



# Ever Upward: August 2015

## Gradwell Elected next President of AsMA; Belland Installed as President

David P. Gradwell, B.Sc., Ph.D., M.B. Ch.B., D.Av.Med., FRCP, FRCP Edin., FRAeS, has been elected President-Elect of the Aerospace Medical Association (AsMA).



Photo by Chris Gradwell

The election was held at the Annual Business Meeting during the 86th Annual Scientific Meeting of the Association, May 12, 2015, at the Walt Disney World Dolphin Resort Hotel, Lake Buena Vista, FL. Over 1500 AsMA members and other researchers and presenters attended the event. Dr. Gradwell, who is currently Professor of Aerospace Medicine, Faculty of Life Sciences and Medicine, Guy's Campus, at King's College London (KCL), will automatically succeed to the Presidency of AsMA in 2016.

Dr. Gradwell holds the UK's first, full-time, Chair in Aerospace Medicine. KCL is one of the leading UK institutions for teaching and research in aerospace medicine. He directs the Diploma in Aviation Medicine course at KCL to prepare doctors for examination by the Faculty of Occupational Medicine of the Royal College of Physicians (London). He also runs the European Aviation Safety Agency's qualifying courses for Aviation Medical Examiners and an M.Sc. in Aviation Medicine.

Dr. Gradwell is an Honorary Consultant in Aviation Medicine at Guy's and St. Thomas' NHS Trust, London, where he has set up an aeromedical clinic with the specific goal of assisting NHS patients who wish to travel by air. His clinical research activities focus on the effects of flight on their clinical conditions. His other professional activities include Chairman of the Joint Royal Colleges of Physicians Training Board Specialty Advisory Committee in Aviation and Space Medicine, President of the Association of Aviation Medical Examiners, Civilian Consultant Advisor in Aviation Medicine to the Royal Air Force, Chairman of the Scientific Committee of the 2015 International Congress of Aviation and Space Medicine and Chancellor of the International Academy of Aviation and Space Medicine.

Although he grew up in Cornwall, in the southwest of England, Dr. Gradwell went to university in Scotland where he graduated from the University of Dundee with a B.Sc. (Hons.) in Physiology in 1976. He continued to medical school there, qualifying M.B. Ch.B. in 1981. After house officer posts at Ninewells Hospital in Dundee, he undertook a Scottish rotational training scheme in internal medicine. He subsequently joined the Royal Air Force (RAF) in 1984. After an initial posting to a fighter station he was appointed to the RAF Institute of Aviation Medicine, Farnborough in 1986, to undertake specialist training in aviation medicine. He had gained his Diploma in Aviation Medicine in 1988, worked on aspects of altitude life support systems, including those for the Harrier GR5 and then the Eurofighter and conducted research into cardiovascular and respiratory physiology at high altitude. This culminated in the award of his Ph.D. in 1993. Later in the same year, he was appointed as a Consultant in Aviation Medicine at Farnborough and became Head of the Altitude Life Support Division.

In addition to his research activities, Dr. Gradwell was responsible for much of the RAF teaching in altitude physiology and related subjects at the RAF School of Aviation Medicine. He was involved in international activities through NATO and the Air Standardization Coordinating Committee and has taught at aviation medical institutes in the United States, Germany, Poland and the Czech Republic.

In 1998, when the RAF Centre of Aviation Medicine at Henlow in Bedfordshire was formed, Dr. Gradwell became Head of the Operational Aviation Medicine Wing and the RAF Consultant Advisor in Aviation Medicine. Promoted Group Captain in 2004 he was appointed a Queen's Honorary Surgeon in 2012.

A Fellow of the Royal Aeronautical Society since 1998, he delivered the eponymous Stewart Memorial Lecture there in 1999 and for some years chaired the Aviation Medicine Group of the Royal Aeronautical Society. He was elected a member of the International Academy of Aviation and Space Medicine in 1999 and became a Fellow of the Aerospace Medical Association in 2000. He received the Louis H. Bauer Award from the Aerospace Medical Association in 2005 in recognition of his contributions to aerospace

medicine, particularly in the area of education, and the Eric Liljencrantz Award in 2006. Dr. Gradwell first served on the AsMA Council over 10 years ago, is a member of the Scientific Program Committee, and is a reviewer and member of the Editorial Board of Aerospace Medicine and Human Performance. He became a Vice President of AsMA in 2012.

Dr. Gradwell has served on a number of other national and international advisory committees and been recognized for his contributions, receiving the Fox-Linton Memorial Award for contributions to flight safety, and the Lady Cade Medal from the Royal College of Surgeons, London. He has written and presented on a wide range of topics, including rapid decompression, high altitude physiology, and patient fitness for flight, delivering the 2014 Haliburton Lecturer at King's College London, and a UTMB/NASA Johnson Space Center Grand Rounds Lecture in 2015. He has contributed to US and UK textbooks and now co-edits the standard UK textbook in aviation and space medicine.

**CAPT Kris Belland, MC, USN**, who currently serves as Navy Medicine Operational Training Center (NMOTC) Executive Officer, was installed as President of AsMA during the Council meeting on Thursday, May 14, 2015. [For a full biography of Dr. Belland, please see *Aviat. Space Environ Med.* 2014; 85(8): 878.] Other elected officers are:

**Vice Presidents:** Hernando J. Ortega, Jr., Roland Vermeiren, Eilis Boudreau (completes Gradwell's term to 2016)

**Secretary:** Brian Pinkston

**Treasurer:** James DeVoll

**Council Members at Large:** Joseph P. Dervay, Patrick J. McGinnis, Eduard M. Ricaurte, and Barry S. Shender.



**PASSING THE GAVEL**—Philip Scarpa, M.D., (right) passes the gavel to incoming president CAPT Kris Belland.

### ICASM 2015 63rd International Congress of Aviation and Space Medicine 20-24 September 2015; Oxford, UK

The 63rd International Congress of Aviation and Space Medicine will be held in the historic city of Oxford, England 20-24 September 2015. The scientific sessions on 21-23 September will be held in the Examinations Schools of the University of Oxford and will include sessions on clinical medicine, human factors, physiology, mental health issues, clinical cases and aeromedical decision-making. Congress accommodation options are available at Christ Church and Keble College, both historical and architecturally important buildings.

To Register and Book accommodation: [www.icasm2015.org](http://www.icasm2015.org)

Send information for publication in this newsletter to: Journal Department, AsMA; [rtrigg@asma.org](mailto:rtrigg@asma.org)

**AEROSPACE MEDICAL ASSOCIATION HONORS NIGHT AWARDS**  
**Lake Buena Vista, FL, May 14, 2015**

Phillip J. Scarpa, Jr., M.D., 2014-2015 President of the Aerospace Medical Association, presented 19 awards to outstanding members during the Honors Night ceremonies at the 86th Annual AsMA Scientific Meeting, May 14, 2015, at the Walt Disney World Swan Hotel, Lake Buena Vista, FL. K. Jeff Myers, M.D., Chair of the Awards Committee, and Cathy DiBiase read the citations, assisted by Allen J. Parmet, M.D. The names of the awards' sponsors and representatives, when present, are printed in parentheses.

All photos, except Klinker Award by Pamela C. Day; the Klinker Award photo is by Dr. Ian Mollan.

**Meeting Photo Galleries**

For more photos from the annual meeting in Orlando, please visit our Photo Gallery page via the AsMA website:

<http://www.asma.org/annual-meetings/photo-gallery>.

All photos by Pamela C. Day.

**Read Current News Online**

Visit the AsMA, Industry, and Member News pages online. They're updated regularly. There's also a form on the top right-hand side of the Members Only page so members can send in their news!



**LOUIS H. BAUER FOUNDER'S AWARD**  
**David J. Schroeder, Ph.D.**  
 (Clayton Cowl, M.D., Mayo Clinic)



**BOOTHBY-EDWARDS AWARD**  
**Nomy Ahmed, M.B.Ch.B.**  
 (Warren Silberman, Harvey W. Watt & Co.)



**JOHN ERNSTING AWARD**  
**Prof. Henri Marotte, M.D., Sc.D.**  
 (George K. Anderson, M.D., Environmental Tectonics Corporation)



**KENT K. GILLINGHAM AWARD**  
**Mica Endsley, Ph.D.**  
 (Brig. Gen. Erich Roedig, GAF(Ret.), AMST)



**WALTER AND SILVIA GOLDENRATH AWARD**  
**Col. Donald J. White, USAF(Ret.)**  
 (Walter and Sylvia Goldenrath Foundation)



WON CHUEL KAY AWARD  
**Lorenzo Vargas-Alfaro, M.D. (Estrella Forster accepts)**  
(Young Hwan Kwon, Aerospace Medical Association of Korea)



JOE KERWIN AWARD  
**Jonathan B. Clark, M.D., M.P.H.**  
(Genie Bopp, Wyle)



MARY T. KLINKER AWARD  
**Flt. Lt. Belinda Mollan, RAF**  
(George Beck, ZOLL Medical Corporation)  
[Photo by Dr. Ian Mollan]



SIDNEY D. LEVERETT, JR., ENVIRONMENTAL  
SCIENCE AWARD  
**George A. Bendrick, M.D., M.P.H., M.S.**  
(George K. Anderson, M.D., Environmental Tectonics Corp.)



ERIC LILJENCRANTZ AWARD,  
**Col. Robert M. Shaffstall, USAF(Ret.)**  
(Aerospace Medical, PLC)



RAYMOND F. LONGACRE AWARD  
**Thomas E. Nesthus, Ph.D.**  
(Dwight Holland, M.D., Ph.D., Aerospace Human Factors Assoc.)



**THEODORE C. LYSTER AWARD**  
**Christopher J. Brooks, OMM, OSTJ, CD, M.B.Ch.B., FFOM**  
 (John Crowley, M.D., U.S. Army Aviation Medical Assoc.)



**MARIE MARVINGT AWARD**  
**Susan Ip Jewell, M.D.**  
 (Henri Marrotte, M.D., French Aerospace Medical Assoc.)



**HARRY G. MOSELEY AWARD**  
**Lt.Col. Brian T. Musselman, USAF**  
 (Whit Campbell, Lockheed Martin Corporation)



**JOHN PAUL STAPP AWARD**  
**Col. Mark S. Adams, L/RAMC**  
 (George K. Anderson, M.D., Environmental Tectonics Corp.)



**JOHN A. TAMISIEA AWARD**  
**Susan E. Northrup, M.D., M.P.H.**  
 (Clayton Cowl, Civil Aviation Medical Association)



**THOMAS J. AND MARGARET D. TREDICI AWARD**  
**Claudia Stern, M.D.**  
 (Tredici Endowment Fund)



**ARNOLD D. TUTTLE AWARD**  
**Rebecca S. Blue, M.D., M.P.H.**  
 (Michelle Freiling, Wyle)



**JULIAN E. WARD MEMORIAL AWARD**  
**Peter D. Hodkinson, M.B.Ch.B., MRCP (UK), D.Av.Med.**  
 (Col. Joe Ortega, USAF, MC, Society of USAF Flight Surgeons)



**FELLOWS CLASS OF 2015**—Mark S. Adams, William R. Agerton, Sally A. Evans, Troy P. Faaborg, Edmond F. Feeks, Gordon G. Giesbrecht (not pictured), Marvin W. Jackson, Timothy T. Jex, Nicholas M. Lomangino, Kurt D. McCartney (not pictured), and Terrance A. Taddeo. Those present at Honors Night are pictured here with AsMA President Philip Scarpa (top left) and the Chair of the Fellows Group, James Vanderploeg (top right).



**50-YEAR PINS**— (left) Two members of AsMA, Frank Pettyjohn (left) and Hubert Bonfili (right), were presented with 50-year pins commemorating their 50 years of membership in AsMA. Other recipients, not present, were: Nestor Kowalsky, Donald Lyddon, and Harold Sandler.



**PRESIDENT'S GIFT AND PIN**—Incoming AsMA President Kris Belland presents outgoing President Phil Scarpa with a token of appreciation for his service to AsMA (left). Phil's wife, Colleen, pins Phil with the Past President's pin (right).

### Upcoming FAA AME Seminars

| Dates      | Location      | Seminar Type |
|------------|---------------|--------------|
| Aug. 29-30 | Denver, CO    | Refresher    |
| Oct. 8-10  | Ft. Worth, TX | CAMA         |
| Oct. 26-30 | OK City, OK   | Basic        |
| Nov. 20-22 | St. Louis, MO | Refresher    |

For more information on these or to register, please visit the FAA's AME Seminar page: [http://www.faa.gov/other\\_visit/aviation\\_industry/designees\\_delegations/designee\\_types/ame/seminar\\_schedule/](http://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/ame/seminar_schedule/).

**PLEASE NOTE:** The only FAA seminar AsMA takes registrations for is the one held in conjunction with our annual meeting in May.



**PRESIDENT'S CITATION**--David Tipton, M.D., was presented the citation from Dr. Scarpa for his mentorship and friendship.



**PRESIDENT'S CITATION**--The journal staff of *Aerospace Medicine and Human Performance*, Pam Day, Deb Sventek, Fred Bonato, and Rachel Trigg (not pictured), received the citation for efforts in the journal name change and redesign.



**PRESIDENT'S CITATION**--Stanley R. Mohler, M.D., was posthumously presented the citation for his dedication to Aerospace Medicine. Dean Olsen accepted.



**BAUER LECTURE**--Melchor Antuñano, M.D., M.S., receives a memento from Genie Bopp, representing Wyle, the sponsor of the lecture. Dr. Antuñano spoke on medical technologies and their implications for aerospace medicine and human performance.



**REINARTZ LECTURE**-- Thomas Jones, Ph.D., receives a gift for his presentation on the importance of deep space exploration.



**ARMSTRONG LECTURE**--Robert Cabana (center right) receives a token of appreciation for his lecture on the Kennedy Space Center from George K. Anderson (far left) and Robert Laurent (center left), representing the educational supporters of the lecture, Environmental Tectonics Corp., as AsMA president Phil Scarpa (far right) looks on.

## Abridged Minutes of the Aerospace Medical Association 86th Annual Business Meeting

Tuesday, May 12, 2015, Walt Disney World Dolphin Hotel, Lake Buena Vista, FL

**Call to Order (Scarpa):** A quorum for the meeting was established at 12:15 p.m. on Tuesday, May 12, 2015. Dr. Philip Scarpa, President, called the meeting to order at 12:16 p.m.

**Recognition of Past Presidents (Scarpa):** Dr. Scarpa invited the Past Presidents of AsMA to rise.

**In Memoriam (Scarpa):** The president asked attendees to pause and remember those members who passed away this year.

**Report of the President (Scarpa):** Phil said his focus this past year was to highlight the value of AsMA. One way was by sharing stories on the President's Page from fellow members about the value of the organization.

He set out this year with 4 initiatives: Increase Membership, Improve Value, Improve Services for non-US members, and Strengthen Finances. Those were addressed through the hard work of many members.

In the area of increasing membership, they contacted multiple aeromedical-minded groups, training programs, offered one-day free attendance. For the first time since 2010, AsMA membership increased.

In the area of improving the value of AsMA membership, we have increased the utility of the website, expanded web-based training, beta tested consolidated constituent and association dues payments, and provided educational material for pilots, the flying public, and researchers. We added poster sessions during the AsMA meeting for Constituents, Affiliates, and Committees to display and discuss their activities. We codified the Space Medicine Association for all space medicine issues. We made the process of electing our organization's leaders process more transparent by announcing the onset and re-

sults well before the annual meeting. We set up accounts on Facebook and Twitter to communicate with the next generation of Aerospace Medicine Specialists. We have created an AsMA ceremonial flag and minted a new AsMA coin.

In the area of improving services for non-U.S. members, we have published Affiliate reports to the website to facilitate sharing their activities with other Affiliates. We increased AsMA's presence at several regional and non-regional meetings this year, especially outside the US. We will co-sponsor with the European Society of Aerospace Medicine a meeting in fall of 2016 in Norway. We waived the annual meeting registration fees for all students traveling to Orlando from outside the United States. With the help of several members of AsMA, Aerospace Medicine is now recognized as a specialty in Canada. The UK Spaceflight and Biomedical Sciences Association has been approved as our newest Affiliate.

In the area of strengthening finances, we set a financial self-sustainability goal at a level that we think will ensure that our organization's financial future. We reviewed our investment policy and verified a forward-looking investment approach. We have significantly expanded our revenue streams beyond the annual meeting. We have strengthened our relationship with Corporate and donor interests by working to establish a Corporate Tiered Donor program. We are increasing the ties with the AsMA Foundation.

**Report of the Executive Director (Sventek):** "Mr. President, officers, and members of the Aerospace Medical Association, it is my pleasure to report that this past year was extremely active and highly successful. It is the incredible volunteer spirit of our Association members that facilitates our success. Thank you for your continued

strong support of the Aerospace Medical Association. I'd like to recognize the Headquarters Office staff and our journal independent contractors. They work hard every day to provide a high quality scientific journal as well as outstanding customer service and administrative support to our nearly 2,300 members.

As many of you know, attendance at our Annual Scientific Meetings is affected by the ability of those attending to garner continuing education credits for their participation. This year's meeting is accredited for 24 AMA PRA Category 1 Credits™ as well as 23.5 Prescribed Credits by the American Academy of Family Physicians, and 23.5 Category 1-B Credits by the American Osteopathic Association.

Nurses attend our Annual Scientific Meeting for numerous reasons, and a Nurse Contact Hours track was accredited by the Montana Nurses in our 2014 meeting in San Diego. Participation in the Nurse Contact Hours track was good so we decided to seek accreditation for a Nurse Contact Hours track again for our 2015 meeting. The Aerospace Nursing Society accepted the challenge to submit the necessary documentation to the Montana Nurses Association. This is no small task and Nora Johnson, RN, BSN, CCM led the effort to organize and submit the required documents for review. Her efforts resulted in the Nurse Contact Hours track being approved for 18 Nursing Contact Hours. Congratulations on this significant achievement.

As of this morning, total registration for this meeting is 1,521, compared to 1,363 at the same time for the 2014 meeting. Of that total, 1,379 were registered in advance of the meeting and 142 attendees registered here on site. This represents an increase of 158 attendees or 11.6% above the 2014 meeting in San Diego. We extended the Advance Registration rates through the end of April in an effort to provide the US federal agencies more time to make their conference funding decisions. We also worked closely with Mr. Walt Galanty of AIM Meetings and Events and the Walt Disney World Dolphin Hotel to provide all attendees per diem room rates. The Dolphin Hotel sold out of rooms by the middle of March. Walt Galanty and I coordinated a contract with the Disney Caribbean Beach Resort for a block of rooms at the same per diem rate offered by the Dolphin Hotel. We also chartered a 25-passenger shuttle bus service to provide direct transport between the two hotels since they are 1.5 miles apart.

This will be the last year our meeting dates include the Mother's Day holiday as is celebrated in the United States. Beginning with the 87th Annual Scientific Meeting in Atlantic City, NJ, all future meetings will avoid the Mother's Day holiday. As a result, the 87th Annual Scientific Meeting will be conducted at the Harrah's Atlantic City Resort on April 24–28, 2016. Please mark your calendars and begin making plans to join us next year in Atlantic City, New Jersey.

There are 34 companies exhibiting with us this year using 34 exhibit booth spaces. We very much appreciate our exhibitors and corporate members. They provide our attendees with great insight into the latest technologies and processes to improve the delivery of Aerospace Medicine. We held the AsMA Welcome Reception in the Exhibit Hall again this year and I've received very positive comments for that event. This year's Welcome Reception was sponsored by the Caesar's Entertainment Corporation, hosts for our 2016 meeting in Atlantic City. I thank the Caesar's Entertainment Corporation for their sponsorship and I look forward to working with them over the coming year. We also offered exhibitors the opportunity to provide presentations on their products and services this year. This was the first time for this exhibitor offering. We will collect feedback from the exhibitors and determine if we will continue to offer exhibitors the opportunity to provide presentations in future meetings.

For the first time, we are offering AsMA Committees, Constituent Organizations, and Affiliated Organizations the opportunity to provide poster presentations on their activities. The poster session for these groups will be Wednesday, May 13, 2015 in the Americas Seminar Room from 10:00 AM to 2:00 PM. Please take a few minutes to visit the poster session and see all of the excellent work accomplished by our AsMA Committees, Constituent Organizations, and Affiliated Organizations. You may consider joining one or more of these groups to help them in their mission.

Finally, I am required to report the Aerospace Medical Association financial status for 2014. I will leave the details to our Treasurer to explain but on December 31, 2014 the Aerospace Medical Association reported a loss of \$2,662.00.

**Report of the AsMA Foundation (Anderson):** George Anderson delivered the report of the AsMA Foundation. George said the Foundation is doing very well. George thanked the Executive Director,

Peach Taylor. Jeff Davis is the Vice Chairman. Dr. Anderson said the Board is doing a great job of managing their endowed assets in the Foundation. The principal mission of the Foundation is to receive charitable gifts, to responsibly manage their finances, and to award scholarships and grants. He reported that Anita Mantri was the recipient of the Stanley R. Mohler, M.D., Aerospace Medicine Endowed Scholarship this year, as announced during the Opening Ceremonies. Dr. Anderson then told the members that his message is to give to the Foundation. It's easy to do. The Foundation has a booth in the Exhibit Hall and someone will be happy to answer any questions.

#### **GOVERNANCE (Belland)**

Kris Belland, VP for Governance, reported that this is the third year for the Strategic Plan. The actions reported by Council are aligned with this plan.

#### **Committees**

*Bylaws Committee (Baisden):* Denise Baisden thanked her committee and put forward the motions concerning bylaws changes. The proposed changes to the Bylaws were printed in Aerospace Medicine and Human Performance, p. 151. All but the last change (Motion 5) were passed. The change regarded Article XI. COMMITTEES, Section 3. Standing Committee Functions. P. Resolutions Committee. After much discussion about how voting would be done for passing resolutions via an electronic voting method, the change was referred back to the By-Laws Committee.

*Finance Committee (Ortega):* Joe Ortega compared the budget numbers over the past few years. He then provided a comparison of income and expenses from the meeting between 2009 and 2013. The year 2013 was difficult because income was lower due to government travel issues and expenses were higher in Chicago. We had investment gains but had to withdraw money from investments to cover the reduction in income from the meeting. By combining investment accounts we saved on management fees. The bottom line is that we had a gain of \$33,666 in income and cash flow with a paper loss of \$36,389, totaling -\$2,622 for the year in 2014. We came very close to breaking even. In addition, we spent about \$30K in IT improvements in 2014. So even though we had an unplanned expense, we pretty much broke even last year.

*Nominating Committee (Sides):* Marian Sides stepped in for Glen Merchant as Chair of the Nominating Committee this year. Marian said the Committee had worked for 6 months to develop the 2015 slate of officers:

**President Elect:** David Gradwell

**Vice Presidents:** Hernando J. Ortega, Jr., Roland Vermeiren, Eilis Boudreau (completes Gradwell's term to 2016)

**Secretary:** Brian Pinkston

**Treasurer:** James DeVoll

**Council Members at Large:** Joseph P. Dervay, Patrick J. McGinnis, Eduard M. Ricaurte, and Barry S. Shender

The slate of officers was accepted unanimously.

#### **EDUCATION AND RESEARCH (Boudreau)**

Eilis Boudreau introduced the Education and Research reports. She said that the Committees had done a lot of work and completed a number of initiatives during the past year.

#### **Committees**

*Aerospace Human Performance Committee:* Steve Veronneau was unable to attend the Business meeting. Keith Ruskin will be the Chair of the Aerospace Human Performance Committee for the next year.

*Aerospace Safety Committee (Ricaurte):* Eduard Ricaurte presented the report Committee. The Committee was involved in reviewing the letter about the 3rd Class Medical certificate. They were involved in some of the Aviation Safety panels. The Committee is going to conduct an injury workshop at the FAA Civil Aerospace Medical Institute in November.

*Education and Training Committee (Garbino):* Alex Garbino reported that Committee worked on several initiatives this year. One is to provide workshops for Aerospace Medicine faculty. They also reviewed Conflict of Interest reviews. They also want to provide Education and Training to the public – M.D.s, nurses, passengers – and address issues beyond just health care. The committee would appreciate the help of all members.

*History and Archives Committee (Dalitsch):* Walt Dalitsch presented the report of the committee. This past year, we lost one of our Giants in Aerospace Medicine history, Stan Mohler. He was second to none in providing history lessons for our Association. The Committee had several initiatives this year and sponsored several panels. This year's Historical Movie was "Apollo 13," which is appropriate because we are at the location where those events occurred. The Committee is

working on a timeline to get onto the website. One of their initiatives, a historical editorial, began being published in the journal in January. "This Month in Aerospace Medicine History" is in its 13th year. Walt said the Committee had been tasked by Council to look at the AsMA logo. They will provide a historical discussion about it to the journal and to Council.

*Science and Technology Committee (Fraser):* Bill Fraser presented the report of the Science and Technology Committee. S&T is co-sponsoring two panels this year and is looking at future programs. Bill mentioned the S&T Watch column in the journal. Bill appealed to the aeromedical community for articles. Articles are non-peer-reviewed; Bill edits the columns; articles are 2000-3000 words. The Committee is also involved in developing criteria for reviewing scientific abstracts to improve the quality of the presentations.

#### **REPRESENTATION AND ADVOCACY (Vermeiren)**

##### **Committees**

*Resolutions Committee (DeJohn):* Chuck DeJohn acknowledged the members of the Resolutions Committee. He then presented two resolutions:

**Resolution 2014-01:** Medical Certification for Commercial Spaceflight Crewmembers

**THEREFORE BE IT RESOLVED:** That the Aerospace Medical Association strongly recommends that the FAA require a Class I Medical Certificate for crewmembers with safety-critical flight-related duties participating in Commercial Spaceflights.

**Resolution 2014-02:** Data Repository for Commercial Spaceflight Crewmembers and Spaceflight Participants

**THEREFORE BE IT RESOLVED:** That the Aerospace Medical Association strongly recommends that the FAA establish a non-at-tributable medical data repository for commercial spaceflight crewmembers and spaceflight participants and that the repository be established before the beginning of extensive commercial spaceflights.

Chuck DeJohn reported that both resolutions had been reviewed by the membership and were resubmitted to Council. Both passed unanimously. Chuck DeJohn reported that the Resolutions Committee will present a poster on Wednesday. Chuck also indicated that he is resigning his position after 5 years as Chair of the Resolutions Committee. Douglas Boyd will be taking over as Resolutions Committee Chair.

*Air Transport Medicine Committee (Alvez):* Paolo Alvez thanked Martin Hudson, his predecessor as Chair of the ATM Committee. One of the Committee's activities is reviewing Medical Guidelines for Air Travel. They decided that the Guidelines are a living document, provided in an electronic format, with links to supporting documentation. They have also discussed the process for how to update the Guidelines on an ongoing basis. Paolo thanked the Aerospace Medical Residents who completed many of the chapters in the Guidelines. A hard copy will be published in the Journal. Paolo thanked Claude Thibeault, Tony Evans, and Martin Hudson, who also provided support for the Medical Guidelines. The Committee is sponsoring 4 panels this year: The role of aerospace medicine in the medical education process; two panels on in-flight medical events; and a panel on new guidelines for medical certification and eye surgery. Next year, they will submit proposals for panels on diabetes, safety of flight while using performance-enhancement substances, and transport of patients with communicable diseases.

Roland Vermeiren said that the ATM Committee is a global think-tank committee of this Association.

*Communications Committee (DeVoll):* Jim DeVoll said that most of the Communications Committees' activities this year were performed by the ad hoc Committee on Social Media. Roland Vermeiren said that Jim DeVoll will move from chairing the Communications Committee to chairing the Finance Committee next year. In the meantime, they are trying to convert the Social Media Subcommittee to a standing Committee. He observed that the number of tweets and Facebook followers are increasing. Some increases occurred after the recent GermanWings accident. The Social Media ad hoc Committee is also supporting a Question of the Day and is developing a YouTube video about Aerospace Medicine.

#### **MEMBER SERVICES (Martindale)**

Valerie Martindale, Vice President of Member Services, said she is pleased that membership numbers are increasing and recognized Joe Dervay's efforts in this area.

##### **Committees**

*Membership Committee (Dervay):* Joe Dervay acknowledged Membership Committee members. They have been reaching out to

students, with the help of AMSRO. They identified the Association of American Medical Colleges, which represents more than 90,000 students. Joe said he contacted some of their leadership. They are eager to help us send the word out about AsMA: guidance, scholarships, and website. Jeff Sventek will meet with one of the directors. Joe also identified the Accreditation Council of Graduate Medical Education in Chicago. That organization represents 3,500 residency programs in the US, with 300,000 residents in training. Joe said they plan to go through a similar process of providing information about scholarships and the web site.

Joe said they are trying to increase membership of dentists and dental professionals through links with the International Association of Aerospace Dentists and the American Dental Association. Joe said that he and Kris Belland attended the Naval Aeromedical Conference in January. He is trying to talk with the Coast Guard's Flight Surgeon. They are trying to develop a relationship with the hundreds of Army Physician Assistants. They are also trying to revitalize the relationship with the Air National Guard. Joe said he is also working with Kris Belland to contact osteopathic students, especially in the Northeast. Finally, the Committee is trying to explore why we have nonmember attendees. This year, they came up with a one-page survey given out at Registration. They have collected about 50 surveys so far and will analyze the data after the meeting.

Valerie Martindale encouraged all Committees, Constituent organizations, and Affiliates to have a representative on the Membership Committee.

*Corporate and Sustaining Membership Committee (Lee):* Peter Lee gave the report for the Committee. He said there are a couple of issues that they have been working on that are coming to resolution. One is the evolution of the Corporates from Affiliate status to what we're calling a Corporate Forum. This is still being discussed to work out the exact details. The Corporates will remain active and will have a voice in the Association. The other issue is offering of sponsorship packages as a tiered structure. Instead of having a Corporate membership, the Corporates will have a package of benefits and recognition of their contributions.

*Awards Committee (Myers):* Jeff Myers thanked the AsMA members for their award nominations this past year. Jeff said he thought members would enjoy the banquet on Honors Night. He said that he is currently soliciting nominations for next year's awards in four categories: Boothby-Edwards, Goldenrath, Leverett, and Tredici.

#### **INTERNATIONAL SERVICES (Gradwell)**

David Gradwell, VP of International Services, said that 55 nations were represented at this year's Annual Scientific Meeting. He said they have undertaken initiatives to increase the global reach of AsMA. One is the upcoming International Congress of Aviation and Space Medicine. We've also been doing a lot regarding training and supporting organizations around the world in terms of recognition of specialist training in Aerospace Medicine.

##### **Committees**

*International Activities Committee (Buys):* Philip Buys reported that there were 19 attendees at today's meeting of the International Activities Committee. He said the Committee discussed the President's initiatives for this year and next year. AsMA will be co-sponsoring and participating actively in the international conference next year in Oslo.

The Committee are pleased that students from outside the U.S. had their registration fees waived this year. They pushed for a number of years to make the International reports more transparent; the reports of International Affiliates are now published on the website.

The Committee voted to rebrand by changing its name to better reflect their goals. The new name will be Global Liaison and Outreach Committee (GLOC). Philip said that they will be working with the President and Bylaws Committee to have the name change included in the Association Bylaws changes next year. Philip Buys said he will be stepping down as chair next year. The Chair of the Committee will be Yael Barr. Philip Buys will become the Vice Chair, along with other Vice Chairs.

**Unfinished and New Business (Scarpa):** None.

In his closing remarks, Dr. Scarpa thanked his Vice Presidents, the Executive Committee, Council, the Constituent organizations, the hard working Committees, the Home Office staff, and Jeff Sventek.

**Adjourn:** The meeting adjourned at 1:44 p.m.

**Jeffrey C. Sventek, M.S., CAsP, Executive Director**  
**Carol Manning, Ph.D., Secretary**



## LIFE SCIENCES AND BIOENGINEERING BRANCH AWARDS 2015

### LSBEB A. Howard Hasbrook Award

This award, presented to Squadron Leader (Sq Ldr) Gareth “Gaz” Kennedy, Commanding Officer for the Aviation Medicine Flight of the Royal Air Force Centre of Aviation Medicine (RAF CAM), recognizes an individual who has provided noteworthy data or design with respect to safety, survivability or crashworthiness relevant to aircraft or space vehicles. It is sponsored by Infocitex Corp.

Sq Ldr Kennedy is a fast jet test pilot with over 5,500 total flying hours. Since 2009 he has served as the Commanding Officer of the Aviation Medicine Flight of the Royal Air Force Centre of Aviation Medicine (RAF CAM). He has performed outstanding work investigating flight accidents and fielding the next generation aircrew flight ensembles. A few key examples are:

Providing the Ministry of Defence Service Inquiry with a thorough understanding of the sequence of events that led to the fatal ground ejection seat mishap of the Red Arrow pilot at RAF Scampton. Identifying a critical lack of G protection in the Hawk T1 when pulling G at idle power. Subsequently, he developed airborne high G onset rate training in order to prevent similar accidents and delivered this unique in-flight training to over 30 RAF Qualified Flying Instructors (QFIs) and to the Flag Officer, Director of Flying Training.

Conducting a large number of in-flight trials of developmental flight equipment, ranging from clothing to corrective flying spectacles. Including coordinating the installation and flight testing of the improved Typhoon Aircrew Services Package, the F35 respirator and pilot cooling unit.

Sq Ldr Kennedy is highly respected by his peers and he has been recognized for saving countless lives through both his involvement with mishap investigation and his flight trials operational test and evaluation program.

### LSBEB Professional Excellence Award

This award, presented Dr. Estrella M. Forster, Manager of Protection and Survival Research Laboratories at the FAA Civil Aviation Medical Institute (CAMI) in Oklahoma City, OK, recognizes an individual who has produced outstanding research accomplishments or technical and/or research management achievements important to life sciences and/or biomedical engineering of a number of years. It is sponsored by the David Clark Company.

Dr. Forster’s civil service career began in 1989 at the Naval Air Development Center, Warminster, PA, where she established herself as a top level researcher and program manager in the areas of crew systems performance enhancement and safety and protection.

One of her first major efforts was the Aircrew Integrated Life Support System program in which she managed the efforts of government scientists and laboratories, domestic and foreign industrial contractors and university laboratories to develop, test and evaluate the various versions of the ALLSS program (HAILSS, TAILSS, SAILSS). While running this complex multidisciplinary program, she served as Branch Manager of a newly formed Crew Systems Department research group during the 1995 Base Realignment and

Closure process, keeping this group on track and focused while transferring operations to the Naval Air Warfare Center Aircraft Division in Patuxent River, MD.

Her next assignment was U.S. Navy Science Advisor to Commander Third Fleet (C3F) in San Diego, CA, where she advised and represented C3F on a broad range of domestic and international Science and Technology issues. She served as liaison between C3F and university laboratories, industrial contractors and international entities and pursued research collaborations involving the Office of Naval Research and the Mexican Navy. In addition, she oversaw joint operational relationships among Pacific Fleet Command, ONR, US Marine Corps and US Air Force.

In her current position at CAMI, Dr. Forster reports directly to the Director of CAMI and oversees research in flying environment safety, medicine, physiology, biodynamics, and radiation exposure.

Dr. Forster has accumulated well over 200 peer reviewed publications, conference presentations and invited speaking engagements in the areas of acceleration physiology, crew systems, environmental effects on performance and human factors considerations for both military and civilian flying personnel.

See LSBEB, p. N48



**PROFESSIONAL EXCELLENCE**--Dr. Forster receives the award from LSBEB President Dr. Andy McKinley



**HASBROOK AWARD**--Sq. Ldr. Gareth Kennedy receives the award from LSBEB President Dr. Andy McKinley and Infocitex Corp representative Ms. Lindsey McIntire.



**MCFARLAND AWARD**--Ms. Alaina Brinley receives the award from Gentex Corp representative Mr. Mark Davies.

**LSBEB Ross McFarland Student Award**

This award is given to the author of the best student research paper accepted by the AsMA Scientific Program Committee that reports on a significant achievement in biomedical engineering. There are no nominations for this award. The best abstract from those submitted by students each year is selected by a committee who rate the scientific merit, clarity of presentation, application of the findings, and scope of interest in research outcome. The McFarland Award is sponsored by Gentex Corporation.

The 2015 winner is Ms. Alaina Brinley, of the University of Texas Medical Branch - School of Medicine at Galveston for "Reactivation of Latent Viruses under Stress in Antarctic Personnel."

The significant physical and psychological stress associated with working in extreme environments, such as operations in Antarctica and spaceflight, can lead to immune suppression and reactivation of latent viruses.

Ms. Brinley reviewed medical records for U.S. Antarctic personnel living at McMurdo and Palmer Stations during the 2014 winter season for occurrence of herpes zoster as a marker of viral reactivation and compared the incidence rate to the general population. There were five cases of zoster reactivation, 4 of these cases in persons under 40 years of age, in a population of about 182 persons wintering over. This translates to a total population incidence of about 22 per 1,000, in persons 30 to 39 years of age. When compared to the general US population rate of roughly 2 per 1,000, this represents over an 11-fold increase in the overall incidence.

Working and living in an extreme environment can cause significant physiologic and psychological stress that can lead to altered immune function, such as increased expression of inflammatory cytokines and decreased cell-mediated immunity. Such changes have been observed in Antarctic personnel, U.S. astronauts, and others. This work has helped to better define this response in order to improve care management of Antarctic personnel and, more critically, before undertaking human exploration of deep space.

**SPACE MEDICINE ASSOCIATION JEFF MYERS YOUNG INVESTIGATOR AWARD 2015**

*K. Jeffrey Myers, M.D.*

The Space Medicine Association Jeff Myers Young Investigators Award is a competition intended for those making their first major efforts into Aerospace Medicine Research. To compete for this award, contestants must be making their first presentation of a scientific paper or poster at an AsMA meeting (excluding cases presented at Grand Rounds as a student resident); they must appear as first author on the paper; and they must prepare and submit a manuscript for judging. Finalists compete in a second phase of competition at the AsMA Meeting involving further evaluation of their presentation and interviews. The potential applicability of the findings to Space Medicine and the degree of involvement of the student in the project are major considerations.

The finalists in this year's competition, selected from 165 potential contestants, are richly talented and diverse. The winner of the 2015 SMA JM YIA is Dujuan Sevillian for his paper entitled "Flight Deck Engineering: The Impact of Flight Deck Crew Alerting and Information Systems on English as a Second Language Flight Crew Performance." Earning the trust and cooperation of his pilot test subjects was the most daunting task Dujuan had to overcome. As a pilot himself, he understood their perspective and was able to convince them that he had their best interest at heart--a universal Flight Surgeon's principle. The paper underscores the importance of addressing differences in language and nationality between the potential flight crews during the design of the flight deck and in training of these crews. Of course, for some time Cosmonauts and Astronauts from different nations and with different native languages have had to adapt to each other's spacecraft and systems. As we move forward and more nations and cultures become active in the space community this will remain an important consideration in optimizing safety and insuring mission success. Growing up in Atlanta, Dujuan

became interested in aviation while studying physics in high school. Motivated by his dreams to someday work in the aerospace industry, he earned his bachelors and master's degrees at Embry Riddle University in Daytona Beach, also earning his private pilot's license, while working 2 jobs to support himself. He now works full time at Boeing while working towards his PhD in Human Factors at Cranfield University in Seattle. He is living the Dream!

The first runner up is Dr. Lisa Brown, a surgery resident from New Zealand working toward a Ph.D. in surgery at Oxford University in the UK. She presented two papers entitled: "Pulmonary Hypertension in Airline Passengers," and "The Feasibility of Surgical Percutaneous Drain Use in Microgravity." Lisa just so happens to also be an accomplished triathlete, finishing third in the recent New Zealand Triathlon. The second runner up is Wing Commander Prateek Kinra, a squadron physician in the Indian Air Force at Bangalore, India. His paper is entitled "A Study of Simulated Microgravity on Immunological Parameters (TCells)". Adil Ahmed a medical student at the Baylor College of Medicine working with the Center for Space Medicine in Houston, received Honorable Mention for his paper entitled "Diabetes Mellitus--A Novel Analogue Environment to Assess Immune Dysfunction in Microgravity."

I would like to thank the members of the YIA committee: John Darwood, Lloyd Tripp, Smith Johnston, Julie Sundstrom, Jeff Jones, and Cathy Dibiase. As another memorable meeting draws to a close, former YIA winner Phil Scarpa completes his tour in the office of AsMA President, former YIA winner Rebecca Blue wins the Tuttle Award, former YIA finalist Babak Alagha is selected as a member of the Board of Aerospace Physiology, and a new generation of Young Investigators continues to make their mark toward the challenges of Space Exploration. Remember, if you want to do more than just exist, you must have a dream. Dream well and make a difference.



**SMA JM YIA WINNER**--Jeff Myers (center) presents the SMA JM Young Investigator Award to the 2015 winner, Dujuan Sevillian (left), while SMA President Bill Tarver (right) looks on.



**YOUNG INVESTIGATOR AWARD**--Left to right: 2005 YIA Award winner Julielynn Wong, Jeff Myers, Astronaut Story Musgrave, 2015 YIA winner Dujuan Sevillian, and 2015 runner-up Lisa Brown pose together.

## AEROSPACE PHYSIOLOGY SOCIETY 2015 AWARD WINNERS

Maj. Dana "Addict" Thomas; aviation\_addict@yahoo.com

The Aerospace Physiology Society (AsPS) is proud to announce the 2015 winners of the Society's annual awards for excellence in operational aerospace physiology, aerospace physiology research, aerospace physiology leadership, and its Partnership in Education Award. The award recipients were announced during the 86th Aerospace Medical Association Annual Scientific Meeting in Orlando, FL, during the AsPS luncheon. The Society would like to acknowledge each of its award sponsors. Because of their generosity, each recipient is presented with a plaque and an honorarium. Additionally, the winner of the Fred A. Hitchcock Award is presented with a hardbound copy of "Barometric Pressure." This perpetual trophy is passed down to all Fred A. Hitchcock Award winners.

### Paul Bert Award for Physiological Research



The Paul Bert Award is presented annually for outstanding research contributions in the field of aerospace physiology. It is sponsored by Wyle. This year the Paul Bert Award for Physiological Research is awarded to Lt. Col. Brian Mussleman, USAF, BSC. Brian is a recognized expert in aerospace physiology, human performance, safety and accident investigation. He continuously invokes a positive impact through-out the AF and DoD. He currently serves as Air Mobility Command's Aerospace and Operational Physiologist Command Consultant.

Over the past 15 years he has acquired vast experience with pressure suit and aircrew flight equipment operations; researched aeromedical solutions to numerous operational problems; investigated an F-22A fatal mishap as well as numerous physiological incidents; established the first ANG Human Factors Safety Division; implemented DoD HFACS across USAF investigations; and was key to the creation of the USAF Safety Center's Human Factors Division.

### Fred A. Hitchcock Award for Excellence in Aerospace Physiology

The Fred A. Hitchcock Award is presented annually for excellence in either operational physiology or physiological research. This award is sponsored by International ATMO, Inc. This year the Fred A. Hitchcock Award for excellence in Aerospace Physiology is awarded to CDR Deborah White, MSC, USN, in recognition of her superior expertise as a human factors analyst and aerospace physiologist has provided unprecedented support to the aerospace physiology community. Her unique ability to identifying critical human factor issues related to adverse physiological episodes has been instrumental in directing critical research attention towards finding mitigating solutions that would ultimately improve aviation physiology readiness among both civilian and military aircrew. Her exceptional insight and unsurpassed professional



**HITCHCOCK AWARD**--CDR Debra White (left) receives the award from Rich Folga, AsPS president for 2015 (right).

knowledge directly contributed to some of the safest years in the history of aviation.

### Wiley Post Award for Operational Physiology

The award is presented annually for exceptional service and achievements in operational physiology, including education and physiological support. It is sponsored by Gentex Corporation. This year the Wiley Post Award for Operational Physiology is awarded to Maj. Gabriel Gonzalez, USAF, BSC. Gabe serves as both the Operations Flight Commander and Assistant Director of Operations for the 9th Physiological Support Squadron at Beale Air Force Base, CA. He provides high altitude operational physiological support and training for U-2 aviators engaged in worldwide intelligence, surveillance, and reconnaissance combat missions. He leads a team of 71 Airmen providing Full Pressure Suit (FPS) maintenance, support, and integration for the 9th Reconnaissance Wing and NASA as the Department of Defense's only FPS depot maintenance and supply center.



**POST AWARD**--Maj. Gabriel Gonzalez received the Wiley Post Award from the Aerospace Physiology Society. He is pictured here preparing for a high altitude (70,000-ft) flight in the chamber.

### Partnership in Education Award

The Partnership in Education Award is presented annually to a teacher in a school district of the host city for the AsMA Annual Scientific Meeting. The winner is recognized as an individual who has brought a unique approach to teaching science in the classroom and has inspired his or her students to an interest in science. It is sponsored by the Aerospace Physiology Society.

This year the Partnership in Education Award was presented to Ms. Barbara Walters-Phillips. Barbara has been blending aviation and space into the curriculum for over 20 years. She currently serves her community as a 4th and 5th Grade Math and Science Coach at Cheney Elementary School in Orlando, FL. She teaches enrichment classes where students study aviation using the Civil Air Patrol's Aerospace Connections in Aviation (ACE) program.

Her students have designed, constructed and launched hot air balloons; built and flown balsa gliders; as well as designed spacesuits for future astronauts. For several months, Barbara has taught a science camp each Saturday morning at the school where students participate in hands-on labs in both the life and physical sciences.

Barbara also travels to the Orlando Executive Airport where she works with the Orlando Youth Aviation Center teaching students about aviation related careers. Barbara has been introducing her students to the Experimental Aircraft Association's Young Eagles Program since it began. Through her efforts, many central Florida youth have had the free opportunity to go for their first airplane flight and sow the seeds of future aviation careers! Recently members of her chapter flew a record 102 students during one weekend event, contributing to the chapter record of over 10k students, and

contributing to National EAA Young Eagles report of over 1.9 Million flights since the program began in 1992.

After their flight, the students come back very excited and want to know how they can learn more about aviation. The excitement from these future aviation professionals is what drove Barbara to write the curriculum for the Orlando Youth Aviation Center's Introduction to Aviation program. Barbara's efforts have forged new ties between students, teachers, and parents that foster cooperation between the school and the family that is so important to the growth and nurturing of her students.



**PARTNERS IN EDUCATION**--Left to right: Andrew Metelko, Nereyda Sevilla, Barbara Walters-Phillips and colleague, and Rich Folga , AsPS President for 2015, pose with the award plaque.

### Vargas Graduates with B.A.



Gisselle Vargas, who is the Operations Manager for the Aerospace Medical Association home office, recently earned a B.S. in Criminal Justice at Strayer University. She attended classes at Strayer's Woodbridge Campus, majoring in Criminal Justice with a concentration in Criminal Justice Administration. She intends to return next summer to work on a Masters in Public Administration and intends to go to law school in the future.

### News of Members



**Robert R. Orford, M.D., M.P.H.**, a Fellow of the Aerospace Medical Association (AsMA), was elected to a 3-year term on the Board of the International Commission on Occupational Health (ICOH) during a recent ICOH meeting in Seoul, Korea. ICOH is an international non-governmental professional society that aims to foster the scientific progress, knowledge, and development of occupational health and safety in all its aspects. Dr. Orford is a longtime AsMA member and the current Parliamentarian for AsMA's Council. He also serves on the Air Transport Committee, as a non-voting member of the

Bylaws Committee, on the International Activities Committee, and on the Scientific Program Committee.

### New Members

Bolling, Charity, Capt., USAF, APO AP  
 Carlile, Venentina, B.Sc., D.O., P.T., Milano, Italy  
 Celestino, Victor R. R., Ph.D., Brasilia, Brazil  
 DeBons, Virginia, LT, USN, Pensacola, FL  
 Desjardins, Andrew P., Dr., Encinitas, CA  
 Guay, Norman, Capt., North Yarmouth, ME  
 Foo, Joanna Minli, M.B., B.S., Singapore  
 Hsu, Stephen I., M.D., Ph.D., Alachua, FL  
 Lee, Richard R., B.Sc., Trenton, Ontario, Canada  
 Louis, Alyssa S., Toronto, Ontario, Canada  
 Mahoney, Michael A., M.D., Daphne, AL  
 Manna, Biagio, D.O., Yardley, PA  
 McKenzie, Mark, M.B., Ch.B., Northwick, Cheshire, United Kingdom  
 Obayed, Mohammed A., Dr., Bedford, United Kingdom

Park, Ben, Kettering, OH  
 Rosenweg, Peter N., Brighton, Australia  
 Singh, Anraj, Dr., Kolkata, West Bengal, India

### In Memoriam: CAPT Jay S. Dudley, MC

AsMA was saddened to learn of the death of CAPT Jay S. Dudley, MC (FS), a St. Louis, MI, native, in Pensacola, FL. He completed in his Bachelor of Arts degree in Biology in 1983 at the University of Missouri-Kansas City, later receiving his Doctor of Medicine degree in 1984 from the same university through a Health Professions Scholarship Program. He next completed his General Surgery Internship at McLaren General Hospital, Flint, MI, and pursued his second year General Surgery residency at Allegheny General Hospital in Pittsburgh, PA.

CAPT Dudley then reported in July 1986 to Marine Corps Logistic Base, Albany, GA, as the only General Medical Officer for a base of 2,000 active duty and government employees. After this 2-year tour, his 2-decade affiliation with Naval Aerospace Medicine began when he entered Naval Flight Surgeon training in Pensacola, FL, and was subsequently designated a Naval Flight Surgeon in February 1989. After a variety of operational tours of duty, he earned his Master of Public Health degree at the Harvard School of Public Health, Boston, MA, in 1993 and proceeded to complete his aerospace residency training in 1995 at the Naval Aerospace & Operational Medicine Institute, Pensacola, FL, the facility for which he would later serve as the Director of Academics and ultimately as the Officer-in-Charge.

CAPT Dudley was an Affiliate Member of the American College of Preventive Medicine, an Associate Fellow of the Aerospace Medical Association, Diplomat of the American Academy of Family Medicine, member of the Department of Defense Space Shuttle Medical Support Operations, a member of the Society of U.S. Naval Flight Surgeons, and a lifetime member of the Society of U.S. Army Flight Surgeons.

## SPACE APPLICATIONS FUELING BUSINESS INNOVATION

Business executives are looking  
for a competitive advantage.  
Find yours at SpaceCom.

TRANSPORTATION

COMMUNICATIONS

MANUFACTURING

MEDICAL

ENERGY

VISIT [WWW.SPACCOMEXPO.COM](http://WWW.SPACCOMEXPO.COM) TO LEARN  
MORE AND JOIN US FOR THIS ONE-OF-A-KIND  
CROSS-INDUSTRY CONVERGENCE.



**NOVEMBER 17-19, 2015**  
 George R. Brown Convention Center,  
 Houston, TX

#### Visit Us on Social Media!

**Twitter:** [https://twitter.com/aero\\_med](https://twitter.com/aero_med)  
**Facebook:** [www.facebook.com/AerospaceMedicalAssociation](http://www.facebook.com/AerospaceMedicalAssociation)  
**LinkedIn:** [https://www.linkedin.com/company/2718542?trk=tyah&trkInfo=arId:1404740611720,tas:Aerospace Medical,idx:1-1-1](https://www.linkedin.com/company/2718542?trk=tyah&trkInfo=arId:1404740611720,tas:Aerospace%20Medical,idx:1-1-1)

## NEWS OF CORPORATE MEMBERS

### AOPA Requests FAA to Restore Sim Time

In formal comments filed with the FAA in July, AOPA asked the agency to expedite publication of a final rule that would once again allow pilots to count more hours in an approved aviation training device (ATD) toward an instrument rating. For many years, the FAA had issued letters of authorization that allowed pilots to count up to 20 hours of ATD time toward the requirements for earning an instrument rating. But in January 2014, the FAA published a policy change that cut that number in half. The agency received more than 200 comments opposing the policy change and AOPA and others asked the agency to undergo an expedited rulemaking process to restore the higher standard. In December 2014, the FAA published a direct-to-final rule to restore the 20-hour allowance, but two adverse comments forced the agency to withdraw the direct-to-final rule and go through a standard rule-making process. In its most recent comments, AOPA noted that restoring the higher ATD limit would improve safety, reduce training costs, and encourage the use of new technologies and training techniques.

—Please visit <http://www.aopa.org/News-and-Video/All-News/2015/July/17/AOPA-asks-FAA-to-restore-sim-time> to learn more about this.

### ALPA's President Testifies Before Congress

In testimony before the U.S. House Subcommittee on Transportation Security in July, Capt. Tim Canoll, president of the Air Line Pilots Association, Int'l (ALPA), underscored the union's support for the Federal Air Marshal Service (FAMS) as a key element in a multi-layered, risk-based approach to aviation security that also includes advancing the Federal Flight Deck Officer (FFDO) program and secondary cockpit barriers on passenger airliners. For decades, ALPA pilots have had a strong relationship with the FAMS. ALPA leaders meet on a regular basis with the FAMS to ensure that pilots have the most current and accurate understanding of air marshals' roles, responsibilities, training, and methods. In his statement to the subcommittee members, ALPA's president noted that the Federal Flight Deck Officer program also serves as another critical layer of protection and contributes to a risk-based approach to security. Capt. Canoll also highlighted to the subcommittee members ALPA's long-held position that installing secondary cockpit barriers on passenger airliners would create a common-sense additional layer of security by protecting the cockpit when the hardened door must be opened.

—Please see <http://www.alpa.org/news-and-events/news-room/2015-07-16-FAMS-Essential-Role-in-Aviation-Security> to read more about this.

### SAA Official Airline of the Trek4Mandela Expedition

South African Airways (SAA) is proud to have been the official carrier for the Trek4Mandela Expedition, where an intrepid group of mountain climbers trekked up Mount Kilimanjaro to raise funds in support of improving the lives of young girls across Africa. The campaign formed part of initiatives in celebration of International Nelson Mandela Day in July, which is celebrated annually across the globe. People pledge their support to Mandela Day initiatives in celebration of the life of South Africa's former statesman and global icon for peace. SAA customers are encouraged through various communications mediums to support Mandela Month initiatives, promoting the Trek4Mandela campaign and other initiatives. SAA's participation in the event stems from its Corporate Social Investment (CSI) department which has a long standing partnership with the Nelson Mandela Foundation, with the project aligned with its objectives to contribute toward quality education in South Africa.

—Please see <http://www.flysaa.com/us/en/flyingSAA/News/South-African-Airways-Proud-Official-Airline-of-the-Trek4Mandela-Expedition.html> to read more about this.

### Air Canada's Foundation Raises Money for Children's Charities

Air Canada's Foundation's annual golf tournament netted over \$1,000,000 in support of organizations focused on the health and wellbeing of children in Canada. Now in its fourth year, the tournament was held in mid-July at the Saint Raphaël Golf Club, Québec. The event featured 73 teams totaling 292 golfers from across North America. It included a full day of golf followed by a dinner and silent and live auctions of items donated by tournament partners and Air Canada Foundation supporters. As a registered not-for-profit organization, the Air Canada Foundation's mission is to help connect sick

children to the medical care they need, grant children's wishes and alleviate child poverty. The Foundation also actively participates in humanitarian activities following natural disasters around the world.

—Please see <http://aircanada.mediaroom.com/index.php?s=43&item=902> to read more about this.

### Mayo Clinic Uncovers Key Differences in ALS Patients

Researchers on Mayo Clinic's Florida campus have identified key differences between patients with sporadic amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease) and those with the most common genetic form of ALS, a mutation in the C9orf72 gene. Their findings, reported online in July in *Nature Neuroscience*, demonstrate that ALS patients show abnormalities in levels and processing of ribonucleic acids (RNA), biological molecules that determine what gene information is used to guide protein synthesis. More than 30,000 Americans live with ALS, a condition that destroys motor neuron cells that control essential muscle activity. The team of Mayo Clinic investigators carefully analyzed the RNA from human brain tissues. They found that ALS brains had numerous RNA defects compared to nondiseased brains. They also predicted molecular events that may be altered due to the changes found in RNAs involved in the pathways regulating those events and that may contribute to ALS. While the researchers observed some commonalities, they also found many distinctions between the RNAs that were altered in sporadic versus C9orf72 mutation-associated cases. This suggests there may be different factors contributing to ALS in patients. Future therapies may need specific tailoring to the specific root cause of a patient's motor neuron disease. Furthermore, the data obtained from their study, which was deposited into a public genomics data repository, provides a wealth of information available to other researchers to accelerate ALS research.

—Please visit <http://newsnetwork.mayoclinic.org/discussion/mayo-clinic-study-uncovers-key-differences-among-als-patients/#more-68822> for more.

### Corporate News Bites

**United Airlines:** United has partnered with Soho House & Co. to bring their premium spa brand, Cowshed Spa, amenities on board their planes. Starting this month, United will offer Cowshed's skin care products to premium customers on intercontinental flights. For more on this, please visit <http://newsroom.united.com/2015-07-07-United-Airlines-Brings-Aboard-Soho-Houses-Cowshed-Spa-Brand-Premium-Skin-Care>.

**InoMedic:** A team of InoMedic employees at NASA's Kennedy Space Center recently rescued an endangered Green Sea Turtle who had wandered pretty far from the shore. To see the photos, please see the Facebook post at [www.facebook.com/IHAMedical/posts/630504160420366](http://www.facebook.com/IHAMedical/posts/630504160420366).

**ETC:** Environmental Tectonics Corporation (ETC) recently announced the return of James D. Cashel as their Vice President, General Counsel, and Chief Compliance Officer. He had previously served as Vice President and General Counsel from 2008-2013. To read more about this, please visit <https://www.etcusa.com/etc-announces-the-return-of-james-d-cashel-as-vice-president-general-counsel-and-chief-compliance-officer/>.

**AMAS:** Aviation Medicine Advisory Service's (AMAS) President & CEO and another AMAS employee attended AsMA's annual meeting in May. AMAS's President also gave a presentation at the Flight Safety Foundation's Business Aviation Safety Seminar in mid-May. For these and other news about AMAS, please visit <https://www.aviationmedicine.com/amas-notams/latest-amas-news/>.

**NIOSH:** The Pittsburgh Federal Executive Board (FEB) recognized more than 40 National Institute for Occupational Safety and Health (NIOSH) staff for their dedication and commitment to the Federal government at the Excellence in Government Awards, an annual event that honors exceptional government employees. The Pittsburgh FEB is comprised of more than 100 Federal agencies and over 20,000 Federal employees in the Pittsburgh region. To see the names of the winning employees, please see <http://www.cdc.gov/niosh/updates/upd-06-30-15.html>.

## MEETINGS CALENDAR

**September 20-24, 2015;** 63rd International Congress of Aviation and Space Medicine (ICASM 2015); Oxford, UK. For more information or to register, please visit <http://icasm2015.org/en/>.

**September 29-30, 2015;** Aviation Health Conference; Millennium Gloucester Hotel, London, UK. For more information, please visit <http://www.quaynote.com/ankiti/www/?code=AVHealth15>.

**October 12-16, 2015;** 66th International Astronautical Congress (IAC 2015); Jerusalem, Israel. For more: <http://www.iac2015.org/cost-and-payments/>.

**October 26-30, 2015;** 2015 International Annual Meeting of the Human Factors and Ergonomics Society; JW Marriott Los Angeles at L.A. Live. For more information, please visit <https://www.hfes.org/Web/HFESMeetings/2015annualmeeting.html>.

**November 2-4, 2015;** 53rd Annual SAFE Symposium; Caribe Royale Hotel & Convention Center, Orlando, FL. For more information, please visit <http://www.safeassociation.com/index.cfm/page/symposium-overview>.

**November 2-4, 2015;** International Air Safety Summit (IASS); Miami, FL. For more information or to register, please visit <http://flightsafety.org/meeting/iass-2015>.

**November 3-4, 2015;** Injury Mechanism Analysis in Aerospace Accident Investigation Workshop; Civil Aerospace Medical Institute (CAMI) Auditorium, Mike Monroney Aeronautical Center, Oklahoma City, OK. For more info or to register, please visit [http://www.faa.gov/data\\_research/research/med\\_humanfacs/aeromedical/aai\\_workshop/](http://www.faa.gov/data_research/research/med_humanfacs/aeromedical/aai_workshop/).

**November 10-12, 2015;** The XI International Scientific and Practical Conference "Manned Space Flights"; Star City, Russia. For more information, please visit <http://msf2015starcity.com/en>.

**November 23-25, 2015;** ICAO World Aviation Forum: Aviation Partnerships for Sustainable Development; ICAO Headquarters, Montreal, Quebec, Canada. For more information, please visit <http://www.icao.int/meetings/iwaf2015/Pages/default.aspx>.

**December 3-5, 2015;** First UAE International Symposium on Air Sport Medicine. This symposium is being held as part of the FAI World Air Games Dubai 2015 from Dec. 1-12. For more, please visit: <http://www.worldairgames.aero/>.

## HFES 2015 International Annual Meeting

Join the largest international gathering of researchers and solution-providers to discuss innovative ideas, debate hot-button issues, and hear the most recent and relevant knowledge in the dynamic, fast-paced field of human factors/ergonomics. HFES 2015 will be held October 26-30, 2015 at the JW Marriott Hotel at L.A. LIVE in Los Angeles, California.

Expand your career capabilities with hands-on skill-building workshops and 100+ technical sessions presented in 23 specialty areas, including

- Health Care
- Safety
- Aerospace Systems
- Surface Transportation
- Product Design
- And much more!

Grow your global network, explore new partnerships, and share ideas and experiences with like-minded colleagues.

Nonmembers who have never been HFES members receive complimentary HFES membership through December 31, 2016, with payment of the regular full-week nonmember registration fee. (Not applicable for student registrants.)

For more information about HFES 2015, including complete registration details, accommodations, technical tours, workshops, and more, visit [www.hfes.org/Web/HFESMeetings/2015annualmeeting.html](http://www.hfes.org/Web/HFESMeetings/2015annualmeeting.html).

## Future AsMA Annual Scientific Meetings

April 24-28, 2016: Harrah's Resort  
Atlantic City, NJ

April 29 - May 4, 2017: Sheraton Denver Downtown Hotel  
Denver, CO

May 6-10, 2018; Hilton Anatole Hotel  
Dallas, TX

May 5-9, 2019; Rio All Suites Hotel  
Las Vegas, NV