

Senate Q&A 17

Question: Last year, the FAA Administrator testified in the same hearing, “I think it is absolutely critical and important (to contain costs). We are putting every measure that we can in place to contain costs. . . . we always have to be looking at ways to keep those cost down. As Ken Mead and others have said, it is particularly challenging when you have a budget that is made up primarily of personnel costs. We have to recognize that as we look at some of the efficiencies, I put a lot of hope on the kind of efficiencies we have talked about in our contract negotiations and our agreed-upon contract with NATCA. Asking people to take on more responsibilities as well as some of the other efficiencies that we have talked about are very important.” **To date, the subcommittee is unaware of any significant cost savings that have emerged at the FAA due to increased efficiencies. Please provide a list and quantify them for the subcommittee. In addition, the subcommittee views the cost control measures that the FAA has taken to be on the order of one time annual savings—cutting training, travel, slowing hiring or replacement personnel, etc., -- what savings has the FAA instituted that have significant efficiencies in the out years? Please provide a list and quantify the out years savings.**

Answer: Two strategies have been identified to increase the efficiency and effectiveness of the NAS from a human factors perspective. These strategies cover the primary areas of human factors research and applications.

Federal Aviation Administration Cost Containment / Efficiency Activities

Organization	Cost Containment /Efficiency Activities	Estimated Savings*

*Specify annual or one-time savings.

Federal Aviation Administration FY 2000 Cost Control Activities

Organization	FY 2000 Cost Control / Cost Avoidance Activities	Estimated Outyear Savings
AAR-100	Conduct human factors research to provide the knowledge base and foundation for the increased efficiency and effectiveness of FAA operations and the integration of human factors into NAS systems and applications. This includes such activities as: <ul style="list-style-type: none"> a) Basic Electronic Specialist Test – This improved screening test for selection of Airway Facilities new-hires will provide an estimated \$3-\$5 million/year in reduced training costs. b) The Air/Ground Integration Experiment, a joint FAA/NASA human-in-the-loop simulation, addresses shared separation responsibility between air traffic controllers and pilots in a free flight environment. The FAA has contributed \$700K and has leveraged \$1M from NASA. c) The human factors certification job aid will assist certification engineers in assessing the likelihood of an applicant’s submission resulting in designed-induced human performance errors. The job aid will also enhance the speed, accuracy, and repeatability with which certification engineers can access relevant regulatory and human factors information to make their choices. Projected savings in labor is 4000 hours. Cost savings is approximately \$200K d) Projected research that includes human-in-the-loop simulations addressing human factors issues with future air traffic control concepts will be awarded to a university with existing capabilities. A 	\$4M \$1M \$200K \$100K

	cost savings of approximately \$100K will be realized in comparison to funding the study at the FAA William J. Hughes Technical Center.	
AAR-100	Apply human factors best practices through engineering activities to ensure human factors issues are integrated in FAA acquisitions and applications. This includes such activities as: a) Monitoring FAA acquisition policy/guidance, processes, and best practices and proposing revisions such as modifying the Acquisition Management System policy, or ensuring the acquisition and assignment of human factors personnel; b) Reviewing and acquiring the necessary technical tools, capabilities, and techniques, such as system emulation prototyping capabilities; c) Conducting human factors training, such as general human factors awareness training, or technical training on the application of color to air traffic control systems; d) Conducting activities and assessments across systems and applications to ensure that human factors issues/potential impacts and risks continue to be identified, documented and resolved.	Undetermined (however, one recent program indicated that a \$3 million expenditure would avoid an expense of \$171 million.