

Revitalizing American Manufacturing for Security and Prosperity: Testimony before the House Committee on Oversight and Reform's Subcommittee on Economic Growth, Energy Policy, and Regulatory Affairs

Introduction

Chairman Burlison, Ranking Member Frost, and Members of the Subcommittee, thank you for the opportunity to appear today.

My name is Chris Power, and I am the founder and CEO of Hadrian, a company building advanced, automated factories in the United States. As you can hear from my accent, I was born in Australia, and I came to America to build here because I believe so strongly in Pax Americana and what this country can do.

My company, Hadrian, combines robotics, machine learning, artificial intelligence (AI), and cutting-edge process engineering to help American workers produce components and products for our defense and aerospace sectors—operating ten times more effectively than other onshore U.S. factories. We do this at speed, at scale, and on U.S. soil. The technologies we employ are not theoretical future concepts; we are deploying automation, AI-driven processes, robotics, and digital twin platforms in live production environments right now, and are easily the fastest growing manufacturer in the United States. In fact, high levels of automation and AI in manufacturing have already enabled order-of-magnitude improvements in throughput and cost—while creating new and better jobs along the way. These methods are proven and ready to scale across our industrial base. My testimony today will emphasize the urgency of revitalizing

U.S. manufacturing using such advanced technologies and outline how smart policy can unlock America's industrial potential.

How the U.S. Fell Behind

Over the past 40 years, America traded industrial power for short-term financial efficiency.¹ We offshored production, disinvested in our physical infrastructure, and allowed core manufacturing capabilities and supply chains to atrophy. The consequences are stark: not enough factories, not enough skilled workers, and not enough capacity to meet national demands in an era when deterrence and resilience depend on our ability to produce at scale. The U.S. defense industrial workforce, for instance, has shrunk dramatically—from about 3 million workers in the mid-1980s to roughly 1.1 million in 2021.² In just the last five years, over 17,000 companies exited the defense business, and the Department of Defense (DoD) reports that the number of small suppliers in our defense industrial base (DIB) has fallen by over 40 percent in the past decade.³ This erosion of industry has left us with fragile supply lines and dwindling expertise. The result is an unsustainable situation: major defense programs are plagued by delays and cost overruns, and America's ability to out-produce a peer competitor, like we once did in World War II, has been severely diminished. The core problem is skilled talent—and we don't have enough of them to

¹ In 1939 (the earliest year for which comparable data are readily available), goods-producing industries employed approximately 38 percent of workers on nonfarm payrolls in the United States, while service-providing industries employed the remaining 62 percent. By 2023, those numbers were 13 percent and 86 percent, respectively. U.S. Bureau of Labor Statistics, "A Look at a Long-Term Trend for the Bureau's Birthday," *The Economics Daily*, March 27, 2024. Available at: <https://www.bls.gov/opub/ted/2024/a-look-at-a-long-term-trend-for-the-bureaus-birthday.htm>

² Congressional Research Service, *The U.S. Defense Industrial Base: Background and Issues for Congress*, R47751, September 23, 2024. Available at: <https://www.congress.gov/crs-product/R47751>

³ "Small Businesses Are Heartbeat of U.S. Economy, Says DoD Leader," *Defense Logistics Agency*, Nancy Benecki, May 11, 2023. Available at: <https://www.dla.mil/About-DLA/News/News-Article-View/Article/3391996/small-businesses-are-heartbeat-of-us-economy-says-dod-leader/>

meet the current needs of the DIB, not to mention the future needs of the DIB as we scale into a potential China conflict. Because of this lack of skilled workforce, we believe automated factories are the only way to win—where robotics and AI are combined with a New American Workforce to give them superpowers and outcompete China.

We see the evidence of this decline in one sector after another. In shipbuilding, for example, the Navy has not managed to increase the size of its fleet in 20 years despite nearly doubling its shipbuilding budget over that period. The Government Accountability Office has found that Navy shipbuilding programs consistently suffer from growing costs, late deliveries, and ships that don't perform as promised.⁴ The lead ship of the new frigate program began construction before design was complete and is now expected to deliver at least three years behind schedule—with cost overruns so significant that Congress was forced to allocate hundreds of millions in emergency funding just to keep the first ships on track. Across the board, critical projects are delayed and over budget, while U.S. industry struggles to keep up. Part of the problem is sheer capacity: some shipyards today lack the physical space and enough skilled workers to build the volume of ships the Navy plans to buy.⁵ Aging infrastructure and workforce shortages mean that even funded programs cannot translate into timely production. When we consider a conflict with China or another near peer adversary or a national emergency, this shortfall in industrial capacity becomes

⁴ U.S. Government Accountability Office, *Navy Shipbuilding: Increasing Focus on Sustainment Early in the Acquisition Process Could Save Billions*, GAO-25-108225, March 2025. Available at: <https://www.gao.gov/products/gao-25-108225>

⁵ U.S. Government Accountability Office, “U.S. Navy Shipbuilding: Consistently Over Budget and Delayed Despite Billions Invested in Industry,” *GAO WatchBlog*, April 8, 2025. Available at: <https://www.gao.gov/blog/u.s.-navy-shipbuilding-consistently-over-budget-and-delayed-despite-billions-invested-in-industry>

a strategic vulnerability. Simply put, we have allowed our once-mighty industrial base to shrink to a point where it is not sustainable for the world we now face.

China's Strategy and America's Opportunity

Meanwhile, our competitors have taken a very different path. China has made industrial capacity the centerpiece of its national strategy: the Chinese government heavily subsidizes materials and components energy dominates critical supply chains, and has scaled manufacturing on a breathtaking level across sectors from shipbuilding to electronics. China is now the world's sole manufacturing superpower, accounting for roughly three times the manufacturing output of the United States.⁶ In shipbuilding as well, China's capacity dwarfs ours—by one estimate, China has over 5,000 commercial ships flying its flag versus fewer than 100 for the United States.⁷ Beijing's strategic playbook is clear: build, build, build. By marshaling state-driven investment and industrial planning, China has leapt ahead in production capacity, threatening to leave the United States at a permanent disadvantage in the ability to supply not only global commercial markets but also its own military in a conflict.

But America does not need to copy China's model to reassert our industrial leadership. We have a profound opportunity to vault ahead by doing what the United States has always done best: pairing world-class innovation with an unwavering commitment to execution on the factory floor.

⁶ "China: The World's Sole Manufacturing Superpower?" *VoxEU*, Caroline Freund and Luiza Santos, Centre for Economic Policy Research, January 17, 2024. Available at: <https://cepr.org/voxeu/columns/china-worlds-sole-manufacturing-superpower-line-sketch-rise>

⁷ U.S. Trade Representative. *Section 301 Petition – Maritime Logistics and Shipbuilding Sector*. March 2024. Available at: <https://ustr.gov/sites/default/files/Section%20301%20Petition%20-%20Maritime%20Logisitics%20and%20Shipbuilding%20Sector.pdf>

Our private sector is the most inventive on the planet, from Silicon Valley to our factory floors where innovation meets execution, but we must leverage that ingenuity to rebuild actual production. That means blending software with machine tools, embedding AI in every step of manufacturing, and deploying modular, reconfigurable production systems. America's defense cannot wait. If China is building hulking state-owned factories, America can leapfrog with highly agile, automated, digitally interconnected factories. We can out-innovate and out-produce by unleashing the creativity of our entrepreneurs and engineers, but also by backing them with bold action and smart policy to scale up these capabilities at home. The bottom line is: we shouldn't try to beat China at its own game; we should play to America's strengths—innovation, technology, and empowerment of our people—to rebuild an industrial base that is second to none—leapfrogging China using what we're the best in the world at: software engineering and inspiring the next generation of manufacturing workforce.

What Works and What's Ready Now

The good news is we're not starting from scratch. Advanced manufacturing systems already operating in the United States can turn digital designs into finished, qualified parts in days rather than months. Technologies like generative design (using AI to optimize part geometry), automated machining guided by machine learning, additive manufacturing for complex geometries, and real-time process monitoring have dramatically compressed production timelines. A part that once took 20 weeks can now be delivered in two.

These capabilities are not theoretical—they're live on factory floors. At Hadrian's facilities, we've delivered critical components for missile systems, fighter jets, spacecraft, and naval vessels.

When a major supplier unexpectedly went out of business, a defense prime turned to us to prevent a shutdown. Our automated factory migrated production on an emergency basis, closing a gap that could have grounded an entire program.

This kind of agile response was unthinkable a decade ago—but it's possible now, and it's already keeping critical defense projects on track.

The broader takeaway: these technologies are proven, and the use cases are real. Digitally integrated factories and America's best manufacturing talent have shown they can deliver hardware 10 times faster and at 50 percent lower cost than legacy processes, while flexibly adapting to different products. The barrier isn't capability—it's scale. Too few of these facilities exist, and procurement still favors legacy systems. But with the right demand signal and policy support, we could stand up hundreds more within five years. America has the tools, and we just need to use them at scale.

How Policy Can Unlock U.S. Manufacturing Leadership

Reinvigorating American manufacturing at scale will require a partnership between industry and government. Congress and the executive branch have a crucial role to play in setting the conditions for success. Policy can be the catalyst that unlocks our latent industrial capacity. I would like to highlight several policy actions that would have an immediate impact:

First, prioritize advanced manufacturing in federal programs. Every major federal initiative—whether it's building submarines, satellites, electric grids, or critical infrastructure—should incorporate modern, advanced manufacturing as a core requirement. In practical terms, this

means that when Congress funds a new ship or aircraft program, it should ask: Are the parts and systems for this program being built with state-of-the-art, efficient manufacturing techniques? If not, we are leaving productivity on the table. We need to bake innovation into the production process from day one. By directing agencies to prioritize digitized, AI-enabled, and automated production in their contracting, Congress can ensure that we upgrade our industrial base while we execute important projects. Simply put, whether it's ships, missiles or transformers for the grid, the supporting factories must be modern, capable, and located on U.S. soil. Making advanced manufacturing and next-generation automated factories a national priority in this way will drive investment into new facilities and equipment and prevent us from relying on outdated production methods.

Second, enforce domestic sourcing and close loopholes. We must stop subsidizing China's industrial base through weak enforcement of our own procurement and domestic sourcing rules. Strong "Buy American" and domestic content rules already exist on paper, but they need to be strengthened, enforced, and applied with fewer waivers and exceptions. If we choose not to, U.S. tax dollars will continue to flow to foreign manufacturers—including, incredibly, Chinese suppliers of components used in frontline weapons. In one egregious example from the last decade, the Pentagon issued waivers to keep Chinese-made magnets in the F-35 fighter jet just to avoid delays.⁸ That's unacceptable.

⁸ "Exclusive: U.S. Waived Laws to Keep F-35 on Track with China-Made Parts," *Reuters*, Mike Stone, January 3, 2014. Available at: <https://www.reuters.com/article/world/exclusive-us-waived-laws-to-keep-f-35-on-track-with-china-made-parts-idUSBREA020VA>

Congress must strengthen domestic sourcing mandates with real teeth—tighten waiver rules (with reasonable exceptions), require transparency on component origins, and hold contractors accountable for building U.S.-based supply chains. Clear demand from the federal government will justify private investment in new American factories. The message should be simple: build it here, and we'll buy it here.

Third, pass industrial capacity legislation and invest in workforce development. Congress has already begun to consider bipartisan measures to expand America's industrial base. Legislation like the proposed SHIPS for America Act (Shipbuilding and Harbor Infrastructure for Prosperity and Security Act) would be transformative. That bill aimed to narrow the vast gap between U.S. and Chinese shipbuilding capacity and to improve our ability to mobilize forces and commerce in a conflict. It would have established a dedicated maritime security trust fund—modeled on the Highway Trust Fund—to invest in U.S. shipyards, ports, and the maritime workforce, independent of the yearly budget squabbles. By supporting shipbuilding, shipping, and workforce training, the SHIPs Act would strengthen supply chains, reduce reliance on foreign vessels, create good-paying American jobs, and ensure the Navy and Coast Guard can get the ships they need. This is just one example. There have been other proposals with bipartisan support—covering areas from munitions production lines to semiconductor fabrication to electric vehicle supply chains—that would directly expand U.S. production capacity and train the next generation of skilled workers. I would encourage Congress to move quickly to pass and fund these kinds of initiatives. They represent a wise investment in our national security and economic strength.

Fourth, provide clear and consistent demand signals to industry. The federal government can become a better partner to industry by improving the predictability of demand. One major reason companies are hesitant to invest in new factories or workforce is uncertainty about future orders. If we want the private sector to scale up manufacturing capacity, we have to give them confidence that if they build it, the demand will come. You've heard it before: budgets need to be passed on time, multi-year procurement contracts when appropriate and coordination of needs across programs. Unfortunately, in recent years we have done the opposite: in 13 of the last 14 years, the federal government operated under stopgap continuing resolutions that froze funding for months at a time. These budgetary delays have prevented new program starts and delayed planned production ramp-ups, sending exactly the wrong signal to the industrial base. We must do better. Returning to regular order in appropriations will enable the Pentagon and other agencies to commit to stable, long-term purchases. DoD, for its part, should communicate its future needs clearly through tools like multiyear procurement contracts (which Congress has recently authorized for munitions) and through engaging industry early about upcoming requirements. When industry has predictability—for example, knowing that there will be a steady demand for certain aircraft parts or ship components for the next five to ten years—companies can secure financing, invest in expanded production lines, and train workers with confidence. American industry can surge quickly when called upon (as we saw with the COVID-19 vaccine production or wartime vehicle production), but it performs best when it has a partner in government that provides consistent support and a stable outlook. Providing that demand signal and partnership is one of the most impactful things Congress can do to unleash our industrial capacity.

In summary, these policy measures—prioritizing advanced manufacturing, enforcing domestic sourcing, passing capacity-building legislation, reforming acquisition, and stabilizing demand—are all within Congress’s power. Taken together, they would remove the obstacles holding back U.S. manufacturing and allow our nation’s innovation to translate into real-world production at scale. They would let us build here, buy here, and compete on a level playing field with anyone.

Why This Matters to Americans

Rebuilding American manufacturing isn’t just about policy—it’s about people. A strong industrial base means more and better jobs, especially in skilled trades and engineering. When we build new factories, we create high-paying careers that support families and strengthen communities—exactly the kind of middle-class jobs that have disappeared from too many towns. Manufacturing has a powerful multiplier effect: every new plant supports suppliers, service providers, and small businesses around it. The more we make here, the stronger and more resilient our economy becomes.

At Hadrian, we see this every day. One of the things we’re proudest of is our culture. Our team includes elite software engineers, seasoned machinists, and people who once worked in restaurant drive-thrus and warehouses. Everyone has equity. Everyone has purpose. With the right tools and training, we can take someone with no machining experience and, in 40 days, prepare them to manufacture precision components bound for space. That’s not just a job—it’s a launchpad into a new American industrial future.

Reindustrialization is also about resilience. The pandemic and global chip shortages showed what happens when we rely too heavily on foreign suppliers. A country that can't make what it needs in a crisis puts its security at risk. By rebuilding capacity for microelectronics, machine tools, and other essential technologies, we strengthen our national defense and ensure we can withstand economic shocks—and help our allies do the same.

Finally, advanced manufacturing is about empowering the American worker. Automation and AI make skilled workers more productive and their jobs more rewarding. With the right tech, American machinists and technicians can outproduce any workforce in the world. Our advantage has always been our people. Now we have the chance to amplify that advantage with the best tools.

But we must act. The risk of inaction isn't just geopolitical—it's economic and cultural. A nation that doesn't build cannot thrive. Reindustrialization is about more than avoiding decline; it's about ensuring the next generation inherits a country that still knows how to build, innovate, and lead.

Conclusion

Members of the Committee, we have arrived at a moment for bold action. The capability to revitalize American manufacturing exists—the technologies are real, and the initial successes have been proven on the ground. What we lack is not technology or capital or talent; it is the collective will and decision-making to scale up what works. We do not need another report to tell

us what we already know, nor can we afford to wait another decade to act. We need a bold commitment now to start building again like the superpower we are.

Think of the sense of urgency and national purpose that defined America on December 8, 1941—the day after Pearl Harbor—when our country mobilized overnight to become the “Arsenal of Democracy.” If this were that day, what would we do? What would we change to unleash our full productive might? What rules would we break to enable victory? We should be asking ourselves those questions today. And then we must go do that. This is our generation’s pivotal moment to reassert America’s industrial strength. I urge you, as Members of Congress, to prioritize execution and industrial reinvestment with the seriousness and urgency that history demands. Our national security, our economic future, and the well-being of the American people depend on it.

Thank you for the opportunity to testify. I am happy to answer any questions you may have.