

Human Factors/Aviation Medicine: \$+5.601 million

Human Factors research responds directly to Congressional Directives, FAA Strategic Direction, and aviation community initiatives to eliminate accidents caused by human error, and to implement new systems that fully account for the role of people in the system. The proposed cut in Human Factors funding will have major impacts on current and programmed Flightdeck, Air Traffic/Airway Facilities, and Aviation Medicine research.

1. The following Flightdeck/Aviation Maintenance/System Integration research projects will be canceled: human factors evaluation of electronic chart information layering; improving pilot training for automated cockpit operations; development of methods to link Flight Operations Quality Assurance data and pilot training performance data in order to assess air carrier pilot training effectiveness; development of advanced general aviation training techniques; human factors evaluation of angle of attack instrumentation for general aviation; and baselining of aircraft maintenance human factors related accidents and incidents.
2. The scope of these impacts to the Air Traffic/Airway Facilities human factors research program includes: cancellation of Air-Ground Integration Experiments directed at identifying information requirements associated with distributed air-ground operations, and studies on operational and procedural impacts associated with the dynamic allocation of en route airspace boundaries.
3. Air Traffic/Airways Facilities projects which will be seriously delayed are incomplete development of tools and approaches for the study and assessment of human error in Air Traffic Management system development and decreased development and ability to disseminate educational materials addressing the mitigation of fatigue in the Air Traffic Controller workforce. The program will be degraded in its ability to handle computer-human interface assessments and rapid prototyping projects associated with the ongoing research program. There will be incomplete data and understanding of human performance impacts, and consequently on safety and efficiency benefits, resulting from transitions to enhanced capabilities.
4. The reduction in Aviation Medicine will result in complete elimination of the only contract funding within aeromedical research. This funding supports the fifth and final year of the FAA's Congressionally mandated NIOSH research program investigating cabin air quality, disease transmission, symptomology and galactic radiation exposure of cabin occupants and flight crews.
5. Aviation Medicine will be unable to maintain the same level of quality and number of biochemical analyses performed in support of the NTSB to determine the presence or absence of pharmacological agents (drugs) associated with aircraft fatalities. The results frequently determine the cause of fatal accidents and point to corrective actions for enhancing aviation safety.