

# Reinvigorating the Manufacturing and Defense Industrial Base

## The Industrial Base Executive Order

American forces have been at war for more than 15 years. Combined with spending constraints imposed by the Budget Control Act of 2011 (BCA), our armed forces – and our industry – have come under significant strain. Although sequestration’s cuts have been somewhat mitigated by Overseas Contingency Operations (OCO) funding and short-term budget agreements, appropriations have been unpredictable and inconsistent. Despite the dedication of our troops, and the noble work of our companies, neither the government nor the private sector can operate properly under these conditions; it is no surprise that senior civilian and military leaders have publicly warned that they are struggling to maintain readiness and modernize capability.

There is wide bipartisan agreement that our military readiness has declined, and our industrial base would have difficulty surging to support a defense buildup or to replace losses in a conflict. On July 21, 2017, President Trump issued an executive order entitled Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States, which notes that “The ability of the United States to maintain readiness, and to surge in response to an emergency, directly relates to the capacity, capabilities, and resiliency of our manufacturing and defense industrial base and supply chains.”

## AIA’s Response

This initiative is consistent with one of AIA’s major priorities to “Promote a secure, efficient and innovative industrial base that shapes and supports U.S. national security strategy and enhances economic growth.” To focus our efforts surrounding the Executive Order, we have established an Industrial Base Working Group (IBWG) of senior industry thought leaders to serve as industry’s main conduit of information and dialogue with the Department of Defense and other agencies. As its agenda develops, the IBWG has begun to focus on four pillars of the industrial base – **robust, balanced and stable defense spending, streamlined acquisition policy, a talented workforce, and stewardship of key capabilities** – and **10 initial priorities** that DOD’s assessment must address.

## Examining the Industrial Base – Four Pillars, Ten Priorities

### ► **Robust, balanced and stable defense spending**

The United States military relies on the vitality and ingenuity of the American free market system to provide the goods and services it needs to win. The foundation of a healthy manufacturing and defense industrial base is a stable, high demand signal, with: **(1) robust budgets** to begin buying back readiness capability lost to BCA cuts; **(2) balanced funding** that meets today’s readiness and operational requirements, while investing in the procurement and modernization needs of tomorrow’s military; and **(3) stable appropriations** across fiscal years, permitting DOD and industry to plan effectively to meet our national security strategy. For more than a decade, funding has been inadequate and unreliable – Congress must provide budget stability, so that our companies can ensure a strong and resilient supply chain.

### ► **Streamlined acquisition policy**

In our response to President Trump’s January 30, 2017 ‘Two-for-One’ Executive Order on de-regulation, AIA submitted recommendations to repeal, replace or modify 70 different DFARS 252 clauses or solicitation provisions.\* AIA believes DOD has the opportunity to unleash enormous innovation, flexibility and speed in the procurement of vital defense capabilities. In its assessment of the industrial base, DOD should consider areas such as:

- **(4) Reforming the contracting process:** Curtailing the use of ‘lowest price technically acceptable’ (LPTA) contracts; shortening an awards process that often takes well over a year; broadening the use of lot buys and multi-year procurements; and de-layering duplicative and costly audit processes. These reforms will enable companies to better innovate and reduce overhead costs.

- ▶ **(5) Improved DOD-industry dialogue to encourage innovation:** In a free market economy, companies that take risks and develop innovative technology and methods should be encouraged and rewarded. They need flexibility in using independent research and development funds, and their investment in intellectual property and data development must be protected.
- ▶ **(6) Synchronized defense and commercial aerospace trade policies:** Defense exports to America's trusted allies and partners advance U.S. foreign policy and national security interests while creating sustainable aftermarket sales for small and medium-sized companies. Encouraging strong commercial aerospace exports benefits DOD as well; while most of the aerospace and defense industry's \$90 billion trade surplus can be attributed to commercial trade, that trade generates economies of scale and revenue that companies in the supply chain exploit to sustain and drive innovation in their defense business. In both cases, a whole of government approach to trade promotion and negotiation must combine with greater government-industry communication and coordination.
- ▶ **A talented workforce**  
The aerospace and defense industry boasts a workforce of 2.4 million people in the United States. These are skilled, high-wage jobs, but we face challenges recruiting and retaining the best available talent – studies show that by 2025 industry will have as many as two million jobs unfilled. To recover, we must:
  - ▶ **(7) Invest more in STEM education to develop critical skills:** Our traditional disciplines of aerospace, mechanical and electrical engineering must be augmented by cognitive computing, artificial intelligence, machine learning and materials and data science. Other emerging needs include reshaping of Systems Engineering and advanced manufacturing from factory floor to research and development.
  - ▶ **(8) Modernize and accelerate the security clearance review process:** Many of the positions in defense manufacturing require appropriately cleared personnel; however, the background investigations for more than 700,000 federal civilians, military personnel and industry employees have not yet been conducted. This backlog is increasingly impairing our troops' ability to carry out their missions, and our industry's ability to support them. Solving this problem depends on additional resources and concurrent, continuous automation and modernization of the investigation process.
- ▶ **Stewardship of key capabilities**  
Some vital defense capabilities are threatened by adverse market conditions or single points of failure. For example, the Navy currently relies on a single facility to build and repair nuclear submarines. As the number of major acquisition programs diminishes, opportunities for truly competitive bidding become rarer. In other areas, like cyber or unmanned systems, we need to better understand potential opportunities and vulnerabilities. Two areas of focus should be:
  - ▶ **(9) Adapting business processes by embracing digital transformation:** Digital transformation is not simply digitization of paper – it is an organizational change that enables companies to maximize use of digital data. Digital transformation can drive innovation and increase industry's ability to bring products to market faster and at lower cost.
  - ▶ **(10) Fostering innovative technologies:** Many U.S. defense programs rely on secure access to hardened microelectronics from a domestic source that cannot be disrupted in the event of hostilities. We also need a focus on developing advanced materials that are lighter and more durable.

## Conclusion

Addressing the health of the aerospace and defense industrial base begins and ends with one salient fact: the best way to ensure long-term industrial vitality is for the U.S. government to provide sustained, high demand for aerospace and defense products. The lethality and survivability of our armed forces depend on industry's contribution. If industry is to provide the best possible products and services, Congress must provide robust, balanced and stable funding.

The President's Executive Order has come at a critical time and we applaud his decisive action on behalf of our industry. Ultimately, these issues are not just about the health of American industry, but about our ability to sustain U.S. and allied forces in a severe and possibly prolonged conflict. With streamlined regulations, a healthy workforce, stewardship of certain specialized capabilities and a sustained high demand signal from DOD, that ability can be secured.

\*AIA's recommendations, contained in a September 11, 2017 letter to the DAR Council, can be found here: <https://www.regulations.gov/document?D=DARS-2017-0001-0015>