

# UNCLASSIFIED

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 Office of Secretary Of Defense **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 7: Operational Systems Development</i>					<b>R-1 Program Element (Number/Name)</b> PE 0607210D8Z I <i>Industrial Base Analysis and Sustainment Support</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	0.000	-	9.993	14.778	-	14.778	17.896	15.536	10.341	5.719	Continuing	Continuing
819: <i>Industrial Base Analysis and Sustainment</i>	0.000	-	9.993	14.778	-	14.778	17.896	15.536	10.341	5.719	Continuing	Continuing

# The FY 2015 OCO Request will be submitted at a later date.

## Note

This was a new start program in FY 2014 with a strategic goal of strengthening the industrial base in support of DoD supply chain and defense manufacturing requirements.

## A. Mission Description and Budget Item Justification

The Defense-wide Industrial Base Analysis and Sustainment (IBAS) program element provides the Department with a comprehensive ability to achieve the strategic goal of strengthening the industrial base in support of DoD supply chain and defense manufacturing requirements. This program maintains or improves the health of essential parts of the defense industry to avoid reconstitution costs for capability after a Defense procurement hiatus on major investment programs or critical supply chain products where affordable and innovative mechanisms are available to work with the producers in the interim.

A stated purpose of the program is to provide for sustainment of the industrial base through a break in production. Criteria for project selection will include factors such as 1) identifiable path of preservation, transformation or innovation between an existing capability and a capability with a very high probability of being needed in the short to medium term (< 5 years); 2) loss of the capability is likely in the absence of the proposed project; 3) analysis showing that the project results in a lower overall cost to the department than if capability is developed from scratch when needed; and 4) preference is given to projects supporting multiple programs or services with no clearly identifiable principle beneficiary.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>
Previous President's Budget	-	14.000	12.000	-	12.000
Current President's Budget	-	9.993	14.778	-	14.778
Total Adjustments	-	-4.007	2.778	-	2.778
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-4.000			
• Congressional Rescissions	-	-0.007			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Reduction	-	-	-1.718	-	-1.718

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense					Date: March 2014	
Appropriation/Budget Activity			R-1 Program Element (Number/Name)			
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development			PE 0607210D8Z / Industrial Base Analysis and Sustainment Support			
• Travel efficiencies savings			-	-	-0.004	-0.004
• Missile Sector Sustainment			-	-	4.500	4.500
<b>Change Summary Explanation</b>						
FY 2014 Industrial Base Sustainment: Funds realigned to this DoD high priority issue to achieve the strategic goal of strengthening the industrial base in support of DoD supply chain and defense manufacturing requirements.						
FY2015 increase for Missile Sector Sustainment is targeted to improvements in the existing production process efficiencies, exploration of advanced materials for higher performance, and upgrading of outdated technology for missile components.						

# UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense										Date: March 2014		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0607210D8Z / Industrial Base Analysis and Sustainment Support				Project (Number/Name) 819 / Industrial Base Analysis and Sustainment			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
819: Industrial Base Analysis and Sustainment	-	-	9.993	14.778	-	14.778	17.896	15.536	10.341	5.719	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
OSD Acquisition, Technology and Logistics (AT&L) investments under this program are informed by the Department's industrial assessment tools to include the Sector by Sector, Tier by Tier (S2T2) repository of defense industrial base information maintained by Deputy Assistant Secretary of Defense (Manufacturing and Industrial Base Policy) (DASD(MIBP)). These tools collaboratively identify elements of the industrial base where current acquisition programs will not invest enough in production and/or research to support the minimum sustaining rate that would keep critical suppliers viable. While industrial base risks identified through these assessment tools are to be mitigated primarily through direct engagement with military departments, agencies, and industry, exceptional cases will require defense-wide intervention via investment accounts, often in collaboration with multiple Services and agencies, to ensure adequate industrial capability to support future defense needs.												
This funding is a key tool for addressing supply chain risks and diminishing manufacturing sources. Investments are prioritized though a careful analysis at every tier of the supply chain according to a numerical scale of risk-area's fragility and criticality. Criticality examines characteristics that make a specific product or service difficult to replace if disrupted; fragility examines characteristics that make small deviations in the status quo likely to have substantial effects on an industry / supplier. These concepts underpin AT&L's core mission and inform critical investment, budgetary, and programmatic decision-making.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: Industrial Base Sustainment									-	9.993	14.778	
Description: Sector by Sector, Tier by Tier (S2T2) fragility and criticality assessments are applied across the DoD enterprise to identify and prioritize industrial base niches requiring additional investment by DoD. The purpose of investment is to sustain essential industrial production and design team capabilities. Projects will have impact across all industrial base sectors: aircraft; Command, Control, Communications and Computers (C4); missiles; ground vehicles; radar & Electronic Warfare (EW) and others. Projects will be improvements of existing capabilities with a very high probability of success.												
IBS will include focused projects in the following critical areas in FY 2014: Butanetriol, a solid rocket fuel precursor chemical; Infrared Focal Plane Array; Advanced Solid Rocket Propulsion; Test Facilities for Radiation Hardened Electronics.												
With a decline in the procurement of missile programs, design and production skills for critical components within the missile sector industrial base are at risk which could result in costly delays and unanticipated expense. The loss of this design and production capability could have a significant impact on many current and future missile programs damaging the readiness of the												

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Office of Secretary Of Defense		<b>Date:</b> March 2014	
<b>Appropriation/Budget Activity</b> 0400 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607210D8Z / <i>Industrial Base Analysis and Sustainment Support</i>	<b>Project (Number/Name)</b> 819 / <i>Industrial Base Analysis and Sustainment</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>
<p>Department. The missile sector sustainment effort will improve the existing production process efficiencies, explore advanced materials for higher performance, and upgrade outdated technology for missile components. FY 2014 and FY 2015 efforts will include the following important capabilities: high precision attitude control, thermal batteries; and fuzes.</p> <p><b>FY 2014 Plans:</b> Address supply chain vulnerabilities and early indicators of program risk and make corrective and innovative investments in essential defense supply chains.</p> <p>Butanetriol: This project develops a qualified domestic source for Butanetriol (BT), a solid rocket fuel precursor chemical, that will preclude the necessity of procurement from a prohibited foreign source. Since 2008, DoD's projected requirements have shrunk to levels that substantially change the business case for development of new domestic source. To re-enable the business case and develop a permanent domestic industrial base, DoD plans to fund a project to close the gap between the new and old business cases.</p> <p>Infrared Focal Plane Array (IRFPA): This project focuses on sustaining a continuous production capability for the impending modernization program of Improved Forward Looking Infrared (I-FLIR). There is a gap between the end of horizontal integration of FLIR and the slated start of I-FLIR modernization. In order to bridge the gap, the Department plans to maintain the foundry capability and intellectual base of critical suppliers through time-phased lots of IRFPAs.</p> <p>Advanced Solid Rocket Propulsion: To support future missile interceptor missions, advanced kill vehicle thrusters for high precision and long duration missions are required. This is a defense-unique industrial base niche. In order to maintain this capability and avoid the loss of skills and intellectual capital, the Department is executing a project to develop high precision attitude control.</p> <p>Test Facilities for Radiation Hardened Electronics: joint efforts with other DoD, Department of Energy, and the National Reconnaissance Office to maintain industrial base facilities that are capable of testing radiation hardened electronics. Provides resources to cover a one-time FY 2014 funding gap.</p> <p><b>FY 2015 Plans:</b> Address supply chain vulnerabilities and early indicators of program risk and make corrective and innovative investments in essential defense supply chains.</p> <p>Missile Sector Sustainment: Fragility and Criticality Assessments have assessed the impacts to the missile industrial base caused by declining procurements. Specific action is necessary preserve industrial base capabilities for fuzes and thermal batteries.</p>			

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Office of Secretary Of Defense		<b>Date:</b> March 2014	
<b>Appropriation/Budget Activity</b> 0400 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0607210D8Z / <i>Industrial Base Analysis and Sustainment Support</i>	<b>Project (Number/Name)</b> 819 / <i>Industrial Base Analysis and Sustainment</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>
<p>Projects will be executed to improve the efficiency of existing production processes, explore advanced materials for higher performance and upgrade outdated technology.</p> <p>Industrial Base Sustainment Other: DoD will conduct additional industrial base assessments in FY 2014 to identify weaknesses and fragile and critical capabilities for FY 2015 project development. A call for FY 2015 projects has also been sent to the Service's Acquisition Executives requesting that proposals rate the fragility and criticality of subject capabilities. A Joint Industrial Base Working Group Panel will rank the proposals, and the Deputy Assistant Secretary for Manufacturing and Industrial Base Policy will make the final selection.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>		-	9.993
<p><b>C. Other Program Funding Summary (\$ in Millions)</b> N/A</p> <p><b>Remarks</b></p> <p><b>D. Acquisition Strategy</b> N/A</p> <p><b>E. Performance Metrics</b>            Goal is to insert industrial base considerations consistently in program review            To make informed investment and production decisions            To avoid reconstitution costs for capability that we will need again soon         </p>			