Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*				R-1 ITEM NOMENCLATURE PE 0603313A: *Missile and Rocket Advanced Technology*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	83.649	84.553	90.602	-	90.602	77.540	72.921	54.201	59.679	Continuing	Continuing
206: *MISSILE SIMULATION*	3.384	3.502	3.554	-	3.554	3.612	3.677	3.644	3.524	Continuing	Continuing
263: *FUTURE MSL TECH INTEGR(FMTI)*	40.861	42.002	60.716	-	60.716	61.086	62.528	38.110	34.829	Continuing	Continuing
550: *COUNTER ACTIVE PROTECTION*	7.831	8.547	7.522	-	7.522	0.008	0.009	0.009	4.100	Continuing	Continuing
704: *Advanced Missile Demo*	7.509	18.418	8.810	-	8.810	4.834	6.707	12.438	17.226	Continuing	Continuing
G03: *Area Defense Advanced Technology*	1.920	12.084	10.000	-	10.000	8.000	-	-	-	Continuing	Continuing
NA6: *Missile and Rocket Initiatives (CA)*	22.144	-	-	-	-	-	-	-	-	Continuing	Continuing

Note

FY12 funding increase for Indirect Fire Protection Capability (IFPC) Technology Development.

A. Mission Description and Budget Item Justification

This program element (PE) matures and demonstrates advanced missile technologies to enhance weapon system lethality, survivability, agility, deployability, and affordability. This PE focuses on smaller, lighter weight, more affordable missiles. This PE supports high fidelity simulations for advanced tactical missiles and interceptors (project 206); missile and interceptor components with capabilities for locating targets in clutter, precision guidance, high speed missile flight, and missile communications, command, and control (project 263); guided interceptors to work with ground combat vehicle active protection systems (project 550); technologies to detect and track rocket, artillery, and mortar threats (project 704); and technologies required for missile-based deployable force protection as well as defense against unmanned aerial vehicles and rotary wing aircraft (project G03). Project NA6 funds congressional special interest items.

Work in this PE is complimentary to PE 0602303A (Missile Technology), and is fully coordinated with PE 0603003A (Aviation Advanced Technology), PE 0603270A (Electronic Warfare Technology), PE 0602624A (Weapons and Munitions Technology), PE 0603004A (Weapons and Munitions Advanced Technology), and PE 0603005A (Combat Vehicle and Automotive Advanced Technology).

The cited work is consistent with the Director, Defense Research and Engineering Strategic Plan, the Army Modernization Strategy, and the Army Science and Technology Master Plan.

Work in this PE is performed by the Aviation and Missile Research, Development, and Engineering Center (AMRDEC) located at Huntsville, AL.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603313A: *Missile and Rocket Advanced Technology*	PROJECT G03: *Area Defense Advanced Technology*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
G03: *Area Defense Advanced Technology*	1.920	12.084	10.000	-	10.000	8.000	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project matures and demonstrates Deployable Force Protection missile technology for small command outposts and air defense missile technology to protect against: unmanned aerial vehicles, rotary wing aircraft large caliber rockets, and cruise missiles as well as expands the protection envelope to a division/corps area.

The cited work is consistent with the Department of Defense Research and Engineering Strategic Plan, the Army Modernization Strategy, and the Army Science and Technology Master Plan.

Work in this project is performed by the Aviation and Missile Research, Development, and Engineering Center (AMRDEC), Huntsville, AL.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: Air Defense Advanced Technology ***Description:*** This effort matures and demonstrates missile technology to provide capability for Warfighter force protection against low and slow flying air vehicle threats in all environments without increasing the force structure. This effort leverages activities from PE 0602303A, project 214. ***FY 2010 Accomplishments:*** Matured the design of critical components for an air defense capability, performed component evaluation in a laboratory environment, and matured high fidelity simulations. ***FY 2011 Plans:*** Continue design and demonstration of critical components; and integrate and demonstrate an air defense system capability in a relevant environment.	1.920	2.084	-
Title: Deployable Force Protection Missile Technology ***Description:*** This effort demonstrates affordable missile technology to provide force protection for smaller forward operating bases (FOBs). This effort will integrate existing and developmental missile technology and design novel fire control, guidance, and control systems to use missiles for a force protection role. ***FY 2011 Plans:***	-	10.000	10.000

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603313A: *Missile and Rocket Advanced Technology*	PROJECT G03: *Area Defense Advanced Technology*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Demonstrate missile system technologies for affordable effects to provide area protection for smaller FOBs; design guidance, control, actuation, and propulsion technology to enable 360 degree protection; design fire control systems to provide 360 degree protection to a re-configurable protected area using multiple missiles and launchers. ***FY 2012 Plans:*** Will integrate missile component technologies into missile systems; will integrate missile system with the fire control systems; Will demonstrate missile and fire control systems individually and will evaluate performance of the combined systems.			
Accomplishments/Planned Programs Subtotals	1.920	12.084	10.000

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

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.