

AEROSPACE MEDICAL ASSOCIATION  
87TH ANNUAL SCIENTIFIC MEETING

# HUMAN PERFORMANCE AND THE YEAR OF THE AEROSPACE MEDICINE PROFESSIONAL

HARRAH'S RESORT HOTEL  
ATLANTIC CITY, NJ  
APRIL 24-28, 2016



## AEROSPACE MEDICAL ASSOCIATION

### 87th Annual Scientific Meeting

Harrah's Resort Hotel, Atlantic City, NJ

April 24-28, 2016



## HUMAN PERFORMANCE AND THE YEAR OF THE AEROSPACE MEDICINE PROFESSIONAL

Among the current challenges facing Aerospace Medicine practitioners are long-duration space travel, spaceflight physiology, aircrew fatigue, legislative removal of medical standards, aircraft and spacecraft cabin environments, unpiloted aerial vehicles, mental health in aircrew, medical and ethical guidelines for commercial spaceflight passengers and crew, and decreased funding and support. How has our understanding and impact on these and other challenges been improved? What key work is filling the knowledge gaps, what research is being done to solve critical problems, what scientific information or activities support a change in viewpoints or policy?

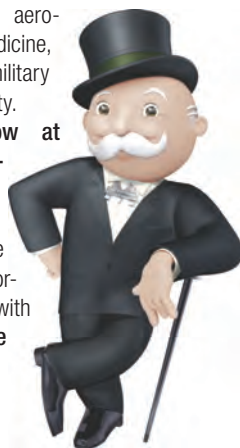
Aerospace medicine is truly multi-disciplinary and international. Our presentations come from diverse experts who will enhance the world's knowledge and understanding of the current challenges in Aerospace Medicine and demonstrate an impact on improving the health, safety, and human performance of those involved in aviation, space, and extreme environments. Our annual scientific meeting presents an opportunity to learn about the work of our colleagues from around the world, to share the knowledge and wisdom which we gain in our day-to-day work and practice, and is a great way to expand the overall community of aerospace medicine.

### AsMA 2016 is THE forum for the latest information on health, safety, and human performance in aerospace environments.

The Program Committee, chaired by Barry Shender, Ph.D., has organized a balanced program of sessions on human performance, aerospace medicine, travel medicine, aerospace medicine, civil and military aviation medicine, and safety.

Register Online now at [www.asma.org/annual-meetings/registration](http://www.asma.org/annual-meetings/registration)

to learn about current trends in the aerospace medicine and human performance arena and meet with your colleagues. We hope to see you there.



## EDUCATIONAL OBJECTIVES

Based upon responses to a survey provided at the end of the 86th Annual Scientific Meeting in Orlando, FL, the top 6 categories our members indicated a need for more information in were: **1.** Human Performance/Human Factors; **2.** Aerospace Medicine; **3.** Travel Medicine; **4.** Space Medicine; **5.** Operational Medicine; and **6.** Accident Investigation.

The 87th Annual Scientific Meeting program will be focused on these six major categories. Sessions will cover the latest findings in the fields of aviation and space medicine, human performance, and related fields such as aerospace nursing, aerospace physiology, and human systems integration.

Abstracts are centered on the meeting objectives, which are aligned with the theme. The participant will:

- Learn about evolving trends and best practices in aerospace medicine;
- Apply principles of evidence-based medicine, operational risk management, and aeromedical decision-making in aircrew selection and clinical aerospace medicine practice;
- Analyze mechanical, human performance, and systems integration factors in aviation mishaps and safety programs;
- Identify mechanical, biological, social, cognitive, environmental stress, and systems factors that impact on optimal human performance and decision making in the full spectrum of aerospace operations;
- Apply ethical principles to aerospace medicine decision-making and foster competency in professionalism and systems-based practice in the application of aerospace medicine skills, teamwork, and interoperability in a multi-discipline professional environment.



## KEY TOPICS

- Aerospace Medicine Board Review, Aeromedical Grand Rounds, and "RAM Bowl"
- Pilot Mental Health
- Hypoxia, acceleration, and high altitude medical issues
- Unmanned aircraft systems
- Spatial disorientation
- Aerospace dentistry
- Crashworthy systems
- Neurophysiology
- Injury mitigation
- Patient safety and air transport medicine issues
- In-flight medical events
- Commercial spaceflight medical considerations
- Long-duration spaceflight/deep space exploration
- Human Systems Integration
- Human performance in aviation
- Aviation safety in civil and military settings
- Aviation Medicine Case Studies
- French, German, and Spanish language aeromedical panels
- FAA Seminars for AMEs

## EDUCATIONAL BENEFITS

- CME credits— AsMA is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.
- AsMA designates this live activity for a maximum of **24 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
- Nurses may receive CEUs from the Montana Nursing Association. Sessions available for credit will be identified in the program.
- MOC Available! Maintenance of Certification modules: Workshops, Panels, and Slide Sessions have been designated for MOC. At least 20 non-concurrent hours of MOC training will be available.
- The Aerospace Medicine Board Review series will review core topics in Aerospace Medicine and is designed to prepare Aerospace Medicine specialists for the ABPM re-certification exam. Topics are presented in three sessions each year by specialists in the field and adhere to the ABPM Study Guide outline, which will be covered in its entirety over the course of three consecutive years. Combined with the annual RAM Bowl and Aerospace Medicine Grand Rounds sessions, these board review sessions will address the preventive medicine core topic areas and the required knowledge areas of Human Factors, Egress, and Disaster; Epidemiology and Biostatistics, Review of Respiratory and Metabolic Diseases; Pilot Selection and Retention, Evaluation and Risk Assessment, and Civil Aviation Regulations.



## PROFESSIONAL DEVELOPMENT

Several sessions highlight professional development, one of the core competencies for Maintenance of Certification, including the Epidemiology Workshop, the MOC sessions, and the panel on Aeromedical Ethics.



## OTHER BENEFITS

- Networking with Peers
- Scientific and Technical Exhibits
- Constituent and Affiliate Organization Luncheons and Awards
- Spouses Program

## SPECIAL SUNDAY WORKSHOPS

### 1. Aircrew Fatigue: Causes, Consequences, and Countermeasures

Sunday 9:00 a.m. – 4:00 p.m.

6 AMA PRA Category 1 Credits™.

This workshop will outline the importance of addressing fatigue as a danger in aviation, the basic physiological mechanism underlying fatigue, and the most common causes of fatigue in air transport and other settings. Ways to recognize fatigue in operational environments and information about the efficacy of various countermeasures, including specific information about countermeasure techniques such as proper work/rest schedules, adequate sleep, napping strategies, rest breaks, circadian entrainment, stimulants, and others, will be provided. Presented by Dr. John Caldwell and Dr. Lynn Caldwell.

### 2. Introduction to Epidemiology

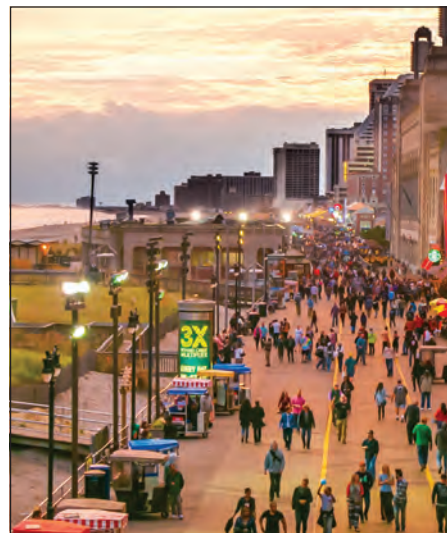
Sunday 9:00 a.m. – 5:00 p.m.

8 AMA PRA Category 1 Credits™.

This course acquaints people familiar with statistics with the special application of statistics used to analyze rare events.

The principle topic will be aerospace mishaps. While the topic is specific, the course material includes most of the topics necessary for a thorough review of statistics and epidemiology for the Specialty Board examinations conducted by the

American Board of Preventive Medicine. The course is oriented to professionals in aerospace medicine, mishap analysis, aerospace psychology, aerospace physiology, flight medicine, aviation medicine, aviation safety analysis, aerospace engineering, human factors engineering, and anyone else involved in the analysis of aviation mishaps or rare events. It will be taught from an aerospace mishap analysis perspective. The course will include 6 hours of classroom lecture by members of the International Association of Military Flight Surgeon Pilots and 2 hours of guided practice with problems taken from real life analyses. Learners must bring a portable computer with the appropriate EpiInfo™ program for the operating system loaded. Please note that EpiInfo™ does not have a Macintosh compatible option, so Apple products will not permit the guided practice portion of the course to be completed. A fully charged computer battery will be needed, but WiFi access is not required. The EpiInfo™ program can be downloaded from the CDC web site for free: <https://wwwn.cdc.gov/epiinfo/html/downloads.htm>.



### 3. Aerospace Medicine Faculty Development Workshop

Sunday, 12:00 – 3:00 p.m.

3 AMA PRA Category 1 Credits™.

This workshop, chaired by Col. Patrick Storms and Dr. Richard Allnut of the USAF School of Aerospace Medicine, will provide presentations on current topics of interest to the international faculty of aerospace medicine residencies and fellowships. These presentations may also be of interest to faculty of other preventive medicine residencies, including general preventive medicine and occupational medicine.

The presenters are current faculty of aerospace medicine programs within and outside of the United States. They will present topics aimed at improving teaching skills and providing proven methods for evaluating residents and will address international considerations in aerospace medicine residency training. Current and future faculty members may benefit from these presentations and are invited to attend. Continuing Medical Education and Maintenance of Certification credit will be available for completion of this workshop.



## KEY SPEAKERS



### 62nd BAUER LECTURER

Monday, April 25 (Wyle, sponsor)  
**Douglas Robb, Lt. Gen. (Ret.), USAF, MC**  
First Director, Defense Health Agency  
"Aerospace Medicine: Adapt or Perish"



### 3rd REINARTZ LECTURER

Tuesday, April 26 (Reinartz Fund, sponsor)  
**Frank K. Butler, Jr., CAPT (Ret.), MC, USN**  
Director, Prehospital Trauma Care Division,  
Joint Trauma System  
"The Top Ten Lifesaving Advances in Aeromedical  
Evacuation from 14 Years of Conflict."



### 51st ARMSTRONG LECTURER

Thursday, April 28 (Environmental  
Tectonics Corporation, sponsor)  
**Arnaud Desjardin**  
Deputy Head of the Investigations Dept.,  
Bureau d'Enquêtes et d'Analyses pour la  
sécurité de l'aviation civile (BEA),  
Paris-Le Bourget, France  
"BEA's Safety Investigation into the German Wings  
accident - Findings and Lessons Learned."

## ONE MEETING FOR OPPORTUNITIES, NETWORKING AND EDUCATION

### Opportunities

Opportunities to learn about the latest products and services from our many technical and scientific exhibitors; to experience three plenary lectures; to govern during the business luncheon, where you have the opportunity to help guide our association; to honor the best and the brightest among your fellow professionals during awards luncheons and the honors night banquet; to socialize through the spouses program, which is open to all spouses and friends of AsMA members—all at one meeting!

### Networking

Perhaps the greatest benefit of our meeting because we bring together the international experts from all aspects of the aerospace community in ONE place. Ideas for research, careers, projects, and presentations are forged during our meeting. And the friendships made will last a lifetime.

### Education

The primary objective of the Aerospace Medical Association's Annual Scientific Meeting. Designed from meeting evaluation forms, periodic surveys, and abstracts submitted, our meeting provides the latest results in sessions designed for aerospace medicine professionals under **one** roof. The scientific program will benefit residents, medical and graduate students, and advanced undergraduates who have an interest in aerospace medicine. Professional development and the other core competencies as outlined by the American Board of Preventive Medicine will be highlighted throughout the meeting. Continuing education credits are available for participants.

The AsMA is international in both membership and scope of interest, providing opportunities to connect and exchange ideas with some of the world's foremost medical specialists and internationally renowned scientists in the field of Aerospace Medicine and Human Performance. If you are interested in the multi-disciplinary approach to working with humans in flight and challenging environments, whether as a physician, physiologist, researcher, engineer, technician, nurse, student, or pilot, (or even a racecar, wheelbarrow, boot, top hat, thimble, steamship, or a scotty dog!) **You should be one of us!**

**No need to turn on the "Water Works" or turn off the "Electric Company"! Just open the Community Chest and use your Income Tax Refund, Bank Error in Your Favor, Life Insurance Matures, or even Your Building Loan Matures card to Register Now!**



## ADVANCE TO ATLANTIC CITY!

**Contribute to your Association and meet your fellow Aerospace Professionals**

## YOU'VE WON 2ND PLACE IN A BEAUTY CONTEST!

### Spouses Program

The WING of AsMA, a volunteer spouse organization, sponsors a program to share the cultural and educational experiences of the host city with old and new friends. There is a Hospitality Room, a Welcoming Reception on Monday, April 25, and a Luncheon on Wednesday, April 27. One tour is planned. The Tuesday Tour of Old Atlantic City will include a guided bus tour highlighting the Golden era of the 1920's in Atlantic City, when the city was the premier place to visit with grand hotels, a beach teeming with visitors, 'Speakeasies', and a free-wheeling nightlife. We will enjoy lunch (included) at an historic Irish Pub and then return to Harrah's.



## ADVANCE TO GO!

The Richard B. "Dick" Trumbo Preventive Medicine 5K Walk/Run will be held on Monday, April 25. The start time is 6 a.m. The fee is \$10 and tickets must be purchased in advance.



## TAKE A WALK ALONG THE BOARDWALK

**CLIMATE FOR MAY:** Highs in the mid-60s and lows in the mid-40s are normal. There is a 40% chance of light rain at some point. Bring a wind-breaker if you plan to go to the beach—it will be breezy and chilly.

## TAKE A RIDE ON THE NEW JERSEY TRANSIT'S ATLANTIC CITY LINE

### Transportation

For those driving to the meeting, AsMA has negotiated free self-parking at Harrah's and a one-time \$10 fee for valet parking. From Philadelphia Airport, Trip Advisor has some good directions for getting to Atlantic City from Philly via car, train, bus, or airport shuttle & limo service. Check out [www.asma.org/annual-meetings/helpful-links](http://www.asma.org/annual-meetings/helpful-links) for more information.

### Airline Discounts

Discount rates are available for United Airlines using Z Code ZVUY and Agreement Code 442327.

U.S. 50 States & Canada Customers: Call your professional travel agency, book online via [www.united.com](http://www.united.com) or call United Reservations Meetings Desk at 800-426-1122 and use the codes listed above. A nonrefundable booking service fee per ticket will be charged.

Passengers outside the U.S. & Canada: Call your professional travel agency, book online via [united.com](http://united.com), or e-mail [groupmeetings@united.com](mailto:groupmeetings@united.com) and provide your preferred itinerary and the codes listed above. Please allow 24 hours for e-mail requests to be processed.

## GO DIRECTLY TO HARRAH'S RESORT—DO NOT PASS GO AND DO NOT COLLECT \$200!

### Special AsMA Room Rates:

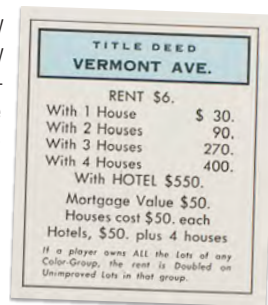
All attendees are offered a room rate of \$92/night + taxes. This exceptional rate is \$5 below the U.S. government employee per diem rate.

Please use the hotel reservation link found on the AsMA Registration webpage: <http://www.asma.org/annual-meetings/registration>. Hotel room block is good through March 31. Book early to ensure a room.

## ADVANCE TO VERMONT AVE.

**(Harrah's is located just off Vermont Ave.)**

Harrah's Atlantic City features 2,590 contemporary guestrooms and luxury suites. Their well-appointed Deluxe Rooms exude graceful warmth and contemporary style, pampering guests with plush Sealy bedding and sumptuous toiletries for bath and shower. The Conference Center is located on the west end of the Harrah's Resort. The AsMA room block offers rooms in the Bayview, Marina, and Harbor towers. The Bayview Tower is closest to the Conference Center, followed by the Marina Tower, and the Harbor Tower is farthest away from the Conference Center. All the standard amenities are available, including in-room high speed internet access.



## COMMUNITY CHEST

Attention AsMA Members! If you receive a paper copy of the journal in your mail box each month, **please bring your March Program Issue** with you to the meeting this year. If you don't want to bring the Program issue, that's okay! You can pay \$10 to pick up a copy with your registration. The program will be available for free online and through the mobile app at the meeting. Note: Nonmembers and those who receive only the electronic version of the journal will be entitled to one copy of the program without charge.

### PLEASE NOTE:

**Event tickets must be purchased in advance. The hotel requires us to cut off tickets sales 72 hours before each event.**



**ADVANCE REGISTRATION FORM**  
**Aerospace Medical Association 87<sup>th</sup> Annual Scientific Meeting**  
 Atlantic City, NJ, April 24 - 28, 2016

Information for our records			
Name:		Degree/Credentials:	
Organization:		Title:	
Street Address			
City:		State/Country:	Zip Code:
E-mail:			
Telephone Number:		Fax Number:	

**NEW!!! Early Bird Registration runs January 1 – February 1.**

**We strongly encourage online registration at [www.asma.org/annual-meetings/registration](http://www.asma.org/annual-meetings/registration)**

**Advance registration closes April 15. A \$50 administrative fee is applied to all cancellations. No cancellations or refunds after April 15.**

**Spouses who have registered with the Wing and require CME credits may do so at the AsMA Member fee.**

Please indicate if this is an address change to your AsMA Membership Record

Online registration is available at [www.asma.org/annual-meetings/registration](http://www.asma.org/annual-meetings/registration)

You must be an active member of AsMA in order to register at the member fee.  
 Registration fee does not include membership dues.

Are you a first time attendee, or new member?  YES  NO Special dietary requirement: \_\_\_\_\_

If you are being funded by the U.S. DoD please indicate Branch:  Army  Navy  Air Force  Coast Guard

Registration Fee	Early Bird <sup>†</sup> 1/1 – 2/1	Advance 2/1 – 4/15	At-The-Door 4/16 – 4/28	Registration Fee Remitted
<input type="checkbox"/> Member	\$355	\$430	\$530	
<input type="checkbox"/> Non-Member	\$630*	\$705*	\$805*	
<input type="checkbox"/> Non-Member Presenter	\$530*	\$605*	\$705*	
<input type="checkbox"/> Residents	\$275	\$350	\$350	
<input type="checkbox"/> Students	\$50	\$100	\$100	
§FAA-AME Seminar	\$235	\$310	\$310	

\*Go to [www.asma.org](http://www.asma.org) to become a member and take advantage of the reduced registration rates, receive the official Aerospace Medical Association journal and other membership benefits.

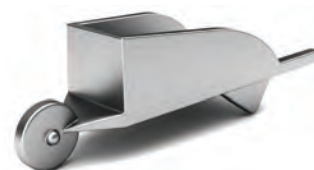
<sup>†</sup>Early Bird Registration must be paid in full (including all events and meal functions) at the time of registration.

§Fee Covers AsMA overhead costs. CME credit for the FAA Seminar only is included.

Add AMA PRA Cat 1 Credit(s) <sup>™</sup> and MOC below and gain full access to the AsMA meeting and associated CME.				
<input type="checkbox"/> Add Member AMA PRA Category 1 Credit(s) <sup>™</sup>	\$150	\$150	\$150	
<input type="checkbox"/> Add Non-Member AMA PRA Category 1 Credit(s) <sup>™</sup>	\$200	\$200	\$200	
<input type="checkbox"/> Add Member AMA PRA Category 1 Credit(s) <sup>™</sup> & MOC	\$200	\$200	\$200	
<input type="checkbox"/> Add Non-Member AMA PRA Category 1 Credit(s) <sup>™</sup> & MOC	\$250	\$250	\$250	
Subtotal for Registration Fee ►				

Fax registration form with credit card information to: 703-739-9652.

Payment must accompany form to be registered in advance (see reverse for workshops and events).



# ADVANCE REGISTRATION FORM

## Aerospace Medical Association 87<sup>th</sup> Annual Scientific Meeting

Atlantic City, NJ, April 24 - 28, 2016

Note: Workshops are Limited. Only one per day, per attendee. Register Early.

Date	Workshop Name	Fee	Amount Paid	
Sunday, April 24, 9:00 a.m.-4:00 p.m.	<input type="checkbox"/> Workshop #1 "Aircrew Fatigue" (MAX 75)	\$150		
Sunday, April 24, 9:00 a.m.-5:00 p.m.	<input type="checkbox"/> Workshop #2 "Introduction to Epidemiology" (MAX 100)	\$200		
Sunday, April 24, 12:00 p.m.-3:00 p.m.	<input type="checkbox"/> Workshop #3 "Aerospace Medicine Faculty Development (MAX 50)	\$75		
Date	Events	No. of Tickets	Fee Per Ticket	Total Fee
	<input type="checkbox"/> Additional Meeting Program (Only for AsMA members who receive their journal by mail)		\$10	
Sunday, April 24	<input type="checkbox"/> AsMA Welcome to Atlantic City (Note: All attending event must have tickets)		\$10	
Monday, April 25, 6:00 a.m.	<input type="checkbox"/> Richard B. "Dick" Trumbo 5k Walk/Run (advance purchase only)		\$10	
Monday, April 25	<input type="checkbox"/> Civil Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> Society of USAF Flight Surgeons Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> U.S. Navy Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> U.S. Army Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> Aerospace Human Factors Association Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> Corporate and Sustaining Affiliate Luncheon (advance purchase only)		\$45	
Monday, April 25	<input type="checkbox"/> Fellows Dinner (advance purchase only) (MUST be a Fellow or guest of AsMA Fellow)		\$85	
Tuesday, April 26	<input type="checkbox"/> Associate Fellows Breakfast (advance purchase only)		\$45	
Tuesday, April 26	<input type="checkbox"/> AsMA Annual Business Meeting (Free Attendance; Ticket required for meal) (advance purchase only)		\$45	
Tuesday, April 26	<input type="checkbox"/> Access to Both Events: Reception to Honor International Members and Associate Fellows/Fellows Reception		\$45	
Wednesday, April 27	<input type="checkbox"/> Aerospace Physiology Society Luncheon		\$45	
Wednesday, April 27	<input type="checkbox"/> Society of NASA Flight Surgeons Luncheon		\$45	
Wednesday, April 27	<input type="checkbox"/> Aerospace Nursing Society Luncheon		\$45	
Wednesday, April 27	<input type="checkbox"/> Iberoamerican Association of Aerospace Medicine Luncheon		\$45	
Thursday, April 28	<input type="checkbox"/> Space Medicine Association Luncheon		\$45	
Thursday, April 28	<input type="checkbox"/> AsMA Honors Night Banquet (Black Tie Optional)		\$85	
			Subtotal of Events ▶	
			Total Amount Due (Registration Subtotal + Workshop + Subtotal of Events) ▶	

Method of Payment	
Check Number:	<input type="checkbox"/> Check <input type="checkbox"/> AMEX <input type="checkbox"/> Discover <input type="checkbox"/> Mastercard <input type="checkbox"/> Visa <input type="checkbox"/> Diners
Name as it appears on card: (Please Print)	
Credit Card No:	Expiration Date:
Signature	
Approval (Official Use Only):	
<p><b>Fax with credit card information to:</b> 703-739-9652</p> <p><b>Or mail with payment to:</b> Aerospace Medical Association 320 S. Henry Street Alexandria, VA 22314-3579.</p>	

Payment must accompany form. All payments are in U.S. funds. Registrants submitting via fax must include credit card information. Please remember to include both sides when faxing. Use only one method to register.

**PAYMENT MUST ACCOMPANY FORM TO BE REGISTERED IN ADVANCE.**



# MEETING SCHEDULE

## Aerospace Medical Association 87<sup>th</sup> Annual Scientific Meeting

Atlantic City, NJ, April 24 - 28, 2016

Sunday, April 24								
9:00 A.M. - 4:00 P.M.	1. AIRCREW FATIGUE: CAUSES, CONSEQUENCES, AND COUNTERMEASURES - WILDWOOD 8-9							
9:00 A.M. - 5:00 P.M.	2. INTRODUCTION TO EPIDEMIOLOGY - WILDWOOD 20-21							
12:00 NOON - 3:00 P.M.	3. AEROSPACE MEDICINE FACULTY DEVELOPMENT WORKSHOP - AVALON 3-4							
Monday, April 25								
8:00 A.M. - 9:30 A.M.	OPENING CEREMONIES AND 62nd LOUIS H. BAUER LECTURE—"Aerospace Medicine: Adapt or Perish" (Wildwood 27-28)							
	Avalon 1-3	Avalon 7-9	Avalon 10-12	Avalon 13-14	Avalon 15-16	Avalon 17	Avalon 6	Avalon 18-19 POSTERS:
10:30 A.M.-12:00 NOON	SAFETY/PANEL: 2nd Transport Rotorcraft Airframe Crash Testbed Study	CLINICAL/SLIDE Clinical Neuropsychology	HP/SLIDE Human Factors in Medicine	SPACE/PANEL Bringing Gravity to Space	HP/PANEL Enabling Human Performance Sciences	HP/PANEL MOC: Human Factors, Egress, and Disaster	HP/SLIDE Bodies and Movements	10:00 a.m. POSTERS: Human Performance
12:00 NOON-2:00 P.M.	SPECIAL LUNCHEONS—CAMA, Navy, Air Force, Army, Aerospace Human Factors, Corporate and Sustaining Forum							
2:00 P.M.-3:30 P.M.	SAFETY/SLIDE Accident Investigation/Injury Analysis	CLINICAL/SLIDE Aviation Vision	HP/SLIDE Hot and High	SPACE/PANEL Mars Exploration: Recommendations for Team and Social Support	HP/PANEL Improving Human Performance from the Clinic Platform	CLINICAL/PANEL Superman Readiness Skills Verification for Flight Surgeons	HP/PANEL In-Cockpit SD Experience: Lessons & Countermeasures	2:30 p.m. POSTERS: Travel/Transport; Space; Public Health
4:00 P.M. - 5:30 P.M.	SAFETY/SLIDE Neck Injuries in Aviation	CLINICAL/PANEL Paroxysmal Neurologic Disorders	HP/SLIDE Special Senses and Situational Awareness	SPACE/PANEL Behavioral Health & Performance in Spaceflight	HP/PANEL FAA Research & Analysis for En Route & TRACON ATC	CLINICAL/PANEL Gotham City Readiness Skills Verification for Flight Surgeons	CLINICAL/SLIDE Clinical Aviation Cardiology	
Tuesday, April 26								
8:30 A.M.-10:00 A.M.	3rd MEMORIAL REINARTZ LECTURE—"The Top Ten Lifesaving Advances in Aeromedical Evacuation from 14 Years of Conflict" (Wildwood 27-28)							
10:30 A.M.-12:00 NOON	SAFETY/PANEL Airshow Performers Are They Dangerous Risk Takers? (60 min)	CLINICAL/PANEL Cases from the USAF Aeromedical Consultation Service	OTHER/PANEL Resident Research Panel - Pt. 1	SPACE/SLIDE Observations in Space Medicine	HP/PANEL UAS in Support of Civilian & Military Operations	CLINICAL/PANEL Guarding Remote Weapon Strike Warrior: Op. Med. Challenges	OTHER/PANEL Intriguing Figures in Aeromed History	10:00 a.m. POSTERS: Aviation Medicine; Aerospace Human Factors
12:00 NOON-2:00 P.M.	AEROSPACE MEDICAL ASSOCIATION LUNCHEON AND BUSINESS MEETING							
2:00 P.M.-3:30 P.M.	SAFETY/PANEL (45 min) Performance Enhancing Drug Use by Aircrew	CLINICAL/PANEL MOC: Epidemiol/Biostat. Review of Respiratory & Metabolic Diseases	OTHER/PANEL Resident Research Panel - Pt. 2	SPACE/SLIDE Assessment & Treatment in Space Medicine	HP/PANEL Synthetic Environments to Enhance UAS Operator Performance	CLINICAL/PANEL Predictors & Risk Factors in USAF Combat Search & Rescue	OTHER/PANEL Celebrating the Legacy of Brooks AFB	2:30 p.m. POSTERS: Issues in Human Performance
4:00 P.M.-5:30 P.M.	SAFETY/SLIDE Aircrew Protection	CLINICAL/PANEL Neuropsych Case Presentation: Psychosis in a Pilot	OTHER/PANEL Resident Research Panel - Pt. 3	SPACE/SLIDE Aeromedical Effects of Microgravity	HP/PANEL Total Exposure Health Initiative	CLINICAL/PANEL Complex Problems & Solutions: Junior Flight Surgeons in USAF	CLINICAL/PANEL (In Spanish) Advances in Aerospace Medicine in IberoAmerica	
Wednesday, April 27								
8:30 A.M.-10:00 A.M.	HP/PANEL Respiratory Impacts of High-Performance Flight	CLINICAL/SLIDE Aircrew Health Concerns	CLINICAL/PANEL Resident Grand Rounds - Pt. 1	TRAVEL/SLIDE Prevention & Care of Medical Problems for Commercial Passengers	HP/PANEL Problems, Pitfalls & Potential in Working with Legacy Data- Case Study	CLINICAL/PANEL Therapeutics in Aviation Medicine	SAFETY/PANEL Diabetes & Insulin Use by Commercial Pilots	POSTERS: AsMA Committees, Constituents, and Affiliates
10:30 A.M.-12:00 NOON	HP/PANEL Neurological Effects of Hypobaric Exposure	SAFETY/PANEL Aviation Safety Year in Review: 2015	CLINICAL/PANEL Resident Grand Rounds - Pt. 2	OTHER/PANEL Advancing USAF CCAT Capabilities	SPACE/PANEL Mars Exploration: Fatigue Management	OTHER/PANEL Diversity in Aviation and Space Medicine	CLINICAL/PANEL Aeromedical Ethics	
12:00 NOON-2:00 P.M.	SPECIAL LUNCHEONS—Aerospace Nursing Society, Aerospace Physiology Society, Society of NASA Flight Surgeons, Ibero-American Association of Aerospace Medicine, Wing							
2:00 P.M.-3:30 P.M.	HP/SLIDE Hypoxia Training and Susceptibility	CLINICAL/SLIDE Practice of Aerospace Medicine	CLINICAL/PANEL Resident Grand Rounds - Pt. 3	TRAVEL/SLIDE Educational Topics for Aeroevac & Preventive Medicine Providers	HP/SLIDE Biomarkers & Biosensors	CLINICAL/PANEL NATO & EACSACWG: Interactive Case Studies in Aviation Cardiology	CLINICAL/PANEL Aerospace Dentistry	
4:00 P.M.-5:30 P.M.	HP/PANEL Hypoxia—Prediction & Prevention	CLINICAL/SLIDE Aircrew Neuropsychology	Room: Wildwood 27-28 CLINICAL/PANEL 9th Annual RAM Bowl		HP/PANEL Flexible Hybrid Electronics fo Aerospace Medicine	CLINICAL/PANEL Case Presentations— According to the Guidelines (in German)	HP/PANEL HP Optimization through Aerospace and Operational Physiology	
Thursday, April 28								
8:15 A.M.-9:15 A.M.	51st HARRY G. ARMSTRONG LECTURE—"BEA's Safety Investigation into the German Wings Accident - Findings and Lessons Learned" (Wildwood 27-28)							
10:00 A.M.-11:30 A.M.	HP/SLIDE Aerospace Medicine: Then, Now & Future	CLINICAL/PANEL Aerospace Medical Practice Updates - Pt. 1	HP/SLIDE Environmental Challenges in Aerospace Medicine	TRAVEL/PANEL International Air Ambulance Operations	HP/PANEL From Briefing to Exam Room: Adapting Cognitive Science	OTHER/PANEL MOC: Pilot Selection/Retention, Eval/Risk Assessment & Civil Aviat. Regulations		
11:30 A.M.-1:30 P.M.	SPECIAL LUNCHEONS—Space Medicine Association							
1:30 P.M.-3:00 P.M.	HP/SLIDE Issues in Psychophysiology	CLINICAL/PANEL Aerospace Medical Practice Updates - Pt. 2	HP/SLIDE Fatigue & Aviation Performance	TRAVEL/SLIDE New Perspectives for Patient Movement	HP/SLIDE Neck & Back: Characterization, Prevention & Injury	CLINICAL/SLIDE Aerospace Medical Standards		
3:30 P.M.-5:00 P.M.	HP/SLIDE Acceleration Training & Tolerance	CLINICAL/SLIDE Womens Health Issues in Aviation	HP/SLIDE Research & Review of Stimulants & Fatigue Countermeasures	HP/PANEL (60 min) Using Gap Analysis to Guide HP Research	OTHER/SLIDE Atlantic City Monopoly	CLINICAL/PANEL AAMIMO Cases		

COLOR CODE	HUMAN PERFORMANCE (HP)	CLINICAL MEDICINE	TRAVEL & AIR TRANSPORT MEDICINE (ATM)	SPACE MEDICINE	SAFETY	OTHER/HISTORY
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## AEROSPACE MEDICAL ASSOCIATION 87TH ANNUAL SCIENTIFIC MEETING

# HUMAN PERFORMANCE AND THE YEAR OF THE AEROSPACE MEDICINE PROFESSIONAL

HARRAH'S RESORT HOTEL  
ATLANTIC CITY, NJ  
APRIL 24-28, 2016

