NOVEMBER 1996

Infectious disease transmission low in flight (Arizona Department of Health Services, Phoenix, AZ): "We investigated the likelihood of transmission of tuberculosis (TB) from a highly infectious passenger with pulmonary/laryngeal TB to other persons aboard two airline flights, each approximately 1.25 h in duration... The 146 passengers with known U.S. residence and 15 flight crew were... asked to complete a risk factor questionnaire and return this form with TST information provided by the health care provider... Five passengers were found to be TST positive. There were no positive TST's identified among flight crewmembers. Each of the TST positive individuals had a risk factor for a positive TST. The TST positive individuals were seated throughout the plane, and each was seated at least 5 rows away from the passenger with infectious TB... Although the possibility of transmission cannot be excluded, the findings of our investigation support a low likelihood of TB transmission during the study flights."1

Long-term effects of GLOC (Defense and Civil Institute of Environmental Medicine, North York, ON, Canada): "Of the 29 pilots, 12 experienced G-LOC during the centrifuge training. The flying performance of the 17 non-G-LOC pilots was not affected by their exposure to [high sustained G (HSG)]. Of the 12 G-LOC pilots, 11 had no measurable performance decrement while 1 pilot, after a severe G-LOC, stalled and 'spun-in' on take-off and then (after being reestablished on the outbound radial) could not complete the task. This same pilot flew the task very well 45 min later. This study did not identify a degradation in flying performance after HSG nor after G-LOC except in the 1 pilot... Whether or not a pilot's flying performance is affected after G-LOC may be related to the severity of the G-LOC. Some pilots may experience seizure activity relating to the G-LOC with a resulting sustained performance decrement that appears to resolve by 45 min. It is possible that some of the other G-LOC pilots in the study might have had measurable performance decrements if we had been able to have them fly the task while they were still in the gondola (i.e., immediately after the G-LOC)."²

NOVEMBER 1971

Future food for flight (NASA Manned Spacecraft Center, Houston, TX): "Since the flight of Freedom 7 (Mercury 6), the evolution of space food systems has been marked by the application of technological principles to design and develop unique food formulas and packages so highly acceptable, safe, nutritious, and convenient food would be available for the astronauts...

"The new generation of manned orbital space flights will begin when the space shuttle program is activated in the mid-1970's. During preliminary food-system-design studies for the space shuttle, it has been determined that optimum overall food-system performance can be obtained by maximizing the use of rehydratable foods. Rehydratable foods allow maximum vehicle payload because food weight is reduced by approximately 80 percent when water is removed. Adequate water for rehydration is available from fuel cells. Excellent rehydratable foods are in the current space-flight food inventory. These foods have been developed and verified for flight during the Mercury, Gemini, and Apollo missions. The advantages of diets composed of rehydratable foods also have been verified by comprehensive studies of the physiological performance of crew members in earthbased situations. The space shuttle program also will require a unique, fast-response, ground-based-resupply food-service program of airline design. The results of trade-off studies have established that this type of logistical system can be adapted best to space flight by utilizing rehydratable foods. Thus, the advances achieved in the Apollo food program will continue to have a strong influence on the development of food programs for future space missions."3

NOVEMBER 1946

Sanitized aircraft for global transport (Air Transport Command, U.S. Army Air Forces, Wright Field, OH): "The Air Transport Command of the Army Air Forces... maintained and operated, at its peak, facilities and air routes which extended 184,000 miles, using 3,090 major transport planes, 209,000 military personnel, and well over 100,000 civilian personnel... [Additionally] twenty-one [civilian airlines] functioned as contract carriers...

"The problems of sanitation aboard aircraft has necessitated scrupulous cleanliness of commodes, with a chemical liquid deodorant used in flight. Careful attention must also be directed to a potable water supply in water tanks and thermos jugs. Certain types of the latter have been found to suffer cracks in the lining, with subsequent absorption of debris and contaminants. To maintain proper cleanliness and sanitation at each service stop, special trained fleet service teams inspect, clean and re-equip each transport aircraft, replacing commodes, thermos jugs and such items as towels and soap.

"The preventive medical aspects of global air transportation are concerned principally with quarantine and disinsectization procedures. Physical inspections are conducted at ports of aerial embarkation and debarkation

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THIS MONTH IN AEROSPACE MEDICINE HISTORY, continued

for and from overseas areas, which fulfill the quarantine requirements of the Public Health Service. Disinsectization by use of an aerosol bomb spray must be accomplished on all aircraft leaving areas where insect vectors of diseases are found. Immunization requirements for military personnel are complete. The commercial airlines may find it necessary to recommend immunization against typhoid and smallpox, as well as typhus, cholera and plague, for those of their passengers going to regions where the incidence of these diseases is high.²⁴

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Erratum

Concerning the article: Blacker KJ, Seech TR, Funke ME, Kinney MJ. Deficits in visual processing during hypoxia as evidenced by visual mismatch negativity. Aerosp Med Hum Perform. 2021; 92(5):326–332.

In this article, there was an error in the direction for the ERP waveforms in two places. In the Methods, on p. 329, second to last paragraph, second to last sentence, it says: "After artifact rejection, average waveforms were calculated for standard and deviant trials separately and then difference waves were created as standard minus deviant." This sentence should read "After artifact rejection, average waveforms were calculated for standard and deviant trials separately and then difference waves were created as standard minus deviant." This sentence should read "After artifact rejection, average waveforms were calculated for standard and deviant trials separately and then difference waves were created as deviant minus standard."

This error was repeated in the caption for Fig. 4. The first sentence says "ERP difference waveforms (standard – deviant) for each experimental session for A) a group of posterior electrodes and B) a group of frontal midline electrodes." It should read "ERP difference waveforms (deviant – standard) for each experimental session for A) a group of posterior electrodes and B) a group of frontal midline electrodes."

We sincerely apologize for the error and any inconvenience this may cause.