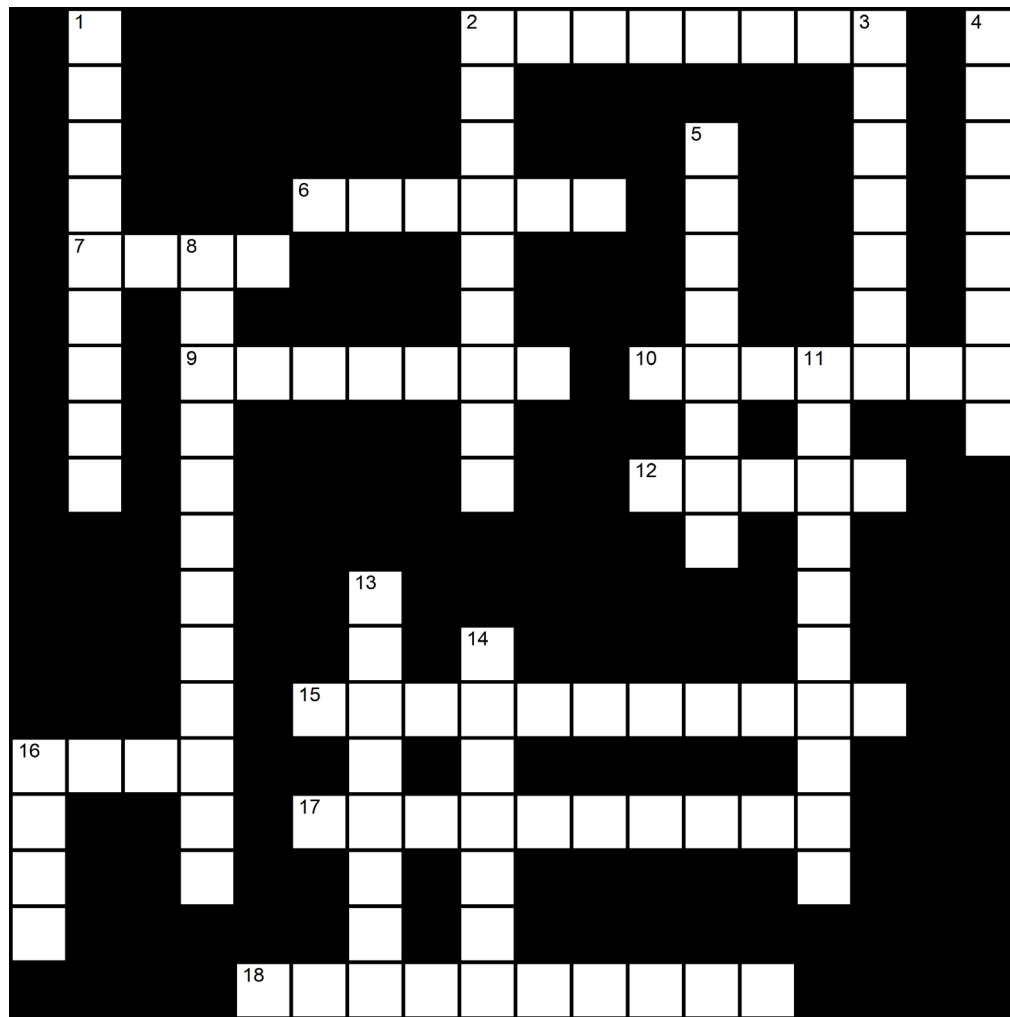


April Crossword

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 become 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. N23

From "April crossword", p. N22

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. N24.

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News of Corporate Members

Cardinal Digital Marketing Joins AsMA

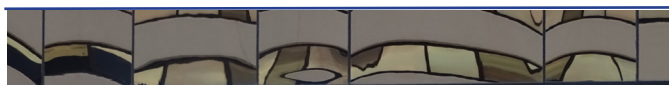
Cardinal Digital Marketing is AsMA's newest Corporate Member. They are a healthcare performance marketing agency who are experienced in working with the medical air ambulance and aerospace medical industries. Located in Atlanta, GA, United States, they can assist with increasing patient volume in private 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 <https://www.axiomspace.com/news/nsfgrant> 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-X™—Leidos' comprehensive air traffic management platform.

—Please see <https://www.leidos.com/insights/leidos-establishes-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, minuscule 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

See "Corporate News", p. N24