

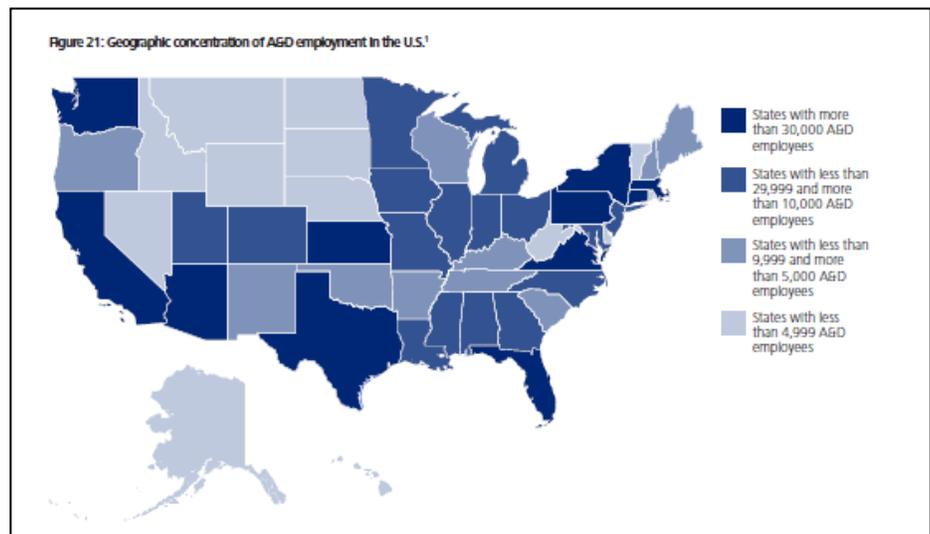
# ASSURING THE VIABILITY OF THE U.S. AEROSPACE AND DEFENSE INDUSTRIAL BASE

## AN AIAA INFORMATION PAPER

**ABSTRACT:** Continued stability of the U.S. aerospace and defense (A&D) industrial base is critical to our economy, national security, infrastructure, and future workforce. The A&D industry is facing one of its greatest challenges in history as Congress and the Administration deal with mounting national debt and the need to balance the federal budget. All federal agencies face significant budget reductions, with the Department of Defense (DoD) potentially bearing the biggest burden. While all areas must be examined to identify unnecessary spending that can be reduced or eliminated to help lower the federal budget deficit and national debt, we must make sure that the nation's future is not mortgaged to address today's crisis.

**BACKGROUND:** The aerospace and defense industry employs more than one million people. Annual sales are nearly \$331 billion and the industry supports more than two million middle-class jobs. In 2010, these workers received \$84.2 billion in wages and paid \$15.4 billion in U.S. federal individual income tax, and \$1.9 billion in state individual income taxes. These numbers represent only industry employment; in addition the federal government employs an estimated 845,198 aerospace and defense skilled workers at DOD, FAA and NASA.<sup>i</sup> Aerospace sales alone account for \$77.5 billion in exports, providing the economy with a foreign trade surplus of more than \$50 billion. Conservatively, U.S. aerospace sales account for three to five percent of our country's gross domestic product (GDP). The industry's workforce is highly skilled and leads our nation in global competitiveness, providing current and future opportunities for young people to have high-paying careers that will keep the industry strong for the future while advancing our national and economic security.

The A&D industry can be found in every state of the nation. The seven states with the highest numbers of industry employees (in descending order) are California, Washington, Texas, Florida, Arizona, Connecticut, and Virginia. These states account for 48.5% of the total industry employment in the U.S. as of 2010.



The A&D industrial base possesses inimitable capabilities and expertise required to address the unique and diverse missions required by both their civil and military customers. The domino effect of reduced federal budgets will undoubtedly force some companies to go out of business and still others to significantly scale back, resulting in single-source suppliers, or perhaps no domestic supplier for certain items on the critical development path. If those capabilities are allowed to erode in this lean budget environment, this nation could become technologically bankrupt and unable to address future threats to our national security or economic stability when they arise.

According to senior executives at manufacturing and service companies that support the U.S. military, the projected \$480 billion in additional DOD budget cuts projected over the next decade could cripple certain defense sectors, resulting in an industrial base that is smaller, less innovative, and less responsive to urgent wartime needs. The impact would not just be felt by the large prime contractors but felt more deeply by the lower-tier subcontractors who tend to be smaller and less diversified. Impacts of major cuts would most likely include:<sup>ii</sup>

- Forcing firms to close production lines and lay off skilled full-time workers – beyond the thousands already let go in the wake of previous budget cuts and program cancellations – specialized manufacturing capacity and human capital that cannot be regenerated without great cost and significant time.
- Reducing or eliminating investments in capabilities beyond those needed to meet existing contracts;
- Making defense companies and business units – manufacturing and service, up and down the supply chain – more likely to exit the sector altogether, consolidate further, be divested by their parent corporation or, in the case of smaller companies, either be acquired or just go out of business.

Likewise, future U.S. space operational capabilities face industrial base challenges, both from reduced production capability and from loss of supporting human expertise.

The A&D industry also contributes in ways not directly represented in GDP, employment, revenue and taxes paid. Although it has only been a little over 100 years since the Wright Brothers first flew, technology created by the A&D industry has changed the way we live, work, travel, and communicate.

If we are to maintain our technological leadership, national security, economic well-being, and quality of life, Congress and the Administration must carefully consider the impact of budget cuts on the continued viability of the aerospace and defense industrial base.

---

<sup>i</sup> Deloitte, Draft of The Aerospace and Defense Industry in the U.S., A financial and economic impact study produced in February 2012 for the Aerospace Industries Association.

<sup>ii</sup> November 11, 2011 letter signed by Marion Blakey, AIA; Lawrence P. Farrell, Jr., National Defense Industrial Association; and Stan Soloway, Professional Services Council.