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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				PE 0603627A: <i>Smoke, Obscurant and Target Defeating Sys-Adv Dev</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.337	4.572	2.725	-	2.725	4.285	5.168	0.173	-	Continuing	Continuing
E79: <i>SMOKE/OBSCURANT SYSTEM</i>	2.337	4.572	2.725	-	2.725	4.285	5.168	0.173	-	Continuing	Continuing

Note

Change Summary Explanation: Funding - FY 13: Funds realigned to higher priority Army programs.

A. Mission Description and Budget Item Justification

Project supports Screening Obscuration Module (SOM) in the development and improvement of an array of obscurant agents, and devices to improve survivability of the combined armed forces, support extended range capability, complement combined weapon systems, and enhance force effectiveness and combat power. This program element supports critical management studies and analyses that are conducted on a continuing basis to ensure that Technology Development efforts are targeted against the emerging threat. US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using generated and launched smoke systems.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	2.425	9.501	4.589	-	4.589
Current President's Budget	2.337	4.572	2.725	-	2.725
Total Adjustments	-0.088	-4.929	-1.864	-	-1.864
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.073	-			
• Adjustments to Budget Years	-	-	-1.864	-	-1.864
• Other Adjustments 1	-0.015	-4.929	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603627A: Smoke, Obscurant and Target Defeating Sys-Adv Dev				PROJECT E79: SMOKE/OBSCURANT SYSTEM			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
E79: SMOKE/OBSCURANT SYSTEM	2.337	4.572	2.725	-	2.725	4.285	5.168	0.173	-	Continuing	Continuing
Quantity of RDT&E Articles											
Note Not applicable for this item.											
A. Mission Description and Budget Item Justification Project supports Screening Obscuration Module (SOM), and Projected and Generated Obscuration Capability (PGOC), devices to improve survivability of the combined armed forces, support extended range capability, complement combined weapon systems, and enhance force effectiveness and combat power. SOM is a small smoke generator that degrades the visual through near infrared portion of the Electro-Magnetic Spectrum. PGOC will integrate an obscuration generator and grenade launcher(s) onto an unmanned platform to provide the capability of obscuring the Visual/IR spectrum. This program element supports critical management studies and analysis that are conducted on a continuing basis to ensure that Technology Development efforts are targeted against the emerging threat. US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using generated and launched smoke systems.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: SOM Engineering and Modeling Articles: Description: Engineering and Modeling for SOM systems. FY 2011 Accomplishments: Engineering and Modeling for SOM systems. FY 2012 Plans: Engineering and Modeling for SOM systems. FY 2013 Plans: Engineering and Modeling for SOM systems.								0.622	0.929	0.400	
								0	0		
Title: SOM Development.								1.715	2.186	1.846	
Articles:								0	0		

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603627A: <i>Smoke, Obscurant and Target Defeating Sys-Adv Dev</i>			PROJECT E79: <i>SMOKE/OBSCURANT SYSTEM</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
							FY 2011	FY 2012	FY 2013		
Description: SOM Development. FY 2011 Accomplishments: SOM Development. FY 2012 Plans: SOM Development. FY 2013 Plans: SOM Development.											
Title: Test and Evaluation of SOM systems. Description: Test and Evaluation of SOM systems. FY 2012 Plans: Test and Evaluation of SOM systems. FY 2013 Plans: Test and Evaluation of SOM systems.							Articles: -	1.457 0	0.479		
Accomplishments/Planned Programs Subtotals							2.337	4.572	2.725		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• SMOKE/OBSCURANT SYSTEM: <i>Project 200 Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	2.807									0.000	2.807
• Target Defeating System: <i>Project 198 Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	2.339									0.000	2.339
D. Acquisition Strategy Acquisition Strategy: Development of PGOC and SOM systems to include design, construction, modeling and testing of prototypes.											

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603627A: <i>Smoke, Obscurant and Target Defeating Sys-Adv Dev</i>	PROJECT E79: <i>SMOKE/OBSCURANT SYSTEM</i>
<p>PGOC acquisition strategy follows an evolutionary strategy with two increments. The first increment will integrate an obscuration generator and grenade launcher(s) onto an unmanned platform to provide the capability of obscuring the Visual/IR spectrum. The second increment will add the capability of obscuring the Millimeter Wave (MMW) spectrum to the obscuration generator. Award of two contracts for Competetive prototyping during TD phase. Development of two prototype designs, integration of grande launchers, robotic control packages onto already developed obscuration platforms (M56E1 and M56E2). Development of a government designed advanced grenade launcher.</p> <p>SOM acquisition strategy is to develop a small smoke generator that degrades the visual through near infrared portion of the Electro-Magnetic Spectrum. SOM program will focus on replacing current smoke pots to provide the Joint Land Forces with a medium area screening obscuration device. The initial increment, Increment 1, will focus on developing a SOM system capable of obscuring the Visual through Near IR wavelengths of the electromagnetic spectrum. Future SOM Increments 2 and 3 will incorporate bi-spectral and multi-spectral effects. The SOM has the capability to quickly produce (less than 15 seconds) medium duration (20 minutes), medium area (11 meters wide x 20 meters length x 5.25 meters height) screening obscuration effects, screening an area equivalent to three times the size of a large combat vehicle. The individual Soldier or team will employ the SOM devices on open and complex terrain; excluding enclosed areas. SOM will be deployed to accomplish the following mission types: avoid observation, defense of a battle position, and assault position.</p> <p><u>E. Performance Metrics</u></p> <p>Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603627A: Smoke, Obscurant and Target Defeating Sys-Adv Dev				PROJECT E79: SMOKE/OBSCURANT SYSTEM					
Management Services (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Project Management Personnel	MIPR	JPM:NBCCA	3.538	0.929		0.479		-		0.479	Continuing	Continuing	Continuing	
Subtotal			3.538	0.929		0.479		-		0.479				
Product Development (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
SOM Hardware Development	C/CPFF	TBD:TBD	18.870	2.186		1.846		-		1.846	Continuing	Continuing	Continuing	
Subtotal			18.870	2.186		1.846		-		1.846				
Support (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Engineering Modeling and Studies SOM	MIPR	Edgewood Chemical Biological Center:Edgewood, Md	1.964	0.100		0.400		-		0.400	Continuing	Continuing	Continuing	
Subtotal			1.964	0.100		0.400		-		0.400				
Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
SOM Test & Evaluation	MIPR	OGA Various:Various	-	1.357		-		-		-	Continuing	Continuing	Continuing	
Subtotal			-	1.357		-		-		-				
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			24.372	4.572		2.725		-		2.725				

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	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army										DATE: February 2012			
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	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SOM Developmental Testing #1																												
SOM Operational Assessment #1																												
SOM Milestone B																												
SOM Contract Award																												
SOM Design and Fabrication																												
SOM Developmental Testing #2																												
SOM Operational Assessment																												
SOM Milestone C																												
SOM MS C Contract Award																												
SOM FRP																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Army			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603627A: <i>Smoke, Obscurant and Target Defeating Sys-Adv Dev</i>	PROJECT E79: <i>SMOKE/OBSCURANT SYSTEM</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SOM Developmental Testing #1	2	2012	3	2012
SOM Operational Assessment #1	4	2012	4	2012
SOM Milestone B	1	2013	1	2013
SOM Contract Award	2	2013	2	2013
SOM Design and Fabrication	2	2013	4	2014
SOM Developmental Testing #2	1	2015	2	2015
SOM Operational Assessment	3	2015	4	2015
SOM Milestone C	4	2015	4	2015
SOM MS C Contract Award	2	2016	2	2016
SOM FRP	4	2016	4	2016