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<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)</b>								DATE <b>February 1999</b>																																																									
<b>BUDGET ACTIVITY</b> <b>7 - Operational System Development</b>				<b>PE NUMBER AND TITLE</b> <b>0203801A Missile/Air Defense Product Improvement Program</b>																																																													
<i>COST (In Thousands)</i>	FY1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost																																																							
Total Program Element (PE) Cost	29471	15151	29985	28649	46730	61904	66162	53535	Continuing	Continuing																																																							
D036 Patriot Product Improvement Program	21017	9224	7761	6741	4550	4778	9040	8044	Continuing	Continuing																																																							
D038 Avenger Product Improvement Program	0	0	0	0	2016	0	4225	15000	Continuing	Continuing																																																							
D303 Stinger RMP Product Improvement Program	8454	5927	22224	21908	40164	57126	50932	21662	Continuing	Continuing																																																							
D633 THAAD P3I	0	0	0	0	0	0	1965	8829	Continuing	Continuing																																																							
<p><b>A. <u>Mission Description and Budget Item Justification:</u></b> The goal of the Air Defense Artillery (ADA) modernization is to provide the most capable systems to well-trained soldiers at the right time to defeat the evolving threat. The ADA systems under this Program Element achieve the AMD force which will assist the Army and the joint force in gaining Full Spectrum Dominance in any operational requirement, from smaller-scale contingency operations to major theater wars (MTW). ADA must continually be upgraded and modernized to meet these challenges. The FY00-FY01 budget funds critical improvements to Patriot and Stinger.</p>																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: left;"><b><u>B. Program Change Summary</u></b></td> <td style="text-align: center;"><u>FY 1998</u></td> <td style="text-align: center;"><u>FY 1999</u></td> <td style="text-align: center;"><u>FY 2000</u></td> <td style="text-align: center;"><u>FY 2001</u></td> </tr> <tr> <td>Previous President's Budget (FY 1999 PB)</td> <td style="text-align: right;">30443</td> <td style="text-align: right;">11252</td> <td style="text-align: right;">32105</td> <td style="text-align: right;">31034</td> </tr> <tr> <td>Appropriated Value</td> <td style="text-align: right;">31412</td> <td style="text-align: right;">15252</td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>a. Congressional General Reductions</td> <td style="text-align: right;">-969</td> <td style="text-align: right;">-101</td> <td></td> <td></td> </tr> <tr> <td>b. SBIR / STTR</td> <td style="text-align: right;">-731</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c. Omnibus or Other Above Threshold Reductions</td> <td style="text-align: right;">-241</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d. Below Threshold Reprogramming</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Budget Years Since FY 1999 PB</td> <td></td> <td></td> <td style="text-align: right;">-2120</td> <td style="text-align: right;">-2385</td> </tr> <tr> <td>Current Budget Submit (FY 2000/2001 PB)</td> <td style="text-align: right;">29471</td> <td style="text-align: right;">15151</td> <td style="text-align: right;">29985</td> <td style="text-align: right;">28649</td> </tr> </table>											<b><u>B. Program Change Summary</u></b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	Previous President's Budget (FY 1999 PB)	30443	11252	32105	31034	Appropriated Value	31412	15252			Adjustments to Appropriated Value					a. Congressional General Reductions	-969	-101			b. SBIR / STTR	-731				c. Omnibus or Other Above Threshold Reductions	-241				d. Below Threshold Reprogramming					e. Rescissions					Adjustments to Budget Years Since FY 1999 PB			-2120	-2385	Current Budget Submit (FY 2000/2001 PB)	29471	15151	29985	28649
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0203801A Missile/Air Defense Product Improvement Program				PROJECT D036		
COST (In Thousands)	FY1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D036 Patriot Product Improvement Program	21017	9224	7761	6741	4550	4778	9040	8044	Continuing	Continuing
<p><b>A. <u>Mission Description and Justification</u> D036 - Patriot Product Improvement Program:</b> The Patriot system is being upgraded through a series of individual materiel changes (MC) culminating in the attainment of the Patriot Advanced Capability - 3 (PAC-3) system. The communication upgrades improve Patriot's above and below battalion communication equipment. These changes eliminate Patriot peculiar communications equipment and improve Patriot's interoperability between systems and between the Services. FY00 will be the first year for the Remote Launch Communication Enhancement Upgrade (RLCEU) Link 16 Phase 1 and Post Deployment Build 5 (PDB5). RLCEU Link 16 will develop and test the hardware required for a Link-16 terminal, terminal control and communications processing equipment required to receive and process the Link 16 Joint Data Net information. PDB 5 will improve system capability against advanced threats (Theatre Ballistic Missiles and Air-Breathing Threats (TBMs and ABTs) in all environments to include clutter and/or intense Electronic Counter Measures (ECM). Program objective will be to define the software changes necessary to enhance system capabilities against advanced TBM threat and advanced cruise missile threats. In addition, interoperability improvements [e.g., Cooperative Engagement Capability (CEC) interface, cueing, and Tactical Data Information Link (TADIL-J) direct to Fire Unit (FU)], PAC-3 missile integration improvements in ground software Classification Discrimination &amp; Identification (CDI3) enhancements, and on-line diagnostic evolution will be addressed.</p> <p><b>FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 5571 P3I test program</li> <li>• 6198 Communication upgrade</li> <li>• 9248 Anti-Cruise Missile Upgrade</li> </ul> <p>Total 21017</p> <p><b>FY 1999 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 5612 P3I test program</li> <li>• 600 Responsive threat analysis</li> <li>• 2768 Horizontal Battlefield Digitization</li> <li>• 244 Small Business Innovative Research/Small Business Technology Transfer Programs</li> </ul> <p>Total 9224</p>										
Project D036			Page 2 of 10 Pages				Exhibit R-2A (PE 0203801A)			

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<b>BUDGET ACTIVITY</b> <b>7 - Operational System Development</b>				<b>PE NUMBER AND TITLE</b> <b>0203801A Missile/Air Defense Product Improvement Program</b>				<b>PROJECT</b> <b>D036</b>		
<p><b>FY 2000 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 2452 RLCEU Link 16 Phase I</li> <li>• 5309 PDB 5</li> </ul> <p>Total 7761</p> <p><b>FY 2001 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 2452 RLCEU Link 16 Phase I</li> <li>• 4289 Post PDB 5</li> </ul> <p>Total 6741</p>										
<b>B. Other Program Funding Summary</b>										
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To Complete	Total Cost
Missile Procurement, Army										
Budget Activity 3 - Patriot Mod (C50700)	7732	14275	30840	22884	23754	22855	37651	68834	Cont	Cont
Budget Activity 3 – Patriot Mod Initial Spares	2713	4920	3657	2667	735	1468	3969	5307	Cont	Cont
<p><b>C. Acquisition Strategy:</b> The design objective of the Patriot system was to provide a baseline system capable of being modified to cope with the evolving threat. This alternative minimizes technological risks and provides a means of enhancing system capability through planned upgrades of deployed systems. The Patriot program consists of two interrelated acquisition programs - The Patriot growth program and the PAC-3 missile program. Growth program modifications are grouped into configurations which are scheduled to be fielded in the same time frame. Configuration groupings are a convenience for managing block changes of hardware and software and are not a performance-related grouping. However, incremental increases in performance will be determined for each configuration in order to provide benchmarks for configuration testing and for the development of user doctrine and tactics.</p>										
<b>D. Schedule Profile</b>										
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</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>
Configuration 3 Contractor Development Test & Evaluation		2Q								
Configuration 3 Initial Operational Test & Evaluation		1Q								
PDB-5 Software Improvements Initiated			1Q							
PBD-5 Software Improvements Continuation				1-4Q						
RLCEU Link 16 Phase I Program Initiated				1Q						
RLCEU Link 16 Phase I Program Continuation				1-4Q						
PAC-3 FUE			3Q							
<p>Project D036 <span style="float: right;">Page 3 of 10 Pages</span> <span style="float: right;">Exhibit R-2A (PE 0203801A)</span></p>										

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<b>ARMY RDT&amp;E COST ANALYSIS (R-3)</b>	DATE <b>February 1999</b>
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<b>BUDGET ACTIVITY</b> <b>7 - Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0203801A Missile/Air Defense Product Improvement Program</b>	<b>PROJECT</b> <b>D036</b>
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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a.	DAAH0182CA181	Raytheon/MA	3722							Cont	Cont	
b.	DAAH0187CA025	Raytheon/MA	22455							Cont	Cont	
c.	DAAH0189C0458	Raytheon/MA	23228							Cont	Cont	
d.	DAAH0192C0036	Raytheon/MA	5000							Cont	Cont	
Small Contracts			1168							Cont	Cont	
e.	DAAH0187CA006	General Electric/FL	4824							Cont	Cont	
f..	DAAH0189C0167	Brunswick/	3100							Cont	Cont	
Martin Marietta												
g.	DAAH0192C0301	SS/CPFF Lockheed-Martin/AL	4314							Cont	Cont	
h.	DAAH0191C0602	SS/CPIF Raytheon/MA	23077							Cont	Cont	
i.	DAAH0192C0006	SS/CPAF Raytheon/MA	56460							Cont	Cont	
j.	DAAH0195C0043	SS/CPAF Raytheon/MA	16113	400	Dec 98					Cont	Cont	
k.	DAAH0196C0406	Lockheed Martin/AL	200							Cont	Cont	
l.	DAAH0196C0062	Raytheon/MA	62937							Cont	Cont	
m.	DAAH0196C0018	Raytheon/MA	5046							Cont	Cont	
n.	RLCEU Link 16 Phase I					1226	Dec 99	1226	Dec 00	Cont	Cont	
o.	Horiz Btlfld Digit			2768	Feb 99					Cont	Cont	
p.	Post PBD 5					2060	Feb 00	1654	Feb 01	Cont	Cont	
q.	RAM Improvements											
Subtotal Product Development:			231644	3168		3286		2880		Cont	Cont	

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a.	DAAH0187CA008	CAS, Inc/AL	2270								Cont	
b.	DAAH0190C0487	CAS, Inc/AL	6266								Cont	
c.	DAAH0194C0105	C/CPAF CAS, Inc/AL	6135								Cont	

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<b>II. Support Costs</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total PYs Cost</b>	<b>FY 1999 Cost</b>	<b>FY 1999 Award Date</b>	<b>FY 2000 Cost</b>	<b>FY 2000 Award Date</b>	<b>FY 2001 Cost</b>	<b>FY 2001 Award Date</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
d. DAAH0197C0324		CAS,Inc/AL	2737	791	Mar 99						Cont	
e. In-House Support		RSA/AL	11920	1131	Mar 99	1000	Mar 00	900	Mar 01		Cont	
f. Matrix Support		RSA/AL	1250	950	Feb 99	800	Feb 00	700	Feb 01		Cont	
<b>Subtotal Support Costs:</b>			<b>30578</b>	<b>2872</b>		<b>1800</b>		<b>1600</b>			<b>Cont</b>	
<b>III. Test and Evaluation</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total PYs Cost</b>	<b>FY 1999 Cost</b>	<b>FY 1999 Award Date</b>	<b>FY 2000 Cost</b>	<b>FY 2000 Award Date</b>	<b>FY 2001 Cost</b>	<b>FY 2001 Award Date</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
a. Missile Command	1095	RSA/AL	11428	250	Mar 99	2062	Mar 00	1661	Mar 01	Cont	15401	
b. White Sands Missile Range	MIPR	WSMR/NM	11725	1694	Jan 99	613	Jan 00	600	Jan 01	Cont	14632	
c. Other Govt Agent	MIPR		9063	1240	Feb 99					Cont	10303	
d. RDEC and Other Govt Agent	1095/MIPR	RSA/AL	95377							Cont	95377	
<b>Subtotal Test and Evaluation:</b>			<b>127593</b>	<b>3184</b>		<b>2675</b>		<b>2261</b>			<b>135713</b>	
<b>Project Total Cost:</b>			<b>389815</b>	<b>9224</b>		<b>7761</b>		<b>6741</b>		<b>Cont</b>	<b>Cont</b>	

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BUDGET ACTIVITY <b>7 - Operational System Development</b>				PE NUMBER AND TITLE <b>0203801A Missile/Air Defense Product Improvement Program</b>				PROJECT <b>D303</b>		
COST <i>(In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D303 Stinger RMP Product Improvement Program	8454	5927	22224	21908	40164	57126	50932	21662	Continuing	Continuing
<p><b>A. <u>Mission Description and Budget Item Justification:</u></b> This project provides a product evolution of the Stinger-RMP to improve countermeasures capability via externally loaded software, which is downloaded from a reprogrammable module. This concept allows for timely upgrades to correct system deficiencies, rapid reaction to new threats or threat countermeasures, development of specialty software programs where full capability may not be desired, and accommodation of new missions. The Block I upgrade project, which adds a roll sensor and enhanced software, extends the missile service life, solves the recognized system performance deficiencies in countermeasures and other engagement conditions, and increases terminal accuracy. The Block II program is a development of an advanced infrared (IR) Focal Plane Array Seeker which improves the performance of the missile against an expanded target and in background clutter. The program develops the improved missile for adaptation to any or all of the Stinger firing platforms, extends the missile service life and establishes a government post deployment software support posture. The Block II engineering, manufacturing and development (EMD) program provides for development to a performance specification, design qualification of guidance section conducted as part of the production qualification, and platform integration. Funds also developed MIL-STD 1760 launcher electronics to be fielded with the Apache Longbow Helicopter air-to-air requirements, based on Joint Service (U.S. Air Force and U.S. Army) doctrine. The air-to-air requirement satisfies three tasks: self-protection, protect force, and augmentation of air defense forces.</p> <p><b>FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 2865 Finalized Block II Packaging; Fabricate and Assemble Three Tactical size Guidance Sections</li> <li>• 1464 Integrated Guidance Assembly with Control Section</li> <li>• 1516 Block II Airframe Dynamic Analysis, Tests, Performance Prediction</li> <li>• 759 Continued Telemetry Unit Design</li> <li>• 200 Conducted Target Acquisition Sensor Study</li> <li>• 1650 Completed VSHORADS/SHORADS Feasibility Study and Forward NATO Staff Requirement</li> </ul> <p>Total 8454</p> <p><b>FY 1999 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 1400 Build and Evaluate Block II Guidance Sections</li> <li>• 1773 Hardware-in-the-Loop Flight Simulation Development, Missile Airframe and Missile Simulation Analyses</li> <li>• 300 Continue Telemetry Development</li> <li>• 500 Rate Sensor Evaluation</li> </ul>										
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- 1800 Performance Prediction; Weapon System Integration; Preparation for Entry into EMD
- FY 1999 Planned Program: (continued)**
- 154 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs
- Total 5927
- FY 2000 Planned Program:**
- 1250 Conduct System Trade Studies and Initiate System/Subsystem Performance Specifications
  - 15390 Initiate Preliminary Design of Guidance Section Upgrade (hardware and software)
  - 4318 Initiate Preliminary Design of System Interfaces, Launch System Modifications and Support Equipment
  - 1266 Initiate Guidance Section Production Pilot Line Definition
- Total 22224
- FY 2001 Planned Program:**
- 13251 Complete Detailed Design of Guidance Section (hardware and software)
  - 4385 Complete Detailed Design of System Interfaces, Launch System Modifications and Support Equipment
  - 2399 Continue Production Pilot Line Development and Initiate Prototype Manufacturing Activities
  - 1873 Initiate System Test and Evaluation Planning
- Total 21908

<b>B. Other Program Funding Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Compl</u>	<u>Total Cost</u>
Missile Procurement, Army										
Budget Activity 3 – Stinger Mods (C21300)	17283	13495	17712	22421	28365	26869	28192	17210	0	238593
Budget Activity 3 – Stinger Mods (C21400)							14000	68300	Cont'd	Cont'd
Budget Activity 3 – Bradley LB Mods (C21500)	3701								0	5201

**C. Acquisition Strategy:** The Block I development program is a Sole Source/Cost Plus Incentive Fee contract awarded in 1992. The Block II development began FY 1993 as a Technology Base Broad Agency announcement with a SS/CPFF contract. Current SS/CPFF contract awarded 1996 for pre-Engineering, Manufacturing and Development (EMD). The sole source EMD contract is planned in 1QFY 2000, currently funded through FY 2005. A SS/CPFF contract was awarded mid-FY 1997 for the MIL-STD Launcher electronics development. The VSHORADS/SHORADS Competitive/Firm Fixed Price contract was awarded to two international consortia; the United Kingdom was designated as the Pilot Nation, serving as contracting authority.

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BUDGET ACTIVITY <b>7 - Operational System Development</b>	PE NUMBER AND TITLE <b>0203801A Missile/Air Defense Product Improvement Program</b>	PROJECT <b>D303</b>

<b>D. Schedule Profile</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
PDRR Contract Award 2Q FY 1996								
Complete Guidance Section Integration Design	4Q							
Milestone II		3Q						
EMD Contract Award			1Q					
Performance Design Review				1Q				
Critical Design Review					1Q			
Engineering Development Tests Start						1Q		
Low Rate Initial Production Long Lead Item							1Q	
PQT-C/G Start							3Q	
PVT Start								4Q

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<b>ARMY RDT&amp;E COST ANALYSIS (R-3)</b>	DATE <b>February 1999</b>
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<b>BUDGET ACTIVITY</b> <b>7 - Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0203801A Missile/Air Defense Product Improvement Program</b>	<b>PROJECT</b> <b>D303</b>
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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. DAAH0192C0213	SS-CPIF	Hughes, Tucson, AZ	20838							0	20838	
b. DAAH0193CR127	SS-CPFF	Hughes, Tucson, AZ	4629							0	4629	
c. DAAH0195C0028	SS-CPFF	Hughes, Tucson, AZ	1965							0	1965	
d. DAAH0196C0180	SS-CPFF	Hughes, Tucson, AZ	16837	1491	2Q					0	18328	
e. DAAH0197C0084	SS-CPFF	Raytheon(Hughes), Tucson, AZ	1000							0	1000	
f. DAAH0197C0099	SS-CPFF	Raytheon(Hughes), Tucson, AZ	3101	1500	2Q					0	4601	
g. Block II EMD	TBD	Raytheon, Tucson, AZ	0			12057	1Q	16607	1Q	Cont'd	28664	
h. Block I Aggregate	Various	Various	7025							0	7025	
i. BSFV Aggregate	Various	Various	8569							0	8569	
j. In-House Support	1095	RDEC, Redstone Arsenal, AL	5382	900	2Q	5322	1Q	3776	1Q	Cont'd	15380	
k. Other Govt Agency	MIPR/1095	Various	406	1000	2Q	244	1Q	249	1Q	Cont'd	1899	
Subtotal Product Development:			69752	4891		17623		20632			112898	

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. DAAH0195CA032	SS-FFP	Sigma Tech, Huntsville, AL	1198							0	1198	
b. OSD MOU (Barclay Bank 42779277)	SS/C-FFP & 1080	United Kingdom Ministry of Defense	4090							0	4090	
Subtotal Support Costs:			5288								5288	

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BUDGET ACTIVITY <b>7 - Operational System Development</b>				PE NUMBER AND TITLE <b>0203801A Missile/Air Defense Product Improvement Program</b>						PROJECT <b>D303</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Targets	1095	ITTS, Redstone Arsenal, AL	2100							Cont'd	2100	
b. Telemeters	1095	RTTC, Redstone Arsenal, AL	1004							Cont'd	1004	
c. Countermeasures	1095	ARL, WSMR, NM				3367				Cont'd	3367	
Subtotal Test and Evaluation:			3104			3367					6471	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Project Management	In-House	SHORAD PMO, DSA AMCOM	1331	438	2Q	836		851		Cont'd	3456	
b. DLA90093D00121	SS-FFP	IITRI, Huntsville, AL	775							0	775	
c. Contracted Services	Various	Various	333	444	2Q	398		425		Cont'd	1600	
d. SBIR/STTR				154							154	
Subtotal Management Services:			2439	1036		1234		1276			5985	
Project Total Cost:			80583	5927		22224		21908			130642	