

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2003																																																										
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys-Adv Dev																																																													
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost																																																							
Total Program Element (PE) Cost	0	2323	10262	12972	6311	8233	15218	8915	0	64234																																																							
E78 TARGET DEFEATING SYS	0	2323	5836	6645	0	0	0	0	0	14804																																																							
E79 SMOKE/OBSCURANT SYSTEM	0	0	4426	6327	6311	8233	15218	8915	0	49430																																																							
<p>A. Mission Description and Budget Item Justification: U.S. Forces must be able to defeat target acquisition, weapon guidance systems, and surveillance sensors across the electro-optical spectrum. This program element supports the Component Advanced Development and System Integration developmental phases of high performance obscuration materials and systems to increase the survivability of the combined armed forces and to complement weapon systems. These programs develop systems provide large area and projected obscuration across the spectrum from visual through infrared and millimeter wavelength radar. The technologies supported by this program enhance obscuration systems as combat multipliers.</p> <p>Systems developed support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).</p>																																																																	
<table border="1"> <thead> <tr> <th></th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>B. Program Change Summary</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget (FY 2003)</td> <td>0</td> <td>2432</td> <td>10421</td> <td>13590</td> </tr> <tr> <td>Current Budget (FY 2004/2005 PB)</td> <td>0</td> <td>2323</td> <td>10262</td> <td>12972</td> </tr> <tr> <td>Total Adjustments</td> <td>0</td> <td>-109</td> <td>-159</td> <td>-618</td> </tr> <tr> <td>Congressional program reductions</td> <td></td> <td></td> <td>-159</td> <td>-618</td> </tr> <tr> <td>Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Congressional increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Reprogrammings</td> <td></td> <td>-42</td> <td></td> <td></td> </tr> <tr> <td>SBIR/STTR Transfer</td> <td></td> <td>-67</td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Budget Years</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												FY 2002	FY 2003	FY 2004	FY 2005	B. Program Change Summary					Previous President's Budget (FY 2003)	0	2432	10421	13590	Current Budget (FY 2004/2005 PB)	0	2323	10262	12972	Total Adjustments	0	-109	-159	-618	Congressional program reductions			-159	-618	Congressional rescissions					Congressional increases					Reprogrammings		-42			SBIR/STTR Transfer		-67			Adjustments to Budget Years				
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2003			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys-Adv Dev				PROJECT E78		
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
E78 TARGET DEFEATING SYS	0	2323	5836	6645	0	0	0	0	0	14804
<p><u>A. Mission Description and Budget Item Justification:</u> U.S. Forces must be able to defeat target acquisition, weapon guidance systems, and surveillance sensors across the electro-optical spectrum. These program elements support the Component Advanced Development and System Integration developmental phases of high performance obscurant materials and systems to increase the survivability of the combined armed forces and to complement weapons systems. These programs develop systems to provide large area and projected obscurant across the spectrum from visual through infrared and millimeter wavelength radar. The technologies supported by this program enhance obscurant systems as combat multipliers. Instead of traditional self-defense procedures, this technology will transfer the visibility defeating materials directly to the threat and remove soldiers from direct-fire risk. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).</p>										
<u>Accomplishments/Planned Program</u>							<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Initiate program planning and conduct a Milestone A for distant smoke or robotic obscurant systems.							0	1067	0	0
Conduct contract planning and execution for distant smoke or robotic obscurant systems.							0	1256	3836	3145
Conduct developmental testing (DT) or distant smoke or robotic obscurant systems.							0	0	2000	2000
Initiate program planning and conduct a Milestone B for distant smoke or robotic obscurant systems.							0	0	0	1500
Totals							0	2323	5836	6645

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BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys-Adv Dev					PROJECT E78	
<u>B. Other Program Funding Summary</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
	RDTE, A, Budget Activity 2, PE 0602622A, Project 552	3190	3395	3540	3553	3713	3742	3830	3933	Continuing
<u>C. Acquisition Strategy:</u> Project Smoke/Obscurant and Target Defeat: The Distant Smoke System (DSS) will begin Component Advanced Development in FY2003. The effort will be a combined in-house and competitive contract program.										

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes					PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys- Adv Dev					PROJECT E78		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DSS - Supports robotic hardware development	C/CPFF	TBS	0	758	3-4Q	3500	2Q	3264	1Q	0	7522	0
Subtotal:			0	758		3500		3264		0	7522	0
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DSS - Supports developmental testing	OGA	TBS	0	0		50	1Q	300	1Q	0	350	0
Subtotal:			0	0		50		300		0	350	0

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes					PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys- Adv Dev					PROJECT E78		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DSS - Conducts developmental tests	OGA	TBS	0	0		1409	1-2Q	1581	1Q	0	2990	0
Subtotal:			0	0		1409		1581		0	2990	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DSS - Supports program management	In house	SBCCOM, APG, MD	0	1000	1Q	877	1Q	1500	1Q	0	3377	0
b . DSS - Conducts Milestone and Initiates contract planning	In house	SBCCOM, APG, MD	0	565	1-3Q	0		0		0	565	0
Subtotal:			0	1565		877		1500		0	3942	0
Project Total Cost:			0	2323		5836		6645		0	14804	0

Schedule Profile Detail (R-4a Exhibit)							February 2003	
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys- Adv Dev				PROJECT E78
<u>Schedule Detail</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
DSS - Milestone A, Program initiation		3Q						
DSS - Initiate RDTE competitive contract planning		1-2Q						
DSS - Award competitive RDTE contract		3-4Q						
DSS - Conduct developmental testing			2-3Q	4Q				
DSS - Conduct Milestone B				4Q				

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2003			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603627A - Smoke, Obscurant and Target Defeating Sys-Adv Dev				PROJECT E79		
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
E79 SMOKE/OBSCURANT SYSTEM	0	0	4426	6327	6311	8233	15218	8915	0	49430
<p><u>A. Mission Description and Budget Item Justification:</u> This is a new effort in FY04. U.S. Forces must be able to defeat target acquisition, weapon guidance systems, and surveillance sensors across the electro-optical spectrum. These program elements support the Component Advanced Development and System Integration developmental phases of high performance obscurant materials and systems to increase the survivability of the combined armed forces and to complement weapons systems. These programs develop systems provide large area obscurant across the spectrum from visual through infrared and millimeter wavelength radar. The technologies supported by this program enhance obscurant systems as combat multipliers.</p> <p>This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).</p>										
<u>Accomplishments/Planned Program</u>							<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Initiate component advance development for a smoke grenade and smoke pot which will have the capability to obscure in the visible, infrared, and millimeter wave spectrums.							0	0	4332	0
Conduct initial Milestone B for the multispectral grenade and smoke pot.							0	0	94	0
Execute contract to build candidate smoke grenades and smoke pots with multi-spectral capability. (quantity or cost of each unknown at this time)							0	0	0	5531
Qualify and quantify test requirements for candidate grenades and pots.							0	0	0	600
Initiate environmental impact studies on candidates grenades and pots.							0	0	0	196
Totals							0	0	4426	6327

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								February 2003																								
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<div style="border: 1px solid black; margin-bottom: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%; padding: 5px;"><u>B. Other Program Funding Summary</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2002</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2003</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2004</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2005</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2006</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2007</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2008</u></th> <th style="width: 5%; padding: 5px;"><u>FY 2009</u></th> <th style="width: 5%; padding: 5px;"><u>To Compl</u></th> <th style="width: 5%; padding: 5px;"><u>Total Cost</u></th> </tr> <tr> <td style="padding: 5px;">RDTE, A, Budget Activity 5, PE 0604609A, Project 200</td> <td style="text-align: center; padding: 5px;">7293</td> <td style="text-align: center; padding: 5px;">7320</td> <td style="text-align: center; padding: 5px;">11751</td> <td style="text-align: center; padding: 5px;">3831</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">12757</td> <td style="text-align: center; padding: 5px;">11494</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">54446</td> </tr> </table> </div> <div style="padding: 10px;"> <p><u>C. Acquisition Strategy:</u> There will be a full and open competition for the development contract. SBCCOM will be the procurement agency.</p> </div>											<u>B. Other Program Funding Summary</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>	RDTE, A, Budget Activity 5, PE 0604609A, Project 200	7293	7320	11751	3831	0	0	12757	11494	0	54446
<u>B. Other Program Funding Summary</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>																						
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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Initial Program Planning and System Design	OGA	PMNBC, APG, MD	0	0		4332	1-4Q	0		0	4332	0
b . Developmental Contract	C/CPFF	TBS	0	0		0		5531	2Q	0	5531	0
Subtotal:			0	0		4332		5531		0	9863	0
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Environmental Studies	OGA	TBS	0	0		0		196	2Q	0	196	0
Subtotal:			0	0		0		196		0	196	0

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test & Evaluation	OGA	TBS	0	0		0		600	2Q	0	600	0
Subtotal:			0	0		0		600		0	600	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Conduct initial Milestone B	OGA	PMNBC, APG, MD	0	0		94	1Q	0		0	94	0
Subtotal:			0	0		94		0		0	94	0
Project Total Cost:			0	0		4426		6327		0	10753	0

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Conduct Milestone B			3Q					
Award Contract				2Q				