



Biography – Dr^a Katherine Andrea Lemos



Dr^a Lemos is an Aviation Safety Professional and Social Psychologist with a record of exceptional contribution to the advancement of safety performance and human factors.

As a Visiting Professor at the **Instituto Tecnológico De Aeronáutica (ITA)** in São Jose dos Campos, she teaches the following disciplines in the Aviation Safety and Continued Airworthiness Professional Master and Specialization programs:

- **Human Factors in Aviation Safety:** *Overview of broad range of human factors in aviation from systems and life-cycle perspectives*
- **Aviation Safety Management Systems:** *ICAO requirements for the aviation industry and lessons learned from High Reliability Organizations across diverse industries*
- **Human Factors in Aviation Systems Engineering:** *Engineering: Systems engineering perspective in addressing human factors in design of equipment and procedures*
- **The Human Element in Safety Performance:** *Social influence and sustainable behavior change in aviation and medical domains*

She also works for the **Federal Aviation Administration (FAA)** in the Office of Accident Investigation and Prevention (AVP) in the capacity of an active leader and subject matter expert spanning a variety of system safety domains with the goal of accident prevention:

- Human Factors
- Accident Investigation and Analysis
- Data Sharing and Analytic Techniques for System-Level Mitigation
- Organization and System Safety
- Change Management Leadership
- Research and Development
- Government-Industry Coordination

Prior to this, Dr^a Lemos worked at the FAA as a Flight Deck Human Factors Specialist within the Aircraft Engineering Division of Aircraft Certification, developing guidelines for advanced technologies, overseeing related research and development, and training test pilots in how to carry out human factors evaluations in the certification process.

She also worked for the **National Transportation Safety Board (NTSB)** as a Senior Human Performance Investigator in Aviation Safety for domestic and international major accident investigations, and then as Special Assistant to Vice Chairman of the Board, supporting accident investigations across all transportation modes and the promotion of NTSB recommendations.

Dr^a Lemos holds a Ph.D. from the University of Iowa in Social Psychology, and has been a researcher or faculty member of the following institutions carrying out aviation research and development:

- NASA Langley Research Center
- National Institute of Aerospace
- University of Maryland Department of Aerospace Engineering
- University of Iowa Department of Industrial and Mechanical Engineering

In addition to her education in Social Psychology, she holds a Master's Degree in Counseling Psychology, a Bachelor's Degree in Business Management, and is a Certified Change Management Practitioner from APMG-International.

Prior to joining the aviation industry, she worked in the medical domain for 10 years, conducting research on risky behaviors, decision-making, team interactions and methods to promote sustained belief and behavior change in effecting safety performance at the level of the individual, group, organizational and in broader cultural societal norms.

Dr^a Lemos comes from a family of aviators and takes a personal interest in aviation safety. She is a Captain and active Check Pilot/Flight Instructor for the Civil Air Patrol based at Andrews Air Force Base, MD, and holds a certificate for flight instruction – instruments (CFII) for single- and multi-engine land and sea aircraft. She also contributes to Professional Pilot Magazine, with articles that seek to provide practical tools in reducing the role of human error through accident case examples.