

DTIC Current Awareness: June 2002

General Accounting Office. (2002). *Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (Report No. GAO-02-591). Washington, DC. (DTIC No. ADA402639)

<http://handle.dtic.mil/100.2/ADA402639>

Abstract: The Federal Aviation Administration (FAA) is responsible for managing the nation's air transportation system so that the 200,000 aircraft taking off and landing each day can safely and efficiently carry more than 700 million passengers per year. Because of the significant hiring in the early 1980s to replace strikers who had been fired, many thousands of FAA's controllers will soon become eligible to retire, potentially leaving FAA with too few fully trained controllers. Because of these concerns, the chairman and ranking democratic member of the Subcommittee on Aviation, House Committee on Transportation and Infrastructure, asked GAO to (1) identify likely future attrition scenarios for FAA's controller workforce and (2) examine FAA's strategy for responding to its short- and long-term staffing needs, including how it plans to address the challenges it may face. To identify likely future attrition scenarios, we (1) reviewed FAA's 10-year hiring plan and associated attrition forecasts for approximately 15,000 controller specialists who actively control and separate traffic in the air and on the ground; (2) analyzed FAA's workforce database to determine when the current controllers (those at FAA as of June 30, 2001) would become eligible to retire; (3) developed a computer model to predict future attrition based on historic levels; and (4) developed and administered a survey to a statistically representative sample of controllers so as to obtain information on when they might leave FAA. GAO's analysis covers over 20,000 controllers—the 15,000 controller specialists whom FAA analyzed, plans about 5,000 controllers who supervise and manage the air traffic control system. GAO included the additional personnel because attrition from these positions is generally filled from the controller specialist ranks and, thus, omitting them would understate potential attrition among all controllers.

Wilkens, T. T. (1999). *Earned Value, Clear and Simple*. Los Angeles, CA: Metropolitan Transportation Authority. (DTIC No. ADA402619)

<http://handle.dtic.mil/100.2/ADA402619>

Abstract: The term "Earned Value" is gaining in popularity around project management circles as if it is some wonderful new concept to be embraced. Yet, it has been in use since the 1960s when the Department of Defense adopted it as a standard method of measuring project performance. The concept was actually developed as early as the 1800s when it became desirable to measure performance on the factory floor. Today, it is both embraced and should often in response to prior experience or stories told in the hallway." The opponents will generally cite the cost and effort to make it work, and the limited benefit derived from its implementation. The proponents will cite the cost savings to the project overall, the improved analysis, communication and control derived from its implementation.

Wright, P., Hollnagel, E., & Dekker, S. (Eds.). (2000). *ECCE 10: Confronting Reality. Proceedings of the Tenth European Conference on Cognitive Ergonomics*. Linköping, Sweden. (DTIC No. ADA402318)

<http://handle.dtic.mil/100.2/ADA402318>

Abstract: Human work has irrevocably become work with technology and the nature of work has changed to make the role of human cognition more important. Modern society has come to depend on the safe and efficient functioning of a multitude of technological systems in areas as diverse as industrial production, transportation, communication, supply of energy, information, and materials, health and finance. ECCE-IO focuses upon the practical issues of human interaction with technology in the context of work and in particular how human cognition affects, and is affected by work and working conditions. The main topic areas of ECCE-IO are accident investigations, applications engineering, automation design, classification schemes and taxonomies, decision making, design and use of tools and interfaces, modeling of cognition and joint systems, performance analysis and prediction, risk and reliability studies, simulation, system design, development and training.