Department of Defense
Fiscal Year (FY) 2025 Budget Estimates

March 2024

Office of the Secretary Of Defense

Defense-Wide Justification Book Volume 1 of 2

Defense Production Act Purchases

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Volume 1 Table of Contents

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Department of Defense
FY 2025 President's Budget
Exhibit P-1 FY 2025 President's Budget
Total Obligational Authority
DoD Component Summary
(Dollars in Thousands)

Mar 2024

Appropriation Summary	FY 2023 Actuals	FY 2024 PB Request with CR Adjustments*	FY 2025 Request
Defense Production Act Purchases	518,906	372,906	393,377
Total Defense-Wide	**518,906**	**372,906**	**393,377**
Grand Total Department of Defense	**518,906**	**372,906**	**393,377**

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

Defense-Wide
FY 2025 President's Budget
Exhibit P-1 FY 2025 President's Budget
Total Obligational Authority
Defense Summary
(Dollars in Thousands)

Mar 2024

Appropriation Summary	FY 2023 Actuals	FY 2024 PB Request with CR Adjustments*	FY 2025 Request
Defense Production Act Purchases	518,906	372,906	393,377
Total Defense-Wide	**518,906**	**372,906**	**393,377**

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

Department of Defense
FY 2025 President's Budget
Exhibit P-1 FY 2025 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2024

Organization: Procurement, Defense-Wide	FY 2023 Actuals	FY 2024 PB Request with CR Adjustments*	FY 2025 Request
Secretary of Defense, OSD	518,906	372,906	393,377
Total Defense-Wide	**518,906**	**372,906**	**393,377**

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

Defense-Wide
FY 2025 President's Budget
Exhibit P-1 FY 2025 President's Budget
Total Obligational Authority
0360D BA Summary
(Dollars in Thousands)

Mar 2024

Appropriation: **Defense Production Act Purchases**

	FY 2023 Actuals	FY 2024 PB Request with CR Adjustments*	FY 2025 Request
Budget Activity			
01. Defense Production Act Purchases	518,906	968,605	393,377
20. Undistributed		-595,699	
Total Defense Production Act Purchases	**518,906**	**372,906**	**393,377**

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

Defense-Wide
FY 2025 President's Budget
Exhibit P-1 FY 2025 President's Budget
Total Obligational Authority
0360D Detail
(Dollars in Thousands)

Mar 2024

Appropriation: 0360 Defense Production Act Purchases				FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost*	Quantity	Cost
Budget Activity 01: Defense Production Act Purchases									
Defense Production Act Purchases									
1	Defense Production Act Purchases	A	U		518,906		968,605		393,377
Total Defense Production Act Purchases					**518,906**		**968,605**		**393,377**
Budget Activity 20: Undistributed									
Undistributed									
2	Adj to Match Continuing Resolution	A	U				-595,699		
Total Undistributed							**-595,699**		
Total Defense Production Act Purchases					**518,906**		**372,906**		**393,377**

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

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Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 0360D: Defense Production Act Purchases

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Line Item Table of Contents (Alphabetically by Line Item Title)

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Exhibit P-40, Budget Line Item Justification: PB 2025 Office of the Secretary Of Defense	Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 0360D: Defense Production Act Purchases / BA 01: Defense Production Act Purchases / BSA 10: Defense Production Act Purchases	**P-1 Line Item Number / Title:** TITLE3 / Defense Production Act Purchases
ID Code (A=Service Ready, B=Not Service Ready):	**Program Elements for Code B Items:** 0902199D8Z — **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	678.397	518.906	968.605	393.377	-	393.377	393.377	393.377	337.517	338.048	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	678.397	518.906	968.605	393.377	-	393.377	393.377	393.377	337.517	338.048	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**678.397** (1)	**518.906** (2)	**968.605**	**393.377**	**-**	**393.377**	**393.377**	**393.377**	**337.517**	**338.048**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

New Start (Y/N): No

Title III of the Defense Production Act (DPA) provides the President broad authorities to ensure the timely availability of domestic industrial base capabilities essential for the national defense. DPA Title III authorizes the use of economic incentives to create, maintain, protect, expand, or restore domestic sources for critical components, critical technology items, and industrial resources. The DPA is authorized by 50 U.S.C. Sections 4501-4568.

This budget includes a project portfolio that will appropriately utilize DPA Title III authorities to strengthen domestic industrial base capabilities essential to national defense. The multi-year projects in this budget will incentivize domestic sources to establish, strengthen, and expand domestic industrial base capabilities in key areas such as strategic radiation-hardened microelectronics and the rare earths supply chain.

Exhibit P-40, Budget Line Item Justification: PB 2025 Office of the Secretary Of Defense	Date: March 2024
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 0902199D8Z	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) / ($ M)*	Quantity / Total Cost *(Each) / ($ M)*	Quantity / Total Cost *(Each) / ($ M)*	Quantity / Total Cost *(Each) / ($ M)*	Quantity / Total Cost *(Each) / ($ M)*	Quantity / Total Cost *(Each) / ($ M)*
P-5	1 / Defense Production Act Purchases				- / 678.397	- / 518.906	- / 968.605	- / 393.377	- / -	- / 393.377
P-40	**Total Gross/Weapon System Cost**				**- / 678.397**	**- / 518.906**	**- / 968.605**	**- / 393.377**	**- / -**	**- / 393.377**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
This program element supports the Department's priority to build a resilient Joint Force and defense ecosystem by building enduring advantages. This is executed by sustaining and expanding domestic industrial capabilities to ensure the Defense industrial base can meet the needs of the current and future warfighter.

Strategic overview:

The Defense Production Act Purchases (DPAP) program element line executes under the authorities provided by the Defense Production Act (DPA) Title III and is one component of a broader DoD investment strategy to build and strengthen the defense industrial base and secure U.S. supply chains. Residing within the Office of the Assistant Secretary of Defense for Industrial Base Policy (OASD(IBP)), DPAP investments are used discretely and in tandem with other DoD investment programs, such as the Industrial Base Analysis and Sustainment (IBAS) program, to ensure collaborative and non-duplicative investment against critical defense industrial base and U.S. supply chain issues. The DPAP program element supports Department priorities through investment in prime and sub-tier suppliers to mitigate supply chain risks and eliminate production capacity bottlenecks. DPA Title III investments are driven by strategy starting with the National Security Strategy, National Defense Strategy, and National Defense Industrial Base Strategy working to build a resilient Joint Force and defense ecosystem by building enduring advantages. DPA Title III investments are also supporting Department of Defense modernization priorities and recommendations from interagency reports in response to Executive Order 14017 (E.O. 14017), including prior assessments as directed by this executive order. Examples of this would be investments in Critical Chemicals and the Hypersonics industrial base to support the Departments' kinetic capabilities; investments in radiation hardened electronics, advanced packaging and other electronics areas to support of the Department's microelectronics requirements; investments in the rare earth supply chain and other mining activities to support the supply of strategic and critical materials; investments in castings and forgings; and investments in the energy storage and battery supply chain. DPA Title III investments are further synchronized across the department through coordination with other research and development programs, such as the Defense-Wide Manufacturing Science and Technology Program, residing in the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)).

Program Element Summary:

The FY 2025 budget reflects the Department resourcing the DPA Fund so the DPAP program element can address critical shortfalls in the domestic industrial base in areas such as critical chemicals, hypersonic applications, turbine engines and rocket motors, electronics, space, rare earths, and small unmanned aerial systems. The respective decreases of $381.200 million, $169.900 million, and $180.500 million in FY 2025, FY 2026, and FY 2027 when compared to the FY 2024 President's Budget Request (PBR 2024) were made to support other DoD priorities. Specified numbers for each initiative are estimates that are subject to change based on ongoing market research, the acquisition process, and other external factors.

FY 2025: $393.377 million
- Critical Chemicals Supply Chain ($30.000 million)
- Biomanufacturing Critical Chemicals ($124.664 million)
- Casting and Forgings ($75.000 million)
- Manufacturing Industrial Base Sub-Tier Facilitization ($50.000 million)
- Hypersonics Industrial Base ($53.392 million)
- Strategic Radiation Hardened Microelectronics ($20.321 million)

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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 0902199D8Z	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

- Space Industrial Base ($12.000 million)
- Chemical and Biological Defense Capabilities ($8.000 million)
- Program Management and Administrative Support ($20.000 million)

FY 2024: $968.605 million
- Critical Chemicals Supply Chain ($79.740 million)
- Biomanufacturing Critical Chemicals ($260.000 million)
- Hypersonics Industrial Base ($64.808 million)
- Manufacturing Industrial Base Sub-Tier Facilitization ($236.000 million)
- Strategic Radiation Hardened Microelectronics ($57.669 million)
- Microelectronics Packaging Capabilities ($63.935 million)
- Strategic and Critical Materials ($30.000 million)
- Casting and Forgings ($5.000 million)
- Energy Storage and Batteries ($120.000 million)
- Space Industrial Base ($20.000 million)
- Small Unmanned Aerial Systems ($11.453 million)
- Program Management and Administrative Support ($20.000 million)

FY 2023: $518.906 million*

Enacted FY 2023 Appropriation: $372.906 million
- Critical Chemicals Supply Chain ($158.844 million)
- Hypersonics Industrial Base ($13.000 million)
- Strategic Radiation Hardened Microelectronics ($13.378 million)
- Microelectronics Packaging Capabilities ($86.112 million)
- Strategic and Critical Materials ($24.367 million)
- Casting and Forgings ($38.000 million)
- Energy Storage and Batteries ($15.525 million)
- Program Management and Administrative Support ($23.680 million)

Additional Ukraine Appropriation Act (FY 2022 funds): $146.000 million*
- Solid Rocket Motors ($146.000 million)

*FY 2023 actuals include $146.000 million FY 2022 funds from the Additional Ukraine Supplemental Act that was transferred into the OSD A&S account in FY 2023.

Descriptions are provided below for the essential, transformational initiatives using the authorities established in Title III of the DPA. The single or multi-year cost phasing of each of the initiatives is addressed in the P5 exhibit.
Project Descriptions:

Adversarial Aggression Supply Chain Risk Mitigation:

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Line Item MDAP/MAIS Code: N/A

This line of effort utilizes funds appropriated by the Additional Ukraine Supplemental Appropriations Act to deter adversarial aggression, while being prepared to prevail in conflict when necessary. Focused actions include mitigating defense industrial base (DIB) constraints to enable faster munition production to resupply U.S. stocks transferred to Ukraine. U.S. inventory levels for certain munitions have been significantly reduced, hence it is critical that we increase production capacity to quickly replenish U.S. inventories. Several industrial base constraints and obsolescence issues limit the speed at which the U.S. Department of Defense (DoD) can replenish inventories of munitions provided to Ukraine. Funds will also be leveraged to mitigate supply chain disruptions for critical materials amidst adversarial aggression. The Additional Ukraine Supplemental Appropriations Act appropriated $600.000 million of FY 2022 funds into the DPAP account in FY 2022, and an additional $146.000 million of FY 2022 funds was transferred into the DPAP account in during FY 2023 to invest in the solid rocket motor supply chain.

- Missile & Munitions Production: The DoD has identified several issues where Title III of the DPA is the most expedient and cost-effective solution to address a DIB constraint. Many of these constraints are shared across multiple munitions and missile systems. Examples of constraints include limited specialized testing equipment and capacity constraints for specialized missile components, such as precision ball bearings, solid rocket motors, and forging production equipment for artillery shells. $246.000 million was allocated to expand domestic capacity for these resources. As of the end of FY 2023, $172.069 million of these funds have been obligated. The program anticipates obligating the remaining $73.931million to mitigate these shortfalls in FY 2024.

- Strategic and Critical Materials: The adversarial aggression against Ukraine has resulted in global supply chain disruptions and skyrocketing prices for strategic and critical materials necessary for national defense and economic security. For instance, Russia is a major producer and exporter of metals and materials such as titanium, steel, aluminum, magnesium, and other key industrial inputs that are necessary for production of defense systems, essential civilian market items, and advanced technologies. Ukraine is also a significant producer of strategic and critical materials, such as noble gases used in semiconductor production (neon, krypton) and boron carbide powder used in U.S. military armor supply chains. $500.000 million was allocated to expand domestic capacity for these resources. As of the end of FY 2023, $92.109 million has been obligated to date with an additional $267.236 million in acquisition, leaving $140.655 million for additional investments in FY 2024. Investments have been planned across multiple Areas of Interest (AOI) that cover key activities in critical materials supply chains. These AOIs include:
- Feasibility Studies: Comprehensive technical and economic study of a selected development option for a project that includes appropriately detailed assessments of realistically assumed extraction, processing, metallurgical, economic, marketing, legal, environmental, social, and governmental considerations, together with any other relevant operational factors and detailed financial analysis, that are necessary to demonstrate at the time of reporting that production is reasonably justified.
- By / Co-Product Extraction: Recovery of materials from a host material that may or may not be a material used in the production of large capacity batteries for automotive use by DoD, e-mobility, and stationary storage applications
- Modernization & Productivity Improvements: Deployment and integration of flowsheet modifications to increase process efficiency and materials recovery. This includes transformational changes, such as the adoption of autonomous systems, automated logistics / materials handling, and related facility infrastructure.
- Recycling & Reclamation: Recovery of materials from in process / post processing waste and post-consumer products.
- Enabling Sub Tier Resources: Industrial resources that are necessary to accomplish the work covered under the preceding bullets but are not produced by the prime contractor or major subcontractors performing the work (e.g., certifications and education, skilled trades, and workforce development programs, diamond core dill bit and other tooling manufacturing).

Inflation Reduction Act Supply Chain Risk Mitigation:

The Inflation Reduction Act (IRA), signed into law on August 16, 2022, appropriated $500.000 million of supplemental funding for the "enhanced use of the Defense Production Act." The DoD received $250.000 million of the IRA Supplemental, which will be applied to expanding capabilities for domestic mining, mineral processing, and related industrial sectors for large-capacity batteries and other critical material shortfalls identified in the reports pursuant to E.O. 14017. These industrial capabilities will build enduring advantages that will help ensure a resilient defense ecosystem. Similar to the Strategic and Critical Material funding, planned investments were distributed across the same AOIs appropriate to mineral and material supply chains. As of the end of FY 2023, $127.445 million of these funds have been obligated, with an additional $114.377 million of projects are in acquisition, leaving $8.178 million for additional investments in FY 2024.

Industrial Base Risk Mitigation Projects:

- Critical Chemicals Supply Chain: Multiple efforts are being scoped to address critical shortfalls in the domestic industrial capability to produce materials for DoD missiles and munitions, as well as other critical capabilities such as body armor. In January 2019, the President signed four Presidential Determinations addressing vulnerabilities in the supply chain for critical chemicals for DoD munitions, including: precursor materials, inert materials, energetic materials, and advanced manufacturing techniques for producing the materials. Relying on foreign sources, especially China, for these critical chemicals poses a risk to

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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 0902199D8Z	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

the Department's readiness to deter and defeat adversaries. $67.8 million was obligated in FY 2023, executing multiple efforts, including additional investments in Black Powder, expanding the Chemical Manufacturing Innovation Pilot, initiating a Munitions Campus to accelerate new chemistries and production techniques, and multiple awards towards a chemical production call for proposals to establish financially viable domestic chemical production capabilities. Additional awards towards the call for proposals are expected to award in FY 2024. Additional investments are also anticipated to be awarded in FY 2024 and beyond. The current priority for DPA Title III is to onshore the top ten mission critical chemicals currently produced overseas as well as modernize the Defense Industrial Base for chemicals from the WWII era manufacturing to a more flexible, more versatile industrial base that can pivot quickly to meet new demands.

- Biomanufacturing Critical Chemicals: 2024 funds will be utilized to support domestic, modular bio-manufacturing of multiple materials critical to the Department.

- Hypersonics Industrial Base: The Department has been working with stakeholders to identify gaps in the industrial capability to produce components for hypersonic systems and scale production from prototype levels to the required capacity. In FY 2020, the President authorized the use of the DPA Title III authorities to execute industrial base projects that support high/ultra-high temperature composites for hypersonic, strategic missile and launch systems. $24.981 million of prior year funds was obligated to these projects. Additional projects are anticipated to be executed in FY 2024 to expand required industrial capabilities needed to build hypersonic weapons in areas such as high temperature composites, advanced propulsion systems, and navigation and guidance components.

- Manufacturing Industrial Base Sub-Tier Facilitization: FY 2024 and 2025 funds will be utilized to support domestic manufacturing industrial base's sub-tier production capabilities. Current planned investments include approximately $156.000 million in solid rocket motors, $55.000 million in precision ball bearings, $55.000 million in guidance control and actuation subsystems, and $20.000 million in gas turbine engines.

- Strategic Radiation Hardened Microelectronics: The purpose of this effort is to provide assured capabilities to produce or acquire strategic radiation hardened (SRH) trusted microelectronics in compliance with Department of Defense Instruction 5200.44 to supply critical microelectronic components for necessary radiation environments involved with the acquisition of delivery systems for nuclear weapons. These investments are necessary to support the Departments priority to deter strategic attacks against the United States, Allies, and partners. The first set of projects provide production, engineering, and sustainment services in support of SRH microelectronics fabrication via a Defense Microelectronics Activity (DMEA)-accredited Trusted Supplier using a Trusted flow. $88.858 million has been obligated against multiple contracts between FY 2019 through FY 2023. Further efforts are being developed to execute in FY 2024 and FY 2025 to ensure the sustainment and advancement of this critical industrial capability. Another effort was initiated in FY 2021 to sustain partially depleted silicon-on-insulator (PDSOI) semiconductor (SCs) capabilities. This supports nuclear modernization systems (Sentinel Program, LRSO, etc.), which require radiation hardened microelectronics (nuclear modernization is DoD's #1 priority); PDSOI is also the most advanced space qualified Complementary Metal-Oxide Semiconductor (CMOS) technology to date. $125.000 million has been obligated to date to accomplish this, and planned DPA investments will occur over the next 2-3 years to qualify the new source for use in space and non-nuclear systems.

- Microelectronics Packaging Capabilities: The challenges facing the electronics industrial base are wide-reaching and significant. Commercial industry has trended toward yearly product refreshes and updating technology nodes frequently, leaving legacy DoD systems that must be maintained for decades with severe obsolescence issues. On the opposite end of the spectrum, new systems that desire to integrate the newest technologies face challenges obtaining assured and/or trusted supply as much of the electronics manufacturing supply chain has gone overseas. In addition, domestic suppliers that exist are reluctant to work with unique DoD requirements as it would negatively affect their commercial runs and overall business viability. Advanced packaging and printed circuit boards is the immediate focus of this effort, however MECIP, in concert with its stakeholders, is continuing to identify and vet efforts to serve DoD's need for electronic materials, digital/analog/mixed signal integrated circuits, discrete components, displays, power electronic components, electro-optical/IR components, radio frequency components, and other cross-cutting technologies. The President authorized the use of DPA Title III authorities in FY 2023 and projects are anticipated to use FY 2023, and FY 2024 funds.

- Strategic and Critical Materials: DPA Title III is working to strengthen mining and processing capabilities required to support capabilities across the entire defense infrastructure. This includes materials such as cobalt, lithium, graphite, and platinum, as well as rare earth elements (REEs). The intent is to alleviate the Department's reliance on foreign markets for these critical minerals and materials. Important defense applications for the end product of these supply chains include REE permanent magnets, jet fighter engines, missile guidance systems, antimissile defense, space-based satellites, communication systems, and batteries. Efforts have been awarded in FY 2020 and 2021 to bolster the domestic industrial base to support the separation and processing of REE and domestic production capability for Neodymium Iron Boron (NdFeB) rare earth permanent magnets. In FY 2023, a project was awarded for $94.072 million to further advance the production of NdFeB rare earth permanent magnets. Further investments are planned in In FY 2024 to secure upstream Security of battery materials are planned.

Exhibit P-40, Budget Line Item Justification: PB 2025 Office of the Secretary Of Defense	Date: March 2024
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 0902199D8Z	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

- Casting and Forgings: Investments are planned in the shipbuilding industrial base to support casting and forging requirements to support shipbuilding and other system requirements. $23.000 million of FY 2023 funds will be used to invest in domestic aluminum castings and $15.000 million of FY 2023 funds will be used to invest in heavy forging capabilities. A casting and forging partnership program will be initiated in FY 2024 with a $5.0 million investment in FY 2024, and ramping up to $75.00 million in FY 2025.

- Energy Storage and Batteries: in FY 2023, $15.525 million of FY 2023 funds was obligated to initiate a prototype Energy Storage Systems Campus that convenes a fundamental understanding of raw materials availability within energy storage systems supply chains, optimizes the current manufacturing of batteries via expanded existing production and new trusted battery foundries, and accelerates next-generation energy storage systems to reduce reliance upon China and other States near-monopoly upon critical minerals mining and processing, and battery manufacturing. Also in FY 2024, investments are planned to support the Department's requirements to procure and field large capacity batteries. Projects are anticipated to be executed in FY 2024.

- Space Industrial Base: Gaps in the National Security Space industrial supply base are continuously being assessed. Projects are anticipated to be executed in FY 2024 to address industrial short falls impacting integrated optical chips and infrared (IR) Detectors. Additional projects are anticipated to be executed in FY 2025.

- Small Unmanned Aerial Systems (sUAS): In June 2019, the President issued a Presidential Determination authorizing the use DPA Title III to strengthen the domestic industrial base for sUAS. The sUAS domestic industrial base has struggled to compete commercially in the midst of dominant foreign competition, and DPA Title III is currently assessing where investments would best remedy the domestic industrial base shortfall and result in an economically viable domestic supplier. $13.630 million was obligated toward 9 projects in FY 2021. $5.330 million was obligated to one project in FY 2022. Multiple other projects are anticipated to be awarded in FY 2024.

- Chemical and Biological Defense Capabilities: This effort postures the Department to more rapidly respond to biological incidents by leveraging industrial base partnerships and buying down risks to production optimization efforts. Partners across Industrial Base Policy, Chemical and Biological Defense Program, and Defense Health Program to prioritize onshoring of key chemicals (active pharmaceutical ingredients (API), key starting materials (KSMs)) critical to produce DoD-unique enhanced biodefense medical countermeasure needs. Increased use of computational tools and manufacturing controls to reduce the cost burden of small batch and continuous advanced manufacturing methods and enhance FDA regulatory compliance. Advanced development efforts in support of chemical and biological defense, including medical, non-medical and counterproliferation-related activities.

The following projects that were reported in the FY 2024 President's Budget Request are no longer reported here because they were fully obligated at the end of FY 2023 and only utilized prior year funds:

- NSS ISB - Radiation-Hardened Digital/Analog Production & Qualification: This project funds work at the 45nm and 14 nanometer (nm) nodes. It is imperative that government organizations responsible for national security, e.g., intelligence acquisition, missile early warning, missile defense, and other space requirements maintain a strong industrial base to supply technology necessary to design, develop, and fabricate secure, radiation hardened, high reliability, and DoD space qualified Application Specific Integrated Circuits (ASIC), Application Specific Standard Products (ASSP), such as very high speed data switches, and Multi-Core General Purpose Processors (MCGPP) at the 45nm technology node or smaller to support onboard processing and other critical applications. The objective of this project is to enhance the Radiation Hardened by Design flow, optimize selected circuit designs to reduce power and increase performance, and complete the design, fabrication, testing, and qualification of certain critical devices to include the MC-GPP. In addition to achieving an estimated improvement in performance of > 25% for power and performance for some specific designs, the proposed effort will support life-time acquisition buys of these critical circuits for some identified systems with attendant reductions in system technical, cost, and schedule risks. Multiple awards were made toward this effort in FY 2019 through FY 2023.

- NSS ISB - Infrared Sensor Substrates (Cadmium Zinc Telluride / Mercury Cadmium Telluride): The purpose of this effort is to establish and maintain a high-quality production capability for Mercury Cadmium Telluride (MCT) epitaxy grown on Cadmium Zinc Telluride (CZT) substrates via molecular beam epitaxy (MBE) at key US-owned and operated foundries to assure the necessary supply of infrared focal plane arrays (IRFPAs) to NSS agencies when needed. The primary goal is to ensure domestic availability of these detectors, and demonstrate on-shore MCT detectors are equivalent in performance to IRFPAs utilizing off-shore substrates. Additional awards were made toward this effort in prior years and have been funded utilizing FY 2022 and prior year funds.

- NSS ISB - Copper Solder Columns: This project will sustain and expand the capabilities of a sole domestic supplier of copper-reinforced solder columns that are the preferred interconnect for high-pin count integrated circuits for use in rugged environments. The project will decrease lead-time dramatically by reducing downtime, resolving production bottlenecks, and eliminating the use of foreign suppliers for reliability test, positively impacting schedule for systems with ASIC design and manufacture in their critical path. This project was fully obligated in FY 2023 using FY 2022 funds.

Exhibit P-40, Budget Line Item Justification: PB 2025 Office of the Secretary Of Defense		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 0360D: Defense Production Act Purchases / BA 01: Defense Production Act Purchases / BSA 10: Defense Production Act Purchases	**P-1 Line Item Number / Title:** TITLE3 / Defense Production Act Purchases	
ID Code (A=Service Ready, B=Not Service Ready)**:**	**Program Elements for Code B Items:** 0902199D8Z	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Footnotes:

(1) DPA Title III funds appropriated prior to FY 2023 were non-expiring, so the "Prior Year" funding indicates only unobligated prior year funds (FY 2022 and earlier) brought forward into FY 2023 that are planned to be obligated towards efforts. This same logic is applied to all lines of effort listed.

(2) FY 2023 actuals include $146.000 million FY 2022 funds from the Additional Ukraine Supplemental Act that was transferred by Comptroller into the OSD A&S account in FY 2023.

Exhibit P-5, Cost Analysis: PB 2025 Office of the Secretary Of Defense		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 0360D / 01 / 10	**P-1 Line Item Number / Title:** TITLE3 / Defense Production Act Purchases	**Item Number / Title [DODIC]:** 1 / Defense Production Act Purchases
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	678.397	518.906	968.605	393.377	-	393.377
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	678.397	518.906	968.605	393.377	-	393.377
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**678.397**	**518.906**	**968.605**	**393.377**	**-**	**393.377**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Millions)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 Total		
	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*	Unit Cost *($ M)*	Qty *(Each)*	Total Cost *($ M)*
Hardware - Industrial Base Risk Mitigation Cost																		
Recurring Cost																		
Program Management and Administrative Support	-	-	5.330	-	-	23.680	-	-	20.000	-	-	20.000	-	-	-	-	-	20.000
Subtotal: Recurring Cost	-	-	*5.330*	-	-	*23.680*	-	-	*20.000*	-	-	*20.000*	-	-	-	-	-	*20.000*
Non Recurring Cost																		
Strategic Radiation Hardened Microelectronics	-	-	0.000	-	-	13.378	-	-	57.669	-	-	20.321	-	-	-	-	-	20.321
Advanced Packaging & Printed Circuit Boards	-	-	0.000	-	-	86.112	-	-	63.935	-	-	0.000	-	-	-	-	-	0.000
Critical Chemicals Supply Chain	-	-	27.968	-	-	158.844	-	-	79.740	-	-	30.000	-	-	-	-	-	30.000
Biomanufacturing Critical Chemicals	-	-	0.000	-	-	0.000	-	-	260.000	-	-	124.664	-	-	-	-	-	124.664
Hypersonics Industrial Base	-	-	40.722	-	-	13.000	-	-	64.808	-	-	53.392	-	-	-	-	-	53.392
Manufacturing Industrial Base Sub-Tier Facilitization	-	-	0.000	-	-	0.000	-	-	236.000	-	-	50.000	-	-	-	-	-	50.000
Strategic and Critical Materials	-	-	0.000	-	-	24.367	-	-	30.000	-	-	0.000	-	-	-	-	-	0.000
Castings and Forgings	-	-	0.000	-	-	38.000	-	-	5.000	-	-	75.000	-	-	-	-	-	75.000

Exhibit P-5, Cost Analysis: PB 2025 Office of the Secretary Of Defense		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 0360D / 01 / 10	P-1 Line Item Number / Title: TITLE3 / Defense Production Act Purchases	Item Number / Title [DODIC]: 1 / Defense Production Act Purchases
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 Total		
	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ M)	Qty (Each)	Total Cost ($ M)
Energy Storage and Batteries	-	-	0.000	-	-	15.525	-	-	120.000	-	-	0.000	-	-	-	-	-	0.000
Space Industrial Base	-	-	0.000	-	-	0.000	-	-	20.000	-	-	12.000	-	-	-	-	-	12.000
Chemical and Biological Defense Capabilities	-	-	0.000	-	-	0.000	-	-	0.000	-	-	8.000	-	-	-	-	-	8.000
Small Unmanned Aerial Systems	-	-	0.000	-	-	0.000	-	-	11.453	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*68.690*	-	-	*349.226*	-	-	*948.605*	-	-	*373.377*	-	-	-	-	-	*373.377*
Subtotal: Hardware - Industrial Base Risk Mitigation Cost	**-**	**-**	***74.020***	**-**	**-**	***372.906***	**-**	**-**	***968.605***	**-**	**-**	***393.377***	**-**	**-**	**-**	**-**	**-**	***393.377***
Hardware - Adversarial Aggression Supply Chain Risk Mitigation Cost Cost Cost																		
Non Recurring Cost																		
Missile & Munitions Production	-	-	73.931	-	-	146.000	-	-	-	-	-	-	-	-	-	-	-	-
Strategic and Critical Materials	-	-	407.891	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	*481.822*	-	-	*146.000*	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - Adversarial Aggression Supply Chain Risk Mitigation Cost Cost Cost	**-**	**-**	***481.822***	**-**	**-**	***146.000*** [(3)]	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Hardware - Inflation Reduction Act Supply Chain Risk Mitigation Cost																		
Non Recurring Cost																		
Critical Minerals and Materials	-	-	122.555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	*122.555*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - Inflation Reduction Act Supply Chain Risk Mitigation Cost	**-**	**-**	***122.555***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**678.397**	**-**	**-**	**518.906**	**-**	**-**	**968.605**	**-**	**-**	**393.377**	**-**	**-**	**-**	**-**	**-**	**393.377**

Footnotes:

(3) FY 2023 actuals include $146.000 million FY 2022 funds from the Additional Ukraine Supplemental Act that was transferred by Comptroller into the OSD A&S account in FY 2023.

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