

Ever Upward: April 2024

Scholarship Winners Announced

Anita Mantri, Ph.D., Memorial Travel Scholarship

Nina Purvis is a junior doctor in the NHS with an interest in extreme environment physiology and health. Her interest in space medicine stems from her undergraduate and Master's



studies in Astrophysics (M.Phys.), which she has amalgamated with a Ph.D. in Cancer Research, studying medicine as a graduate-entry student (M.B.B.S.), and taking a year out to complete a second Master's in Space Physiology and Health. She worked as a Postdoctoral Research Fellow in the United States before medical school. She is now completing her PGY-2 year, with a view to starting her next stage of training in summer 2024.

Dr. Purvis has completed the ESA Space Physician Training Course and UTMB PASM internship, being that year's Shaskan Scholarship winner. She is also a past winner of the Aerospace Speaker's Travel Grant from the Royal Aeronautical Society, the Space Medicine Association's International Scholarship, and the Red Flower Vacation Scholarship. She has additionally won awards for research and presentations. She is currently Junior Chair Elect of the AsMA Associate Fellows Group and has contributed to AsMA and AMSRO over the past 6 years, including judging scholarships, publishing in AsMA's journal, helping organize AMSRO elections, running a lecture series during COVID-19, and being an active member and mentor of the next generation of aerospace medicine.

AsMA International Aerospace Medical Scholarship

Dr. Anthony Rengel is a specialist general practitioner and designated aviation medical examiner from Perth, Western Aus-



tralia. He is a Fellow of the Australian College of Rural & Remote Medicine, a graduate of the Master of Aviation Medicine from the University of Otago and is currently completing his final semester of fellowship training with the Australasian College of Aerospace Medicine. He holds a Masters in Aviation Medicine from the University of Otago, a Bachelor of Medicine and a Bachelor of Surgery from the University of Western Austra-

lia, and a B.Sc., also from the University of Western Australia. Having been flying since 15 years of age and holding a Commercial Pilot Licence, Anthony has combined a passion for remote health care and aviation into a career in aerospace medicine. This has included running fly-out general practice clinics in rural Western Australia, 8 years as an aviation medi-

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cal examiner for the Civil Aviation Safety Authority, and, in the last 3 years, as a specialist in aeromedical retrieval for the Royal Flying Doctor Service on a variety of fixed and rotary wing platforms. In 2023, Anthony was appointed as a reservist to the Royal Australian Air Force Institute of Aviation Medicine in Adelaide. Recently, he accepted a position with the Australian Antarctic Division and will soon begin preparation to overwinter at Davis Station for the 2025 season. His long-term goal is to work in the space sector, leveraging his knowledge and experience to assist with the next generation of human exploration. Additionally, he wishes to continue active involvement in the training of the next generation of health and aerospace professionals.

Stanley R. Mohler, M.D., Aerospace Medicine Endowed Scholarship

Dora Babocs is a medical doctor with an aim to make surgical procedures a safe option for future deep-space missions. She



is currently serving as a Postdoctoral Research Fellow at UTHealth's Advanced Aortic Research Program. Her journey into the realms of medicine and space exploration began in Szeged, Hungary, where she embarked on her career as a General Surgery resident. Driven by a profound curiosity about the cosmos, she is concurrently pursuing a Bachelor's degree in Astronomy and Planetary Science, just graduated as a space specialist

in life sciences, and participated in ESA's Space Physician Training 2023. She also plays an integral role in the Biomedical Engineering Group at the Austrian Space Forum (OeWF), contributing her expertise to Mars analog missions. Additionally, she serves as a scholar-in-residence at iGAINT, European Representative of the International Outreach Committee at AMSRO, and as National Point of Contact for Hungary at the Space Generation Advisory Council, fostering international collaboration in space exploration.

Dr. Babocs was also selected for the *Forbes* 30/30 list in 2024. She leads and participates in multiple international projects and activities related to space surgery and is an author or co-author of 3 peer-reviewed articles, 11 other articles, and 2 book chapters. In 2022, she was awarded the Keck Medicine of USC Travel Scholarship from the University of Szeged, Albert Szent-Györgyi Medical School, and won a Best Poster award in February 2024. She is a member of the American Society of Aerospace Medicine Specialists, the Space Surgery Association, the Aerospace Physiology Society, and the Aerospace Nursing and Allied Health Professionals Society.

See "Scholarship winners", p. N19

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space-medical-association-asma

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

From "Scholarship winners", p. N18

Jeffrey R. Davis, M.D., Aerospace Medicine Endowed Scholarship

Dr. Corey Morris is a native of McMinnville, TN, United States. He received his undergraduate education at Motlow State Community College and Tennessee Technological University. He



worked for his local community college as an adjunct laboratory instructor and assistant director of new student services before being accepted to medical school. He completed his medical education at Lincoln Memorial University- Debusk College of Osteopathic Medicine in 2022 and started his medical residency training at Lake Cumberland Regional Hospital on July 1, 2022, where he is currently a second-year Family Medicine resident.

He has a wide variety of interests, including rural primary medicine, osteopathic manipulative medicine, wound care/hyperbarics, and aviation/space medicine.

Dr. Morris has served on the AMSRO executive board for two terms while a medical student and currently serves on the AsMA Communications Committee. He is a current board member of the American Osteopathic College of Occupational and Preventive Medicine representing resident physicians. He is also a member of the Civil Aviation Medical Association, the Aerospace Human Factors Association, the American College of Hyperbaric medicine, the Undersea and Hyperbaric Medical Society, the American College of Osteopathic Family Physicians, and the American Osteopathic Association. When not at work in Kentucky, you can find him spending time with family in Tennessee, building models with Legos*, or watching action, comedy, or sci-fi movies.

Philip J. Scarpa, Jr., Aerospace Medicine Endowed Scholarship

Claudio Franc was born in the northwestern region of Romania, colloquially known as Transylvania, and immigrated to the United States with his mother when he was 5 years old. As



a child, his favorite question to be asked was "what do you want to be when you grow up?" because that always gave him free reign to start talking about his favorite topic and how he has always dreamed of becoming an astronaut. From reading On the Shoulders of Giants by Stephen Hawking at a young age, to traveling to the Kennedy Space Center for his 10th birthday, his fascination with the field of space exploration is as boundless as the

universe itself. He has travelled all over the globe and has lived in many states, but calls Louisiana his home. In 2019, he graduated with his Bachelor of Science degree in Molecular Biology from Southeastern Louisiana University, with minors in chemistry, history, and psychology. In 2021, he earned his Master of Business Administration degree from the same university before matriculating into medical school at St. George's University, where he is currently enrolled as a third-year medical student.

While being engaged in his clinical rotations in New York City, Claudio is also concurrently completing his Master of Public Health degree at Johns Hopkins University. Upon graduation next summer, he hopes to match into a general surgery residency and enlist in the U.S. Air Force with the dream of one day serving his country as a surgeon. He also has aspirations to further his knowledge and training by completing an aerospace medicine fellowship so that he may serve as a flight surgeon, with the aim of treating and preventing a variety of diseases not only here on Earth, but also, hopefully, among the stars. He is a member of the Thieme Group, where he is a Student Ambassador, and the Advocates for Safe Air Policy and Safe Air for Everyone, where he serves as a Council intern. He is a past winner of the Welch Scholarship from Johns Hopkins University and multiple awards from both St. George's University and Southeastern Louisiana University.

Associate Fellows Announced

The following members of the Aerospace Medical Association have achieved Associate Fellow status and were approved by the Executive Committee: Jennifer Benincasa, Nicola Boyd, Lauren Church, Diego Garcia, Frederick Hauser, Roy Hoffman, Sasirajan Jeevarathinam, David Leary, Max Lee, Peter Letarte, Heather Panic, Michael Pohlen, Timothy Sprott, Michael Stephens, Tesfaye Tetemke, Alicia Tucker, and Richard Whittle.



Wing News

Greetings Wing Family and accompanying guests of AsMA members!



Fran Laue

After months and years of planning, the 94th Annual AsMA Scientific Meeting and The Wing are just a few weeks away. The Wing commitees have been busy planning for another great event. Chicago is going to be a great city to visit. There is no end of things to do, so it should be a fun week. In Chicago, we will be joined by Mary Dervay, M.D., who is the Wing's Honorary President

while her husband, Dr. Joe Dervay, serves as

the AsMA President. We look forward to Mary joining us.

Over the past 10 or so years, my own experience with the Wing has been a real blessing in my life. I was a dues-paying member for years prior to then, but I never got involved and rarely attended Wing events. I went to many AsMA meetings but was too introverted to participate – some-



Mary Dervay

thing I really regret. Once I started joining in Wing activities, I quickly made friends, had fun, and learned so much from other Wing members. If you are in a similar situation – not sure about the Wing or reluctant to get involved – I suggest that you stop by the Wing hospitality room (Plaza Ballroom A) and meet some people and learn more about what we do. You will be warmly greeted and welcomed. Registration for the Wing meeting includes the Wing reception on Monday afternoon and your Wing name tag provides access to AsMA meeting sessions and exhibit areas. Registrants can also sign up to join us on our See "The Wing", p. N20

From "The Wing", p. N19

Tuesday architecture river cruise (I've taken this before, and it is really a neat way to see Chicago).

If not this year in Chicago, we will be in Atlanta in 2025, so plan ahead for that.

I look forward to seeing friends again and meeting new Wing members. I hope to see you there.

Warm regards, **Fran Lane**

President, The Wing of AsMA

The Wing of AsMA, Chicago, May 5 – 10, 2024



Yalonda Silberman, Membership Chair

Please register (if you haven't already) to let us know you are coming to Chicago. Take advantage of advance registration savings. Register online OR download and complete the form found at https://www.asma.org/asma/media/AsMA/pdf-meetings/2024%20 Chicago/Wing_registration-form.pdf and mail as directed.

Chicago is calling your name! With so many amazing choices we decided to do something different for Thursday's activities. Details of what to expect from the moment

you walk into the Hyat Regency Chicago until you enter The Wing's Hospitality / Registration room are in the March newsleter. Let us know if you missed it and would like us to email you another copy.

See the second page of the Wing registration form (found at https://www.asma.org/asma/media/AsMA/pdf-meetings/2024%20Chicago/Wing_registration-form.pdf) for details on ALL Wing activities. You'll see all our usual planned activities that you know and love!

If you've joined our Wing events before, you know The Wing tours are always a highlight of your time at AsMA. *This year during AsMA week*, we have something special in store for you! Forget about boring bus tours with stuffy tour guides. We're a lively and chatty group, and we've learned (from experience) that we have way more fun when we're free to chat and enjoy each other's company. *Here's a list of adventures we can choose from on Thursday.* We will coordinate in the Wing Hospitality Room and figure out who wants to do what.

We love TripAdvisor and have used their website for ideas and links. Credit to: https://www.tripadvisor.com/Tour-ism-g35805-Chicago_Illinois-Vacations.html.

- Shopping: https://www.tripadvisor.com/Attractions-g35805-Activities-c26-Chicago_Illinois.html
- Magnificent Mile: https://www.tripadvisor.com/Attraction_Review-g35805-d109779-Reviews-The_Magnificent_Mile-Chicago_Illinois.html
- Chicago Riverwalk: https://www.tripadvisor.com/Attraction_Review-g35805-d3743225-Reviews-Chicago_Riverwalk-Chicago_Illinois.html
- Chicago Architecture Center: https://www.tripadvisor.com/ Attraction_Review-g35805-d107442-Reviews-Chicago_Architecture_Center-Chicago_Illinois.html
- Navy Pier: https://www.tripadvisor.com/Attraction_Review-g35805-d142948-Reviews-Navy_Pier-Chicago_Illinois.html
- Millennium Park: https://www.tripadvisor.com/Attraction_neview-g35805-d278811-Reviews-Millennium_Park-Chicago_Illinois.html

- The Art Institute of Chicago: https://www.tripadvisor.com/ Attraction Review-g35805-d103239-Reviews-The Art Institute of Chicago-Chicago Illinois.html
- Museum of Science and Industry: https://www.tripadvisor. com/Attraction_Review-g35805-d131645-Reviews-Museum_of_Science_and_Industry-Chicago_Illinois.html
- Pickle Ball Options: https://www.tripadvisor.com/Attraction_Review-g186314-d10147487- Reviews-Spencer_Square_Tennis_and_Pickle_Ball_Courts_with_Coffee_Hut-Ramsgate_Isle_of_Th.html
- Skydeck Chicago Willis Tower: https://www.tripadvisor.com/Attraction_Review-g35805-d103238-Reviews-Skydeck Chicago Willis Tower-Chicago Illinois.html
- 360 Chicago Observation Deck: https://www.tripadvisor.com/Attraction_Review-g35805-d110078-Reviews- 360_Chicago_Observation_Deck-Chicago_Illinois.html
- Chicago Crime and Mob Bus Tour: https://www.tripadvisor.com/AttractionProductReview-g35805-d11453426-Chicago-Crime and Mob Bus Tour-Chicago Illinois.html
- Wrigley Field: https://www.tripadvisor.com/Attraction_Review-g35805-d104004-Reviews-Wrigley_Field-Chicago_Illinois.html
- Frank Lloyd Wright Home & Studio: https://www.tripadvisor.com/Attraction_Review-g36471-d103473-Reviews-Frank_Lloyd_Wright_Home_and_Studio-Oak_Park_Illinois. html
- Big Bus Chicago Hop On Hop Off: https://www.tripadvisor.com/AttractionProductReview-g35805-d11464149- Big Bus Chicago Hop On Hop Off Sightseeing Tour-Chicago Illinois.html
- Go City: Chicago Explorer Pass: https://www.tripadvisor.com/AttractionProductReview-g35805-d12181674- Go_City_Chicago_Explorer_Pass_with_Up_to_7_Atractions-Chicago_Illinois.html
- Chicago CityPASS: https://www.tripadvisor.com/AttractionProductReview-g35805-d12463204- Chicago_City-PASSR-Chicago_Illinois.html

What did we forget? Send us your Chicago favorites and we'll include in our next newsletter. Until then....

Register at http://www.thewingofasma.com/Conference_Registration.html OR download and complete the form found at https://www.thewingofasma.com/Conference_Registration.html OR download and complete the form form form and mail as directed.



Chicago Riverwalk

New Members

AsMA welcomed 42 new members in the past month.

- Allred, Aaron; Boulder, CO, United States
- Amburn, Brian; Galveston, TX, United States
- Baltrusaitis, Algirdas; Brookfield, WI, United States
- Bascome, Makala; Meridian, MS, United States
- Bister, Daniel; Miami Beach, FL, United States
- Brent, Christine; Ann Arbor, MI, United States
- Chaloulakou, Stavroula; Thessaloniki, Greece
- Dixon, Dayna; New York, NY, United States
- Ernst, Michael; Dothan, AL, United States
- Erskine, Aja; Davie, FL, United States
- Espina Vazquez, Lucia; Philadelphia, PA, United States
- Ford, Nathaniel; Sacramento, CA, United States
- Geary, Sarah; Hillsborough, NJ, United States
- Gersbach, Troy; Williamtown, New South Wales, Australia
- Hou, Qibo; Champaign, IL, United States
- Kelkar, Rucha; Charleston, SC, United States
- Kostolansky, Abigail; Urbana, IL, United States
- Kumar, Vikas; APO AE, United States
- Lacy, Rachel; Flowery Branch, GA, United States
- Lang, Rachelle; Seguin, TX, United States
- LeBlanc, Daniel; Houston, TX, United States
- Little, William; Dallas, TX, United States
- Lyons, Hannah; Cocoa Beach, FL, United States
- · Magadan, Andrew; Chatsworth, CA, United States
- Mahajan, Amishi; Novi, MI, United States
- Maxwell, John; Yakima, WA, United States
- McNulty, Darrion; Little Elm, TX, United States
- Meyers, Amos; Hampton, VA, United States
- Miller, Jonathan; Boise, ID, United States
- Mulligan, Stefan; Moree, New South Wales, Australia
- Nally, John; Pearland, TX, United States
- Nowitz, Joshua; Bellaire, TX, United States
- Phillips, Jeffrey; Lillian, AL, United States
- Reid, Robert; St. Albert, Alberta, Canada
- Smith, Alyson; Boise, ID, United States
- Thoolen, Stijn; Houston, TX, United States
- Turner, James; Englewood, CO, United States
- Ulm, Christopher; Buffalo, NY, United States
- Watson, John Michael; Wichita, KS, United States
- Young, Corey; Torrance, CA, United States
- · Zerkowski, Jens; Zürich, Switzerland
- Zhang, Qian; Port Orange, FL, United States

AsMA also welcomed back four returning members:

- Cleaver, Lakota; New Haven, CT, United States
- Gaines, Karen; Northfield, VT, United States
- Mathew, Tripthi; West Orange, NJ, United States
- Ward, Jessica; Boston, MA, United States

Obituary Listing

AsMA staff only recently learned that **Dr. Jay A. Danforth, B.Sc., M.D., D.Av.Med.**, of Alberta, Edmonton, Canada, died in November 2023. He was an Emeritus member and Fellow of the Aerospace Medical Association. He graduated from the University of Alberta School of Medicine and received a Diploma of Aviation Medicine (RCP) London. He served in the Canadian Forces from 1968–1976 and later became a General Practitioner

in Calgary. In 1984, he joined Civil Aviation Medicine in Canada, where he served a 2-year assignment with the International Civil Aviation Organization in Jeddah, Saudi Arabia. He then returned to Civil Aviation Medicine until he retired in 2018. His last position was working with the Adult Psychiatry Unit at the University of Alberta until he fully retired in 2021. For a full obituary, please visit https://edmontonjournal.remembering.ca/obituary/jay-danforth-1089127041.

FAA News

For more FAA news, visit https://www.faa.gov/newsroom.

Drone Safety Day

The Federal Aviation Administration (FAA) is inviting the drone community to be part of its 2024 Drone Safety Day on Saturday, April 27. This one-day national event encourages drone pilots and recreational flyers to "Fly RIGHT" by focusing on five safety elements: Register your drone and comply with Remote ID; Interact with others; Gain knowledge; Have a safety plan; TRUST and train. The FAA launched the annual campaign in 2019 to bring attention to drone safety and best practices. Safety is a shared responsibility that requires the community and the FAA to work together. For more, visit https://www.faa.gov/newsroom/faa-drone-safety-day-quickly-approaching.

Discretionary Enforcement of Drone Remote ID

Pilots who operate drones that are required to be registered must comply with the Remote ID Rule. In September 2023, the FAA issued a policy for exercising discretion in determining whether to take enforcement action for drone operators who were not able to comply with the Remote ID rule. That policy ended on March 16, 2024. Operators who do not comply can now face fines and suspension or revocation of their drone pilot certificates. Remote ID lays the foundation of the safety and security groundwork needed for more complex drone operations. It acts like a digital license plate and will help the FAA, law enforcement and other federal agencies locate the control station when a drone appears to be flying in an unsafe manner or where it isn't allowed to fly. For more, visit https://www.faa.gov/newsroom/faa-ends-discretionary-enforcement-policy-drone-remote-identification.

ICAO News

For more ICAO news, visit https://www.icao.int/Newsroom/Pages/default.aspx.

Secretary General Gains Second Term

The 36 States on the governing Council of the International Civil Aviation Organization (ICAO) appointed Juan Carlos Salazar, of Colombia, for a second 3-year term as Secretary General. Since Mr. Salazar's appointment on August 1, 2021, the ICAO Secretariat has embarked on a broad transformation of its activities and operations, ushering a new era for this specialized agency of the United Nations. Mr Salazar is an expert in aviation law and policy, with almost 30 years of experience in international negotiations in the fields of air transport, management, and regulatory affairs. Prior to his appointment as Secretary General, Mr. Salazar had served as the Director

See "ICAO News", p. N22

From "ICAO News", p. N21

General of Civil Aviation of Colombia at Aerocivil, a complex civil aviation organization with more than 3,100 employees. For more information, visit https://www.icao.int/Newsroom/Pages/ICAO-Council-appoints-Secretary-General-Salazar-for-second-term.aspx.

Cross-Border Transferability and the Cape Town Convention

Recognizing the importance of harmonized regulations, practices, and streamlined processes in the context of cross-border aircraft transactions, a new agreement between the International Civil Aviation Organization (ICAO) and the Aviation Working Group (AWG) will facilitate capacity building initiatives for States, particularly in developing States, to further enhance safety and efficiency in these processes. This work will focus on the critical areas of cross-border transferability of aircraft and compliance with the Convention on International Interests in Mobile Equipment and its Aircraft Protocol (the Cape Town Convention). It builds upon longstanding cooperation between the two organizations. The agreement encompasses the development of comprehensive implementation support, through the deployment of workshops, training, and Implementation Packages (iPacks) relating to the cross-border aircraft transfer process. This agreement also reflects the two organizations' joint commitment to supporting States in unlocking the sustainable development benefits of aviation by enhancing the efficiency of aircraft-backed financial transactions. For more information, visit https://www.icao.int/Newsroom/Pages/Enhancing-the-crossborder-transferability-of-aircraft-and-compliance-with-the-Cape-Town-Convention.aspx.





- ► 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 <u>walt3@dalitsch.com</u> if interested.

FAA AME Seminars

These are offered by the FAA AME Program Office.

May 6-9, 2024 Chicago, IL AsMA June 10-14, 2024 Oklahoma City, OK Basic Aug. 9-11, 2024 **TBD** Refresher Sept. 19-21, 2024 Jacksonville, FL **CAMA** Oct. 21-25, 2024 Oklahoma City, OK Basic Nov. 22-24, 2024 **TBD** Refresher

AsMA only takes registrations for the seminar held in conjunction with our annual scientific meeting. For more info on these seminars, please visit the <u>FAA website</u>.

NEW! Aerospace News Highlights

Every week, the Journal Department posts highlights of aerospace medical and research headlines we think would be of interest to AsMA's members, AMHP's subscribers, readers, and followers. These are posted to the AsMA News page at https://www.asma.org/news-events/asma-news/aerospace-news-highlights and to AsMA's social media accounts every Friday.



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/hhpi/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).

July 30-Aug. 1, 2024; 13th Annual International Space Station Research and Development Conference (ISSRDC); Boston, MA, United States. Early registration is now open until May 24. To register or for more information, please visit https://issconference.org/.

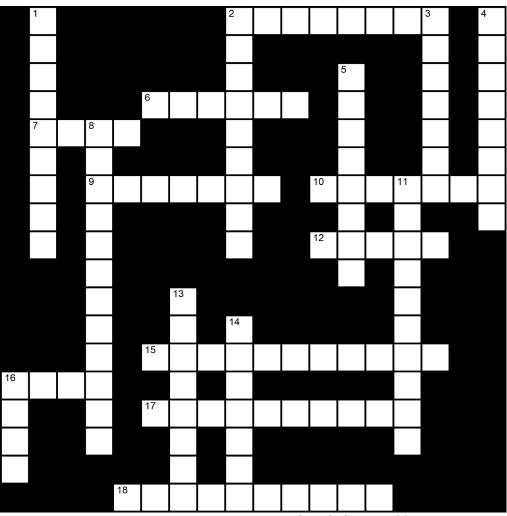
Calls for Papers

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

July 30-Aug. 1, 2024; 13th annual International Space Station Research and Development Conference (ISSRDC). The submission deadline is April 19, 2024. For more, visit https://issconference.org/technical-session-call-for-abstracts/.

April Crossword

By Lt. Col. Srihari Iyer K, Flight Surgeon, Indian Army



ACROSS

- 2. _______'s law is based on probability and assumes that the number of accidents is inversely proportional to the severity of those accidents. (8)
- 6. The _____ maneuver is said to have similar improvements in G tolerance as AGSM but with less fatigue. (6)
- 7. ____ zone around an aviator is formed in which objects becomes less distinct due to relative speed of movement. (4)
- 9. Binocular _____ occurs when there is competition between the two disparate images to each eye. (7)
- 10. After prolonged use of NVGs, some aviators can have transient _____ colored vision on returning to white light conditions. (7)
- 12. The S in VASI (a visual descent guidance information system of lights on the side of an airport runway threshold) stands for _____. (5)
- 15. Passengers seated in the aisle seat at the rear of an aircraft, because of the ______ effect, might observe that the horizontal slope of the aircraft cabin appears to slope up while the aircraft is accelerating along the runway for take-off and before the pilot raises the nose of the aircraft. (11)
- 16. Parachute opening shock is ____ in the 'rigging line first' parachute deployment as compared to the 'canopy first'

parachute deployment. (4)

- 17. _____ dimensions are measured in working positions, taking into account the certain degree of movement of the body and its flexibility. (10)
- 18. The lens effect of the canopy may make the pilot have a tendency to ______ on a visual landing approach. (10)

DOWN

- 1. In a high-speed ejection, if the mouth is open and unprotected, the _____ can cause injury to the lungs. (9)
- 2. _____ hypoxia is the most common cause of hypoxic hypoxia in aviation. (9)
- 3. The inside-out aircraft attitude display is also called a moving _____ display. (7)
- 4. Motion _____ refers to the fact that objects moving at a constant speed across the frame will appear to move a greater amount if they are closer to an observer than they would if they were at a greater distance. (8)
- 5. The closing volume of the lung increases _____ with acceleration. (8)
- 8. Type I spatial disorientation is classified as ______. (12)

See "April crossword", p. N24

From "April crossword", p. N23
11. _____ myopia phenomenon may occur when an aviator has nothing to focus on outside of the aircraft. (5,5)
13. The angle formed between the line of the thrust of an ejection seat and the long axis of the spine is called the _____ angle. (8)
14. _____ vertigo can be produced in susceptible aviators of a rotary aircraft due to the strobe lighting system. (7)

16. _____ splatter to the unprotected skin and eyes can occur to

an aviator during an explosion of the MDC. (4)

The solution can be found on p. N25.

Want to see your company's news here?

Become a Corporate Member! Corporate members receive discounts for advertising and exhibiting, and networking and recruitment opportunities, among other benefits. Visit AsMA's website for more at: https://www.asma.org/for-corporations/benefits-of-corporate-membership.

Ready to sign up? Download the application form at https://www.asma.org/asma/media/AsMA/membership/Corporate/2024_corporate-membership-application.pdf and mail or fax it in.

News of Corporate Members

Cardinal Digital Marketing Joins AsMA

Cardinal Digital Marketing is AsMA's newest Corporate Member. They are a healthcare performance marketing agency who are experienced in working with the medical air ambulance and aerospace medical industries. Located in Atlanta, GA, United States, they can assist with increasing patient volume in private practices, search engine optimization, pay per click management, pro conversion rate optimization, web design, and analytics. Resources on their website include webinars, a recorded livestream, success stories, a podcast, and a blog.

—To read more about this company, visit their website at https://www.cardinaldigitalmarketing.com.

Axiom Space Partners with Wake Forest Institute

Axiom Space has partnered with the Wake Forest Institute for Regenerative Medicine, recipient of an inaugural U.S. National Science Foundation (NSF) Engines grant. The NSF Engines grant allows user-inspired technical challenges to be addressed in collaboration with partnered institutions, including Axiom Space, through Innovation, Translation, and Education Cores (ITECs), each focused on a broad area of unmet need. The ITECs will focus on Development and Manufacturing, Biomaterials, Cell Biology, In-Space Manufacturing, and Workforce Development and will be located with Wake Forest Institute for Regenerative Medicine, North Carolina Agricultural and Technical State University, Winston-Salem State University, the RegenMed Development Organization, and Forsyth Technical Community College, respectively. In partnership with Axiom Space, the In-Space ITEC will explore a new frontier for tissue and organ regeneration in microgravity, adding significant forward-thinking engagement and workforce development through the In-Space ITEC. This grant will allow Axiom Space to further expand their existing NASA InSpace Production Applications collaboration and presence in the Regenerative Medicine Hub.

—Please visit <u>https://www.axiomspace.com/news/nsfgrant</u> to read more.



Leidos Establishes an ATM Office in the Indo-Pacific

Leidos has announced the establishment of an Air Traffic Management (ATM) Research and Collaboration Center in Singapore to keep pace with the rapidly evolving demands of global aviation. This expansion is intended to deliver safe and efficient solutions to the Civil Aviation Authority of Singapore (CAAS) and Air Navigation Service Providers in the Indo-Pacific region. The center will collaborate with regional universities, research institutes and industry partners to augment international air traffic solutions and enhance operations in the region, leveraging Leidos' 65-year history of supporting air navigation service providers and their mission. It will also provide collaborative research and development for advanced capabilities in trajectory-based operations and international air traffic flow management through Skyline-XTM—Leidos' comprehensive air traffic management platform.

—Please see https://www.leidos.com/insights/leidos-establish-es-air-traffic-management-office-indo-pacific-region for more.

Mayo Clinic Studies Health Risks of Microplastics

A landmark study just published in the New England Journal of Medicine links microplastics and nanoplastics found in plaques of human blood vessels to a potential increased risk of heart attack, stroke, or death. The exposome research of Konstantinos Lazaridis, M.D., and his team at the Mayo Clinic Center for Individualized Medicine is at the forefront of exploring how exposures, such as microplastics and nanoplastics, chemicals, and pollution, influence health. Exposome research investigates the accumulative environmental exposures throughout a person's life and their interactions with genetic factors to impact human biology and health. Dr. Lazaridis seeks to draw parallels from existing medical knowledge on exposures to essential metals like iron and copper and their effect on liver function and disease. Microplastics and nanoplastics, miniscule fragments resulting from the breakdown of larger plastic items can be ingested, absorbed, or inhaled, raising potential health risks. These findings raise concerns about the long-term

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effect of microplastics and nanoplastics, particularly for young people. Ultimately, the hope is to advance the understanding of long-term implications of microplastic and nanoplastic exposures, and to chart a course for individualized therapeutic interventions.

—Please visit https://newsnetwork.mayoclinic.org/discussion/whats-lurking-in-your-body-mayo-researchers-probing-health-risks-of-tiny-plastic-particles/ to read more.

MedAire Partners with LJ eLogbooks

MedAire has announced a partnership with LJ eLogbooks, a provider of digital logbooks. The partnership will see the creation of a new digital, medical logbook, created collaboratively between Liz Jackson and MedAire. MedAire provided input on medical considerations, so the logbook has a logical medical assessment format. The logbook will ensure that yachts adhere to regulatory compliance and maintain best practice in onboard medical record keeping. The medical logbook offers the following features: recording and reporting—medical cases, medications administered, and other health-related incidents can be recorded in real time; security and compliance—it adheres to IMO, MARPOL, and SOLAS standards; and intuitive, cloud-based solution—it is user-friendly and consistent with the format of other LJ eLogbooks.

—Please see https://www.medaire.com/about/news-centre/ press-release-detail/2024/03/20/medaire-partners-with-lj-elog-books-to-enhance-onboard-medical-record-keeping to read more.

PharmaFlight Visited by Foreign Delegation

At the end of February, PharmaFlight's management received high-ranking guests. The delegation, led by H.E. Mr. Asad Alam Siam, Ambassador of the People's Republic of Bangladesh in Vienna, was invited by the University of Debrecen and met Gyula Győri, founder and scientific director of PharmaFlight PLC and Dr. Enikő Földi, CEO of the company. After a briefing by PharmaFlight's management, the delegation from South Asia toured the unique institution in the region. The Ambassador was given a briefing by senior management and was given an insight into the training being provided, and also took a seat

Corporate News Bites

AOPA: The Aircraft Owners and Pilots Association (AOPA), surprised the winner of their Cessna sweepstakes with the plane during the Buckeye Air Fair in mid-February. The winner was Clifford Gurske, a pilot for Southwest Airlines. *Please visit https://www.aopa.org/news-and-media/all-news/2024/february/17/surprise-sprung-at-buckeye-air-fair for the complete press release.*

IFALPA: The International Federation of Air Line Pilots Associations (IFALPA) has announced the appointment of a new Technical Director at their Montreal, Canada, head-quarters. Their choice is Gordon Margison, an international aviation safety professional with perspective across multiple industry organizations including airline operators, aviation regulators, and pilot associations. *Please see https://www.ifalpa.org/news/ifalpa-welcomes-gordon-margison-as-technical-director/ for the complete press release.*

in the Airbus simulator to try out the state-of-the-art technical equipment used in pilot training. The two parties then reviewed possible areas of cooperation and agreed to continue technical discussions in the future.

—Please visit <u>https://www.pharmaflight.hu/magas-rangu-kul-foldi-delegacio-jart-a-pharmaflight-nal</u> to read more.

KBR Assists NASA with Mars Analog Mission

KBR supported a simulated Mars habitat set up to analyze humanity's ability to conduct long-duration exploration. NASA's Crew Health and Performance Exploration Analog (CHAPEA) is the first in a series of three analogs to simulate year-long stays on the surface of Mars. The 2023-2024 mission consisted of four crewmembers living in an isolated 1,700-ft², 3D-printed habitat "Mars Alpha Dune", located on the Johnson Space Center campus in Houston, TX. KBR's health and human performance professionals are involved in the project and assist in CHAPEA preparations, operations, and post-mission research via NASA's Human Health and Performance Contract (HHPC). During the mission, the crew faces various challenges from living in yearlong confinement to engaging in space-based activities, including simulated spacewalks using virtual reality and tracking data on physical and behavioral health and performance. Environmental stressors such as resource limitations, communications delays, equipment failure, and significant workloads are also implemented. KBR HHPC experts and their team monitor and analyze everything from food systems and exercise to medical well-being and behavioral health. The team uses online surveys and tests to assess team dynamics and performance. These responses are used to understand how resource allocation and restriction impact behavior and performance, and what indicators are most important so they can monitor them in a way that is targeted.

—Please see https://www.kbr.com/en/insights-news/stories/ analyzing-psychological-impact-first-mars-habitat-simulation to read more.

Crossword Solution

