Testimony of Beehive Industries
Gordie Follin, Chief Product Officer
Submitted to the House Financial Services Committee
Field Hearing: “Securing the Supply Chain: The Defense Production Act in Focus”
August 13, 2025 | Dayton, OH

Written Testimony

Chairman Davidson, Chairman Hill, and distinguished Members of the Committee - including Representatives Huizenga, Moore, and Ogles - thank you for the opportunity to testify on the critical role of the Defense Production Act (DPA) in strengthening our nation’s defense industrial base.

My name is Gordie Follin, and I serve as the Chief Product Officer at Beehive Industries. With just over 300 employees and four locations in the United States, including a new research and development center in Loveland, Ohio, we are a U.S.-based advanced manufacturing company specializing in additive manufacturing of turbine engines for uncrewed weapons systems, counter uncrewed systems, and drones.

We are proud to be part of a new generation of agile, high-precision manufacturers answering the urgent call to replenish U.S. and allied weapons stockpiles, which have been severely strained by ongoing conflicts in Ukraine, the Indo-Pacific, and the Middle East.

Traditional manufacturing timelines are not suited to this level of demand. Additive manufacturing enables us to drastically reduce lead times through new processes to develop, test, evaluate, and finalize parts and systems; offer regional manufacturing distribution; and deliver superior performance-to-cost ratios - all of which are critical in rapidly-evolving combat environments.

Furthermore, additive manufacturing is critical to U.S. national security, particularly in the production of weapons systems, as it enhances supply chain integrity and reduces reliance on foreign components. At Beehive Industries, we print jet engines from powder. By enabling domestic production of complex parts, this technology minimizes the risk of incorporating materials or components from adversarial nations, such as China, into U.S. munitions. This ensures greater control over quality, security, and reliability, safeguarding sensitive defense systems from potential vulnerabilities or sabotage while supporting a resilient, self-sufficient industrial base essential for national defense.

The DPA, especially Title III, enables companies like ours to move swiftly and decisively when the industrial base must surge to meet urgent national security needs.

The Strategic Context: Diminishing Stockpiles, Growing Threats

The U.S. defense posture is being tested by extraordinary global demand for precision-guided munitions, propulsion systems, and autonomous platforms. Many of these systems require the use of turbine engines to provide the capability necessary to counter enemy threats. These systems are being deployed faster than they can be replenished and resupply timelines that are measured in years, not months, put our national readiness at risk.

Traditional defense contractors or new entrants relying on traditional manufacturing processes alone cannot meet this demand. That's where Beehive Industries and other advanced additive manufacturers are playing a transformative role to leap ahead of the threat.

Beehive's Mission: Delivering Turbine Engines Faster and More Affordably

Beehive Industries uses additive manufacturing to produce compact turbine engines that power loitering munitions, drones, and missile systems. Our innovations will yield the following:

- Eliminating Supply Chain Bottlenecks - By producing 90% additively manufactured turbine engines, Beehive reduces lead times from years to months while decreasing reliance on fragile supply chains.
- Unleashing Innovation Without Bureaucratic Delays - Traditional material qualification processes are slowing innovation. We must have the courage to modernize acceptance criteria for AM materials, ensuring faster adoption in critical defense programs.
- Accelerating Production - Traditionally manufactured turbine engines rely on castings and that can take years to procure. Beehive's AM approach eliminates the need for castings and compresses production cycles by more than 50%, ensuring warfighters receive advanced propulsion systems dramatically faster than ever before.
- Strengthening the U.S. Defense Base - By leveraging advanced manufacturing, Beehive's U.S.-based, vertically integrated supply chain adds incremental capacity to the defense industrial base preventing cannibalization of current capacity and ensuring propulsion technologies are domestically sourced.

- Reducing Costs & Enhancing Readiness - Beehive's engines lower fuel consumption, rapidly scale to replenish depleted stocks, and mitigate supply chain risks, directly enhancing DOD budget efficiency and operational security.
- Ensuring Supply Chain Integrity - By utilizing additive manufacturing, Beehive can domestically produce components for critical weapons systems, mitigating against the integration of parts from adversarial nations like China, thereby enhancing the security and reliability of our munitions.

Through design innovation and digital engineering, we're closing the gap between urgent operational needs and production capacity.

DPA: The Tool That Unlocks Industrial Agility

The Defense Production Act, particularly Title III, has been essential to supporting the expansion of U.S. defense innovation. Without its authorities, including loan guarantees, purchase commitments, and advance funding, the risks of scaling complex, capital-intensive manufacturing would be prohibitive for most small and nontraditional businesses.

Some of the ways the DPA supports, and must continue to support, our mission include:

- Preemptive investment - enabling prototype development and the scaling of facilities in anticipation of demand. Additive manufacturing is accelerating our ability to scale, lower cost, and improve performance for turbine engines. Our innovation model takes proven technologies, like turbine engines, and makes them better and faster.
- Capital acceleration - reducing dependence on risk-averse private capital. Strategic DPA investments in companies backed by venture or private equity funding can extend financial runway while also signaling the DoD's commitment to innovation, encouraging ongoing private-sector participation.
- Supply chain assurance - securing access to rare alloys and high-temperature materials critical to propulsion. In 2020, DPA Title III supported U.S.-based suppliers of rare earth elements used in magnets. More recently, in 2025, the Department of Defense has awarded Title III funds to expand domestic production of scandium, tungsten, graphite, and neodymium - all critical to aerospace, magnetics, and propulsion systems. As a downstream manufacturer, Beehive Industries relies on the availability of these critical materials.

DPA investments upstream are essential to our ability to deliver at scale. The momentum behind these recent Title III awards demonstrates the law's continued relevance - not only for legacy supply chains, but for the next generation of defense manufacturing.

Policy Recommendations for the Committee's Consideration

The Defense Production Act is the government's most important statutory tool for shaping and scaling the defense industrial base in times of crisis. Letting it lapse would delay investments in munitions, critical materials, and propulsion systems already under strain. Timely reauthorization that strikes a balance between modernizing the law and providing necessary flexibility to implementing agencies to address their specific requirements is vital to support emerging technologies and processes while reaffirming the U.S. commitment to supply chain resilience and allied readiness.

1. Preserve and clarify Title III authority to support prototype-to-production transitions

Title III should explicitly support prototype development when directly tied to scaling production. Beehive's transition from design to production ready propulsion systems involves mission-critical prototyping, not speculative R&D. Current interpretations can unnecessarily restrict support to only post-prototype phases.

Clarifying that Title III can support these early phases will ensure that advanced manufacturers can deliver systems faster, with lower risk and cost. This is not an academic need - it's a national security imperative.

2. Tailor Title III programs to support agile, advanced manufacturers

While Title III has benefited traditional defense contractors, it must be more accessible to digitally-enabled, non-traditional manufacturers. Beehive's additive manufacturing model allows rapid iteration, but federal acquisition timelines, cost-share requirements, and contracting practices are often misaligned with this pace.

We recommend the following:

- Use of accelerated contracting tools, including OTAs (Other Transaction Authority);
- Flexible cost-sharing structures for growth-stage firms; and,

- Targeted outreach and technical assistance for small to mid-sized manufacturers.

3. Strengthen domestic supply chains for high-temperature alloys and materials for critical turbine components

Additive manufacturing depends on high-performance materials like nickel superalloys, titanium, and neodymium (critical for magnets). Many of these inputs are vulnerable to geopolitical risk and domestic underinvestment. Title III should prioritize domestic sourcing and production of materials essential to turbine engine manufacturing and other critical systems.

4. Encourage alignment between Title III and allied industrial base initiatives

We urge Congress to enable Title III-funded projects to be interoperable with NATO and AUKUS standards. Additive manufacturing platforms allow flexible, distributed manufacturing - but standardization and alliance coordination are key to operational effectiveness.

Recommended actions include the following:

- Promote international standards alignment where appropriate;
- Explore co-investment models with trusted allies; and,
- Facilitate secure technology-sharing for joint production capabilities.

DPA as a Force Multiplier for National Security

The United States cannot maintain global technological superiority - or sustain prolonged industrial competition - without tools like the DPA to catalyze innovation and domestic production.

The Defense Production Act, enacted in 1950 to meet the urgent demands of the Korean War, remains a cornerstone of our nation's ability to ignite its industrial might in times of need. It is a modern, strategic instrument to mobilize responsive, distributed, high-performance manufacturing. From scaling missile production to ensuring critical supplies like baby formulas reach those who need them most, the DPA has proven its versatility and enduring value. Today, as we face new and complex challenges, Beehive Industries stands ready to partner with the Department of Defense, our allies, and this Committee to strengthen the U.S. industrial base and ensure that our warfighters have the tools, technologies, and resources they need, when they need them, to protect our nation and secure our future.

Beehive's experience shows that advanced manufacturing can help close the supply-demand gap for critical defense systems - faster, more affordably, and with greater flexibility.

We urge the Committee to act decisively in reauthorizing and modernizing this essential law.

Thank you for the opportunity to share our perspective. I welcome your questions.