

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013	
Project Cost		4.956	11.198	32.119	83.509	85.500	66.200	0.000	
RDT&E Articles Qty									
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
<p>The Light Armored Vehicle Family of Vehicles (LAV FOV) consists of six fielded LAV configurations, and one communications/intelligence-configured asset on a LAV chassis. The LAV FOV provides a logistically self-contained, highly mobile, and lethal combined arms combat system to the Marine Air-Ground Task Force (MAGTF). The LAV Product Improvement Program funds the development and testing of modifications of four programs; the LAV-Command & Communication (LAV-C2) Upgrade Program, the LAV Lethality Program, the MARINE Personnel Carrier (MARINE PC) Program and the LAV Reliability, Availability & Maintainability (LAV RAM) Program. These programs will ensure that the LAV FOV will be capable of conducting its assigned missions through FY 2025 by enhancing lethality and survivability; reliability, availability, maintainability and durability; as well as reducing operations and support costs. The Marine Personnel Carrier Program will provide mobility for 6 Infantry Battalions with LAV FOV based Infantry Carriers.</p>									
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:									
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009					
Accomplishment/Effort Subtotal Cost		0.000	9.959	26.500					
RDT&E Articles Qty									
MARINE-PC: Develop Marine-PC fording capabilities with Applique Armor, fabricate prototypes, PMO & matrix support, PMO travel, and conduct DT/OT of Marine-PC prototypes.									
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009					
Accomplishment/Effort Subtotal Cost		2.037	1.239	5.619					
RDT&E Articles Qty									
LAV-RAM: Research and development of numerous LAV RAM projects to address minor modification, safety, and obsolescence issues.									
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009					
Accomplishment/Effort Subtotal Cost		2.174	0.000	0.000					
RDT&E Articles Qty									
LAV-C2: LAV-C2 prototype fabrication, conduct DT/OT, PMO & matrix support, PMO travel, CAAS in support of LAV-C2.									
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009					
Accomplishment/Effort Subtotal Cost		0.745	0.000	0.000					
RDT&E Articles Qty									
LAV LETHALITY: System Development, Demonstration and integration efforts, PMO & matrix support, PMO travel & test ammo procurement in support of the LAV Lethality program.									
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009					
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000					
RDT&E Articles Qty									
LAV Sense & Respond Support System: Focuses on the integration of readiness modeling, reliability centered maintenance, condition based maintenance, system health monitoring, and interactive electronic technical manuals.									
(U) Total \$		4.956	11.198	32.119					

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RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP				
(U) PROJECT CHANGE SUMMARY:						<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>		
(U) FY 2008 President's Budget:						5.487	11.440	8.460		
(U) Adjustments from the President's Budget:										
(U) Congressional Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) PR09 Program Review								23.659		
(U) Reprogrammings						-0.393				
(U) SBIR/STTR Transfer						-0.138	-0.170			
(U) Minor Affordability Adjustments							-0.072			
(U) FY 2009 PB09 Budget:						4.956	11.198	32.119		
CHANGE SUMMARY EXPLANATION:										
(U) Funding: See Above.										
(U) Schedule:										
(U) Technical:										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>		<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC, 203800, LAV PIP		87.975	100.948	64.526	35.250	3.810	0.000	80.710	Cont	Cont
(U) PAN,MC, 138800, LAV LETHALITY		9.536							0.000	9.536
(U) Related RDT&E:										
C9A95 Particulate Matter Sys		0.486							0.000	0.486
C9A97 LAV IDE		2.137							0.000	2.137
C9999 Ultrasonic Emb Sensors			1.200							

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RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C1555 Light Armored Vehicle (LAV) PIP
<p>(U) D. ACQUISITION STRATEGY: The Marine Personnel Carrier (MPC) program will utilize Full and Open competition. The MPC is a family of vehicles consisting of a personnel carrier, a command and control platform and a recovery vehicle. After Milestone A, a source selection will be held to select three contractors. Each of these contractors will provide a prototype personnel carrier vehicle that will be subjected to Government evaluation. The results of this evaluation will be used to support both a Milestone B decision as well a another source selection to choose the two best competitors that will be carried through the SDD phase (on the personnel carrier only). The results of the two competitor's SDD efforts will be used to support a Milestone C decision as well as another source selection to choose the ultimate personnel carrier LRIP and recovery and command and control vehicle SDD source.</p> <p>(U) D. ACQUISITION STRATEGY: The LAV-C2 upgrade will be utilizing commercial off-the-shelf, government off-the-shelf, and non-developmental item hardware and software to provide an integrated suite capable of enhanced voice and data transmissions. The majority of the effort will be the integration of existing hardware and software for this upgrade. To the maximum extent possible, components from both the Marine Corps and Army Common Hardware Suites will be utilized to reduce acquisition and support costs. The system architecture has been determined through a Tailored Executive Analysis. One contractor has been selected to fabricate a prototype which will be subjected to DT/OT.</p> <p>(U) D. ACQUISITION STRATEGY: The LAV RAM project funds numerous low-dollar, yet extremely important minor modifications, support equipment and tools and other projects that increase LAV reliability and readiness while simultaneously reducing operations and support costs. The Marine Corps, PM-LAV Sustainment Readiness Team uses multi-disciplined integrated project teams consisting of engineering, logistical, contracting and financial personnel to manage RAM projects. The majority of contracts issued under the RAM line are subject to the competitive acquisition process.</p> <p>(U) D. ACQUISITION STRATEGY: The LAV Lethality upgrade will increase the lethality of the LAV-25's M242 gun through the use of depleted uranium (DU) ammunition during combat operations. The Bradley Fighting Vehicle (BFV) uses the M242 and currently has the capability to fire DU ammunition. PM, LAV will buy existing standard components for the M242 and have them installed. A sole source contract will be initiated with Raytheon to insert the DU firing tables into the Improved Thermal Sight System utilized by the LAV-25. This contract will also include taking the Army's existing technical manual (TM) data on the upgraded M242 components and incorporate it into the LAV-25 TM data base.</p> <p>(U) E. MAJOR PERFORMERS:</p> <p>Marine-PC FY08-FY12 TBD</p> <p>LAV RAM FY06-FY10 Various</p> <p>LAV C2 Upgrade FY06 Lockheed-Martin Systems Integration, Owego, NY. Prototype Fabrication. Apr 06. Yuma Proving Grounds/Electronic Proving Grounds, Yuma, AZ. Developmental Testing. Sep 06. FY07 Yuma Proving Grounds/Electronic Proving Grounds, Yuma, AZ. Operational Testing. Oct 07.</p> <p>LAV LETHALITY FY07 Raytheon Company, McKinney, TX. Integration of Depleted Uranium firing tables into Improved Thermal Sight System (ITSS). Apr 07.</p>		

Exhibit R-3 Cost Analysis							DATE: February 2008							
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Dev				0206623M Marine Corps Ground Combat/Supporting Arms Systems			C1555 Light Armored Vehicle (LAV) PIP							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Product Development (MPC)	Various	TBD						6.970	Various	2.021	Various	Cont	Cont	
Product Development (RAM)	Various	Various	3.386			0.388	Various	0.957	Various	4.438	Various	Cont	Cont	Cont
Product Development (C2-GFE)	Various	Various	3.398									0.000	3.398	
Product Development (C2)	Various	Lockheed-Martin, Owego, NY	14.484			1.921	1Q07					0.000	16.405	
Product Development (S&R)	Various	TBD	0.546									0.000	0.546	
Product Development (Lethality)	Various	Raytheon-McKinney, TX				0.204	2Q07					0.000	0.204	
CAAS	MIPR	SURVICE, Belcamp, MD	0.838									0.000	0.838	
Subtotal Product Dev			22.652			2.513		7.927		6.459		Cont	Cont	
Remarks: Major product development efforts include Applique Armor and Manufacturing 11 Prototype vehicles.														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Technical Eng Services (C2)	MIPR	TACOM, Warren, MI	0.380			0.592	2Q07					0.000	0.972	
Technical Eng Services (S&R)	MIPR	TACOM, Warren, MI	0.394									0.000	0.394	
Technical Eng Services (MPC)	MIPR	TACOM, Warren, MI						0.191	1Q08	0.391	1Q09	Cont	Cont	
Technical Eng Services (RAM)	MIPR	TACOM, Warren, MI						0.025	1Q08	0.175	1Q09	Cont	Cont	
Subtotal Support			0.774			0.592		0.216		0.566		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Devl/Oper Test & Eval (RAM)	MIPR	Aberdeen Proving Ground, MD	2.731			0.100	Various	0.220	Various	0.375	Various	Cont	Cont	
Devl/Oper Test & Eval (S&R)	MIPR	TBD	0.060									0.000	0.060	
Devl/Oper Test & Eval (C2)	MIPR	MCOTEA, Quantico, VA	1.293			0.170	1Q07					0.000	1.463	
Devl/Oper Test & Eval (C2)	MIPR	YPG/EPG/JITC	0.107									0.000	0.107	
Devl/Oper Test & Eval (MPC)	MIPR	TBD								13.033	2/3Q09	Cont	Cont	
Devl/Oper Test & Eval (Lethality)	MIPR	TBD				0.450	3Q07					0.000	0.450	
Subtotal T&E			4.191			0.720		0.220		13.408		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Program Management (MPC)	Various	TACOM, Warren, MI	0.000					2.797	Various	11.056	Various	Cont	Cont	
Program Management	Various	TACOM, Warren, MI	5.008			1.036	Various	0.038	Various	0.530	Various	Cont	Cont	
Matrix Support	MIPR	TACOM, Warren, MI	1.278			0.095	Various	0.000	Various	0.100	Various	Cont	Cont	
Subtotal Management			6.286			1.131		2.835		11.686		Cont	Cont	
Remarks:														
Total Cost			33.903			4.956		11.198		32.119		Cont	Cont	

Exhibit R-4-4a Project Schedule/Detail			DATE:						
APPROPRIATION/BUDGET ACTIVITY			February 2008						
PROGRAM ELEMENT		PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Dev		C1555 Light Armored Vehicle (LAV) PIP							
0206623M Marine Corps Ground Combat/Supporting Arms Systems									
(U) D. SCHEDULE PROFILE:									
<u>MARINE PC</u>									
Milestone A:	2nd Qtr, FY 2008	Milestone C:	1st Qtr, FY 2013						
Milestone B:	1st Qtr, FY 2010	Contract Award:	1st Qtr, FY 2013						
DT	3rd Qtr, FY 2011	IOC:	4th Qtr, FY 2015						
OT	1st Qtr, FY 2015	FOC:	4th Qtr, FY 2019						
<u>LAV C2</u>									
Milestone A:	2nd Qtr, FY2000	Contract Award:	3rd Qtr, FY 2008						
Milestone B:	2nd Qtr, FY2005	IOC:	3rd Qtr, FY 2010						
DT / OT:	4th Qtr, FY 2006	FOC:	2nd Qtr, FY 2012						
Milestone C:	2nd Qtr, FY 2008								
<u>LAV LETHALITY</u>									
Milestone A:	Not Required	Contract Award:	3rd Qtr, FY 2008						
Milestone B:	1st Qtr, FY 2007	IOC:	3rd Qtr, FY 2009						
DT / OT:	3rd Qtr, FY2007	FOC:	2nd Qtr, FY 2010						
Milestone C:	3rd Qtr, FY2008								
Program Funding Summary									
(APPN, BLI #, NOMEN)									
<u>(U) RDT&E,N</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
<u>(U) RDT&E, N Ultrasonic Embedded Sensors</u>	4.956	11.198	32.119	83.509	85.500	66.200	0.000	Cont	Cont
<u>(U) RDT&E, N #C9A95 Particulate Matter Sys</u>	0.000	1.200	0.000	0.000	0.000	0.000	0.000	0.000	1.200
<u>(U) RDT&E, N #C9A97 LAV IDE</u>	0.486	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.486
<u>(U) RDT&E, N #C9A97 LAV IDE</u>	2.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.137
<u>(U) PMC, BLI# 203800 LAV</u>	87.975	100.948	64.526	35.250	3.810	0.000	80.710	Cont	Cont
<u>(U) PANMC, 138800, LAV LETHALITY</u>	9.536	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.536

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C1555 Light Armored Vehicle (LAV) PIP
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LAV SCHEDULE DETAIL	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
MARINE PC								
Milestone A:			2Q					
Milestone B:					1Q			
DT/OT						3Q		
Milestone C:								1Q
Contract Award:								1Q
IOC:								
FOC:								
LAV C2								
DT / OT:	4Q							
Milestone C:			2Q					
Contract Award:			3Q					
IOC:					3Q			
FOC:							2Q	
LAV LETHALITY								
Milestone B:		1Q						
DT / OT:		3Q						
Milestone C:			3Q					
Contract Award:			3Q					
IOC:				3Q				
FOC:					2Q			

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			C2086 Marine Enhancement Program (MEP)			
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems						
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	2.315	3.607	4.178	4.406	4.635	4.758	4.893
RDT&E Articles Qty							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
<p>Marine Enhancement Program (MEP) provides Research, Development, Test and Evaluation funding for low visibility, low cost items. It focuses on items of equipment which will benefit the individual Marine by reducing the load, increasing survivability, enhancing safety and improving combat effectiveness. The emphasis of the program is on non-developmental item/commercial off the shelf (NDI/COTS) available items which can be quickly evaluated and fielded. This program is coordinated with the Army's Soldier Enhancement Program and the Special Operations Command.</p> <p>Marine Expeditionary Rifle Program (MERS) goal and mission is to plan for and treat the infantry rifle squad as a "system" - much as other complex systems - tanks, aircraft, and C4I. This approach ensures integration is designed in, as opposed to being at best an afterthought or worse, handed to the operating forces as stove-piped material solutions are fielded piecemeal. MERS evolved from the old IICS program which was focused on monitoring and keeping pace with the U.S. Army and other soldier as a system programs. MERS is focused on integration issues within the whole squad and is focused on the following activities: 1) Track other Soldier/Marine as a System Initiatives in DoD and throughout the world; 2) Conduct analysis and highlight integration issues with current and future equipment; 3) Strategic Planning - plan for modernization in a coordinated and systematic way; 4) Continue to develop the processes and procedures required to conduct Configuration Management; and 5) Capability Prioritization - ensure we address the capability needs with the Infantrymen's highest priority.</p>							
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:							
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009				
Accomplishment/Effort Subtotal Cost	2.315	2.617	2.757				
RDT&E Articles Qty							
MEP - Explore NDI clothing and individual equipment, ground weapons, communications and command and control equipment that would improve the combat effectiveness and enhance safety and survivability of the Individual Marine.							
COST (\$ in Millions)	FY 2007	FY08	FY09				
Accomplishment/Effort Subtotal Cost	0.000	0.990	1.421				
RDT&E Articles Qty							
MERS - Conduct analysis of Soldier and Marine Infantry Systems and highlight integration issues; plan for modernization of future systems; develop processes and procedures for configuration management of the Infantry Squad.							
(U) Total \$		2.315		3.607		4.178	

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		February 2008								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME									
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems									
C2086 Marine Enhancement Program (MEP)										
(U) Project Change Summary:	FY2007	FY2008	FY2009							
(U) FY 2009 OSD Budget:	2.315	3.686	4.155							
(U) Adjustments from the President's Budget:										
(U) Congressional Program Reductions		-0.024								
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) FY09 Program Review										
(U) Reprogrammings										
(U) SBIR/STTR Transfer		-0.055	0.023							
(U) Minor Affordability Adjustment										
(U) FY 2009 President's Budget:	2.315	3.607	4.178							
CHANGE SUMMARY EXPLANATION:										
(U) Funding: Beginning in FY08, Marine Expeditionary Rifle Program (MERS) (formerly 63635M C2256) program moved to this project.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
(U) PMC BLI#220800 Weapons	0	21.595	3.036	4.119	3.276	3.357	4.435	4.535	Cont	Cont
(U) Total \$										
(U) Related RDT&E: N/A										
(U) D. ACQUISITION STRATEGY: NDI/COTS										

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat Arms Systems	C2086 Marine Enhancement Program (MEP)

(U) E. MAJOR PERFORMERS:

<u>Performer</u>	<u>Effort</u>	<u>FY</u>	<u>Award Date</u>	<u>(\$000) Amt</u>
RDECOM, Natick MA	Product Development	2007	Dec-06	176
RDECOM, Natick MA	DT&E	2007	Dec-06	373
NRL, Wash, DC	Product Development	2007	Various	257
RDECOM, Natick MA	DT&E	2007	Various	944
Operating Forces	OT&E	2007	Mar-07	321
RDECOM, Natick MA	Product Development	2008	Dec-07	180
RDECOM, Natick MA	DT&E	2008	Dec-07	382
TBD	Product Development	2008	Various	263
TBD	DT&E	2008	Various	966
Operating Forces	OT&E	2008	Mar-08	329
RDECOM, Natick MA	Product Development	2009	Dec-08	183
RDECOM, Natick MA	DT&E	2009	Jan-00	388
TBD	Product Development	2009	Various	267
TBD	DT&E	2009	Various	982
Operating Forces	OT&E	2009	Mar-09	334

RDECOM (Research Development and Engineering Command) formerly known as SBCCOM (Soldier Biological and Chemical Command)

Exhibit R-3 Cost Analysis							DATE: February 2008							
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NUMBER AND NAME							
RDT&E, N /BA 7 Operational Sys Dev				0206623M Marine Corps Ground Combat Arms Systems			C2086 Marine Enhanced Program (MEP)							
Cost Categories	Contract Method & Type	Performing Activity & Location				FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Comp	Total Cost	Target Value of Contract
Product Development	Various	Various				0.237	Various	0.516	Various	0.519	Various	Cont	Cont	
Product Development	MIPR	RDECOM, Natick, Mass				0.176	1Q07	0.183	1Q08	0.190	1Q09	Cont	Cont	
Product Development	WR	NFEC, Pt Hueneme, CA				0.051	2Q07	0.053	2Q08	0.055	2Q09	Cont	Cont	
Product Development	WR	NSWC, Crane, IN				0.081	1Q07	0.084	1Q08	0.087	1Q09	Cont	Cont	
Subtotal Product Dev						0.545		0.836		0.851		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location				FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Operational Test & Eval	WR	2nd MARDIV, CamLej, NC				0.321	2Q07	0.334	2Q08	0.337	2Q09	Cont	Cont	
Subtotal Support						0.321		0.334		0.337		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location				FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Eval	Various	Various				0.616	Various	1.150	Various	1.596	Various	Cont	Cont	
Developmental Test & Eval	MIPR	RDECOM, Natick, Mass				0.373	2Q07	0.388	1Q08	0.403	1Q09	Cont	Cont	
Developmental Test & Eval	WR	NFEC, Pt Hueneme, CA				0.109	2Q07	0.113	2Q08	0.108	2Q09	Cont	Cont	
Developmental Test & Eval	WR	NSWC, Crane, IN				0.146	1Q07	0.152	1Q08	0.148	1Q09	Cont	Cont	
Subtotal T&E						1.244		1.803		2.255		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location				FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Mgmt/Tech Spt	FFP	Various				0.205	1Q07	0.634	1Q08	0.735	1Q09	Cont	Cont	
Subtotal Management						0.205		0.634		0.735		Cont	Cont	
Remarks:														
Total Cost						2.315		3.607		4.178		Cont	Cont	

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supporting Arms Systems			C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES					
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Project Cost		8.968	10.049	14.857	12.265	12.495	12.732	13.050	
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
<p>The Family of Combat Equipment Support and Services provides research, development, test and evaluation on low cost items with emphasis on non-developmental/commercially available items. Much of the RDT&E is conducted in coordination/concert with other services and joint organizations, and in consideration of RDT&E efforts being pursued by the other services. Items approved for procurement will transition into Procurement Marine Corps and Operations and Maintenance Marine Corps procurement lines for Individual Combat Equipment, Medical Equipment, and Shelters. The focus is to provide state of the art combat equipment (e.g. lightweight helmet, sleeping bags, load bearing systems, etc.), medical equipment (e.g. Authorized Medical Allowance (AMAL)/Authorized Dental Allowance (ADAL), Enroute Care, Mobile Medical Monitors, etc.), and family of shelters (softwall, different frames and fabrics, etc.). The benefit will be reduced logistics, less weight, improved combat effectiveness, better echelon I and II care for Marines, improved individual and unit protection, tactical mobility, etc. The employment of state-of-the art equipment will ensure Marines are equipped with the best items that technology can offer.</p>									
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:									
COST (\$ in Millions)		FY07	FY08	FY09					
Accomplishment/Effort Subtotal Cost		0.944	0.548	0.600					
RDT&E Articles Qty									
<p>Clothing and Flame Resistant Organizational Gear: Pursue designs, prototyping, user surveys, textile and physical properties testing and the full range of clothing design in response to new uniform initiatives.</p>									
COST (\$ in Millions)		FY07	FY08	FY09					
Accomplishment/Effort Subtotal Cost		3.724	5.552	7.020					
RDT&E Articles Qty									
<p>Family of Ballistic Protection Systems: Exploration of new commercial technologies that can be inserted into current body armor to reduce weight, increase survivability, lethality and mobility. Both torso and head/neck ballistic studies will be conducted to assess blunt trauma/shock forces on the body and how ballistic materials/designs can afford the most protection while reducing weight. Modeling and simulation initiatives will baseline current equipment and enable configuration/compatibility management of new equipment.</p>									
COST (\$ in Millions)		FY07	FY08	FY09					
Accomplishment/Effort Subtotal Cost		0.000	0.438	0.505					
RDT&E Articles Qty									
<p>Family of Improved Loadbearing Equipment: This program supports the Marine Corps requirements for a replacement load bearing system and individual water purifier and supports continual system improvement throughout the life-cycle of the equipment.</p>									
COST (\$ in Millions)		FY07	FY08	FY09					
Accomplishment/Effort Subtotal Cost		0.047	0.104	0.117					
RDT&E Articles Qty									
<p>Family of Combat Support Equipment: The purpose of the Family of Combat Support Equipment is to enhance or improve unit operational capabilities and enhance unit morale. In addition, some items such as the field tarp and poncho will greatly enhance survivability, mobility and provide significantly improved field equipment to Marines.</p>									

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES			
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		0.447	1.411	2.580	
RDT&E Articles Qty					
<p>Family of Mountain Cold Weather Clothing & Equipment (FMCWCE): FMCWCE will provide a capability set of clothing and equipment to facilitate Marine Air-Ground Task Force (MAGTF) operations in mountainous and cold weather environments. The intent is to reduce the individual load (weight/volume) of the Ground Combat Element (GCE), particularly dismounted infantry while maintaining or improving system performance. Mobility, survivability and sustainability requirements for the Command Element (CE), Combat Service Support Element (CSSE), and the Air Combat Element (ACE) will also be met. This program will substantially improve current inventory items and add new capabilities such as steep earth and alpine ice equipment for which we train Marines yet have no assets to perform these missions within the operating forces. Rapid technological advances in the outdoor commercial market make it possible to continuously update the capability provided by FMCWCE.</p>					
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		0.272	0.237	0.339	
RDT&E Articles Qty					
<p>Family of Combat Field Feeding Systems: Improvements on current technology for heating individual rations is being explored to test individual ration heater concepts and equipment. Although some progress has been made in recent years to improve field feeding equipment, most current field messing equipment consists of manpower and maintenance intensive M59 ranges utilizing M2 burners setup within tents. The current Tray Ration Heater System has a large footprint, lacks a quick displacement capability, includes unsafe and hazardous components (specifically the M2 burners), and does not conform to the single fuel concept. Also, this current system is not compatible with tenets of Operational Maneuver from the Sea (OMFTS) and does not facilitate maneuverable warfare operations. Current cookware sanitizing equipment consists of 30 gallon containers used in consonance with immersion water heaters, fueled by gasoline (MOGAS).</p>					
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		3.369	0.400	3.548	
RDT&E Articles Qty					
<p>Family of Field Medical Equipment: Development of new Authorized Medical and Dental Allowance Lists (AMALs and ADALs) to insert new technology, to reduce weight and cube size for expeditionary maneuver warfare, and to enhance health services support to the operating forces. Completion of this block upgrade of AMAL technology.</p>					
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		0.000	1.013	0.000	
RDT&E Articles Qty					
<p>Family of Field Medical Equipment: Testing of Commercial-off-the-shelf/Non-developmental (COTS/NDI) medical equipment items for the Enroute Care System (based on components of an existing USAF system) to evaluate functionality for patient transportation post resuscitative surgery in forward echelons.</p>					

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES			
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		0.000	0.200	0.000	
RDT&E Articles Qty					
Family of Field Medical Equipment: Testing of Commerical-off-the-shelf/Non-developmental (COTS/NDI) medical equipment items to evaluate their functionality improving the quality of warfighter healthcare and to reduce the logistics footprint of USMC medical equipment. Planned completion of testing and initiation of technology insertion.					
COST (\$ in Millions)		FY07	FY08	FY09	
Accomplishment/Effort Subtotal Cost		0.165	0.146	0.148	
RDT&E Articles Qty					
Family of Shelters and Shelter Equipment: Command and Control Systems have out grown the current Modular Command Post Shelter in size and performance. Changing operational doctrine, logistic support systems and advances in technology require development of an advanced lightweight rapid deploying tactical shelter with a minimum of 420 sq. ft. Design and engineering to increase capability, reduce weight, cost and cube of soft wall shelters. Explore and test new technologies in coordination with the US. Army for insertion into the shelter.					
(U) Total \$		8.968	10.049	14.857	
(U) Total \$					
		FY2007	FY2008	FY2009	
(U) FY 2008 President's Budget:		9.388	10.186	14.195	
(U) Adjustments from the President's Budget:					
(U) Congressional Reductions					
(U) Congressional Rescissions					
(U) Congressional Increases					
(U) Reprogrammings		-0.231		0.691	
(U) SBIR/STTR Transfer		-0.189	-0.073		
(U) PR-09 Adjustment					
(U) Minor Affordability Adjustment			-0.064	-0.029	
(U) FY 2009 President's Budget:		8.968	10.049	14.857	
CHANGE SUMMARY EXPLANATION:					
(U) Funding:	See above.				
(U) Schedule:	Not Applicable.				
(U) Technical:	Not Applicable.				

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supporting Arms Systems					C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES				
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>20.174</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>	
(U) PMC Line (BLI#652200) Field Med Equip & CBRN Incident	10.922	24.616	6.623	6.953	6.915	8.248	6.109	Cont	Cont	
(U) PMC Line (BLI#661300) Combat Field Feeding System	7.832	18.843	2.907	1.826	2.681	3.769	3.869	Cont	Cont	
(U) Related RDT&E: Not Applicable.										
(U) D. ACQUISITION STRATEGY:										
<p>Family of Ballistic Protection Systems, Family of Mountain Cold Weather Clothing and Equipment, Family of Improved Loadbearing Equipment, Family of Combat Support Equipment, Clothing & Flame Resistant Organizational Gear, and Combat Field Feeding Systems: Items utilize various acquisition strategies. These programs leverage heavily on current developments and technology in commercial industry. As a result, the government's R&D phase is relatively short. Contracting is performed by either Marine Corps Systems Command Contracting Directorate, the Naval Research Laboratory or the U.S. Army Natick Research, Development & Engineering Center via Indefinite Delivery/Indefinite Quantity (ID/IQ) contracts. ID/IQ contracts are used to decrease the government risk, allow maximum contract flexibility and capitalize on the savings realized by utilizing Economic Order Quantities.</p> <p>Shelters: The Shelter acquisition strategy is to modify non-developmental Items (NDI) to further meet the requirements of the Marine Corps, to support development of multi-service items through inter-service agreements and to adopt Commercial-Off-the-Shelf (COTS)/NDI Marine Corps Specific items.</p> <p>Family of Field Medical Equipment: These programs leverage heavily on current development and technology in the commercial medical industry. The field medical acquisition strategy is to modify non-developmental items (NDI) and adopt Commercial-Off-The-Shelf (COTS) items.</p>										
(U) E. MAJOR PERFORMERS:										
<p>Family of Ballistic Protection Systems, Family of Mountain Cold Weather Clothing and Equipment, Family of Improved Loadbearing Equipment, Clothing & Flame Resistant Organizational Gear, and Family of Combat Support Equipment: U.S. Army Natick Research, Development and Engineering Center, Natick, Mass., and the Naval Research Laboratory, Washington DC.</p> <p>Shelters: TBD based on current technologies.</p> <p>Family of Field Medical Equipment: TBD based on current technologies.</p>										
(U) SCHEDULE PROFILE: Not Applicable.										

Exhibit R-3 Cost Analysis					DATE: February 2008										
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT		PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Sys Development				0206623M Marine Corps Ground Combat/ Supporting Arms Systems		C2503 Initial Issue - Family of Combat Equip Support & Services									
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Development/Tech Insertion	MIPR	USASSCOM Natick, MA	3.815			1.463	1Q/07	2.049	1Q/08	2.700	1Q/09	Cont	Cont		
Development/Tech Insertion	WR	NRL, Washington DC	0.748			1.598	2Q/07	2.475	2Q/08	3.982	2Q/09	Cont	Cont		
Development/Tech Insertion	WR	ONR, Arlington VA	0			0.060	2Q/07	0.000		0.000					
Development/Tech Insertion	FFP	Various (Test Articles)	4.513			3.418	3Q/07	1.480	2Q/08	3.271	2Q/09	Cont	Cont		
Subtotal Product Dev			9.076			6.539		6.004		9.953		Cont	Cont		
Remarks:															
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Program Support	WR	NHRC, SAN DIEGO, CA	0.412			0.126	1Q/07	0.099	1Q/08	0.211	1Q/09	Cont	Cont		
Subtotal Support			0.326			0.126		0.099		0.211		Cont	Cont		
Remarks:															
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Operational Test & Eval	MIPR	USASSCOM Natick, MA	1.590			1.451	2Q/07	0.590	2Q/08	0.892	2Q/09	Cont	Cont		
Field User Evaluations	WR	FMF	3.137			0.000		2.376	2Q/08	2.660	2Q/09	Cont	Cont		
Field User Evaluations	RCP	MCSC, Quantico VA	0.184			0.148	2Q/07	0.180	2Q/08	0.217	1Q/09	Cont	Cont		
Operational Test & Eval	MIPR	USA Ft Belvoir, PEO Soldier	0.000			0.300	3Q/07	0.000		0.000		0.000			
Operational Test & Eval	RCP	ALBANY, GA	0.000			0.008	2Q/07	0.000		0.000		Cont	Cont		
Subtotal T&E			4.911			1.907		3.146		3.769		Cont	Cont		
Remarks:															
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Contractor Eng Suppt	FFP/O	MCSC, Quantico VA	0.759			0.376	1Q/07	0.461	1Q/08	0.509	1Q/09	Cont	Cont		
Travel	DTS*	MCSC, Quantico VA	0.465			0.020	*	0.339	*	0.415	*	Cont	Cont		
Subtotal Management			0.811			0.396		0.800		0.924		Cont	Cont		
Remarks:															
*DTS (Defense Travel System) Obligates throughout the execution year															
Total Cost			11.205			8.968		10.049		14.857		Cont	Cont		

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supt Arms	C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)					
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	3.912	1.176	2.443	0.525	0.545	2.151	2.448
RDT&E Articles Qty							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
<p>HIMARS is a C-130 transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System Family of Munitions (MFOM). The system includes one launcher, two Re-Supply Systems, and the MFOM. HIMARS will provide the Fleet Marine Force with 24 hour ground-based, responsive General Support/General Support Reinforcing (GS/GSR) indirect fires which accurately engage targets at long range (60+km) with high volumes of lethal fire under all weather conditions throughout all phases of combat operations ashore to include irregular warfare and distributed operations. HIMARS is a significant improvement over currently fielded ground fire support systems. During a 24 hour period the system will be expected to conduct multiple moves and multiple fire missions. HIMARS will satisfy the Marine Corps requirement for an indirect fire system that is responsive, maneuverable, and is capable of engaging targets at long range.</p>							
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:							
COST (\$ in Millions)		FY07	FY08	FY09			
Accomplishment/Effort Subtotal Cost		1.794	0.610	1.987			
RDT&E Articles Qty							
Primary and Ancillary Hardware Development and Systems Engineering Support, includes Navy, Marine Corps, Army and contractor R&D efforts.							
COST (\$ in Millions)		FY07	FY08	FY09			
Accomplishment/Effort Subtotal Cost		0.150	0.000	0.000			
RDT&E Articles Qty							
Develop Support Equipment, Army program office support, contractor provided logistics support.							
COST (\$ in Millions)		FY07	FY08	FY09			
Accomplishment/Effort Subtotal Cost		1.425	0.413	0.303			
RDT&E Articles Qty							
Support Test and Evaluation Program with Army. Support Test and Evaluation Program for Marine Corps Principle End Items.							
COST (\$ in Millions)		FY07	FY08	FY09			
Accomplishment/Effort Subtotal Cost		0.543	0.153	0.153			
RDT&E Articles Qty							
Program Management at Quantico, USMC Liaison Office at Army Program, USMC Test Unit at Ft Sill, and contractor support.							
(U) Total \$		3.912	1.176	2.443			

EXHIBIT R-2a, RDT&E Project Justification		DATE:							
		February 2008							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supt Arms	C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)							
PROJECT CHANGE SUMMARY									
	FY2007	FY2008	FY2009						
(U) FY 2008 President's Budget:	6.156	1.191	2.432						
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-2.144								
(U) SBIR/STTR Transfer	-0.100	-0.007							
(U) Minor Affordability Adjustment		-0.008	0.011						
(U) FY 2009 President's Budget:	3.912	1.176	2.443						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: SBIR reduction, reprogramming, and minor affordability adjustments. USMC testing requirement decreased in FY07 due to benefits of common Army Testing.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) C. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC (BLI 221200) HIMARS SYSTEMS AND ROCKETS	237.619	30.443	109.460	172.549	50.394	22.409	6.997	Cont	Cont
(U) Related RDT&E: Not Applicable.									
(U) D. ACQUISITION STRATEGY:									
(U) Total \$									
(U) E. MAJOR PERFORMERS:									
FY-07 Lockheed Martin Missile, Dallas, TX. Modifications to Launcher, GMLRS Development									
FY-07 Lockheed Martin Missile, Dallas, TX. Systems Engineering Support for Development and testing									

Exhibit R-3 Cost Analysis						DATE: February 2008						
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development				0206623M Marine Corps Ground Combat/Supt Arms			C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Primary Hardware Dev	SS/CPAF	Lockheed Martin, Dalla	12.735	0.085	04/07	0.075	12/07	1.661	12/08	Cont	Cont	
Ancillary Hardware Dev	MIPR	RTTC, Redstone, AL	0.070	0.994	12/06	0.225	12/07	0.120	12/08	Cont	Cont	
Systems Engineering	WR	NSWC-Dahlgren, VA	2.720	0.341	10/06	0.195	10/07	0.206	10/08	Cont	Cont	
Systems Engineering	WR	NSWC-Earle, NJ	0.621	0.275	10/06					0.000	0.896	
Systems Engineering	CPAF	Lockheed Martin, Dalla	0.395	0.210	12/06	0.115	12/07			0.000	0.720	
Subtotal Product Dev			16.541	1.905		0.610		1.987		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Integ Logistics Support	WR	NSWCIH, Earle NJ	0.000	0.140	12/06					0.000	0.140	
Subtotal Support			0.000	0.140		0.000		0.000		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Dev Test & Eval	WR	NSWC-Dahlgren, VA	1.544	0.800	10/06	0.213	10/07	0.180	10/08	Cont	Cont	
Dev Test & Eval	WR	Redstone Test Ctr, Hur	0.878	0.315	12/06	0.200	12/07	0.123	12/08	Cont	Cont	
Dev Test & Eval	WR	NSWC-Carderock, MD	0.015	0.079	10/06					0.000	0.094	
Dev Test & Eval	MIPR	DAC, McAlester, OK	0.055	0.090	10/06					0.000	0.145	
Operational Test & Eval	WR	MCOTEA, Quantico, V	1.034	0.040	12/06					0.000	1.074	
Subtotal T&E			3.526	1.324		0.413		0.303		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Program Mngmnt	WR	MCSC, Quantico, VA	1.680	0.316	10/06	0.075	10/07	0.075	10/08	Cont	Cont	
Program Mngmnt	FFP	CEOSS, Quantico VA	4.696	0.227	10/06	0.078	10/07	0.078	10/08	Cont	Cont	
Subtotal Management			6.376	0.543		0.153		0.153		Cont	Cont	
Remarks:												
Total Cost			26.443	3.912		1.176		2.443		Cont	Cont	

Exhibit R-4/4a Schedule Profile/Detail						DATE: February 2008																										
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME																										
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supt Arms			C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)																										
Fiscal Year	FY06				FY07				FY08				FY09				FY10				FY11				FY12				FY13			
Quarter	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
LRIP Delivery		♦																														
FRP	♦																															
FRP System Deliveries																																
Interim Capability																																
IOC																																
FOC																																
M30 FRP Munitions Deliveries																																
USMC GMLRS Unitary DT, Army DT/OT																																
GMLRS Unitary Urgent Material Release (UMR)																																
GMLRS Unitary M31 LRIP																																
GMLRS Unitary M31 FRP																																
GMLRS Unitary M31 Deliveries																																
HIMARS P3I																																
Program Funding Summary												<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>												
(U) RDT&E,N, 0206623M, HIMARS												3.912	1.176	2.443	0.525	0.545	2.151	2.448	Cont	Cont												
(U) PMC, (BLI 221200), HIMARS SYSTEMS AND ROCKETS												237.619	30.443	109.460	172.549	50.394	22.409	6.997	Cont	Cont												

Exhibit R-4/4a Schedule Profile/Detail				DATE: February 2008				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev		PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supt Arms			PROJECT NUMBER AND NAME C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)			
HIMARS SCHEDULE DETAIL								
	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
LRIP Deliveries	---2Q							
Interim Capability	1Q-----	-----	-----4Q					
USMC Full Rate Production (FRP) Decision	1Q							
USMC FRP Deliveries		2Q----	-----	-----	-----	---2Q		
GMLRS (M30) Munitions Deliveries		2Q----	-----	-----	-----	-----	-----	-----
Initial Operational Capability			4Q					
Full Operational Capability				1Q				
GMLRS Unitary Munitions								
USMC DT, US Army DT/OT	-----	-----	----3Q					
GMLRS Unitary LRIP		2Q						
GMLRS Unitary FRP				1Q				
Unitary Deliveries			2Q-----	-----	-----	-----	-----	-----
HIMARS Pre-Planned Product Improvements (P3I)								
Comm Upgrades	2Q-----	-----	-----	-----	-----4Q			
Hybrid Electric					1Q-----	-----	-----	----3Q
GMLRS Capability Improvements								
Insensitive Munition (IM)	-----	-----	----4Q					
Self Destruct Fuze	-----	-----	-----	1Q				
Multi-Mission Round						1Q-----	-----	-----

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supt Arms			C3098 Fire Support Systems			
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	6.335	6.377	8.884	7.674	5.612	7.551	7.758
RDT&E Articles Qty							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
(U) This Project develops joint and Marine Corps unique improvements to artillery technology, USMC unique Amphibious Armor Systems (AAS), and international weapons developments.							
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	0.273		0.291		0.299		
RDT&E Articles Qty							
Family of Artillery Munitions (FAM): Support R&D of ACAAP (Advanced Cannon Artillery) and Excalibur to include approved IM (Insensitive Munitions) and WSESRB (Weapons Systems Explosives Safety Review Board) testing, program support, and travel. Actively monitor U.S. Army artillery ammunition development programs in order to leverage off of and influence army developmental efforts.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	1.036		1.718		1.773		
RDT&E Articles Qty							
Fire Support Sustainment: (Formerly known as Fire Support Mods) Joint participation in artillery and fire support improvement projects for legacy systems, i.e., the M198 Howitzer and LW 155mm Howitzer.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	0.361		0.380		0.386		
RDT&E Articles Qty							
Fire Support Sustainment - Fielded System Readiness: (Formerly known as Readiness) Joint participation in artillery and fire support improvement projects for replacement capabilities. Projects include the Digital Aiming Circle and more accurate gun laying technology.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	3.761		3.003		5.416		
RDT&E Articles Qty							
Expeditionary Fire Support System (EFSS): Program entered Milestone B in November 2004 and the award of a contract with cost plus award fee and firm fixed price line items. EFSS entered the System Development and Demonstration (SD&D) with a single vendor - General Dynamics Ordnance and Tactical Systems. Milestone C decision made in June 2005. Functional Configuration Audit began May 2006. LRIP decision made June 2006. Operation Testing (OT) completed on July 2007. Limited Full Rate Production Decision made in September 2007. Follow On Test and Evaluation (FOT&E) scheduled for February to March 2008. EFSS supports irregular warfare and distributed operations.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	0.904		0.985		1.010		
RDT&E Articles Qty							
Tactical Meteorological Manager (TM2): (Formerly know as Meteorological Measuring Sets (MMS) -Profiler) The RDT&E dollars listed above will be utilized to adapt the Air Force Weather Agency Predictive Weather Model as required input to howitzer fire control. It will also be used to develop meteorological sensors conducive to battlefield operations.							
(U) Total \$	6.335		6.377		8.884		

EXHIBIT R-2a, RDT&E Project Justification

DATE: **February 2008**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supt Arms	C3098 Fire Support Systems

(U) PROJECT CHANGE SUMMARY:	FY 2007	FY 2008	FY 2009
(U) FY 2008 President's Budget:	7.688	6.494	8.825
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	-1.216		
(U) SBIR/STTR Transfer	-0.137	-0.076	
(U) Minor Affordability Adjustment		-0.041	0.059
(U) FY 2009 President's Budget:	6.335	6.377	8.884
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See above.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI# 473300 CLRF	16.203	5.789	0.000	0.000	0.000	0.000	0.000	0.000	21.992
PMC BLI# 473300 Muzzle Velocity System	0.000	0.113	0.000	0.000	0.000	0.000	0.000	0.000	0.113
PMC BLI# 473300 Meterological Measuring Sets (FSS)	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.212
PMC BLI# 473300 Laser Target Designator	33.778	0.000	0.000	0.000	0.000	0.000	0.000	0.000	33.778
PMC BLI# 473300 Fire Supp Sys (IPADS)	0.000	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.299
PMC BLI# 473300 Fire Supp Sustainment	28.380	3.490	2.654	2.681	4.815	6.937	5.068	Cont	Cont
PMC BLI# 473300 GLTD II	15.073	6.089	0.000	0.000	0.000	0.000	0.000	0.000	21.162
PMC BLI# 473300 PEI Procurement	0.000	9.276	0.000	0.000	0.000	0.000	0.000	0.000	9.276
PMC BLI# 473300 PIAFS	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.336
PMC BLI# 206400 Expeditionary Fire Support Sys	16.291	3.869	22.102	0.000	0.000	0.000	0.000	0.000	42.262
PMC BLI# 700000 Prime Vendor Spares - (CLRF)	1.312	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.312
PMC BLI# 700000 Fire Support Sustainment	2.402	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.402
PMC BLI# 700000 Prime Vendor Spares - (EFSS)	0.432	0.769	0.000	0.000	0.000	0.000	0.000	0.000	1.201

(U) Related RDT&E:

(U) D. ACQUISITION STRATEGY: These programs range from off-the-shelf modifications to developmental items. Fire power enhancement used selected upgrades from Army developmental programs to create a system that more readily meets Marine Corps requirements. EFSS will use an evolutionary acquisition approach fielding a near term capability in FY07 while leveraging emerging technologies to mature the technology by FY09 and beyond.

(U) E. MAJOR PERFORMERS:

General Dynamics Ordnance and Tactical Systems (EFSS) - St. Petersburg, FL

Exhibit R-3 Cost Analysis						DATE: February 2008						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Systems			C3098 Fire Support Systems						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT			SEE BELOW									
EFSS	RCP	GDOTS, St. Petersburg, FL	14.489	2.000	1Q07	1.500	1Q08	2.530	1Q09	Cont	Cont	
EFSS	VAR	VARIOUS	1.130	0.500	2Q07	0.379	2Q08	0.703	2Q09	Cont	Cont	
Fire Spt Sustainment	RCP	Smith Indus, Gd Rapids, MI	2.635	0.290	4Q07	0.867	TBD	0.922	TBD	Cont	Cont	
Fielded System Readiness	VAR	VARIOUS	0.400	0.361	3Q07	0.380	TBD	0.386	TBD	Cont	Cont	
TM2	MIPR	TBD	0.000	0.704	3Q07	0.785	TBD	0.810	TBD	Cont	Cont	
Subtotal Product Dev			18.654	3.855		3.911		5.351		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
PROGRAM SUPPORT			SEE BELOW									
EFSS	RCP	CTQ, Quantico, Va	2.944	0.314	1Q07	0.305	1Q08	0.500	1Q09	Cont	Cont	
EFSS	WR	NSWCDD, Dahlgren, VA	2.164	0.100	1Q07	0.100	1Q08	0.300	1Q09	Cont	Cont	
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA	0.345	0.273	1Q07	0.291	1Q08	0.299	1Q09	Cont	Cont	
Fire Spt Sustainment	WR/RCP	BAEST, Stafford, VA	1.681	0.403	1Q07	0.508	1Q08	0.508	1Q09	Cont	Cont	
TM2	RCP	CEOSS	0.000	0.200	3Q07	0.200	1Q08	0.200	1Q09	Cont	Cont	
Subtotal Support			7.134	1.290		1.404		1.807		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
T&E			SEE BELOW									
EFSS	WR	NSWCDD, Dahlgren, VA	1.780	0.150	2Q07	0.119	2Q08	0.313	2Q09	Cont	Cont	
EFSS	WR	MCPD, Fallbrook, CA	1.688	0.225	2Q07	0.200	2Q08	0.500	2Q09	Cont	Cont	
Fire Spt Sustainment	WR	MCOTE, Quantico, VA	0.400	0.070	2Q07	0.070	1Q08	0.070	1Q09	Cont	Cont	
Subtotal T&E			3.868	0.445		0.389		0.883		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Compl	Total Cost	Target Value of Contract
MANAGEMENT			SEE BELOW									
EFSS	RCP	GDOTS, St. Petersburg, FL	3.951	0.472	1Q07	0.400	1Q08	0.570	1Q09	Cont	Cont	
Fire Spt Sustainment	WR	MCSC, Quantico, VA	0.458	0.273	2Q07	0.273	1Q08	0.273	1Q09	Cont	Cont	
Subtotal Management			4.409	0.745		0.673		0.843		Cont	Cont	
Remarks:												
Total Cost			34.065	6.335		6.377		8.884		Cont	Cont	

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT

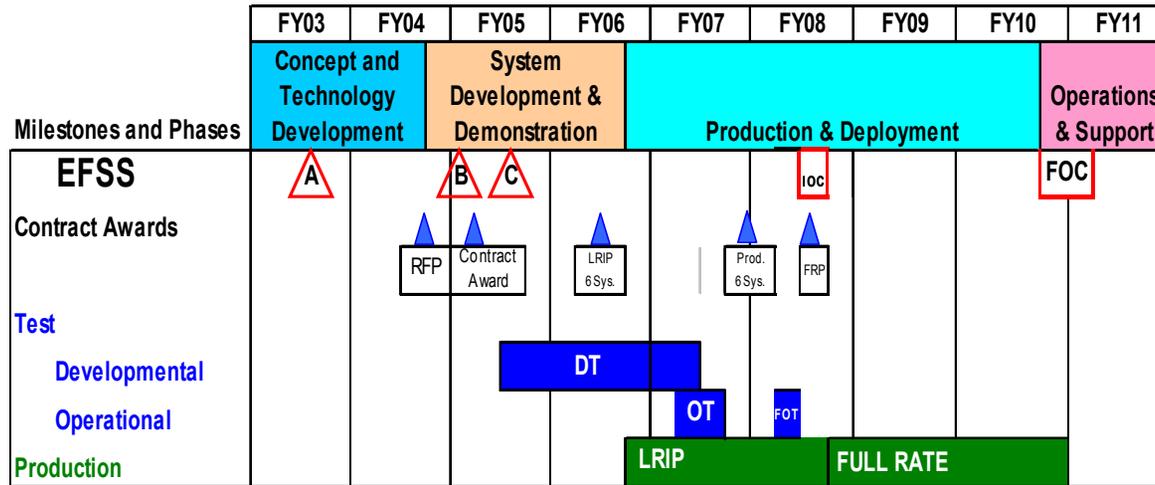
PROJECT NUMBER AND NAME

RDT&E, N /BA-7 Operational Sys Dev

0206623M Marine Corps Ground
Combat/Supporting Arms Systems

C3098 Fire Support Systems

Expeditionary Fire Support System (EFSS)



Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N (C3098) EFSS

PMC BLI# 206400 Expeditionary Fire Support Sys

PMC BLI# 700000 Prime Vendor Spares (EFSS)

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
(U) RDT&E,N (C3098) EFSS	3.761	3.003	5.416	5.169	3.065	4.940	5.077	Cont	Cont
PMC BLI# 206400 Expeditionary Fire Support Sys	16.291	3.869	22.102	0.000	0.000	0.000	0.000	0.000	42.262
PMC BLI# 700000 Prime Vendor Spares (EFSS)	0.432	0.769	0.000	0.000	0.000	0.000	0.000	0.000	1.201

EFSS SCHEDULE DETAIL	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Milestone A - 3rd qtr 2003								
Milestone B - 4th qtr 2004								
Milestone C - 3rd qtr 2005								
Developmental Testing - 4th qtr 2005								
Low Rate Initial Production		3Q						
Operational Testing			3Q					
Initial Operational Capability				3Q				
Full Rate Production				3Q				
Full Operational Capability					4Q			

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supt Arms			C9999 PERM EFSS USMC			
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
Project Cost	19.665	7.154	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
(U) EFSS includes a suite of ammunition that can be safely transported and stored and that has an objective range capability of 17 kilometers. Precision Extended Range Munition (PERM) will enable the EFSS to achieve the required extended range and will provide a precision capability. Insensitive Munitions (IM) components being developed are required for all EFSS ammunition including PERM to allow for safe transport and storage.							
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	0.971		0.000		0.000		
RDT&E Articles Qty							
3-Dimensional Wall 9A25: This effort will develop the new concept/technology based on the Marine Corps Systems Command SBIR contract with Eureka Aerospace for “through-the-wall” imaging capabilities. Successful implementation will provide the capability for high-resolution 3-D visualization of objects, people, weapons and other materiel on the other side of the wall using extremely broadband microwave technology. The requirement is to be able to see who and what is inside a building prior to Marines entering. The system will also be able to spot booby traps and exit routes for the enemy, and help to validate that Marines are attacking the correct building.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	1.068		0.000		0.000		
RDT&E Articles Qty							
Mobile Oxygen Ventilation and External Suction device (MOVES) C9955: This effort will continue the development and subsequent testing of a light weight, portable, oxygen generator, concentrator, ventilator and full vital signs monitor.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	1.941		0.000		0.000		
RDT&E Articles Qty							
Amplifying Fluorescent Polymer Based IED Detection 9A92N: This Congressional Add funds the amplifying fluorescent polymer based IED detection program.							
COST (\$ in Millions)	FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost	1.408		0.000		0.000		
RDT&E Articles Qty							
Lightweight, multi-threat Body and Appendage Armor 9A93N: Develop a lighter weight ceramic armor solution that weighs at least 30% less than current armor at the same ballistic protection level.							

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EXHIBIT R-2a, RDT&E Project Justification		DATE:		
		February 2008		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supt Arms	C9999 PERM EFSS USMC		
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		3.885	0.000	0.000
RDT&E Articles Qty				
Lightweight Prime Mover Vehicle 9A94N: This Congressional Add funds the Lightweight Prime Mover Vehicle program.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.486	0.000	0.000
RDT&E Articles Qty				
Particulate Matter Filter System 9A95N: This Congressional Add funds the Particulate Matter Filter System.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		7.769	4.373	0.000
RDT&E Articles Qty				
Precision Extended Range Munition (PERM) 9A96N: This Congressional Add funds continued uninterrupted development and qualification of ammunition components that support PERM. This development must stay on-track so that the Insensitive Munition (IM) ammunition components are certified and ready to be included in the Operational Test of the EFSS system scheduled to commence in April 07 and to support initial fielding of the basic system during FY07. Previous add commenced PERM effort with the development of compliant ammunition for EFSS. This funding will complete the IM ammunition testing and certification and commence the precision guidance capability for the EFSS ammunition.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		2.137	0.000	0.000
RDT&E Articles Qty				
USMC Light Armored Vehicles Integrated Digital 9A97N: This Congressional Add funds the Light Armored Vehicles Integrated Digital program.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.000	1.588	0.000
RDT&E Articles Qty				
Tractable Durable Net Complex Shaped Body & Extremity Armor: Develop low cost, highly effective ceramic armor for extended body coverage that can defend against lethal threats such as tungsten carbide core Armor-Piercing (AP) and AP-M2 rounds.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.000	1.193	0.000
RDT&E Articles Qty				
Ultrasonic Consolidation of Embedded Sensors: Design, development, test and fielding of consolidated/advanced embedded key sensors and tracking devices to unobtrusively monitor critical condition information to the logistics and tactical front as well as tracking the location and status of critical parts and field resources.				
(U) Total \$		19.665	7.154	0.000

