



Ever Upward: February 2024

Elimination of Print Program for AsMA Annual Scientific Meetings

Jeff Sventek, Executive Director

For many years, the March or April issue of the AsMA journal has been designed to serve as the print program for the AsMA Annual Scientific Meetings. That issue would include a copy of all abstracts accepted by the AsMA Scientific Program Committee during their peer-review process. The print program issue would also include other AsMA and meeting-specific information. AsMA would print 1500–1600 copies and have the publisher ship the programs to the meeting location. Because information for the print program issue must be sent to the publisher 45 days prior to the publication of the journal issue, all AsMA Annual Scientific Meeting information planned for the March issue must be to the publisher by January 15. All AsMA Annual Scientific Meeting information planned for an April issue must be to the publisher by February 15.

AsMA also publishes a Meeting Addendum document every year that provides a quick schedule listing for the meeting. It also includes information that did not make the publication suspense dates as described above. The addendum also informs attendees of all changes from the published information found in the March or April print program. Changes include withdrawn abstracts, added meetings, deleted meetings, changes to scientific session rooms, etc.

AsMA started offering a digital meeting application at the 2012 AsMA Annual Scientific Meeting in Atlanta, GA. AsMA has continued to offer a digital meeting application every year since that 2012 meeting. We've monitored the number of AsMA Annual Scientific Meeting attendees who have downloaded the digital meeting application and have found a greater percentage of attendees using the digital meeting application each year. The digital meeting application allows AsMA staff to make all meeting changes in real time. Withdrawn abstracts can be quickly removed or identified, added or deleted meetings can be entered into the app quickly and easily, changes to scientific session rooms can be made in real time, and push notifications to the attendees about all changes can be sent via the app.

For the 2023 New Orleans meeting, AsMA printed 1500 program issues and had them ground shipped to the meeting hotel. Total cost for that issue was over \$13,000. The AsMA Registration Committee offered attendees a print program issue as part of their registration packet. Many attendees declined the print program issue because they planned to use the digital meeting application exclusively. AsMA Staff found many print program issues in recycle and trash containers during the week in New Orleans and there were approximately 300 print programs left over that were sent to recycling in New Orleans.

A review of this information resulted in a decision to stop offering a print program for the AsMA Annual Scientific Meetings. All attendees will be offered a paper addendum with the meeting schedule and other information as part of

the registration packets. All attendees will be asked to download and use the digital meeting application for viewing the scientific abstracts and building their daily schedules. The digital meeting application will be completely up to date when the Annual Scientific Meeting begins in early May and can be updated/changed in real time as required. Should a scientific abstract be withdrawn from the program, it will be removed from the digital meeting application. All meetings, luncheons, receptions, and dinners will be listed in the meeting application. Attendees will be able to build a personal daily schedule during their time at the meeting by selecting the scientific sessions and other activities they plan to attend.

Following the AsMA Annual Scientific Meeting, the journal staff will use one of the summer issues to publish a proceedings issue. That issue will contain all scientific abstracts that were presented during the recent AsMA Annual Scientific Meeting. It will also include the results of the AsMA Annual Business Meeting and other significant outcomes from the meeting.

By eliminating the March/April print program and replacing it with a summer proceedings issue, AsMA will save money, eliminate the need to identify withdrawn scientific abstracts, post meeting changes in the addendum, and other post-publication changes. The summer proceedings journal issue will provide readers with a summary of the scientific program as well as other significant events that occurred during the AsMA Annual Scientific Meeting.

Our plan is to reduce waste, save some money, improve the efficiency of meeting planning and execution, and provide a summer proceedings issue that will summarize the AsMA Annual Scientific Meeting activities.

**The Need For
SPEED**
Farther, faster, together.

The Aerospace Medical Foundation is working to accelerate its efforts by empowering the next generation of Aerospace Medicine scientists who will take humans to deep space. In order to achieve these objectives, they are setting a goal in the "Need for Speed" campaign of \$5 million by AsMA's 100th Anniversary! Donations can be in cash or in stock and can be made by credit card or PayPal through the AsMAFoundation.org website. AsMA Members: consider joining the Heritage Society and include the Foundation in your estate planning.

Support the Foundation!

Send information for publication in this newsletter to: Journal Department, AsMA: rtrigg@asma.org

New Members

AsMA welcomes 31 members who joined in the past month.

- Anderson, Shauna; Garner, NC, United States
- Anderson, Trevor; Byron, NY, United States
- Cattaneo, Luciano; APO, Germany
- Cowan, Aaron; Cordova, TN, United States
- Dadeboe, Ian; Houston, TX, United States
- Deruelle, William; Beavercreek, OH, United States
- Durrani, Umar; Saint Louis, MO, United States
- Espinola, Dimas; San Antonio, TX, United States
- Eylert, Nick; Meerbusch, North Rhine-Westphalia, Germany
- Fernandez, Edwin; Aurora, CO, United States
- Frank, Keith; Red Feather Lakes, CO, United States
- Hoyniak-Becker, Ann; Shalimar, FL, United States
- Hubbard, Christopher; Syracuse, NY, United States
- Levin, Chelsea; Centerville, OH, United States
- Lopez-Alamillo, Susana; Rosenberg, TX, United States
- Lorntzsen, Bianca; Oslo, Norway
- Meraban, Amir; Del Mar, CA, United States
- Milas, Mira; Phoenix, AZ, United States
- Monlux, Daniel; Coronado, CA, United States
- Nelson, Ariana; Laguna Beach, CA, United States
- Payne, Andrew; Springfield, MO, United States
- Phan, Vy; McLean, VA, United States
- Prazad, Amal; Philadelphia, PA, United States
- Qamer, Maham; Sugar Land, TX, United States
- Rao, Vishnu; Kennsaw, GA, United States
- Rathod, Vaishnavi; Vadodara, Gujarat, India
- Sirven, Joseph; Atlantic Beach, FL, United States
- Stewart, Jared; Provo, UT, United States
- Suffredini, John; Houston, TX, United States
- Williams, Keith; Lexington, MA, United States
- Wright, David; Saint Louis, MO, United States

AsMA also welcomed back two returning members:

- Ghatora, Karan; Ilford, Redbridge, United Kingdom
- Vanichkachorn, Greg; Atlanta, GA, United States

FAA News

For more FAA news visit their Newsroom page: <https://www.faa.gov/newsroom>.

Increased Oversight of Boeing

The Federal Aviation Administration (FAA) announced it is taking action to immediately increase its oversight of Boeing production and manufacturing. These actions come one day after the FAA formally notified Boeing that the FAA has launched an investigation into the company because of the incident on a Boeing Model 737-9 MAX in which the aircraft lost a passenger door plug while in flight. The actions being taken include: an audit of the Boeing 737-9 production line and its supplies; increased monitoring of Boeing 737-9 MAX in-service events; and assessment of safety risks around delegated authority and quality oversight, with examination of options to move those functions under independent, third-party entities.

This release can be found at <https://www.faa.gov/newsroom/faq-increasing-oversight-boeing-production-and-manufacturing>.

ICAO News

For more on what ICAO has been doing, you can visit their news page at <https://www.icao.int/Newsroom/Pages/default.aspx>.

Cooperation Agreement with HBKU

The International Civil Aviation Organization (ICAO) and Hamad Bin Khalifa University (HBKU) have signed an agreement to establish a framework of collaboration for the exchange of knowledge, expertise, and best practices on innovation. The signing ceremony took place in November 2023. Under the agreement, ICAO and HBKU will endeavor to cooperate on a broad range of aviation topics, encompassing key priorities such as the response to the climate emergency, the safe and secure integration of emerging aviation technologies like drones, cyber security and cyber resilience, and optimizing air transport's role as a catalyst for sustainable development. *For more on this, please visit <https://www.icao.int/Newsroom/Pages/Hamad-Bin-Khalifa-University-and-ICAO-to-cooperate-on-aviation-innovation.aspx>.*

Aviation Safety, Security, Sustainability, and Resilience

ICAO's Secretary General, Juan Carlos Salazar, recently visited Geneva, where he conducted a series of meetings and activities in support of the organization's safety and security priorities and air transport's sustainability and resilience objectives. These meetings included bilateral discussions with the Director-General of the World Health Organization (WHO), Dr. Tedros Ghebreyesus; the Secretary-General of the United Nations Conference on Trade and Development (UNCTAD), Rebeca Grynspan; the Deputy Secretary-General of the International Telecommunication Union (ITU), Tomas Lamanauskas; and the senior management team of the International Air Transport Association (IATA), including its Director General, Willie Walsh. In the course of the Secretary General's mission, he also addressed a "Town Hall" meeting in IATA, where he provided the association's staff members with a comprehensive update on ICAO's work and achievements. At IATA, Mr. Salazar highlighted the crucial importance of cooperation between the two organizations and efforts to address gaps in sustainability and safety, and noted that ICAO is taking its 80th anniversary as an opportunity to review its work and mandate in order to better serve Member States and stakeholders. The Secretary General was accompanied throughout his activities by the Directors of ICAO's Capacity Development and Implementation Bureau, Mr. Jorge Vargas and Legal and External Affairs Bureau, Mr. Michael Gill. *To read the complete release, please visit <https://www.icao.int/Newsroom/Pages/Advocating-for-aviation-safety-security-sustainability-and-resilience.aspx>.*

Read Current News Online!

Visit the AsMA & Industry News to see what's new! Members: log in on the home page to read Member News.

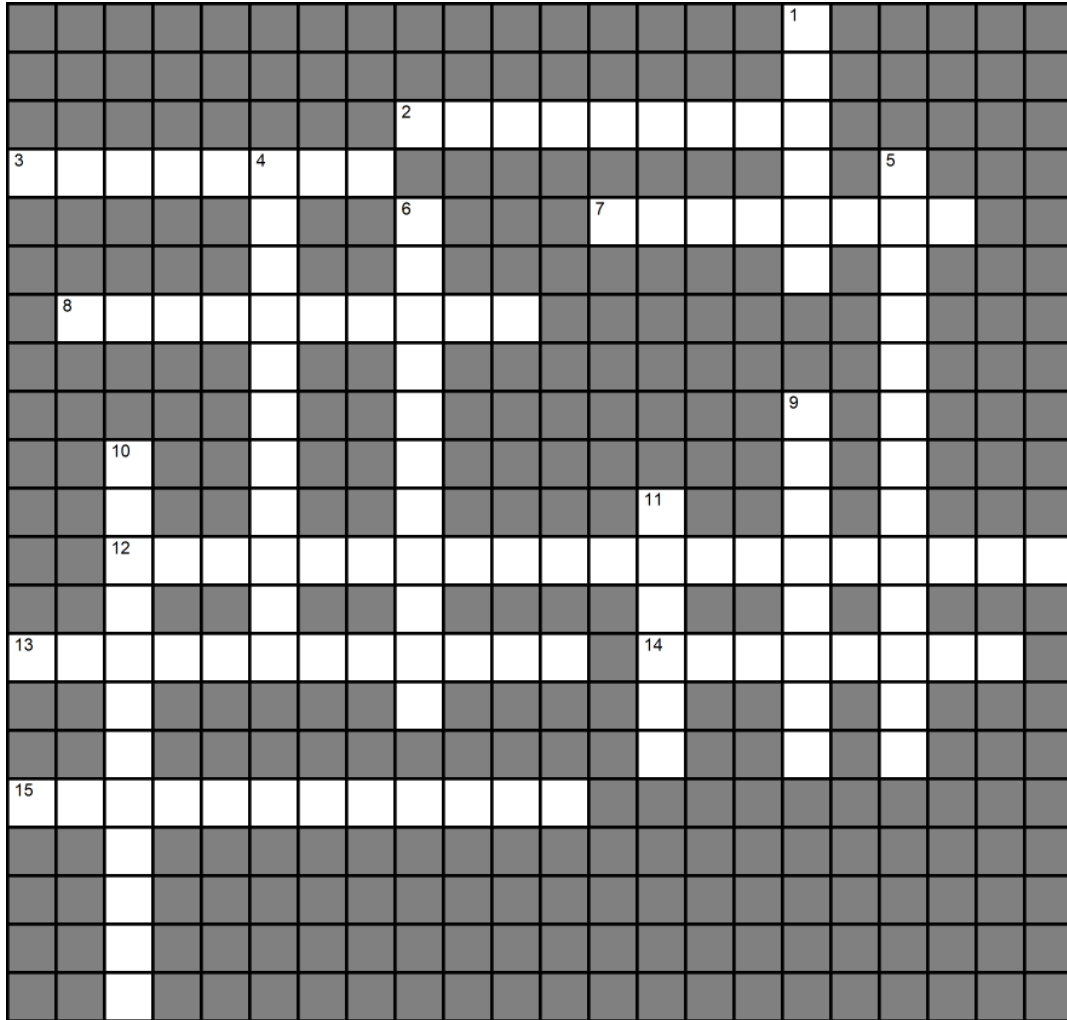
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February Crossword



AEROSPACE & SKIN

By Lt. Col. Srihari Iyer K, Flight Surgeon, Indian Army, and Dr. Sahana Srihari, Assistant Professor, Dermatology, Adesh Institute of Medical Sciences and Research, Bathinda, Punjab, India.

Across

2. Instrument used to study the mechanical properties of human skin in-vivo. (9)
3. Every exposure to which an individual is subjected in his entire life, and hence is a function of quality, intensity, and duration of the event. (8)
7. This structure in the dermis increases up to 143% due to microgravity and is reversible on return to earth. (8)
8. Effect responsible for higher temperature and excessive sweating in military aviators. (10)
12. An ascomycetous yeast which has ability to proliferate in a closed environment like that of the International Space Station (13,7)
13. Drug which is discouraged for use in acne in aircrew as it causes decreased night vision. (12)
14. Spontaneous evolution of water to water vapour in tissues at body temperature when a person crosses the Armstrong's Line. (8)
15. The use of gels and powders is restricted in space due to their inherent _____ (12)

Down

1. A person is said to have gone to space if he crosses the _____ line. (6)
4. This part of the atmosphere absorbs the radiation causing skin cancers. (11)
5. Subclinical _____ is the reason why topical calcineurin inhibitors are not approved in military aviators. (13)
6. Providing food rich in cysteine and glycine supports synthesis of this tripeptide which helps mitigate oxidative stress during spaceflight. (11)
9. Petechiae & fluid filled transudation due to high +Gz acceleration. (8)
10. This induces changes in microorganisms including virulence, antibiotic resistance, and growth. (12)
11. Itching, tingling, numbness due to sub atmospheric decompression and release of entrapped nitrogen in tissues. (6)

The solution can be found on p. N10.

News of Corporate Members

Franklin Scientific Joins AsMA

Franklin Scientific, LLC, is AsMA's newest Corporate Member. They are a small business which provides contractor logistics support services and are located in Philadelphia, PA, United States. The services they offer include maintenance, calibration, upgrades and modifications, and transport and installation. Maintenance includes preventive maintenance, annual calibration, corrective repairs and help desk support. Calibration involves testing sensors without removing them from the system. Upgrades and modification experience encompasses design, start-up and troubleshooting of electrical systems, including large AC and DC motor drive systems, computer monitoring and control systems, audio/video system, and sensors and instrumentation. Finally, transport and installations cover all aspects of equipment installations after delivery of product, including but not limited to: site surveys, managing subcontractors, assembly, start-up testing, and commissioning to get equipment running quickly and efficiently. They can also relocate existing equipment. Their products include athletic chambers, hypoxic systems, CO₂ scrubbers, solar simulators, wind simulators, and rain simulators.

—Please visit <https://www.franklinscientificllc.com/home> for more information.

Mayo Clinic Research to Launch into Space

A Mayo Clinic research experiment will be part of a payload that launches into space from NASA's Kennedy Space Center in Cape Canaveral, Florida, on Jan. 29, subject to weather conditions and other factors. The research team from the lab of Dr. Abba Zubair is preparing stem cells for the flight to test how the absence of gravity plays a role in bone loss. The research project will examine the effect of gravity on a type of stem cells derived from bone marrow known as mesenchymal stem cells, or adult stem cells with growth factors and healing potential. They play a key role in tissue repair and regeneration. Dr. Zubair's team will look at how the stem cells function while in space. Dr. Zubair says the experiment could have implications for future spaceflights that include taking humans to Mars. This early research also could affect human clinical trials down the road, perhaps a decade away.

—Please see <https://newsnetwork.mayoclinic.org/discussion/new-mayo-clinic-stem-cell-research-to-take-flight-into-space/> to read more.

Axiom Crew Launches to ISS

Axiom Mission 3 (AX-3), the first all-European commercial astronaut mission to the International Space Station (ISS), successfully launched in early January on a SpaceX Falcon 9 rocket from NASA's Kennedy Space Center in Florida. The Ax-3 crew is now in orbit. The Ax-3 crewmembers are Commander Michael López-Alegría of the United States and Spain, Pilot Walter Villadei of the Italian Air Force, and Mission Specialists Alper Gezeravcı of Türkiye and Marcus Wandt of Sweden and the European Space Agency (ESA). Ax-3 is the

first commercial spaceflight mission made up of government and ESA-sponsored national astronauts. Mission Specialist Alper Gezeravcı is the first-ever Turkish astronaut and Mission Specialist Marcus Wandt is the first ESA astronaut to fly on a commercial space mission. During their planned 14-day mission, the Ax-3 crew will live and work aboard the orbiting laboratory conducting more than 30 experiments and more than 50 outreach engagements. Human research data collected on the ground before and after the mission, as well as in flight, will improve understanding of human physiology on Earth and in microgravity. Furthermore, this mission will harness opportunities for industrial advancements and technological development to drive discovery off the planet.

—Visit <https://www.axiomspace.com/news/ax3-launches-iss> for more about this.

See "Corporate News", p. N10

Corporate News Bites

ETC: Environmental Tectonics Corporation (ETC) announced that its Aircrew Training Systems business unit was awarded four contracts: three for CLS contracts for repeat customers in the Middle East and United States, and one for a mid-life upgrade of spatial disorientation equipment for an Asian customer. In addition, ETC Simulation, located in Orlando, FL, received an order for the delivery of a customized ADMS simulation system for an emergency response training center being established by an international client active in the oil industry. Please visit <https://www.etcusa.com/etcs-aerospace-segment-awarded-12-4-million-in-contracts/> for more.

ALPA: The Air Line Pilots Association, Int'l (ALPA), took part in the 5th Annual Labor Innovation and Technology Summit in mid-January. ALPA's first vice president and national safety coordinator, Capt. Wendy Morse, joined a panel on tech in the workplace. A discussion at this panel addressed the harmful impacts of artificial intelligence and technology on U.S. workers along with debate on regulatory advances in Europe. The topic of possibly removing pilots from the flight deck was also raised, with discussion on the risks of this. Please see <https://www.alpa.org/news-and-events/news-room/2024-01-11-two-pilots-flight-deck-technology-summit> for the complete press release.

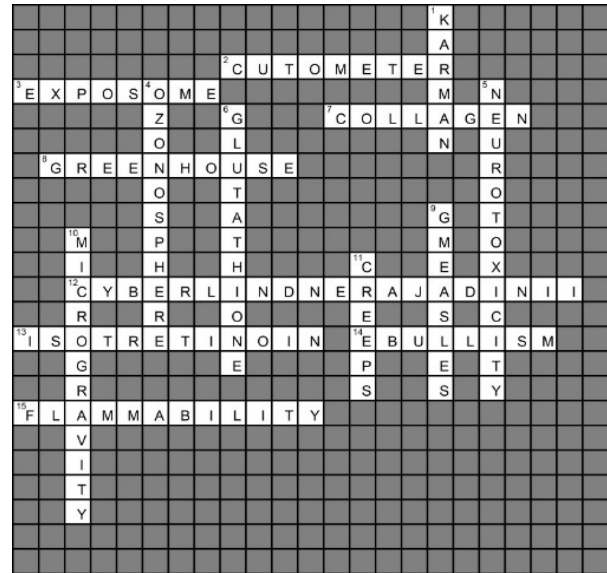
IFALPA: The International Federation of Air Line Pilots Associations (IFALPA) welcomed a new Managing Director: Céline Canu. She started in January, leading the activities of the Secretariat staff from IFALPA headquarters in Montreal, Canada. Before this position, Canu served as IFALPA Technical Officer and actively participated in ICAO consultations and supported IFALPA Member Associations. In the past, she has worked at the International Air Transport Association (IATA), and in policy development for the European Cockpit Association. Please visit <https://www.ifalpa.org/news/ifalpa-welcomes-c%C3%A9line-canu-as-new-managing-director/> for the full press release.

Leidos Team Demonstrates UAS

Leidos and the U.S. Army Combat Capabilities Development Command Aviation and Missile Center's Advanced Multilayered Mobile Force Protection (AM2FP) team demonstrated the successful operation of its Counter - small Unmanned Aerial System (C-sUAS) at the Maneuver and Fires Integration Experiment (MFI) 2024. The AM2FP correctly tracked and identified 100% of the presented threats in the presence of clutter. No false negatives or positives were generated by the system during the MFI flight tests. The AM2FP was the only C-sUAS system that demonstrated tracking and identification of single threats and swarms while operating on the move. The AM2FP team improved its performance from last year's demonstration while also highlighting an additional integration with the Army's Forward Area Air Defense Command and Control architecture. Significant innovations in radar performance and threat discrimination were also validated using targets and design reference missions provided by the government.

—Please see <https://www.leidos.com/insights/advanced-multi-layered-mobile-force-protection-excels-mfi-demo> to read more.

Crossword Solution



Meetings Calendar

April 17-19, 2024; Spaceflight Human Optimization & Performance Summit; Space Center Houston, Houston, TX. For more information or to register, visit <https://www.uhcl.edu/hphi/spaceflight-human-optimization-performance-summit/>.

April 30-May 1, 2024; 69th Annual Business Aviation Safety Summit (BASS); Austin, TX. For more information or to register, visit <https://flightsafety.swoogo.com/BASS2024>.

May 19-22, 2024; 108th American Occupational Health Conference (AOHC), Loews Royal Pacific Hotel, Orlando, FL, United States. For more info, visit [https://acoem.org/American-Occupational-Health-Conference-\(AOHC\)](https://acoem.org/American-Occupational-Health-Conference-(AOHC)).

Calls for Papers

Ongoing; International Astronautical Federation (IAF) Global Networking Forum Space Conversations Series; ON-LINE, 14:00 Paris time. Please visit <https://www.iafastro.org/events/iaf-gnf-space-conversations-series/> for more info.

Upcoming Annual Scientific Meetings

May 5-9, 2024; Hyatt Regency, Chicago, IL
 June 1-6, 2025; Hyatt Regency, Atlanta, GA
 May 17-21, 2026; Sheraton Denver Downtown, Denver, CO
 May 23-28, 2027; Hilton Anatole Dallas, Dallas, TX



CALL FOR AUTHORS

100 YEARS!

- ▶ Join a project spearheaded by the History and Archives Committee as we prepare for the upcoming **100th anniversary** of AsMA in 2029!
- ▶ Seeking **authors interested in contributing a chapter to a book** that examines how aviation and aerospace medicine have changed over the past century, as reflected by our Society through the years.
- ▶ Help us celebrate the history of AsMA and the innovations in our field that many of you have not only witnessed but engineered.
- ▶ Please **contact Committee Chair Walt Dalitsch** at walt3@dalitsch.com if interested.

FAA AME Seminars

These are offered by the FAA AME Program Office.

March 4-8	Oklahoma City, OK	Basic
April 12-14	VIRTUAL	Refresher
May 6-9	Chicago, IL	AsMA

AsMA only takes registrations for the seminar held in conjunction with our annual scientific meeting. For more info on these seminars, please visit the [FAA website](https://www.faa.gov).

AOCOPM 2024 Midyear Educational Conference

Hybrid: Online via Zoom and in Person in Conroe, TX, United States

March 21-24, 2024

Program Chair: Kris Belland, D.O., MPH, MBA, MSS, CPE, FAsHFA, FAsMA

[Click here](#) for the agenda.

Visit aocopm.org/my24 for more information or to register.