



Why We Need to Address Industrial Mobilization Now, Before the Balloon Goes Up

John G. (Jerry) McGinn, Ph.D.
Executive Director, Greg and Camille Baroni Center for Government Contracting
Costello College of Business, George Mason University

Testimony before the Senate Armed Services Committee
March 6, 2025

Dear Chairman Wicker, Ranking Member Reed, and Members of the Committee:

Thank you very much for the opportunity to speak with you today. I am honored to discuss industrial mobilization with all of you and very much look forward to your perspectives on this critical issue facing our nation.

The United States has the most lethal and capable fighting force in the world. Nonetheless, our munitions stocks will be emptied the first weeks of a major conflict – today’s war games have shown this. Significant production challenges supplying munitions and precision guided missiles to Ukrainian and Israeli forces have underscored our inability to rapidly replenish weapons and major systems.

These challenges led me to conduct a study that addressed the following question, ***“How well positioned is the U.S. defense industrial base to mobilize in the event of a major conflict?”***

The short answer, published in our report last fall, is that our ability to win a major war with a near-peer adversary is very much at risk.¹ Profound challenges continue to stymie progress in our defense industrial base despite significant leadership attention and resources. Unless senior officials across Washington and industry pursue bold actions immediately, we face potentially

¹ John G. (Jerry) McGinn, *Before the Balloon Goes Up: Mobilizing the Defense Industrial Base Now to Prepare for Future Conflict*. The Greg and Camille Baroni Center for Government Contracting Report No. 10, October 3, 2024. Available at <https://business.gmu.edu/news/2024-10/balloon-goes-mobilizing-defense-industrial-base-now-prepare-future-conflict> (accessed March 4, 2025).

catastrophic consequences should the balloon go up—to use a phrase first popularized in World War I to signify the imminent start of conflict—in East Asia or elsewhere.²

During this study, we examined how the United States has mobilized its industrial base in response to various crises: the creation of the renowned arsenal of democracy during World War II (WWII); the development and deployment of the Mine-Resistant Ambush-Protected (MRAP) vehicle during operations in Afghanistan and Iraq; the response to the COVID-19 pandemic; and U.S. and allied efforts to support Ukraine’s defense against the Russian invasion. **Table 1** illustrates the findings from these cases:

Table 1: Case Study Findings

Case study	Keys to success
WWII (1938-1945)	<ul style="list-style-type: none"> • Strong national leadership • Close and dynamic government-industry collaboration • Rapid development, iteration, and fielding of systems • Building and maintaining public support
MRAP (2006-2013)	<ul style="list-style-type: none"> • Senior leadership sponsorship • Utilization of established, largely foreign, designs • Rapid development and fielding • Flexibility in requirements • Multi-sourcing strategy
COVID-19 (2020-2021)	<ul style="list-style-type: none"> • Powerful authorities such as the Defense Production Act • Strong bipartisan consensus • Delivering at the speed of need
Ukraine (2022-present)	<ul style="list-style-type: none"> • Production capacity • Flexible acquisition practices to meet exigent circumstances • Addressing supply chain vulnerabilities and bottlenecks • Working with allies and partners to build overall industrial capacity

These findings helped us to identify a series of recommendations that can improve how the Executive and Legislative Branches, working with industry as well as allies and partners, enable our industrial base to deter and defeat national security threats. These recommendations are summarized in **Table 2**:

² This phrase originated in the deployment of observation balloons in the face of imminent enemy attack. See, for example, William Safire, “On Language: Balloon Goes Up On War,” *New York Times*, February 3, 1991.

Table 2: Recommendations to Strengthen Mobilization

Element of Mobilization	Recommendations for Strengthening
Authorities	<ol style="list-style-type: none"> 1. Keep the Defense Production Act (DPA) strictly focused on national security needs 2. DPA Title I – Update executive orders and regulations 3. DPA Title III – Delegate determination authority and use purchase commitment authority 4. DPA Title VII – Relook the use of voluntary agreements and the National Defense Executive Reserve
Design	<ol style="list-style-type: none"> 5. Design for production 6. Dramatically simplify requirements processes
Resourcing	<ol style="list-style-type: none"> 7. Increase defense funding levels 8. Implement PPBE Commission recommendations, particularly <ul style="list-style-type: none"> ○ Transform the budget structure ○ Review and consolidate budget line items ○ Encourage improved in-person communications
Acquisition	<ol style="list-style-type: none"> 9. Continue to prioritize open systems approaches 10. Make production the pacing metric 11. Maximize use of unmanned and attritable systems 12. Contract for speed and surge <ul style="list-style-type: none"> ○ Increase the use of follow-on production Other Transactions Agreements ○ Establish surge CLINs 13. Where possible, pursue second sourcing
Sustainment	<ol style="list-style-type: none"> 14. Grow overseas sustainment capacity 15. Create a SBIR-like tax to enable the second sourcing of parts and reduce supply chain bottlenecks 16. Model surge requirements for future mobilization
Public Support	<ol style="list-style-type: none"> 17. Leaders need to clearly state and restate the rationale for mobilization 18. Make the tangible benefits of mobilization clear
Allies and Partners	<p>Develop a true “Build Allied” approach by</p> <ol style="list-style-type: none"> 19. Prioritizing international industrial collaboration 20. Promoting and funding exportability <ul style="list-style-type: none"> ○ Strengthen exportability incentives ○ Dramatically increase funding of the Defense Exportability Features program to spur increased exportability 21. Establishing a Senate-confirmed DoD official to bolster global coordination with allies and partners 22. Ensuring that technology transfer regimes facilitate increased international industrial collaboration <ul style="list-style-type: none"> ○ Closely monitor the implementation of AUKUS export control reforms ○ Closely monitor technology disclosure and foreign disclosure processes

The report describes these recommendations in detail, but for the purposes of today’s discussion, I would like to focus on my recommendations in two critical areas:

1. Relooking our authorities and planning capabilities
2. Focusing on scale

1. Relooking our Authorities and Planning Capabilities

The government’s ability to mobilize the industrial base starts with the legal authorities and the agency plans and policies to facilitate production, reduce bottlenecks in the supply chain, and otherwise streamline how government and industry can develop the capabilities and capacities to meet the needs of the country in a crisis. The War Production Board, for example, helped the Roosevelt Administration to organize government and industry and facilitate mobilization during WWII.³ In the MRAP case, uses of the Defense Production Act in various manners demonstrated how the government could shortcut bureaucratic processes to meet exigent circumstances. We all saw firsthand the power of the DPA during COVID as well.

Overall, our legislative authorities are strong, but there are several opportunities for strengthening their uses, revitalizing DPA authorities that have not been used in decades, and restarting agency mobilization planning, all of which will strengthen the nation’s ability to respond to crises:⁴

- **Keep the Defense Production Act strictly focused on national security needs.** The DPA was passed in 1950, and there are three active titles today.⁵ Today, it is currently being used to great effect in reshoring and building industrial base capacity in areas such as rare earth processing, castings and forgings, and advanced batteries as well as countering foreign investment that impact national security. The increased use of DPA is welcome but its invocation to support domestic production of solar panels and heat pumps caused political controversy.⁶ It is essential to keep DPA focused exclusively on essential defense and national security issues, in particular threats from China. Using DPA outside of direct national security purposes threatens “the viability of this unique tool for rebuilding a robust, resilient, and globally competitive American industrial base.”⁷

³ Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II*, University of Pennsylvania Press, 2016, pp. 59-76.

⁴ Most of these recommendations are summarized in Jerry McGinn, “How to further strengthen the Defense Production Act,” *Defense News*, May 7, 2024. Available at <https://www.defensenews.com/opinion/2024/05/07/how-to-further-strengthen-the-defense-production-act/> (accessed August 6, 2024).

⁵ For a summary of the DPA’s history and usage, see Alexandra G. Neenan and Luke A. Nicastro, *The Defense Production Act of 1950: History, Authorities, and Considerations for Congress*. *CRS Reports*, R43767, updated October 6, 2023. Available at <https://crsreports.congress.gov/product/pdf/R/R43767> (accessed April 11, 2024).

⁶ White House fact sheet, June 6, 2022. Available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/06/fact-sheet-president-biden-takes-bold-executive-action-to-spur-domestic-clean-energy-manufacturing/> (accessed April 11, 2024); Press Release, House Energy and Commerce Committee Chair Cathy McMorris Rodgers, December 20, 2023. Available at <https://energycommerce.house.gov/posts/chairs-rodgers-and-duncan-decry-administration-s-use-of-war-time-authority-to-subsidize-radical-rush-to-green-agenda> (accessed April 11, 2024).

⁷ William Greenwalt, Jerry McGinn, and Christopher Zember, “The Defense Production Act is helping rebuild the U.S. industrial base. Let’s keep it that way,” *Defense News*, June 15, 2022. Available at

- **DPA Title I – Update executive orders and regulations.** At the national level, the DPA is governed by a number of old and overlapping executive orders spanning numerous administrations that need to be refreshed and simplified. The Trump Administration should conduct a thorough review of relevant executive orders and regulations to better orient DPA policies and practices to address future national security challenges.⁸
- **DPA Title III – Delegate determination authority and use purchase commitment authority.** Title III is a tremendous tool for building industrial capacity. The non-delegable requirement for the president’s signature on each DPA determination, however, has significantly slowed the process by which DPA projects are developed and executed. Allowing the delegation of that determination in the upcoming 2025 reauthorization of the DPA, perhaps to the Secretary level of those agencies with Title III authority,⁹ would significantly streamline the development of Title III projects.

Another significant improvement would be the use of purchase commitments under Title III. All existing Title III projects are purchases under Section 303 of the DPA, but the authority also permits multiyear purchase commitments. Purchase commitments would allow DoD to create a guaranteed demand signal for an industrial capability over a mutually agreed upon period, thereby reducing risks for industry to make their own investments.¹⁰ Adding several purchase commitment projects could significantly help maintain capacity levels in areas such as critical materials and specialty chemicals to support future mobilization efforts. Purchase commitments, however, have not been an option recently because Congress has appropriated DPA funds over the past three years using standard Procurement funds which expire in two years, contrary to traditional DPA appropriations, which do not expire.

- **DPA Title VII – Relook the use of voluntary agreements and the National Defense Executive Reserve (NDER).** *Two sections of DPA Title VII have been scarcely used since the end of the Cold War but present a tremendous opportunity for future industrial mobilization.* Section 708 permits the government to establish voluntary agreements or plans of action with industry “to help provide for the national defense.”¹¹ The Administration, for example, could establish voluntary agreements to prepare stand-by industrial capacity for potential surge use during conflict. Further, these agreements could enable dynamic government-industry collaboration on production issues such as that

<https://www.defensenews.com/opinion/commentary/2022/06/15/the-defense-production-act-is-helping-rebuild-the-us-industrial-base-lets-keep-it-that-way/> (accessed April 11, 2024).

⁸ Jerry McGinn and Daniel Kaniewski, “Where does the Defense Production Act Go from Here? Key aspects need strengthening,” *Defense One*, November 24, 2020. Available at <https://www.defenseone.com/ideas/2020/11/where-does-defense-production-act-go-here/170301/> (accessed April 11, 2024).

⁹ Currently DoD, the Department of Homeland Security, the Department of Energy, and the Department of Health and Human Services have been delegated DPA Title III authority.

¹⁰ Office of the Assistant Secretary of Defense (Industrial Base Policy) briefing, Defense Production Act Title III. Available at <https://www.businessdefense.gov/ibr/mceip/dpai/dpat3/docs/DPA-TitleIII-Overview.pdf> (accessed April 11, 2024).

¹¹ 50 U.S.C. §4558(c)(1); Section 708(c)(1) of the DPA. See also, Neenan and Nicastro, *The Defense Production Act*, pp. 15-16.

during WWII's War Production Board. Section 710 of Title VII also permits the President to establish a NDER, a volunteer group of industrial executives to support mobilization efforts. The Administration should examine the utility of this authority to form on-call groups of industry experts to serve in government during national emergencies. The Baroni team just completed a project addressing these two sections that can inform these efforts when published.

- **Restarting mobilization planning efforts across the U.S. Government.** Mobilization planning ended in the early 1990s. It is time to rebuild that capacity, not only in DoD, but also in the Federal Emergency Management Agency, the Department of Commerce, and the Executive Office of the President. These planning efforts will greatly improve mobilization efforts across agencies.

2. Focusing on Scale.

We need to turbocharge our efforts to change how we design, resource, acquire, and sustain capabilities to help enable scale. Despite a decade's focus on innovating with commercial technology, the defense acquisition system largely remains focused on efficiency and cost savings. While this is a worthwhile goal, this regularly leads to limited production runs built precisely to the terms of the contract and results in industrial capacity that is very difficult to scale quickly as well as decades-long franchise programs that reduce competition. We need to change this dynamic and focus on building industrial base capacity in multiple ways:

- **Design.** This starts with simplifying requirements to harness leading commercial solutions, rapidly iterate technologies, and deliver capabilities at speed. The MRAP's utilization of existing, largely foreign, designs and very simple requirements provides a very useful model. DoD also needs to design systems for production so they are inherently scalable and avoid supply chain challenges. That is the approach the Air Force is taking with its Enterprise Test Vehicle effort.¹²
- **Resourcing.** More resources will certainly help with scale, but DoD and Congress also need to transform the budget structure to increase flexibility in budgetary execution as the Congressional Commission on PPBE Reform outlined in its final report last year. Beyond appropriated funds, DoD and Congress should look for opportunities to unleash the tremendous power of private capital, one of the nation's greatest strengths. The Office of Strategic Capital (OSC) is a tremendous start, but there are additional opportunities to strengthen OSC through the establishment of a loan guarantee program to help derisk larger scale capital expenditures (CapEx). Additionally, DoD could also increase the amount of depreciation allowed on CapEx or major investments. This fortunately is already a major provision in Senator Wicker's Forged Act.¹³

¹² Defense Innovation Unit, "Four Companies Selected to Support the Air Force and Defense Innovation Unit's Enterprise Test Vehicle (ETV) Project," June 3, 2024. Available at <https://www.diu.mil/latest/four-companies-selected-to-support-the-u-s-air-force-and-defense-innovation> (accessed March 5, 2025).

¹³ <https://www.wicker.senate.gov/services/files/4396C3A9-DA26-4BD6-A655-9E0910B83DA8>.

- **Acquisition.** DoD and industry have become experts at prototyping in recent years, but we need to dramatically increase the use of follow-on production Other Transaction Agreements and other means to rapidly transition prototypes to the battlefield. Our industrial base *can* produce at the scale needed to succeed, but only if we change how we do business. For example, DoD went from the drop of the request for proposals to having over 16,000 Mine-Resistant Ambush-Protected vehicles roll off the assembly line within three years during the wars in Iraq and Afghanistan. Delivering life-saving capabilities at this speed and scale required tremendous leadership, simplified requirements, utilizing existing designs, and multi-sourcing.

Another way to increase mass and scale capabilities in theater is to maximize the use of unmanned and attritable systems. The focus on unmanned and autonomous systems to increase fielded capacity has grown significantly in the past few years, but the fact is that we need vast numbers of attritable systems to meet near-term threats.¹⁴ This priority of scale cannot become victim to efforts focused on cost savings.

- **Sustainment.** Our sustainment challenges, from contested logistics and supply chains to sustaining forces at great distance, are probably the hardest facing us. We need, for example, to build more production flexibility into contracts by establishing surge contract line item numbers (CLINS) to reduce the time required to ramp production. Second sourcing¹⁵ and multi-sourcing will also be beneficial as shown with contract awards to nine companies—including three based outside of the United States—to scale 155mm ammunition production.¹⁶

One additional point to add is the importance of allies and partners. Our experience with Ukraine, Israel, and beyond has made it crystal clear that the United States cannot do it all. We need a larger industrial base, involving our closest allies with whom we go to war. Robust international industrial partnerships will help us to build the systems, and the overall capacity we need for future contingencies.¹⁷

¹⁴ John G. (Jerry) McGinn et al, *Case Studies in Technology Transition*. Report for the Commission on Planning, Programming, Budgeting, and Execution (PPBE) Reform, February 2024. Available at <https://business.gmu.edu/news/2024-07/case-studies-technology-transition> (accessed March 5, 2025).

¹⁵ Olivia Letts, Jerry McGinn, and Richard Beutel, “Back to the Future? Second Sourcing in Defense Acquisition,” Greg and Camille Baroni Center for Government Contracting White Paper No. 16, July 12, 2023. Available at <https://business.gmu.edu/news/2023-07/baroni-center-releases-white-paper-back-future-second-sourcing-defense-acquisitions> (accessed March 5, 2025).

¹⁶ Jen Judson, “US Army awards \$1.5B to boost global production of artillery rounds,” *Defense News*, October 6, 2023. Available at <https://www.defensenews.com/land/2023/10/06/us-army-awards-15b-to-boost-global-production-of-artillery-rounds/#:~:text=US%20Army%20awards%20%241.5B%20to%20boost%20global%20production%20of%20artillery%20rounds,-By%20Jen%20Judson&text=WASHINGTON%20—%20The%20U.S.%20Army%20said,production%20of%20155mm%20artillery%20rounds> (accessed March 5, 2025).

¹⁷ Jerry McGinn and Michael Roche, *A “Build Allied” Approach to Increase Industrial Capacity*, Greg and Camille Baroni Center for Government Contracting Report No. 9, June 26, 2023. Available at <https://business.gmu.edu/news/2023-06/build-allied-approach-increase-industrial-base-capacity> (accessed March 4, 2025).

Unfortunately, time is not on our side. If the Davidson window is correct, we have two years. Moreover, unexpected crises are always just that – unexpected – so our national security requires preparedness now.

The Trump Administration and Congress, in partnership with industry and our close allies, must harness innovation, manufacturing capacity, and other means to unleash the true strength of our defense industrial base to deter our adversaries in today's very dangerous world. The time to do this is now, before the balloon goes up.