

# OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

APPROPRIATION/ BUDGET ACTIVITY  
RDTE, Defense Wide BA 03

PE NUMBER AND TITLE  
**0603000D8Z - Insensitive Munitions Advanced Technology**

COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P300      Insensitive Munitions AT		3.966	15.970	20.802	17.824	22.779	24.760

**A. Mission Description and Budget Item Justification:** (U) This program addresses advanced technology development associated with improving the lethality, reliability, safety and survivability of munitions and weapon systems. The goal is to develop and demonstrate joint enabling technologies that can be used by Program Managers as they develop their specific weapon programs. The program invests in and demonstrates technologies from a Joint Service perspective thus insuring the development of technology with the broadest applicability, while avoiding duplication of efforts.

(U) This effort will demonstrate enabling technologies needed to develop weapons in compliance with Insensitive Munitions (IM) requirements established in Title 10, United States Code and DoDI 5000.1. This effort will take promising technologies demonstrated at the laboratory scale and transition them into demonstration programs utilizing generic hardware based on priority munitions identified in the Program Executive Office (PEO) IM Strategic Plans. In this way, promising formulations, ingredients, case technologies, liners and coatings can be integrated into a munition configuration and its ability to improve the IM response can be validated. Program Managers can then transition mature demonstrated IM technology, decreasing their program costs and schedule risk, and facilitating their spin-off into other non-compliant munitions within their portfolios.

(U) Under the Joint IM Technology Program (JIMTP), investments are focused on specific munition areas that have been identified by the Science and Technology community and validated by the technology needs identified in the IM Strategic Plans submitted by the PEOs. These five munitions areas are: 1) high performance rocket propulsion, 2) minimum smoke rocket propulsion, 3) large caliber gun propulsion, 4) anti-armor warheads, and 5) blast and fragmentation warheads.

(U) Munition Area Technology Groups (MATGs) have been established for each area and are tasked with 1) coordinating, establishing, and maintaining five-year technology development plans and roadmaps, 2) coordinating biannual meetings to review technical and programmatic details of each funded and proposed efforts, 3) developing and submitting Technology Transition Agreements in coordination with appropriate PEOs for insertion in their IM Strategic Plans, and 4) interfacing with other MATGs and IM science and technology projects as appropriate. The JIMTP Technical Advisory Committee (TAC) (consisting of senior DoD and DOE laboratory representatives and senior Munitions PEO representatives) will provide program oversight, policy, direction and priorities during its annual meeting.

<b><u>B. Program Change Summary</u></b>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008)		6.000	16.000
Current BES/President's Budget (FY 2009)		3.966	15.970
Total Adjustments		-2.034	-0.030
Congressional Program Reductions		-2.000	
Congressional Rescissions			
Congressional Increases			

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Reprogrammings				
SBIR/STTR Transfer				
Other		-0.034	-0.030	

**C. Other Program Funding Summary**

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0602000D8Z - BA 2 Joint Munitions Technology	10.323	12.433	15.254	15.371	15.250	15.453	15.671

Comment:

**D. Acquisition Strategy** Not applicable for this item.

**E. Performance Metrics:** Not Applicable.

# OSD RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

**February 2008**

<b>APPROPRIATION/ BUDGET ACTIVITY</b> <b>RDTE, Defense Wide BA 03</b>		<b>PE NUMBER AND TITLE</b> <b>0603000D8Z - Insensitive Munitions Advanced Technology</b>					<b>PROJECT</b> <b>P300</b>	
COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
P300      Insensitive Munitions AT		3.966	15.970	20.802	17.824	22.779	24.760	

**A. Mission Description and Budget Item Justification:** This RDT&E effort will demonstrate enabling technologies needed to develop weapons in compliance with Insensitive Munitions (IM) requirements established in Title 10, United States Code and DoDI 5000.1. This effort will take promising technologies demonstrated at the laboratory scale and transition them into demonstration programs utilizing generic hardware based on priority munitions identified in the Program Executive Officer (PEO) IM Strategic Plans. PEOs can then transition mature demonstrated IM technology, decreasing their program costs and schedule risk, and facilitating spin-offs to other non-compliant munitions within their portfolios.

Under the Joint Insensitive Munitions Program (JIMTP), investments are focused on five Munition Areas: High Performance Rocket Propulsion, Minimum Signature Rocket Propulsion, Blast and Fragmentation Warheads, Anti-Armor Warheads, and Large Caliber Gun Propulsion. Munition Area Technology Groups (MATGs) under tri-service leadership have developed technology roadmaps for each Munition Area which are used to guide investments based on goals consistent with the DoD IM Strategic Plan. These IM technologies, alone or in combination, will be incorporated in hardware, simulating real-world munitions, to demonstrate its utility and feasibility as part of Technology Transition Agreements with PEOs.

**B. Accomplishments/Planned Program:**

<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2007</u>	<u>FY 2008</u>		<u>FY 2009</u>
Insensitive Munitions Advanced Technology Development		3.966		15.970

FY 2008 Plans: (U) Using DoD's IM Strategic Plan priority munitions configurations, technology demonstration hardware will be designed and manufactured. Current 6.2 Reactive Liner to support large general-purpose warheads will transition to 6.3. Assessments and studies based on mid-scale test results will be conducted to determine readiness for full-scale IM tests, and production capability will be verified with full-scale test assets. An indirect fire munition will be utilized to demonstrate the latest blast/fragment explosive technology. Demonstration programs will be conducted, which demonstrate the range of effectiveness of these new IM technologies against the IM threats of slow and fast heating, bullet and fragment impact, sympathetic reaction, and shaped charge jet impact.

FY 2009 Plans: (U) In addition to those efforts already underway, a generic small diameter rocket motor, called an analog, will be fabricated to demonstrate new vented case design concepts, which may include new propellant formulations. Conduct full-scale IM testing on the reactive liner concept implemented in a general purpose bomb configuration. Evaluate a first generation warhead to demonstrate anti-armor technology, which may include new energetic ingredients and binders, novel formulations, liners or case design concepts. Conduct coordinated IM demonstration programs, which demonstrate the range of effectiveness of these new IM technologies against the IM threats of slow and fast heating, bullet and fragment impact, sympathetic reaction, and shaped charge jet impact.

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<b><u>C. Other Program Funding Summary</u></b>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
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Comment:

**D. Acquisition Strategy** Not applicable for this item.

**E. Major Performers** Not applicable for this item.