSPACE MEDICINE RESIDENCY OPENINGS--Applications are now being accepted for the UTMB/NASA-JSC Aerospace Medicine Residency for July 2004. The two-year program trains physicians in operational and research aspects of space medicine, manned space flight, and comprehensive aerospace medicine topics. Residents participate in mission-oriented medical operations at JSC, receive clinical training in space medicine, and complete a research project. Upon completion of the program, residents earn a Master of Public Health in Preventive Medicine degree. The program is accredited by the Accreditation Council for Graduate Medical Education and is one of three Preventive Medicine residency programs offered at the University of Texas Medical Branch. The MPH program is also accredited by the Council on Education for Public Health. Qualified applicants must have completed at least a PGY-1 clinical year in an ACGME-accredited residency with six months of direct patient care. Deadline for applications: October 31, 2003. Visit our website at www.utmb.edu/pmr, or contact: Yvette Schulz, Office of Preventive Medicine Residencies, University of Texas Medical Branch, 301 University Boulevard, Galveston, TX, 77555-1150. Phone: (409)747-5351. Fax: (409)747-6129. The UTMB is an equal opportunity, affirmative action institution which proudly values diversity. Candidates of all backgrounds are encouraged to apply. M/F/D/V.

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