

# Ever Upward: May 2024

# **Research Assistance Requested**

Dr. Christopher Brooks, an Emeritus member of AsMA, has been wondering if there is any connection between Diver's DCS and Alzheimers. Please contact him at the email below if you can assist with his research:

#### "Dear Reader.

I recently met up with one of our old clearance divers who is suffering from Alzheimer's Disease. Over the years dating back to 1976, I have treated him for Decompression Sickness twice. In lucid moments, he recalls that he has been bent more times than that. Unfortunately, he has lost his diver's log.

My quick review of the literature is notably absent in asking the question whether there is any connection between DCS and Alzheimer's disease in military or commercial divers. Having asked the question, I feel morally and professionally responsible for looking into the problem in more depth. I would be grateful if any or the readership can further help with my quest."

Dr. C. J. Brooks, M.B.Ch.B., FFOM, D.Av.Med., OMM, O.St.J.CD; gnmowgli@gmail.com

### **New Members**

AsMA welcomed 45 new members in the last month.

- Anthony, Jessica; Houston, TX, United States
- Azargoon, Homa; Raleigh, NC, United States
- Beenhakker, Liscia; Soesterberg, Utrecht, Netherlands
- Benko, Michael; Travis AFB, CA, United States
- Chappell, Paul; Hartford, MI, United States
- Cutaiar, Jill; Northville, MI, United States
- Dervay, Ryan; Houston, TX, United States
- Eiehm, Atom; Davenport, IA, United States
- Feng, Henry; Camperdown, New South Wales, Australia
- Fleurat, Michelle; San Francisco, CA, United States
- Foley, Anna; Fort Worth, TX, United States
- Fourno, Maxim; Soesterberg, Utrecht, Netherlands
- Fowler, Joyce; Little Rock, AZ, United States
- Griswold, Dylan; Stanford, CA, United States
- Jarman, Polly; Muskegon, MI, United States
- Kakkar, Nidhi; Stockport, Greater Manchester, United Kingdom
- Knight, Noelle; Patuxent River, MD, United States
- Kozak, Magdalena; Warszawa, Poland
- Kresin, Kora; Beaverton, OR, United States
- Kulp, Daniel; Fort Walton Beach, FL, United States
- Long, William; Elliot Lake, Ontario, Canada
- Manley, Edwin; Pace, FL, United States
- Marcano, Alejandro; Stockholm, Sweden
- Murray, Erica; Dothan, AL, United States
- Osorno, Stefany; Medellin, Colombia
- Pasternack, Laura; Santa Ana, CA, United States
- Peña, Oscar; Benton, LA, United States

- Polozola, Adam; Palmetto Bay, FL, United States
- Prusisz, Tyler; New Orleans, LA, United States
- Ritch de Herrera, Thaddeus; Rose Valley, PA, United States
- Roe, William; Lincoln, CA, United States
- Sant'Anna, Marcelo; Hortolândia, São Paulo, Brazil
- Shah, Abby; Ann Arbor, MI, United States
- Shahi, Nikki; Denver, CO, United States
- Shipman, Anna; Huntsville, AL, United States
- Shubin Stein, Ken; Westport, CT, United States
- Slater, Robert; Folsom, CA, United States
- Sofer, Summer; Tel Aviv, Israel
- Spencer, Cara; Boulder, CO, United States
- Tan, Matthew; Moterey Park, CA, United States
- Thurmond, Karen; Longwood, FL, United States
- Tibbs, Michael; Hanscom AFB, MA, United States
- Tindle, David; Fennville, MI, United States
- Vasquez-Garcia, Hellen; Hayward, CA, United States
- Woo, Alvin; Singapore, Singapore

AsMA also welcomed back three returning members:

- Ilcus, Lidia; Fort Belvoir, VA, United States
- Ruff, Juliette; New Bern, NC, United States
- Sabaner, Eda; Kütahya, Türkiye

# **Obituary Listing**

AsMA staff were saddened to hear that Karen A. "Skim" Rupp, M.D., M.P.H., BSN, Lt.Col., died in mid-April. She served as the Chief of Aerospace Medicine at the 354th Medical Group, 354th Fighter Wing, Eielson AFB, AK. Before that, she was Chief of Aerospace Medicine at Shaw AFB, NC. She was a native of Alaska and was awarded a Health Professions Scholarship to study medicine at Indiana State University School of Medicine in 2004. She received her M.D. in 2009, completed an internship at St. Francis Hospital in Evanston, IL, and was awarded her flight surgeon wings in 2010. She earned her M.P.H. at Wright State University, Dayton, OH, and served residencies in Aerospace Medicine at the U.S. Air Force School of Aerospace Medicine, Wright-Patterson AFB, OH, and in Family Medicine at Wright State University.

Dr. Rupp was board certified in both family and aerospace medicine and was a member of the American Academy of Family Physicians, the American Society of Aerospace Medicine Specialists, and the Aerospace Medical Association. Her awards included the Meritorious Service Medal with one oak leaf cluster and the Air Force Commendation Medal. She authored several publications and had been preparing to become a Squadron Commander later in 2024. An online obituary can be found at <a href="https://www.freemanfamilyfuneralhomes.com/obituaries/dr-karen-rupp">https://www.freemanfamilyfuneralhomes.com/obituaries/dr-karen-rupp</a>.

### **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.

# **Wing News**

# The Wing of AsMA, Hyatt Regency, Chicago, May 5–10, 2024 WHAT TO PACK?

Hey there, fellow Winglets and AsMA accompanying guests! Wondering what to pack and what to wear in Chicago? Well,



Tiffany Leary, Fun Wing member & Special Contributor

you've come to the right place. I'm not selling anything, I'm just trying to help you streamline your travel wardrobe for the main event and give you some packing wisdom so you'll be prepared for anything Chi-town tries to throw your way. What should you expect for Chicago weather? Anything. Literally anything! The lake affects the weather in such a way that it can change from day to day, even multiple times a day. Make sure and check the weather forecast right before you travel.

WEATHER: If you are expecting a "what to expect when prepping for Chicago weather" post, what you're reading now is

not what you're looking for! Expect literally anything! (Don't worry, I think we have passed the opportunity for a polar vortex! See The Frozen Bean; ridiculous fictitious credit goes to <a href="https://www.theonion.com/frigid-chicago-bean-shrivels-up-from-below-zero-tempera-1832192615">https://www.theonion.com/frigid-chicago-bean-shrivels-up-from-below-zero-tempera-1832192615</a>).

Click here for Chicago, IL, USA 14 day weather forecast. The lake creates its own climate. Make sure and check the weather forecast right before you travel, but I will try to give you some packing wisdom so you'll still be prepared for the basics. Try packing a mini capsule wardrobe (aka some items that will mix and match or layer in case the winds change again). This will give you firepower so you can turn the "Windy City" into "Your Kind of Town"!

PACKING: I would suggest packing a mini capsule wardrobe (aka several items that will mix and match) to keep your luggage light and easy to manage. Carry-on travel is possible, it just takes a little planning. So, my 7-day packing formula is: 3-4 pants + 6-9 tops + 2 sets of jewelry + 2 shoes + scarf (example links at the end of the article).

Please tailor to your own style! Do you prefer dresses? Skirts? Pants? Make sure you do your own thing!!!

Don't forget a good pair of walking shoes. Even if you take the train, a cab, or a bike, you will still be walking quite a bit. Limit your shoes to 2 pairs (maybe 3!). This will cut down on the weight. Something comfy and functional, and something nice.

WARMTH: Be sure to remember layering options. Bring a base layer, just in case it is colder than expected.

A scarf will be a valuable addition, both for blocking the wind or even wrapping your packages from shopping (I learned a lot when I lived in Japan!).





Make sure you have a waterproof/wind-breaking outer layer. Chicago is notorious for sudden spring showers. And the wind off of the lake can be strong!

FASHION: This city is known for its trendiness, but not flashiness. Think classic neutrals instead of bold patterns. Select a little punch of floral or classic stripes as an accent, but stick to the neutrals. This will also make a mix-and-match style capsule easier to decide what to wear and still have options.

Read about the 'sudoku' mix and match method here: wardrobe sudoku.

**Extras:** Jewelry. Don't go overboard. Chicago isn't the mobridden city it once was and there are more security cameras around the city than ever before, but you don't want to tempt petty theft. Millennium Park is a safe area, but <u>this warning</u> will give you some safety tips.

Don't forget a packable umbrella... just in case! And PJ's! And all of your personal items and toiletries! Remember, whatever you pack, make sure you're comfortable!

Sometimes I find it better to copy someone else's ideas. Here are some examples of some Chicago-specific spring mini capsule wardrobes or suitcase inspiration, if you want to see some ideas! Dr. Julie's Life, Kelly in the City, Glass of Glam, The Ultimate Guide, and minimal capsule wardrobes: <a href="https://livelovesara.com/2024/04/12-piece-edgy-minimalist-sum-mer-capsule-wardrobe-2024/">https://livelovesara.com/2024/04/12-piece-edgy-minimalist-sum-mer-capsule-wardrobe-2024/</a>.

Last-minute advice: Make sure you're comfortable! Can't wait to see you in Chicago!!!

### HERE'S THE PLAN

With AsMA's 94th Annual Scientific meeting Chicago only days away, you'll be relieved to know you still have time to register in



Yolanda Silberman, Membership Chair

advance for The Wing and our activities. It's great when you let us know you'll be joining us. And even if your travel plans are still up in the air, no worries! You can register on site at a slightly higher fee. We are now so close to arrival time; we truly need to get our counts to the Chicago planning team. We want to ensure space for everyone. We look forward to seeing you. Let's make Chicago 2024 unforgettable! To register, visit <a href="http://www.thewingofasma.com/Conference\_Registration.html">http://www.thewingofasma.com/Conference\_Registration.html</a>.

For up-to-date information on everything happening at AsMA, be sure to download the AsMA App! Go to your favorite App Store and search for "AsMA Events"! Download, open, and start clicking.



See "The Wing", p. N28

Wing of AsMA Activities

### Sunday, May 5, 2024

# Sun May 5 9:00 AM - 5:00 PM Events 9:00 AM Wing of AsMA Executive 11:00 AM Board Meeting 1:00 PM Wing of AsMA Hospitality & 1 5:00 PM Registration Plaza Ballroom A

### Monday, May 6, 2024



### Tuesday, May 7, 2024





### Wednesday, May 8, 2024

iCal

★ My Schedule Wing of AsMA Luncheon & Business Meeting (McCormick & Schmicks) Wed May 8 10:30 AM - 1:00 PM

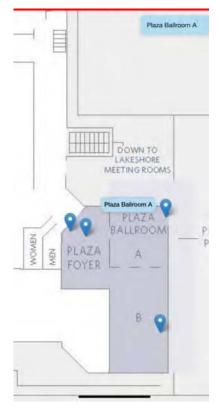
Map Hotel Entrance Lobby

### Thursday, May 9, 2024

Fun Day w/ Wing Friends – "On our own, but not alone."

We have from Sunday until Thursday to plan – be sure to connect with your Wing friends, old & new, to join in.

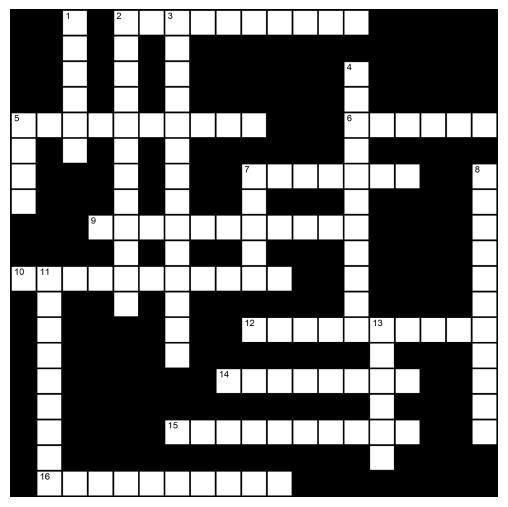
### **Plaza Ballroom**





### Crossword

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**

- combustion ramjet is traditionally known as scramjet. (10)
- anthropometry are measured in working positions and take into account body movement and flexibility.
- 6. A cockpit is generally designed around the \_\_\_\_\_ eye position. (6)
- 7. Pressure breathing without chest counterpressure will result in pressure breathing \_\_\_\_\_. (7)
- 9. One of the early findings of post-decompression collapse is an increase in the blood \_\_\_\_\_. (11)
- \_ is the ability of Anthropomorphic Test Devices to duplicate the biomechanical responses of a human exposed to identical impact conditions. (11)
- 12. Oxygen paradox most probably occurs due to the combination of hypotension with \_\_\_\_\_\_. (10)
  14. The H in SHELL model refers to \_\_\_\_\_\_. (8)
- 15. disorientation can also be called force disorientation. (10)
- 16. If the brightness of an image in each eye differs by more than 10%, there is significant degradation of \_\_\_\_\_\_. (10)

### **DOWN**

- 1. Automation is a tool to aid, not replace, the pilot is the philosophy of aircraft manufacturer. (6)
- refers to a sensation of weight that is acting in a direction that is no longer vertical with respect to the earth. (12)
- is a method in which the body is photographed and the dimensions are measured. (14)
- 4. Rigid water immersion suits work on the principle of development of \_\_\_\_\_ pressure which opposes similar forces produced in the cardiovascular system. (11)
- 5. The negative-G strap is part of a \_\_\_\_ point harness. (4)
- 7. S in STOL aircraft stands for \_\_\_\_\_. (5)
- 8. True Airspeed is equivalent airspeed corrected for and pressure altitude. (11)
- 11. Exposure to +Gz acceleration \_\_ plasma renin levels. (9)
- 13. Illusion of depth by depicting distant objects as paler, less detailed, and usually bluer than near objects is called as \_\_ perspective. (6)

*The solution is on p. N31.* 

# **News of Corporate Members**

# Norwich University Is Newest Corporate Member

Norwich University in Northfield, VT, is AsMA's newest Corporate Member. Their goal is to educate people so they can be citizens of the world. There are both military and civilian educational paths available. The campus is located in rural Vermont, with 1200 acres containing trails for hiking, biking, skiing, and snowshoeing. Norwich University prides itself on being the birthplace of the Reserve Officers' Training Corps (ROTC). There are 45 states and 21 countries represented in their class of 2025 and the university is in the top 10 of nationally recognized institutions for producing commissioned military officers. There are undergraduate, graduate, and professional development programs available, some on-campus and some online.

—For more information about Norwich University, please visit <a href="https://home.norwich.edu/">https://home.norwich.edu/</a>.

## **Leidos Awarded Army Contract**

Leidos was recently awarded a follow-on prime contract to provide the U.S. Army with technology-enabled services, including hardware sustainment, modernization, refresher training, and logistics support. The Responsive Strategic Sourcing for Services (RS3), indefinite delivery/indefinite quantity (IDIQ) task order has a base period of 11 months, with four 1-year options. Under the task order, Leidos experts in Command, Control, Communication, Computers, Cyber, Intelligence, Surveillance, & Reconnaissance (C5ISR) will assess Army hardware capabilities against performance parameters, build out hardware configurations, and implement upgrades. Leidos will also help to coordinate equipment warehousing, shipping, and warranty repair. The task order was awarded by Army Contracting Command-Aberdeen Proving Ground.

—Please visit <a href="https://www.leidos.com/insights/leidos-awarded-267-million-army-c5isr-and-cots-systems-task-order">https://www.leidos.com/insights/leidos-awarded-267-million-army-c5isr-and-cots-systems-task-order</a> to read more.

### **Retired Astronaut Joins Axiom Space**

Axiom Space welcomed recently retired Japan Aerospace Exploration Agency (JAXA) astronaut Koichi Wakata as a newly appointed Astronaut and Chief Technical Officer for the Asia-Pacific region. Wakata, a veteran astronaut with decades of human spaceflight experience, will lead the expansion of Axiom Space's business and strategic presence in the Asia-Pacific region and contribute to the advancement of Axiom Station, the world's first commercial space station. Wakata contributed to the construction of the International Space Station (ISS) and the Japanese Experiment Module "Kibo." He was the first astronaut to serve as JAXA's ISS Program Manager and Vice President for Human Space Technology. He officially retired from JAXA on March 31, 2024, finishing out his career in the space agency as senior management for the ISS and lunar exploration programs.

—Please see <a href="https://www.axiomspace.com/news/koichi-wakata">https://www.axiomspace.com/news/koichi-wakata</a> for more.



## **Mayo Clinic Expands Its Data Network**

Mayo Clinic Platform continues to expand its distributed data network, Mayo Clinic Platform\_Connect1, which now includes eight of the world's leading health systems across three continents: Seoul National University Hospital, SingHealth and UC Davis Health, which join Hospital Israelita Albert Einstein, Mayo Clinic, Mercy, Sheba Medical Center and University Health Network (UHN) as founding members. The global network makes available years of de-identified multimodal clinical data to help improve patient care by providing a new healthcare architecture that allows more tailored medicine, healthcare products, digital services and solutions based on artificial intelligence. Connect provides researchers and innovators with secure, cloud-based access to data using Mayo Clinic Platform's proprietary Data Behind Glass 2 approach, where each healthcare system controls its data. The Platform focuses on patient outcomes through the following: improved clinical decision-making; advanced healthcare solutions; and expanded expert knowledge. Mayo Clinic now has four of the top 11 hospitals in the world on its Platform.

—Please visit https://newsnetwork.mayoclinic.org/discussion/mayo-clinic-platform-expands-global-footprint-of-its-distributed-data-network/ to read more.

### PharmaFlight Presents on Measurement System

PharmaFlight held a presentation in Croatia at the Hotel Esplanade in Zagreb, where their staff presented the PHAPA measurement system and its applicability in various economic sectors. The decades-long professional background behind it was also mentioned, as well as their joint partnership with the Croatian company Poliklinika Terme Selce. At the event, Hungarian hurdler Gréta Kerekes and Zeljko Oreski, president of the Croatian Air Traffic Control Association, also testified about the measurements. The all-day event, organized jointly by Pharma-Flight with its Croatian partner, Poliklinika Terme Selce, was attended by members of the Croatian press, as well as representatives of many organizations, such as dm, Croatian Airlines, A1, and the Croatian Ministry of Labour, among others. Once the presentation was over, participants had a chance to try the system.

—Please see <a href="https://www.pharmaflight.hu/elettani-meresunk-mar-a-horvat-piacon-is-elerheto">https://www.pharmaflight.hu/elettani-meresunk-mar-a-horvat-piacon-is-elerheto</a> to read the complete release.

See "Corporate News", p. N31

### Want to see your company's news here?

Become a Corporate Member! Visit <a href="https://www.asma.org/for-corporations/benefits-of-corporate-membership">https://www.asma.org/for-corporate-membership</a> for info.

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space-medical-association-asma

# **AOPA Planning DC Flyover**

To celebrate general aviation and coinciding with the Airplane Owners and Pilots Association's (AOPA's) 85<sup>th</sup> anniversary, on May 11<sup>th</sup>, AOPA will be flying a conga line of approximately 60 airplanes down the Washington, DC, Mall. Beginning with a Beechcraft Staggerwing, the line of aircraft will tell the story of general aviation as each flight of 3-4 passes over the show center. The event will be narrated and live streamed on AO-PA's YouTube page by AOPA's Tom Haines and former CNN correspondent, Miles O'Brien. This event is aimed to bring awareness to, and grow interest in, general aviation. It will be a great opportunity for Flying Clubs to get together, break out the BBQ, pour a few beverages, and enjoy a storied show of general aviation history.

—Please visit https://youcanfly.aopa.org/flying-clubs/flying-club-newsletter/2024/april/21/news-from-hq to read more.

## **Corporate News Bites**

**InoMedic:** Representatives from InoMedic recently took part in the annual Bridging Partnerships Small Business Symposium. *Please visit the Facebook post at http://bit.ly/3Wqalt7 to read more.* 

UTMB: The University of Texas Medical Branch (UTMB) supports a program in Lima, Peru, called El Comedor ("The Dining Room" in English) which feeds children in the local community and educates mothers on preparing healthy and affordable meals using local ingredients. For more, please see <a href="https://www.utmb.edu/spph//department/of-global-health/news/news-articles/improving-the-nutritional-health-of-children-in-lima-peru">https://www.utmb.edu/spph//department/of-global-health/news/news-articles/improving-the-nutritional-health-of-children-in-lima-peru</a>.

ALPA: The Air Line Pilots Association (ALPA) recently released a statement applauding the Department of Transportation (DOT) for announcing a mandate requiring most freight and passenger railroads to operate trains with two-person crews. Please visit <a href="https://www.alpa.org/news-and-events/news-room/2024-04-02-alpa-applauds-dot-commit-ment-to-safety">https://www.alpa.org/news-and-events/news-room/2024-04-02-alpa-applauds-dot-commit-ment-to-safety</a> to read the complete statement.

### **Meetings Calendar**

May 19-22, 2024; 108th American Occupational Health Conference (AOHC), Loews Royal Pacific Hotel, Orlando, FL, United States. For more info, visit <a href="https://acoem.org/American-Occupational-Health-Conference-(AOHC)">https://acoem.org/American-Occupational-Health-Conference-(AOHC)</a>.

**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 <a href="https://issconference.org/">https://issconference.org/</a>.

# **Calls for Papers**

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

### **KBR Awarded Contract**

KBR announced it has been awarded a contract by SABIC Fujian Petrochemicals to license KBR's market-leading phenol technology in China. Under the terms of the contract, KBR will provide technology licensing and proprietary engineering design for a 250 KTA phenol plant at SABIC's Fujian Petrochemical Complex. The final investment decision for this project was announced in January 2024 with expected completion in FY 2026. KBR's phenol technology offers a sustainable and differentiated solution through reduced energy consumption and improved yields. KBR has offered its leading phenol technology for more than six decades, completing more than 50 phenol projects worldwide.

—See https://www.kbr.com/en/insights-news/press-release/kbrs-phenol-technology-selected-sabic-fujian-petrochemicals for more.

### **Crossword Solution**

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### **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.

### **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
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.