

Aerospace Medicine Researcher: Federal Aviation Administration

Meet Dr. Chuck DeJohn, an Aerospace Medicine Research Physician who concentrates on medical and human factors research for the Federal Aviation Administration. Read more about his experience to see if aerospace medical research may be right for your future career.

Profession: Aerospace Medicine Research

Workplace: Federal Aviation Administration, Civil Aerospace Medical Institute

Education: D.O., Oklahoma State University; M.P.H, University of Alabama, Birmingham; M.S. University of West Florida; B.S. University of Oklahoma.

Years in practice: 49 years in aviation, 24 years in aerospace medicine research.

My typical day: The one thing about my job as an FAA Research Medical Officer is that there is no such thing as a typical day. You really don't know what you're going to do when you come into the office every morning. You may plan to work on scheduled research projects, such as whether sport pilots have a greater accident rate than general aviation pilots, or how the accident rate for pilots with diabetes compares to other pilots. But, if the Federal Air Surgeon calls with a special request, wanting to know how many one-eyed pilots have had accidents, or congress is requesting information on the use of inflight medical kits on airliners, my day gets redirected. The only sure thing is that I'll be doing research, which is what I enjoy doing.

My challenges and rewards: Using my knowledge and experience to provide the FAA Office of Aviation Medicine and others in the industry the data to make better, data-driven decisions making the National Airspace safer for everyone.

How aerospace medical research is different:

Aerospace medicine, is a preventive or occupational medicine specialty that promotes the health and functional well-being of pilots, aircrews, and astronauts, as well as passengers. It involves the study of the biological and psychological effects of aviation, including exposure to changing temperatures, large inertial forces, oxygen deprivation, air sickness, and fatigue.

Skills I need for aerospace medicine:

A knowledge of aerospace medicine and human factors, along with a good understanding of aerodynamics and the flight environment are essential.

Books I recommend:

Fundamentals of Aerospace Medicine (4th edition, April 2015) by Davis, Johnson, Stepanek and Fogarty
Human Factors in Aviation (February 2010) by Wiener and Nagel

Online resources:

www.asma.org
www.faa.gov
www.nts.gov

