Defense Production Act Purchases

Fiscal Year (FY) 2010 Budget Estimates

May 2009

Procurement, Defense-Wide

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Exhibit P-1, Procurement Program

Department of Defense, Office of Secretary Defense

Date: May 2009

Appropration: Defense Production Act Purchases, Procurement
Budget Activity: Major Equipment

P-1 Line Item No	Item Nomenclature	Ident Code	TOA, $ in Millions FY 2008 Qty	FY 2008 Cost	FY 2009 Qty	FY 2009 Cost	FY 2010 Qty	FY 2010 Cost
1	Major Equipment	A	N/A	94.152	N/A	100.268	N/A	38.246
TOTAL - DIRECT				94.152		100.268		38.246

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Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Procurement, Defense Wide / L / Acquisition Resources Analysis	Defense Production Act Purchases (0902199D8Z)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
0902199D8Z	0360	Defense Production Act Purchases

	Prior Years	FY 2008	FY 2009	FY 2010							
Proc Qty											
Gross Cost	485.924	94.152	100.268	38.246							
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	485.924	94.152	100.268	38.246							
Initial Spares											
Total Proc Cost	485.924	94.152	100.268	38.246							
Flyaway U/C											
Weapon System Proc U/C											

Description:

Title III of the Defense Production Act (DPA) provides the DoD with a powerful tool to ensure the timely creation and availability of domestic production capabilities for technologies that have the potential for wide-ranging impact on the operational capabilities and technological superiority of U.S. defense systems. Title III is unique in that it is the sole DoD program focused on establishing, expanding, maintaining, or modernizing domestic production capacity to strengthen domestic industry and to establish the industrial base capacity for essential national defense capabilities.

The Defense Production Act (DPA) is authorized by 50 U.S.C. App. 2061 et seq. This budget includes essential transformational initiatives, using the authorities of Title III of the DPA. Requested funding will be used for continuation of the Beryllium Supply Industrial Base Project, the Lithium Ion Battery for Space Project, and the Power & Energy Initiative. These are multi-year projects that will incentivize domestic sources to establish, strengthen, and expand domestic industrial base capabilities for key technologies that support transformational initiatives and maintain the technological superiority of U.S. defense systems. Brief descriptions of these projects are provided below.

The Beryllium Supply Industrial Base project will ensure the establishment of a domestic production capability for beryllium metal to meet essential national security requirements. Strategic programs such as the Ballistic Missile Defense System require infrared and optical sensors that can detect and track missile threats. The Space Tracking and Surveillance System and Space-Based Infrared System-High programs both employ space-based infrared and optical sensors that rely on beryllium. Beryllium is an essential material for this and other space and satellite applications for use in structures, electronic housings, heat sinks, sensors and sensor support. No other material can meet the performance characteristics provided by beryllium. Defense communications satellite programs such as MILSTAR, Advanced Extremely High Frequency, and the Wideband Global SATCOM are also highly dependent on the availability of beryllium. DoD also relies on beryllium for the NAVSTAR Global Positioning System, Defense Meteorological Satellite Program, Defense Support Program, UHF-Follow-On Satellite, and the Mobile User Objective System satellite.

The Power and Energy Systems Production Initiative is expanding domestic source(s) for critical high power radar system antenna elements, electronic warfare (EW) systems, and power control systems for ground/sea vehicles and aircraft. The expansion will address at least three advanced technology elements. Unique authorities of the DPA Title III program will enable expansion of production capacity for low cost, high power electronic circuit elements critical to Missile Defense Agency and Service radar, electronic warfare, and missile systems. Also, power control system elements used for generation, distribution, and safety systems (circuit breakers, load controls, etc.) will also be addressed. DPA Title III will enable the qualification of these products and demonstrations for known and potential customers in the DOD, other government agencies and potentially commercial applications. In Exhibits P-5 and P-5a below, projects for Gallium Nitride (GaN) X-band MMICs, GaN S-Band MMICs, and GaN EW MMICs under the Power and Energy Systems Production Initiative are identified separately. Funding in FY 2009 through FY 2010 in Power and Energy Systems Production Initiative will supplement/initiate projects within the initiative as required to meet industrial base changes/shortcomings.

Exhibit P-40, Budget Item Justification Sheet			Date: May 2009
Appropriation / Budget Activity / Serial No: Procurement, Defense Wide / L / Acquisition Resources Analysis		P-1 Item Nomenclature Defense Production Act Purchases (0902199D8Z)	
Program Elements for Code B Items: 0902199D8Z	Code: 0360	Other Related Program Elements: Defense Production Act Purchases	

The Global Personal Recovery System project, with $1.200 million provided in the FY 2008 DoD Appropriation by congressional add, did not meet stringent DPA Title III Presidential Determination criteria, and the project will therefore not be executed. Funds for that project were reprogrammed to the Thermal Battery Project.

Radiation Hardened Microelectronics Modernization Project beginning in FY 2010 is intended to achieve a generation gain in the production of microelectronics which are capable of surviving natural and threat levels of radiation in space and terrestrial applications. The increasing miniaturization of microelectronics is permitting higher processing speeds and lower power requirements, but this shrinking of feature size raises the susceptibility of the devices to damage or upset by nuclear radiation. The radiation hardening of the next node of miniaturization will be essential for continued military operability in defense systems. This project will involve process and hardware changes necessary in the production of microelectronics at domestic manufacturers. Limited funding in FY 2010 will enable limited investments in this project while additional funding is sought to continue the effort in future years.

This budget also includes specific Title III projects which were funded by Congress in the FY 2009 Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (P.L. 110-329). These projects include: Domestic Production of Transparent Polycrystalline Laser Gain Materials, Extremely Large, Domestic Expendable and Reusable Structures Manufacturing Center (ELDERS), High Homogeneity Optical Glass.

In accordance with the provisions of Sec. 303(a) of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2061 et seq.), this budget submission provides notification to Congress of the intent of the Department of Defense to execute the above described initiatives/projects to correct domestic industrial base shortfalls for technologies and/or materials essential for the execution of the national security strategy of the United States.

Exhibit P-5, Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement, Defense Wide / L / Acquisition Resources Analysis	P-1 Line Item Nomenclature: Defense Production Act Purchases (0902199D8Z)	Weapon System Type:	Date: May 2009

WBS Cost Elements	ID CD	FY 08			FY 09			FY 10					
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost			
		$000	Units	$000	$000	Units	$000	$000	Units	$000			
Flexible Aerogel Material Supplier Initiative		5000	1	5000									
Photovoltaic Solar Cell Encapsulant Production		2400	1	2400									
Affordable Methanol Fuel Cells Components		1600	1	1600									
Microclimate Cooling Systems		1600	1	1600									
Armstrong Titanium Production Process		5000	1	5000									
Life Cycle Support Center for Unmanned S		2400	1	2400									
SWORDS Safety Confirmation Testing for A		1600	1	1600									
Vacuum Induction Melting & Vacuum Arc Re		18400	1	18400									
Read Out Integrated Circuit (ROIC) Manufacturing Improvement		2400	1	2400	1593	1	1593						
Thermal Battery Industrial Base Infrastructure		1742	1	1742	2986	1	2986						
Polyhedral Oligomeric Silsesquioxane (POSS) Nanotechnology Scale-up Initiative		2400	1	2400	2986	1	2986						
ALON and Spinel Optical Ceramics		2800	1	2800	3981	1	3981						
Advanced Metal Composite Process (Titanium Metal Matrix Composites for Aircraft)		8000	1	8000	3185	1	3185						
Reactive Plastic CO2 Absorbent Production Initiative		4404	1	4404	1593	1	1593						
Military Lens Sys Fabrication & Assembly					2389	1	2389						
Carbon Foam					9556	1	9556						
Automated Composite Technologies Initiative		10000	1	10000	4977	1	4977						
Productions of Miniature Compressors for		1000	1	1000	995	1	995						
Light-weight Ammunition & Armor Initiati		3000	1	3000	4181	1	4181						
Low Cost Military GPS		1600	1	1600	3981	1	3981						
Silicon Carbide Powder and Armor Manufac					1991	1	1991						
Armor & Structure Tran Steel to Titamium					3185	1	3185						
Transparent Polycrystalline Laser Gain M					5176	1	5176						
Extremely Large, Domestic Expendable & R					7963	1	7963						
High Homogeneity Optical Glass					3185	1	3185						
Power & Energy Systems Production Init								9086	1	9086			
Gallium Nitride X-Band MMIC		4000	1	4000	500		500	2500	1	2500			
Gallium Nitride S-Band MMIC					8000		8000						
Gallium Nitride Electronic Warfare MMIC					2610		2610	120		120			
Traveling Wave Tube Amplifiers for Space		2017	1	2017	1174		1174						
Beryllium Supply Industrial Base Production Initiative		10700	1	10700	19500		19500	19500	1	19500			

Exhibit P-5, Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement, Defense Wide / L / Acquisition Resources Analysis	P-1 Line Item Nomenclature: Defense Production Act Purchases (0902199D8Z)	Weapon System Type:	Date: May 2009

WBS Cost Elements	ID CD	FY 08			FY 09			FY 10					
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost			
		$000	Units	$000	$000	Units	$000	$000	Units	$000			
Lithium Ion (Li Ion) Battery Production		2089	1	2089	4581		4581	4040	1	4040			
Radiation Hardened Microelectronics Mode								3000	1	3000			
Prior Year Funding													
Total:		**94152**			**100268**			**38246**					

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No: Procurement, Defense Wide/ L/ Acquisition Resources Analysis	Weapon System Type:	P-1 Line Item Nomenclature: Defense Production Act Purchases (0902199D8Z)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Flexible Aerogel Material Supplier Initiative										
Photovoltaic Solar Cell Encapsulant Production										
FY 2008	Specialized Technology Resource Enfield, CT	C	WPAFB, Dayton, OH	Jun 08		1	2400	no	N/A	N/A
Affordable Methanol Fuel Cells Components										
FY 2008	DuPont Fuel Cells Wilmington, DE	non-compet	WPAFB, Dayton, OH	Jun 08		1	1600	no	N/A	N/A
Microclimate Cooling Systems										
FY 2008	Aspen Compressor, LLC Marlborough, MA	C	WPAFB, Dayton, OH	Mar 08		1	1600	no	N/A	N/A
Armstrong Titanium Production Process										
FY 2008	International Titanium Powder Woodridge, IL	non-compet	WPAFB, Dayton, OH	Jan 09		1	5000	no	N/A	N/A
Life Cycle Support Center for Unmanned S										
FY 2008	Various Various	C	WPAFB, Dayton, OH			1	2400	no	N/A	N/A
SWORDS Safety Confirmation Testing for A										
FY 2008	Various Various	C	WPAFB, Dayton, OH			1	1600	no	N/A	N/A
Vacuum Induction Melting & Vacuum Arc Re										
FY 2008	Latrobe Specialty Steel Co Latrobe, PA	C	WPAFB, Dayton, OH	Dec 08		1	18400	no	N/A	N/A
Read Out Integrated Circuit (ROIC) Manufacturing Improvement										
FY 2008	AMI Semiconductor Pocatello, ID	non-compet	WPAFB, Dayton, OH	Jan 09		1	2400	no	N/A	N/A
FY 2009	AMI Semiconductor Pocatello, ID	non-compet	WPAFB, Dayton, OH	Jul 09		1	1593	no	N/A	N/A
Thermal Battery Industrial Base Infrastructure										
FY 2008	Enser Corp. Pinellas Park, FL	non-compet	WPAFB, Dayton, OH	Mar 09		1	1742	no	N/A	N/A
FY 2009	Enser Corp. Pinellas Park, FL	non-compet	WPAFB, Dayton, OH	Mar 09		1	2986	no	N/A	N/A
Polyhedral Oligomeric Silsesquioxane (POSS) Nanotechnology Scale-up Initiative										
FY 2008	Hybrid Plastics	C	WPAFB, Dayton, OH	May 08		1	2400	no	N/A	N/A

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No: Procurement, Defense Wide/ L/ Acquisition Resources Analysis	Weapon System Type:	P-1 Line Item Nomenclature: Defense Production Act Purchases (0902199D8Z)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
	Hattiesburg, MS									
FY 2009	Hybrid Plastics Hattiesburg, MS	C	WPAFB, Dayton, OH	Jul 09		1	2986	no	N/A	N/A
ALON and Spinel Optical Ceramics										
FY 2008	Surmet Corp Burlington< MA	non compet	WPAFB, Dayton, OH	Aug 08		1	2800	no	N/A	N/A
FY 2009	Surmet Corp Burlington< MA	non compet	WPAFB, Dayton, OH	Mar 09		1	3981	no	N/A	N/A
Advanced Metal Composite Process (Titanium Metal Matrix Composites for Aircraft)										
FY 2008	FMW Bridgeport, WV	non compet	WPAFB, Dayton, OH	Jan 09		1	8000	no	N/A	N/A
FY 2009	FMW Bridgeport, WV	non compet	WPAFB, Dayton, OH	Jul 09		1	3185	no	N/A	N/A
Reactive Plastic CO2 Absorbent Production Initiative										
FY 2008	Micropore, Inc Newark, DE	non compet	WPAFB, Dayton, OH	May 08		1	4404	no	N/A	N/A
FY 2009	Micropore, Inc Newark, DE	non compet	WPAFB, Dayton, OH	Mar 09		1	1593	no	N/A	N/A
Military Lens Sys Fabrication & Assembly										
FY 2009	Optical Systems Technology, In Freeport , PA	C	WPAFB, Dayton, OH	Jul 09		1	2389	no	N/A	N/A
Carbon Foam										
FY 2009	Touchstone Research Laboratory Triadelphia, WV	non compet	WPAFB, Dayton, OH	Jul 09		1	9556	no	N/A	N/A
Automated Composite Technologies Initiative										
FY 2008	ATK Space Systems Clearfield, UT	non compet	WPAFB, Dayton, OH	Aug 08		1	10000	no	N/A	N/A
FY 2009	ATK Space Systems Clearfield, UT	non compet	WPAFB, Dayton, OH	Mar 09		1	4977	no	N/A	N/A
Productions of Miniature Compressors for										
FY 2008	Aspen Compressor, LLC Marlborough, MA	C	WPAFB, Dayton, OH	Mar 08		1	1000	no	N/A	N/A
FY 2009	Aspen Compressor, LLC Marlborough, MA	C	WPAFB, Dayton, OH	Mar 09		1	995	no	N/A	N/A
Light-weight Ammunition & Armor Initiati										

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No: Procurement, Defense Wide/ L/ Acquisition Resources Analysis	Weapon System Type:	P-1 Line Item Nomenclature: Defense Production Act Purchases (0902199D8Z)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2008	MAC, LLC Bay St. Louis, MS	non-compet	WPAFB, Dayton, OH	Sep 08		1	3000	no	N/A	N/A
FY 2009	MAC, LLC Bay St. Louis, MS	non-compet	WPAFB, Dayton, OH	Jul 09		1	4181	no	N/A	N/A
Low Cost Military GPS										
FY 2008	Rockwell Collins Cedar Rapids, IA	non-compet	WPAFB, Dayton, OH	Sep 08		1	1600	no	N/A	N/A
FY 2009	Rockwell Collins Cedar Rapids, IA	non-compet	WPAFB, Dayton, OH	Jul 09		1	3981	no	N/A	N/A
Silicon Carbide Powder and Armor Manufac										
FY 2009	Superior Graphite Hopkinsville, KY	C	WPAFB, Dayton, OH	Mar 09		1	1991	no	N/A	N/A
Armor & Structure Tran Steel to Titamium										
FY 2009	Gautier Steel Ltd. Johnstown, PA	C	WPAFB, Dayton, OH	Mar 09		1	3185	no	N/A	N/A
Transparent Polycrystalline Laser Gain M										
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09		1	5176	no	N/A	N/A
Extremely Large, Domestic Expendable & R										
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09		1	7963	no	N/A	N/A
High Homogeneity Optical Glass										
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09		1	3185	no	N/A	N/A
Power & Engergy Systems Production Init										
FY 2010	Various Various	C	WPAFB, Dayton, OH			1	9086	no	N/A	N/A
Gallium Nitride X-Band MMIC										
FY 2008	Various Various	C	WPAFB, Dayton, OH	Sep 09		1	4000	no	N/A	N/A
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09			500	no	N/A	N/A
FY 2010	Various Various	C	WPAFB, Dayton, OH			1	2500	no	N/A	N/A
Gallium Nitride S-Band MMIC										
FY 2009	Various	C	WPAFB, Dayton, OH	Sep 09			8000	no	N/A	N/A

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement, Defense Wide/ L/ Acquisition Resources Analysis		Defense Production Act Purchases (0902199D8Z)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
	Various									
Gallium Nitride Electronic Warfare MMIC										
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09			2610	no	N/A	N/A
FY 2010	Various Various	C	WPAFB, Dayton, OH				120	no	N/A	N/A
Traveling Wave Tube Amplifiers for Space										
FY 2008	L-3 Comm Electron Tech Torrance, CA	non-compet	WPAFB, Dayton, OH	Sep 08	na	1	2017	no	N/A	N/A
FY 2009	L-3 Comm Electron Tech Torrance, CA	non-compet	WPAFB, Dayton, OH	Sep 09	na		1174	no	N/A	N/A
Beryllium Supply Industrial Base Production Initiative										
FY 2008	Brush Wellman Inc. Cleveland, OH	non compet	WPAFB, Dayton, OH	Jun 08	na	1	10700	no	N/A	N/A
FY 2009	Brush Wellman Inc. Cleveland, OH	non compet	WPAFB, Dayton, OH	Dec 08	na		19500	no	N/A	N/A
FY 2010	Brush Wellman Inc. Cleveland, OH	non compet	WPAFB, Dayton, OH	Dec 09		1	19500	no	N/A	N/A
Lithium Ion (Li Ion) Battery Production										
FY 2008	Quallion, Inc. Sylmar, CA	C	WPAFB, Dayton, OH	Nov 08	na	1	2089	no	N/A	N/A
FY 2009	Various Various	C	WPAFB, Dayton, OH	Sep 09			4581	no	N/A	N/A
FY 2010	Various Various	C	WPAFB, Dayton, OH	Sep 10		1	4040	no	N/A	N/A
Radiation Hardened Microelectronics Mode										
FY 2010	Various Various	C	WPAFB, Dayton, OH			1	3000	no	N/A	N/A

REMARKS: