### **AEROSPACE**



- The aerospace industry comprises of companies producing aircraft, guided missiles, space vehicles, aircraft engines, propulsion units and related parts. Aircraft overhaul, rebuilding and parts are also included (U.S. Bureau of Labor Statistics, www.bls.gov.oco/cg/cgs006.htm).
- Other sectors of the economy depend on aerospace businesses and related disciplines for technical skills and technologies that are critical elements of our security infrastructure and to improve America's position in the global marketplace (President's Commission on the Future of the United States Aerospace Industry).
- Aerospace Industries Association President and CEO John Douglass stated that "U.S. aerospace is a strategic industry in the nation's economy, homeland security and national defense."

## High Growth INDUSTRY PROFILE



#### **Aging Workforce**

Among the issues facing the Aerospace workforce is the impending retirement of many mature workers, who possess experience and intellectual capital. Employers in the industry must protect the skills base, including improving the basic employability skills of entry level workers.

#### **Loss of Technical Talent**

Additionally, to compensate for a loss of technical talent, Aerospace employers must rely on youthful and diverse workers, found in non-traditional labor pools. Efforts must also be increased in improving public perceptions of the industry in order to retain talent and generate interest in aerospace careers. Also, reducing turnover, improving retention and improving high-tech skills in existing workers are key objectives in bolstering Aerospace's workforce system.



(Source: U.S. Bureau of Labor Statistics, 2006-07 Career Guide to Industries and 2006-07 Occupational Outlook Handbook)

 Employers need well-informed, knowledgeable employees who can keep up with the rapid technological advancements in aerospace manufacturing. The industry provides substantial support for the education and training of its workers. Firms provide on-site, job-related training to upgrade the skills of technicians, production workers and engineers. Classes teaching computer skills and blueprint reading are common. Some firms reimburse employees for educational expenses at colleges and universities, emphasizing four-year degrees and postgraduate studies.

- To enter some of the more highly skilled production occupations, workers must go through a formal apprenticeship. Machinists and electricians complete apprenticeships that can last up to four years. Apprenticeships usually include classroom instruction and shop training.
- Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer to applicants with a minimum two-year associate degree in engineering technology. Training is available at technical institutes, community colleges, extension divisions of colleges and universities and public and private vocational-technical schools and in the Armed Forces.
- Many engineering technicians assist in design work, therefore creativity is desirable. Because these workers often are part of a team of engineers and other technicians, good communication skills and the ability to work well with others also are important.
- The National Institute for Certification in Engineering Technologies (NICET) has established a voluntary certification program for engineering technicians.
  Certification is available at various levels, each level combining a written examination in one of about 30 specialties with a certain amount of job-related experience, a supervisory evaluation and a recommendation.

# TA in Action

In June 2003, ETA announced the President's High Growth Job Training Initiative to engage businesses with local education providers and the local/regional workforce investment system to find solutions that address changing talent development needs in various industries.

In October 2005, the Community-Based Job Training Grants were announced to improve the role of community colleges in providing affordable, flexible and accessible education for the nation's workforce.

ETA is investing more than \$260 million in 26 different regions across the United States in support of the WIRED (Workforce Innovation in Regional Economic Development) Initiative. Through WIRED, local leaders design and

implement strategic approaches to regional economic development and job growth. WIRED focuses on catalyzing the creation of high skill, high wage opportunities for American workers through an integrated approach to economic and talent development.

These initiatives reinforce ETA's commitment to transform the workforce system through engaging business, education, state and local governments and other federal agencies with the goal of creating a skilled workforce to meet the dynamic needs of today's economy.



#### nvestments

ETA has invested \$12,475,953.00 in the aerospace industry. This includes seven High Growth Job Training Initiative grants totaling \$8,856,453, two Community-Based Job Training Grants totaling \$3,619,500. Leverage resources from all of grantees total \$17,729,384.00.



#### esources

For additional background information about the industry and details on the grants, information about employment and training opportunities and workforce development tools for employers, educators and workforce professionals, please visit: www.doleta.gov/BRG, www.careervoyages.gov, www.careeronestop.org, and www.workforce3one.org.