

Defense Industrial Base

American Competitiveness Perspective Paper

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In Brief

- Defense industrial base is a key component of American competitiveness
- Engineering and technology skillsets at risk
- Stable and predictable budgets needed
- Look beyond companies: the defense industrial base workforce/pipeline needs attention
- Encourage new entrants, better practices in industry AND government

Introduction

Some of the most damaging effects of sequestration and stop-and-go budgeting this year will be the hardest to see from Washington.

Nowhere is this more true than with American competitiveness, and in particular the defense industrial base (DIB) -- the network of thousands of companies that do everything from designing landing-gear doors for the Air Force's stealthy fighters to constructing 2,700-ton warships for the Navy.

The Defense Department spends hundreds of billions of dollars each year on goods and services from the private sector.

Even with stakes like this, there is far more on the line.



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The defense industrial base is tied to American competitiveness in the 21st Century. For that reason, leaders in the private and public sector must take steps to thrive during a drawn out period of changing expectations while also remaining committed to keeping the country strong through innovation, long-term investment and disciplined management.

Competitiveness is defined by a nation's ability to lead globally on the strength of its actions and ideas, to support a vibrant free-market system, to nurture a responsive democratic political system and to uphold a social contract that honors economic and social progress for its citizens.

Political and business leaders need a consensus that improving our nation's competitiveness is an urgent priority with much higher stakes than acknowledged today.

It is a matter of national security.

A Key Component Of Competitiveness

The defense industrial base comprises much of the country's aerospace know-how and directly supports the military and intelligence community. It sustains an engineering and technology work force whose focus is different than, for example, consumer-oriented IT firms.

In one of his last public addresses at Georgetown University, former Defense Secretary Leon Panetta spoke up for the defense industrial base.

Mr. Panetta's appeal to "invest in the ability to maintain ... that decisive technological edge in the future and maintain our industrial base in this country" underscores this is no parochial matter for the Pentagon.



While it makes sense that the Pentagon's budget should come down after rising more than 80% since 2001, how that reduction is managed is one of the most important questions for American power in the 21st Century.

As it stands, the Pentagon's budget officials and service chiefs are forced to scramble for tranches of money that a few years ago would have been considered inconsequential to the overall Defense Department budget.

"We are in triage mode in terms of getting through this year," Pentagon comptroller Robert Hale recently said. "But these near-term actions won't solve the problems of sequestration."¹

The ultimate cost of sequestration will not be tallied up for some time. But we have already seen signs of disruption, which impacts the defense industrial base. In February, the Navy said it was putting off an overhaul of the aircraft carrier USS Abraham Lincoln, a move that causes problems for the rest of the fleet's maintenance and operations.² It is an example of the ripple-effect risk that one change can have.

Assessing America's national security frequently focuses on how many carrier battle groups the country can send to sea or the end strength of the Marine Corps.

But gauging America's strength is not a matter of orders of battle. As the drama around sequestration and the country's fiscal policy shows, other crucial elements such as the national debt, an efficient and responsive political process, a productive education system and a viable defense industrial base are all part of what will make America strong in the coming decades.

Sec. Panetta's caution is worth heeding because the defense industrial base is important to more than just the military or the local economies that rely on a particular production line or engineering facility. The value is much broader, and it is interconnected to other elements of American competitiveness.



Changing Focus

It is easy to see the defense sector through the lens of its highest-profile products, such as an aircraft carrier or a \$200 million fighter. After all, the U.S. exports more weapons than any other nation, recording more than \$66 billion in sales in 2011³. Each of those weapons systems is the product of effort by thousands of smaller firms, a veritable economic food chain spread throughout the country.

The figure that may matter the most is 1 million. That is the number of workers in the aerospace and defense sector.⁴ These companies, and the technologies they bring to market, count on taxpayers to support science and engineering jobs that are unique to the sector. Their experienced employees will move on to more prosperous fields if they are not given incentives to stay. This is among the aerospace and defense industry's biggest challenges: how to retain, reward and advance their best workers.

This also leads to consideration of a broader series of questions for policymakers: What market forces should influence the defense industry's fortunes? Will this hurt or help the country in the long run? How can more market-driven business practices improve contractor performance?

Another area where this comes into play is with strategic materials such as rare earths metals. The Defense Department recently concluded that America faces supply shortfalls for nearly two dozen materials. China dominates the market for many rare earths. This requires a long-term approach to an issue that is regularly eclipsed by more pressing matters. It also necessitates a strategic look at America's vulnerabilities.

These challenges come amid significant changes to the political climate around defense spending.

Discussions of cutting the deficit point to plans that will certainly reduce military spending, particularly on costly hardware that the industry relied on as mainstays of its profitability and growth. While the biggest government contractors say they are diversified, thousands of subcontractors and suppliers are far more vulnerable to this cyclical business. Initiatives such as the “Better Buying Power” approach to acquisition are a hallmark of the current cycle in the industry, and pressure to improve efficiency will continue to rise.

The tension for policymakers and Congress is the government needs a financially sound and responsive defense industrial base, yet taxpayers do not want to be forced to prop up these firms when this cyclical industry faces a downturn.

Seeking Solutions

Among the steps that will help the industry in the near- and long-term are those that can be looked at as investments in the future, even during a time of budget cuts. This frames such support within a systemic look at the country’s national security and the role that dynamic and innovative companies must play in it.

1. **Support science, technology, engineering and math programs at all education levels.** Start with a focus on two areas: raising support for relevant PhD-level programs and offering more mechanisms to bring high school students into advanced STEM-related coursework tracks. This support can realize benefits within the defense industry as well as in related sectors.
2. **Establish new on-ramps for Pentagon contractors.** Smaller firms and new entrants from more dynamic sectors of the economy should be drawn in to help support the health of the defense industrial base. Foreign firms investing in the U.S. commercial aerospace production should also continue to be encouraged to compete, though policymakers will have to weigh this competition with the desire to retain certain industrial capabilities that otherwise would be lost.
3. **Involve the defense sector in infrastructure projects.** The American Society of Civil Engineers recently gave the U.S. a “D+” grade in its 2013 survey. Aviation received a “D” grade, as did transit and roads. Major government contractors have useful expertise in some areas such as air traffic control, and commitment to such programs will help retain the kind of systems engineering expertise the government prizes. There is a considerable amount of money on the line, which also underscores the chance for government and industry to prove they can better manage major programs so they are completed more quickly and on budget. The U.S. needs to spend \$1.6 trillion more than the \$2 trillion currently forecast by 2020, ASCE found, if needed improvements are to be done.



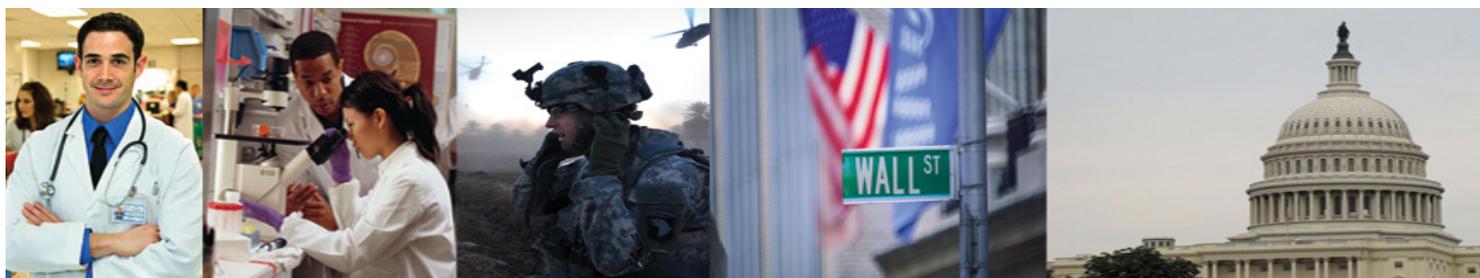
4. **Commit to stable and predictable budgeting.** While encouraging multi-year acquisition may seem preposterous during a time of continuing resolutions and late-night budget deal making, the current approach to budgeting is currently so ineffective that it makes sense to make serious changes. For industry and government alike, being able to budget out beyond a single fiscal year for select programs offers potential savings and could decouple acquisitions and politics, if only slightly. Such an approach would rest, however, on certifying a program as meeting a very high performance standard.
5. **Ensure strategic materials access and supply.** The Defense Department needs to use its strategic materials analysis to come up with a near-term plan to address these potential shortfalls. Relying on China as an ongoing source for rare earth metals is not viable over the long term because of the advantage it gives a potential strategic rival.⁵ Options such as rapid stockpiling may be attractive but need to be carefully considered given the impact that would have on market pricing. Similarly, a prudent approach to North American production is needed given the clear environmental impact. Capturing the importance of improving American competitiveness and weighing these costs, it is worth fully exploring alternative technologies and systems to bypass the use of rare earths when possible.

Conclusion

Improving American competitiveness depends on changing current government policy and corporate sector practices as much as it does in the approach toward coming up with these solutions.

The defense industrial base is an important test for the country's resolve to improve our economic capability and resiliency while also strengthening our national security in obvious and not so obvious ways. There are, of course, other crucial components of American competitiveness that also need urgent attention.

Taking on the challenges faced by the defense industrial base will help set the stage for coming up with strategic approaches to all of them.



This report follows on from ASP's White Paper: [American Competitiveness – An issue of National Security](#)



August Cole is an Adjunct Fellow at the American Security Project, he specializes in Defense Industry Policy, Oversight, Strategy and Financial Markets; Battlefield and Intelligence Contracting; «Smart Power».

From 2007 to 2010, Cole reported on the defense industry for The Wall Street Journal from Washington. He covered companies ranging from Boeing to Blackwater, as well as broader defense policy and political matters. From 1998 to 2006, he worked as an editor and a reporter for MarketWatch.com, a financial Web site, where he began covering the aerospace and defense industry. In 1998, he worked as an intern at the Freedom Forum's European Centre in London and as an intern at the NBC News London bureau.

August is also is a writer focusing on national security issues. His fiction writing tackles themes at the core of American foreign policy and national security in the 21st Century, including the privatization of military and intelligence operations and the future of American power in the Pacific.

Endnotes

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Building a New American Arsenal

The American Security Project (ASP) is a nonpartisan initiative to educate the American public about the changing nature of national security in the 21st century.

Gone are the days when a nation's strength could be measured by bombers and battleships. Security in this new era requires a New American Arsenal harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor of our economy; and the power of our ideals.

We believe that America must lead other nations in the pursuit of our common goals and shared security. We must confront international challenges with all the tools at our disposal. We must address emerging problems before they become security crises. And to do this, we must forge a new bipartisan consensus at home.

ASP brings together prominent American leaders, current and former members of Congress, retired military officers, and former government officials. Staff direct research on a broad range of issues and engages and empowers the American public by taking its findings directly to them.

We live in a time when the threats to our security are as complex and diverse as terrorism, the spread of weapons of mass destruction, climate change, failed and failing states, disease, and pandemics. The same-old solutions and partisan bickering won't do. America needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities the new century offers.



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