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EXHIBIT R-2, RDT&E Budget Item Justification				DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT (PE) NAME AND NO.					
RDT&E, N /BA-7 Operational System Development		0206623M Marine Corps Ground Combat/Supporting Arms Systems					
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	56.786	72.982	47.592	50.157	50.233	42.622	42.259
C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)	0.637	0.769	0.807	0.837	0.858	0.883	0.899
C1555 Light Armored Vehicle (LAV) PIP	14.049	11.997	5.508	1.400	1.395	1.426	1.450
C1901 Marine Corps Ground Weaponry PIP	2.625	6.827	6.466	6.676	7.750	7.505	7.094
C2086 Marine Enhanced Program (MEP)	2.446	2.671	2.583	2.686	2.724	2.781	2.833
B2237 Amphibious Vehicle Test Branch (AVTB)	0.790	0.823	0.859	0.889	0.908	0.934	0.952
* C2315 Training Devices/Simulators	0.0	0.0	7.369	15.111	14.034	10.813	10.913
C2503 Family of Combat Equip Support & Services	3.593	7.286	9.424	11.539	13.185	10.546	10.700
C2928 EIFGSWS (HIMARS)	2.725	4.083	6.179	2.388	0.492	0.0	0.0
C3098 Fire Support Systems	19.835	11.470	7.717	7.456	8.719	7.571	7.258
C4002 Family of Raid Reconnaissance	3.216	1.756	0.680	1.175	0.168	0.163	0.160
C9278 Integrated Digital Camera Riflescope	0.976	0.0	0.0	0.0	0.0	0.0	0.0
C9641 LAV Integ Digital & Collaboration Environment	1.938	0.0	0.0	0.0	0.0	0.0	0.0
C9642 Compl Medal Oxide Semiconductor (CMOS)	0.963	0.0	0.0	0.0	0.0	0.0	0.0
C9643 Marine Advanced Combat Suit MACS)	2.030	0.0	0.0	0.0	0.0	0.0	0.0
C9644 Anti-Oxidant Micronutrients Program	0.963	0.0	0.0	0.0	0.0	0.0	0.0
C9999 FY-06 Congressional Adds	0.0	25.300	0.0	0.0	0.0	0.0	0.0
Quantity of RDT&E Articles							

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational System Development		PROGRAM ELEMENT (PE) NAME AND NO. 0206623M Marine Corps Ground Combat/Supporting Arms Systems	
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:			
<p>This PE provides modification to Marine Corps Expeditionary Ground Force Weapon Systems to increase lethality, range, survivability and operational effectiveness. It also provides for the development of AAV7A1 reliability, maintainability, operational and safety modifications, improvements in command and control in the ADMS, and product improvements to the family of LAVs. The AVTB provides facilities and personnel which perform a broad range of testing, repair and technical services to amphibious vehicles.</p> <p>This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing and manufacturing development for upgrades of existing systems.</p> <p>Note:</p> <p>* Funds for Project C2315 were realigned from PE 0206313M starting in FY07.</p>			
B. PROGRAM CHANGE SUMMARY			
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) FY 2006 President's Budget:	51.421	48.409	44.130
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	6.299	25.3	5.833
(U) SBIR/STTR Transfer	-0.891		
(U) Minor Affordability Adjustment	-0.042	-0.727	-2.371
(U) FY 2007 President's Budget:	56.787	72.982	47.592
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See Above.			
(U) Schedule:			
(U) Technical: Not Applicable.			

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EXHIBIT R-2a, RDT&E Project Justification				DATE:						
APPROPRIATION/BUDGET ACTIVITY				PROJECT NUMBER AND NAME						
RDT&E, N /BA-7 Operational Sys Dev				C1555 Light Armored Vehicle (LAV) PIP						
PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP						
COST (\$ in Millions)				FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost				14.049	11.997	5.508	1.400	1.395	1.426	1.450
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 Service Life Extension Program (SLEP) which includes the Improved Thermal Sight System (ITSS), the LAV-Command & Communication (LAV C2) Program, the LAV Lethality 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 2015 by enhancing lethality and survivability; reliability, availability, maintainability and durability; as well as reducing operations and support costs. The LAV Lethality Program will upgrade the LAV 25's M242 gun and associated hardware and software necessary to enable the firing of M919 25mm Armor Piercing, Fin Stabilized, Discarding Sabot (Depleted Uranium) with tracer ammunition.</p>										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)				FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost				1.811	0.000	0.000				
RDT&E Articles Qty										
LAV SLEP ITSS: Develop ITSS prototypes, PMO & matrix support, PMO travel, Contracted Advisory Assistance Services (CAAS) and DT/OT of ITSS prototypes.										
COST (\$ in Millions)				FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost				0.885	1.102	1.353				
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 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost				11.353	10.895	2.772				
RDT&E Articles Qty										
LAV C2: LAV-C2 prototype development, demonstration and integration efforts, PMO & matrix support, PMO travel, CAAS in support of LAV-C2.										
COST (\$ in Millions)				FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost				0.000	0.000	1.383				
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.										
(U) Total \$				14.049	11.997	5.508				

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	February 2006							
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME							
		C1555 Light Armored Vehicle (LAV) PIP							
(U) PROJECT CHANGE SUMMARY:									
	<u>FY2005</u>	<u>FY2006</u>							
(U) FY 2006 President's Budget	15.130	12.179							
(U) Adjustments from the President's Budget:									
(U) Congressional/OSD Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-0.745								
(U) SBIR/STTR Transfer	-0.327								
(U) Minor Affordability Adjustment	-0.009	0.026							
(U) FY 2007 NAVCOMPT Budget	14.049	11.997							
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 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC, 203800, LAV PIP	579.752	138.529	25.990	29.227	36.670	6.123	5.669	Cont	Cont
(U) PANMC, 138800, LAV LETHALITY	0.000	0.000	9.512	0.000	0.000	0.000	0.000	Cont	Cont
(U) Related RDT&E: C9641 LAV IDE	1.938	2.600							

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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/Supporting Arms Systems	PROJECT NUMBER AND NAME C1555 Light Armored Vehicle (LAV) PIP
<p>(U) D. ACQUISITION STRATEGY: The LAV Service Life Extension Program (SLEP) which is comprised of the Basic SLEP and the Improved Thermal Sight System, is designed to extend the service life of the LAV Family of Vehicles through 2015, an increase of 12 to 15 years beyond its original projected useful life. This utilizes both developmental and off-the-shelf technologies to enhance survivability, lethality, mobility and sustainability while simultaneously reducing the cost of ownership. The Marine Corps uses multi-disciplined integrated product teams consisting of engineering, logistical, contracting and financial personnel to manage the SLEP. SLEP contracts have been designed using a winner-take-all methodology in order to reduce costs and encourage competition.</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. Two contractors have been selected to fabricate prototypes which will be subjected to a System Demonstration. The results of the demonstration and firm production prices will lead to a down-selection to a single source for the completion of the System Development and Demonstration phase and the Production phase.</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 machine 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>		

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(U) E. MAJOR PERFORMERS:		
LAV SLEP/ITSS		
FY05	Raytheon Company, McKinney, TX. OT to be conducted/production award. Oct 04. DRS Corporation, Fort Walton Beach, FLA. -complete the installation. Oct 04. MCCDC, Quantico, VA, OT completion. Oct 04. SURVICE Engineering Company, Belcamp, MD. ITSS test support. Oct 04.	
LAV RAM		
FY05	Various	
FY06	Various	
FY07	Various	
LAV C2 Upgrade Program starts in FY 05.		
FY05	Lockheed-Martin Systems Integration, Owego, NY. System development & demonstration. Jun 05. Northrop Grumman Mission Systems, Carson, CA. System development & demonstration. Jun 05.	
FY06	Downselect to one contractor projected for Apr06	
FY07	TBD	
LAV LETHALITY Program starts in FY 07.		
FY07	Raytheon Company, McKinney, TX. Integration of DU firing tables into ITSS. Jan 07.	

Exhibit R-3 Cost Analysis					DATE: February 2006							
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 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development (ITSS)	Various	Raytheon, McKinney TX	22.869	0.470	3Q05					0.000	23.339	
Product Development (RAM)	Various	Various	2.258	0.829	Various	0.970	Various	1.123	Various	Cont	Cont	
Product Development (C2-GFE)	Various	TBD	0.000	1.858	2Q05	1.941	1Q06			0.000	3.799	
Product Development (C2)	Various	TBD	0.000	8.100	3Q05	6.242	2Q06	1.081	1Q07	0.000	15.423	
CAAS	MIPR	SURVICE, Bellcamp, MD	0.550	0.143	1Q05	0.145	1Q06			0.000	0.838	
Subtotal Product Dev			25.677	11.400		9.298		2.204		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Support												
Technical Eng Services (C2)	MIPR	TACOM, Warren, MI	0.000	0.233	Various	0.147	1Q06			0.000	0.380	0.590
Subtotal Support			0.000	0.233		0.147		0.000		0.000	0.380	0.590
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Test & Evaluation												
Devl/Oper Test & Eval (SLEP/ITSS)	MIPR	Yuma Prv Ground, AZ	8.049	0.384	Various					0.000	8.433	
Devl/Oper Test & Eval (RAM)	MIPR	Aberdeen Proving Ground, MD	2.575	0.056	3Q05					Cont	Cont	
Devl/Oper Test & Eval (SLEP/ITSS)	MIPR	MCOTEA, Quantico, VA	0.922	0.720	Various					0.000	1.642	
Devl/Oper Test & Eval (C2)	MIPR	MCOTEA, Quantico, VA	0.000	0.237	Various	1.691	Various	1.437	1Q07	0.000	3.365	
Devl/Oper Test & Eval (Lethality)	MIPR	TBD	0.000					0.736	3Q07	0.000	0.736	
Subtotal T&E			11.546	1.397		1.691		2.173		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Management												
Program Management	VAR	TACOM, Warren, MI	3.055	0.934	Various	0.711	Various	1.036	Various	Cont	Cont	
Matrix Support	MIPR	TACOM, Warren, MI	1.043	0.085	Various	0.150	Various	0.095	Various	Cont	Cont	
Subtotal Management			4.098	1.019		0.861		1.131		Cont	Cont	
Remarks:												
Total Cost			41.321	14.049		11.997		5.508		Cont	Cont	

Exhibit R-4/a Schedule Profile/Detail		DATE: February 2006							
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							
(U) D. SCHEDULE PROFILE:									
<u>LAV SLEP</u>									
Milestone 0:	1st Qtr, FY 1998	Milestone III:	2nd Qtr, FY 2002						
Milestone I:	2nd Qtr, FY 1999	Contract Award:	3rd Qtr, FY 2002						
Milestone II:	2nd Qtr, FY 2000	IOC:	2nd Qtr, FY 2004						
DT / OT:	2nd Qtr, FY 2001	FOC:	3rd Qtr, FY 2009						
<u>LAV C2</u>									
Milestone A:	2nd Qtr, FY2000	Contract Award:	3rd Qtr, FY 2007						
Milestone B:	2nd Qtr, FY2005	IOC:	2nd Qtr, FY 2009						
DT / OT:	3rd Qtr, FY 2006	FOC:	4th Qtr, FY 2010						
Milestone C:	3rd Qtr, FY 2007								
<u>LAV LETHALITY</u>									
Milestone A:	Not Required	Contract Award:	4th Qtr, FY 2007						
Milestone B:	1st Qtr, FY 2007	IOC:	4th Qtr, FY 2008						
DT / OT:	3rd Qtr, FY2007	FOC:	2nd Qtr, FY 2010						
Milestone C:	4th Qtr, FY2007								
Program Funding									
<u>(APPN, BLI #, NOMEN)</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
<u>(U) RDT&E,N</u>	14.049	11.997	5.508	1.400	1.395	1.426	1.450	Cont	Cont
<u>(U) RDT&E, N #C9641 LAV IDE</u>	1.938	2.600	0.000	0.000	0.000	0.000	0.000	Cont	Cont
<u>(U) PMC, BLI# 203800 LAV</u>	579.752	138.529	25.990	29.227	36.670	6.123	5.669	Cont	Cont
<u>(U) PANMC, 138800, LAV LETHALITY</u>	0.000	0.000	9.512	0.000	0.000	0.000	0.000	Cont	Cont
LAV SCHEDULE DETAIL									
LAV SLEP	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone III:									
Contract Award:									
IOC:		2Q							
FOC:							3Q		
LAV C2									
Milestone A:									
Milestone B:			2Q						
DT / OT:				3Q					
Milestone C:					3Q				
Contract Award:					3Q				
IOC:						2Q			
FOC:								4Q	
LAV LETHALITY									
Milestone A:									
Milestone B:					1Q				
DT / OT:					3Q				
Milestone C:					4Q				
Contract Award:					4Q				
IOC:						4Q			
FOC:								2Q	

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME						
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems		C1901 Marine Corps Ground Weaponry PIP				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost	2.625	6.827	6.466	6.676	7.750	7.505	7.094
RDT&E Articles Qty							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) This project develops joint and Marine Corps unique improvements to infantry weapons and artillery technology, improvements for Night Vision Equipment, Rifle Combat Optics, Family of Individual Optics, Thermal Weapons Sight, Small Unit Remote Scouting System (SURSS) and monitors national and international weapons development.

(U) **MARINE CORPS AIR GROUND COMBAT CENTER (MCAGCC) RANGE INSTRUMENTATION:** Converges training occurring at the Marine Air Ground Task Force Training Command (MAGTFTC), Twenty-Nine Palms, CA with training of other forces occurring at participating Joint National Training Center (JNTC) ranges and with the standing Joint Task Force (JTF), Suffolk, VA. The Marine Corps JNTC strategy is to integrate Live, Virtual, and Constructive (L-V-C) training environments currently utilized or being developed. FY04 funds developed architecture and interfaces to integrate range instrumentation and simulation to digitally capture dismounted infantry and weapon system platform operations, to record command and control communications for after action, to provide integrated targetry, battlefield effects and Military Operations in Urban Terrain (MOUT) training environments, and designed the protocol transferring the correlated digital exercise picture to other JNTC recipients and the Joint Training and Simulation Center (JTASC) within the Joint Forces Command.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	0.600	0.360
RDT&E Articles Qty			

Automatic Rifle: This funding will provide testing and evaluation of test results and program management in support of the program development for the new Marine Corps Infantry Automatic Rifle.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	1.424	1.161
RDT&E Articles Qty		8-81mm/6-60mm	8-81mm/6-60mm

Company and Battalion Mortars: This funding will be used to provide system development and demonstration, pre-Milestone C activities, and purchasing Non-developmental Items (NDI) for testing and evaluation of candidate systems and modifications.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.542
RDT&E Articles Qty			

Family of Individual Optics: This funding will be utilized to support improvements on the technology that is currently used. Research efforts will evaluate the possibility of combining / integrating disparate sensor technology to increase the overall capability. One example will be combining the Infrared (IR) and Image Intensifier (I2) technologies into one system.

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COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.100	0.050
RDT&E Articles Qty				
Rifle Combat Optics: This funding will be predominantly expended during the test and evaluation phase of this program. Samples of potential material solutions will need to be procured to accomplish a limited user evaluation and complete technical and environmental testing.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.661	0.999	0.861
RDT&E Articles Qty				
Infantry Weapons Mods: Joint participation and Marine Corps unique activities for evaluation of safety, lethality, and technology improvements for Marine Corps infantry/reconnaissance individual /crew-served weapons. Past years' efforts have impacted the safety and performance of M2 Machine Guns and M249 Squad Automatic Weapons and have included the new M40A3 Sniper Rifle, the mortar systems, and the current Marine Expeditionary Unit Special Operations Capability (MEU SOC) .45 caliber pistol efforts. Issues particularly related to safety are recurring events from year to year that require immediate attention to maintain an operational readiness posture. Likewise, we will continue to pursue potential technological advances that will significantly enhance the operational utility of both individual and crew-served weapon systems.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.686	1.217	0.480
RDT&E Articles Qty				
Small Unit Remote Scouting System (SURSS): Funds will be used for development, demonstration and testing of product improvements and block upgrades to meet increasingly demanding Operational Requirements Document (ORD) thresholds.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.063	2.187	1.704
RDT&E Articles Qty				
Night Vision Mod Line: Joint participation and Marine Corps unique activities for evaluation of safety, lethality and technology improvements for Marine Corps night vision devices. Provides for In-Service Engineering Agent (ISEA) support at Naval Surface Warfare Center (NSWC), Crane, IN. Participate with Army Program Manager (PM) - Night Vision at Ft. Belvoir on new enhancements for Image Intensification (I2) and fused multispectral weapon sight. Travel to support enhanced systems development and review of tests.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.163	0.300	0.308
RDT&E Articles Qty				
Tactical Unmanned Vehicle (TUV): Funds will be used for developmental testing at Redstone Arsenal.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.052	0.000	0.000
RDT&E Articles Qty				
Thermal Weapons Sight (TWS)AN/PAS-13: Provided for joint participation in Pre-Planned Product Improvement (P3I) for TWS – remote image transfer, laser range finder, aimport reticle (mechanical, quadrant-style sight), mounting brackets for future small arms weapons, vertical angle measurement, and automated aimport reticle (non-mechanical, non-quadrant style, computer-driven sight).				
(U) Total \$		2.625	0.177	0.166

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PROGRAM ELEMENT NUMBER AND NAME

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

0206623M Marine Corps Ground Combat/Supporting Arms Systems

C1901 Marine Corps Ground Weaponry PIP

(U) PROJECT CHANGE SUMMARY:

	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>
(U) FY 2006 President's Budget:	3.063	6.932	9.029
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) POM FY06 CORE Adjustment			
(U) Reprogrammings	-0.389		-1.500
(U) Small Business Innovation Research	-0.048		
(U) Minor Affordability Adjustment	-0.001	-0.105	-1.063
(U) FY 2007 President's Budget:	2.625	6.827	6.466

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 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC (BLI#206100) Mod Kits IWS	0.000	3.264	2.963	2.968	3.040	3.034	3.042	Cont	Cont
(U) PMC (BLI#220900) Mod Kits IWS	2.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.680
(U) PMC (BLI#222000) Under \$5 Million	51.714	99.432	8.959	17.119	28.864	12.962	13.843	Cont	Cont
(U) PMC (BLI#233400) Modular Weapon System	26.978	22.350	0.000	0.000	0.000	0.000	0.000	0.000	49.328
(U) PMC (BLI#493000) Night Vision Equipment	605.520	102.991	13.675	15.247	29.517	29.184	29.079	Cont	Cont
(U) PMC (BLI#473400) SURSS	16.523	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.523
(U) PMC (BLI#474700) INTEL SP EQP SURSS	0.000	8.092	3.817	7.862	14.742	4.771	4.446	Cont	Cont

(U) Related RDT&E:

- (U) All Ground Weapons and Ground Ammunition Systems: Army, Navy, Air Force, Coast Guard, and Special Operations Command

(U) D. ACQUISITION STRATEGY:

- (U) These programs range from off-the-shelf modifications to developmental items. Modification covers safety, reliability, and technology up-grades to meet Marine Corps requirements.

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

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

0206623M Marine Corps Ground Combat/Supporting Arms Systems

C1901 Marine Corps Ground Weaponry PIP

(U) E. MAJOR PERFORMERS:

1Qtr 05, 1Qtr 06, 1Qtr 07 - NSWC, Crane, IN - Product development.

1Qtr 05, 1Qtr 06, 1Qtr 07 - AeroVironment, Simi Valley, CA - Product development.

2Qtr 05 - Watervliet Arsenal, Watervliet, NY - Test & Evaluation.

1Qtr 05 - Present Office of Naval Research (ONR) with R&D for Company and Battalion Mortars

1Qtr 05-Present - Dynamic Flow Form: Vendor for Mortar Development

1Qtr 06; 2Qtr 06 - L3 Titan Corporation: Contractor Support for Program Manager

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Exhibit R-3 Cost Analysis				DATE: February 2006								
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	C1901 Marine Corps Ground Weaponry PIP								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT		SEE BELOW										
Inf Wpns Mods	WR/RCP	MCCDC, Quantico, VA	0.867			0.060	2Q06	0.051	1Q07	Cont	Cont	
Inf Wpns Mods	WR	WTBN, Quantico, VA	0.184			0.220	2Q06	0.225	1Q07	Cont	Cont	
Inf Wpns Mods	MILSTRIP	MCSC, Quantico, VA	0.024			0.229	2Q06	0.290	2Q07	Cont	Cont	
SURSS	RCP	AeroVironment, Simi Valley, CA	0.318	0.298	2/4Q05	0.758	1Q06	0.115	1Q07	Cont	Cont	
SURSS	RCP	MCSC, Quantico, VA	0.030							0	0.030	
SURSS	MIPR	Natick, MA	0.000			0.250	2Q06	0.200	2Q07	0	0.450	
SURSS	WR	NAWCAD, Pax River, MD	0.000	0.020	2Q05						0.020	
Automatic Rifle	RCP	TBD	0.000			0.050	2Q06	0.010	1Q07	Cont	Cont	
Company/Battalion Mortar	RCP	TBD	0.000			0.200	2Q06	0.200	1Q07	Cont	Cont	
Company/Battalion Mortar	Var	TBD, Various	0.000			0.874	2Q06	0.611	1Q07	Cont	Cont	
Family of Individual Optics	WR/RCP	NSWC, Crane, IN	0.000					1.037	1Q07	Cont	Cont	
Nt Vision Mod	WR/RCP	NSWC, Crane, IN	1.198			1.754	1Q06	1.245	1Q07	Cont	Cont	
Nt Vision Mod	MIPR	Night Vision Lab, Ft Belvoir, VA	0.687	0.149	1Q05	0.110	1Q06	0.115	1Q07	Cont	Cont	
TWS	MIPR	Night Vision Lab, Ft Belvoir, VA	0.317							Cont	Cont	
Initial Issue	MIPR	TBD	0.000							0	0.000	
TUV	MIPR	Redstone Arsenal, AL	1.738	0.163	1Q05	0.300	1Q06	0.308	1Q07	Cont	Cont	
MCAGCC Range Inst	RCP(FFP)	SRI Int'l, Menlo Park, CA	3.675								3.675	
Subtotal Product Dev			9.038	0.630		4.805		4.407		Cont	Cont	
Remarks:												

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Exhibit R-3 Cost Analysis				DATE: February 2006								
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		C1901 Marine Corps Ground Weaponry PIP							
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PROGRAM SUPPORT			SEE BELOW									
Inf Wpns Mods	WR	MCSC, Quantico, VA	0.765	0.159	1Q05	0.100	1Q06	0.100	1Q07	Cont	Cont	
Inf Wpns Mods	RCP	BAEST, Stafford, VA	0.847	0.100	1Q05	0.000		0.000		Cont	Cont	
Inf Wpns Mods	RCP	CEOSS	0.000	0.000		0.390	2Q06	0.195	1Q07			
Inf Wpns Mods	RCP	MCSC, Quantico, VA	0.136	0.045	1Q05					0.000	0.181	
SURSS	RCP	BAEST, Stafford, VA	0.537	0.000		0.000		0.000		0	0.537	
SURSS	WR	NSWC, Dahlgren, VA (Civ Sal)	0.165	0.155	1Q05	0.165	1Q06	0.165	1Q07	Cont	Cont	
SURSS	WR	MCSC, Quantico, VA	0.041							0.000	0.041	
SURSS	RCP	MCSC, Quantico, VA	0.090								0.090	
SURSS	RCP	AeroVironment, Simi Valley, CA	0.094							0.000	0.094	
SURSS	MIPR	Joint Spectrum Ctr, Annapolis, MD	0.031	0.050	1Q05	0.044	2Q06			0	0.125	
Automatic Rifle	RCP	TBD	0.000			0.200	2Q06	0.200	1Q07	Cont	Cont	
Company/Battalion Mortar	RCP	TBD	0.000			0.100	2Q06	0.100	1Q07	Cont	Cont	
Nt Vision Mod	WR	MCSC, Quantico, VA	0.305	0.177	1Q05	0.148	1Q06	0.159	1Q07	Cont	Cont	
Nt Vision Mod	RCP	BAEST, Stafford, VA	0.350	0.515	2Q05	0.150	1Q06	0.160	1Q07	Cont	Cont	
Family of Individual Optics	WR	MCSC, Quantico, VA	0.000					0.300	1Q07	Cont	Cont	
Nt Vision Mod	WR	MCSC, Quantico, VA	0.000	0.020	1Q05							
TWS	RCP	BAEST, Stafford, VA	0.037							0.000	0.037	
MCAGCC Range Inst	RCP (FFP)	SENSIS Corp., Dewitt, NY	0.556							0.000	0.556	
Subtotal Support			3.954	1.221		1.297		1.379		Cont	Cont	
Remarks:												

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Exhibit R-3 Cost Analysis				DATE: February 2006								
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		C1901 Marine Corps Ground Weaponry PIP							
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T&E		SEE BELOW										
Inf Wpns Mods	WR	MCOTEA, Quantico, VA	0.140							0.000	0.140	
Inf Wpns Mods	WR	MCCDC, Quantico, VA	0.285							0.000	0.285	
Inf Wpns Mods	MIPR	Watervliet Arsenal, Watervliet, NY	0.000	0.300	2Q05							
Inf Wpns Mods	WR	PM Ammo, Quantico, VA	0.000	0.057	4Q05							
Automatic Rifle	WR	MCOTEA, Quantico, VA	0.000			0.350	2Q06	0.150	1Q07	Cont	Cont	
Company/Battalion Mortar	WR	MCOTEA, Quantico, VA	0.000			0.250	1Q06	0.250	1Q07	Cont	Cont	
SURSS	MIPR	MCOTEA, Quantico, VA	0.000	0.127	3/4Q05					0.000	0.127	
SURSS	WR	NSWC, Carderock, MD	0.000	0.036	1Q05							
Family of Individual Optics	WR	MCOTEA, Quantico, VA	0.000					0.205	1Q07	Cont	Cont	
Rifle Combat Optics	WR	MCOTEA, Quantico, VA	0.000			0.100	2Q06	0.050	2Q07	Cont	Cont	
TWS	RCP	NSWC, Crane, IN	0.000	0.052	2Q05							
Nt Vision Mod	WR	MCOTEA, Quantico, VA	0.150	0.202	4Q05	0.025	2Q06	0.025	2Q07	Cont	Cont	
Subtotal T&E			0.575	0.774		0.725		0.680		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MCAGCC Range Inst	RCP (FFP)	MKI Systems, Orlando, FL	1.491							0.000	1.491	
Subtotal Management			1.491	0.000		0.000		0.000		Cont	Cont	
Remarks:												
Total Cost			15.058	2.625		6.827		6.466		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

C1901 Marine Corps Ground Weaponry PIP

FAMILY OF INDIVIDUAL OPTICS

Fiscal Year	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total
Individual Marine Infantry Weapons Sights													
IMIWS MS B (FY06)								■					
IMIWS MS C (FY07 3 rd Qtr)									■				
Marine Handheld/Helmet Mounted Optic													
MHHMO MS B (FY07)									■				
MHHMO MS C (FY08 4 th Qtr)													

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT

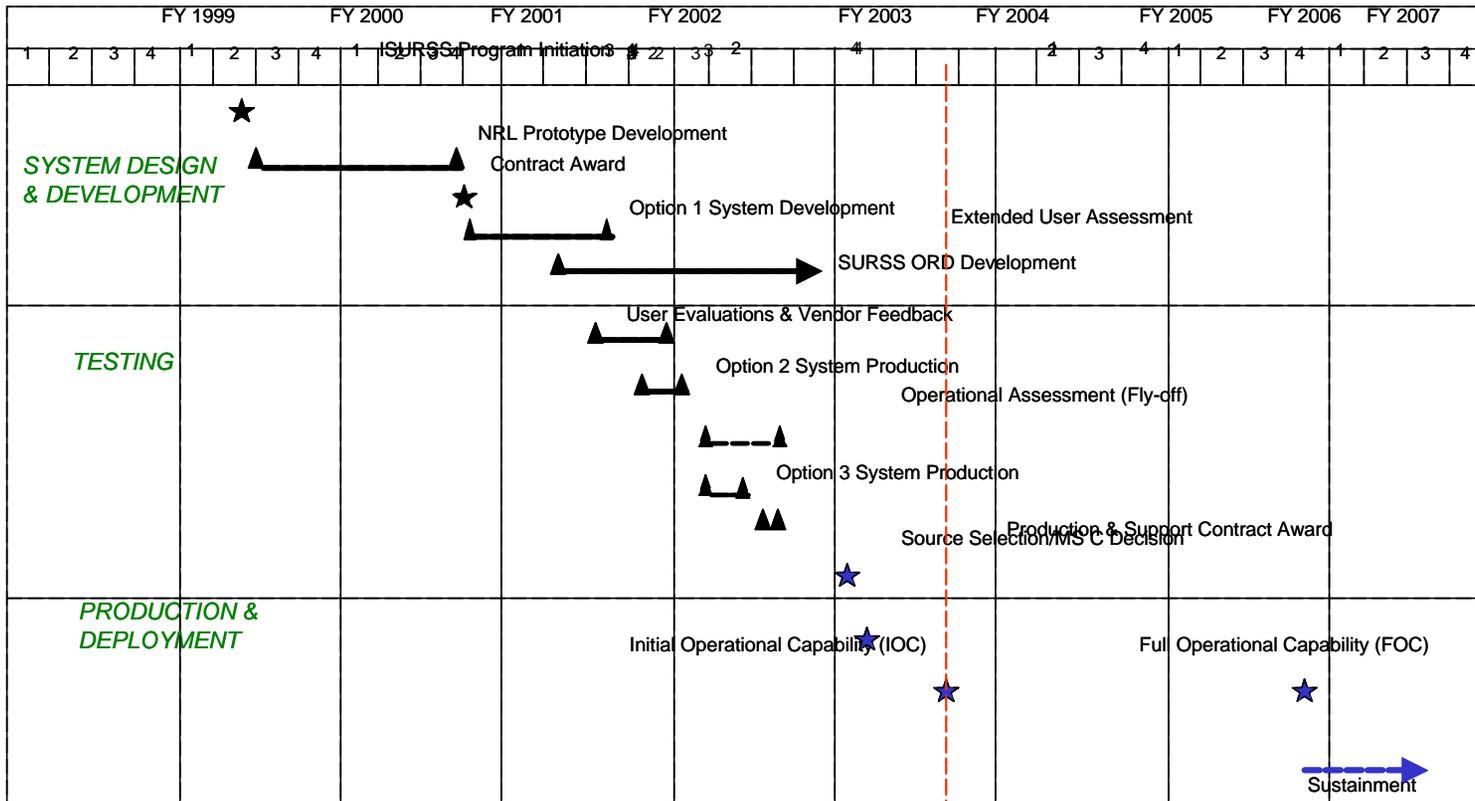
PROJECT NUMBER AND NAME

RDT&E, N /BA 7 Operational Sys Dev

0206623M Marine Corps Ground Combat/Supporting Arms Systems

C1901 Marine Corps Ground Weaponry PIP

SMALL UNIT REMOTE SCOUTING SYSTEM



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Exhibit R-4/4a Schedule Profile/Detail

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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

C1901 Marine Corps Ground Weaponry PIP

Small Unit Remote Scouting System Schedule Detail				FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Program Initiation				2Q							
NRL Prototype Development				2Q							
Contract Award					4Q						
Option 1 System Development					4Q						
SURSS ORD Development						2Q					
User Evaluations & Vendor Feedback							3Q				
Option 2 System Production						4Q					
Extended User Assessment							1Q				
Option 3 System Production							1Q				
Operational Assessment (Fly-Off)							3Q				
Source Selection / MS C Decision								1Q			
Production & Support Contract Award								2Q			
IOC								3Q			
FOC										4Q	

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT

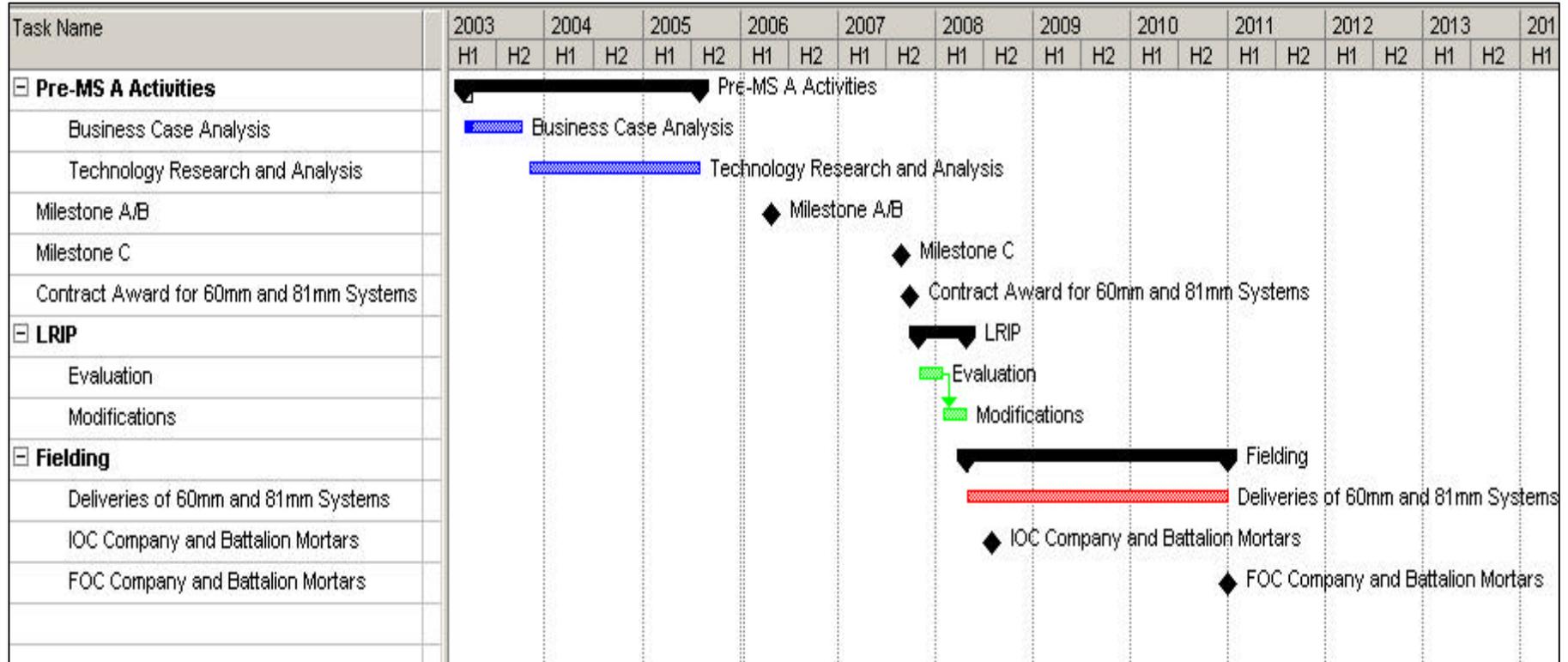
PROJECT NUMBER AND NAME

RDT&E, N /BA 7 Operational Sys Dev

0206623M Marine Corps Ground Combat/Supporting Arms Systems

C1901 Marine Corps Ground Weaponry PIP

COMPANY AND BATTALION MORTARS



APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT

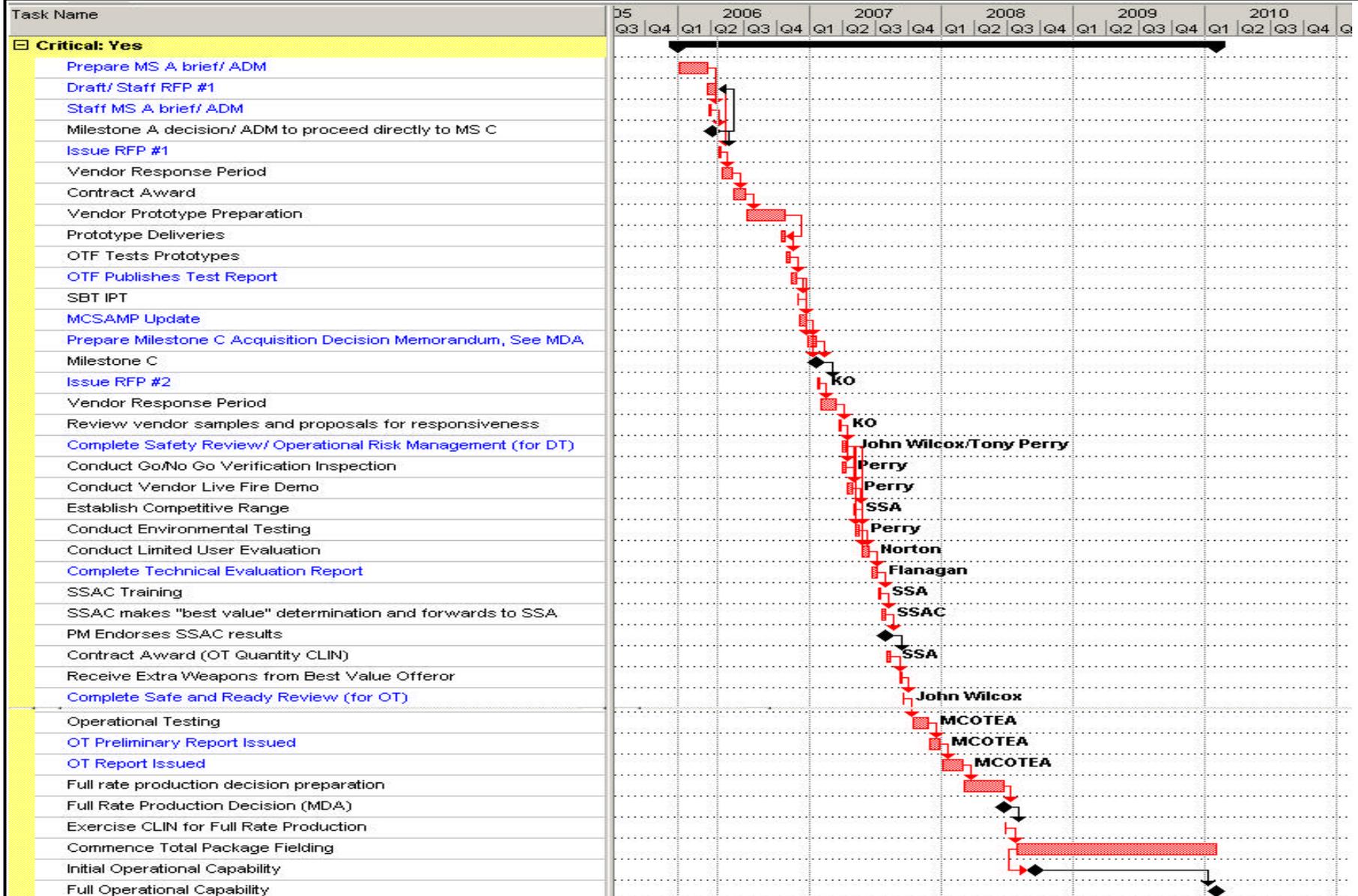
PROJECT NUMBER AND NAME

RDT&E, N /BA 7 Operational Sys Dev

0206623M Marine Corps Ground Combat/Supporting Arms Systems

C1901 Marine Corps Ground Weaponry PIP

Automatic Rifle



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Exhibit R-4/4a Schedule Profile/Detail

DATE:

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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

C1901 Marine Corps Ground Weaponry PIP

Automatic Rifle	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone A			2Q					
Issue RFP for Prototypes			2Q					
Contract Award			3Q					
Prototype Deliveries			4Q					
OTF Tests Prototypes			4Q					
Milestone C				1Q				
Issue RFP #2				1Q				
Verification Testing (Go/No-Go, Demos, Environs, LUE)				2Q				
Source Selection				3Q				
Contract Award				3Q				
Complete Safe and Ready Review (for OT)				3Q				
Operational Testing				4Q				
OT Preliminary Report Issued				4Q				
OT Report					1Q			
Full Rate Production Decision					1Q			
Initial Operational Capability					3Q			
Full Operational Capability							1Q	

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EXHIBIT R-2a, RDT&E Project Justification				DATE:							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev				PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat Arms Systems				February 2006			
								C2086 Marine Enhancement Program (MEP)			
COST (\$ in Millions)				FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11	
Project Cost				2.446	2.671	2.583	2.686	2.724	2.781	2.833	
RDT&E Articles Qty											
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:											
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.											
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:											
COST (\$ in Millions)				FY 2005		FY06		FY07			
Accomplishment/Effort Subtotal Cost				0.797		0.840		0.854			
RDT&E Articles Qty											
Explored NDI equipment that would improve the combat effectiveness and enhance safety and survivability of the Individual Marine.											
COST (\$ in Millions)				FY 2005		FY06		FY07			
Accomplishment/Effort Subtotal Cost				0.833		0.839		0.904			
RDT&E Articles Qty											
Explored clothing and individual equipment that would improve the combat effectiveness and enhance safety and survivability of the individual Marine.											
COST (\$ in Millions)				FY 2005		FY06		FY07			
Accomplishment/Effort Subtotal Cost				0.816		0.992		0.825			
RDT&E Articles Qty											
Explored ground weapons, communications and command and control equipment that would improve the combat effectiveness and enhance safety and survivability of the individual Marine.											
(U) Total \$				2.446		2.671		2.583			

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

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) Project Change Summary: FY2005 FY2006 FY2007

(U) FY 2006 President's Budget: 2.629 2.711 2.571

(U) Adjustments from the President's Budget:

(U) Congressional/OSD Program Reductions

(U) Congressional Rescissions

(U) Congressional Increases

(U) Reprogrammings -0.168

(U) SBIR/STTR Transfer -0.014

(U) Minor Affordability Adjustment -0.001 -0.040 0.012

(U) FY 2007 President's Budget: 2.446 2.671 2.583

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 To Compl	Total Cost
(U) PMC (BLI #221100) MEP	21.565	0.000	0.000	0.000	0.000	0.000	0.000	21.565
(U) PMC (BLI#220800) Weapons Enhancement Pgm	0.000	3.623	5.251	4.015	4.096	4.254	4.340	Cont Cont

(U) Related RDT&E:

(U) D. ACQUISITION STRATEGY: NDI/COTS

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

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	2004	Dec-03	164
RDECOM, Natick MA	DT&E	2004	Dec-03	348
Various	Product Development	2004	Various	240
Various	DT&E	2004	Dec-03	881
Operating Forces	OT&E	2004	Nov-03	300
RDECOM, Natick MA	Product Development	2005	Dec-04	177
RDECOM, Natick MA	DT&E	2005	Dec-04	373
TBD	Product Development	2005	Various	257
TBD	DT&E	2005	Various	946
Operating Forces	OT&E	2005	Mar-05	322
RDECOM, Natick MA	Product Development	2006	Dec-05	173
RDECOM, Natick MA	DT&E	2006	Dec-05	367
TBD	Product Development	2006	Various	253
TBD	DT&E	2006	Various	929
Operating Forces	OT&E	2006	Mar-06	316
RDECOM, Natick MA	Product Development	2007	Dec-06	176
RDECOM, Natick MA	DT&E	2007	Dec-06	373
TBD	Product Development	2007	Various	257
TBD	DT&E	2007	Various	944
Operating Forces	OT&E	2007	Mar-07	321

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

Exhibit R-3 Cost Analysis					DATE: February 2006							
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	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
Product Development	Various	Various	5.648	0.257	Various	0.306	Various	0.257	Various	Cont	Cont	
Product Development	MIPR	RDECOM, Natick, Mass	3.928	0.177	1Q05	0.173	1Q06	0.176	1Q07	Cont	Cont	
Product Development	WR	NFEC, Pt Hueneme, CA	1.150	0.052	2Q05	0.051	2Q06	0.051	2Q07	Cont	Cont	
Product Development	WR	NSWC, Crane, IN	1.518	0.069	1Q05	0.067	1Q06	0.081	1Q07	Cont	Cont	
Subtotal Product Dev			12.244	0.555		0.597		0.565		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Operational Test & Eval	WR	2nd MARDIV, CamLej, NC	7.297	0.228	2Q05	0.316	2Q06	0.321	2Q07	Cont	Cont	
Subtotal Support			7.297	0.228		0.316		0.321		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Eval	Various	Various	14.018	0.870	Various	0.939	Various	0.864	Various	Cont	Cont	
Developmental Test & Eval	MIPR	RDECOM, Natick, Mass	9.335	0.373	1Q05	0.367	1Q06	0.373	1Q07	Cont	Cont	
Developmental Test & Eval	WR	NFEC, Pt Hueneme, CA	3.443	0.109	2Q05	0.108	2Q06	0.109	2Q07	Cont	Cont	
Developmental Test & Eval	WR	NSWC, Crane, IN	4.258	0.106	1Q05	0.143	1Q06	0.146	1Q07	Cont	Cont	
Subtotal T&E			31.054	1.458		1.557		1.492		Cont	Cont	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Mgmt/Tech Spt	FFP	Various	0.095	0.205	1Q05	0.201	1Q06	0.205	1Q07	Cont	Cont	
Subtotal Management			0.095	0.205		0.201		0.205		Cont	Cont	
Remarks:												
Total Cost			50.690	2.446		2.671		2.583		Cont	Cont	

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms Systems			PROJECT NUMBER AND NAME C2315 Training Devices/Simulators			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.000	0.000	7.369	15.111	14.034	10.813	10.913
RDT&E Articles Qty							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
<p>(U) Training simulators supported by this program element include Multiple Integrated Laser Engagement System (MILES 2000), Combined Arms Command & Control Training Upgrade System (CACCTUS), MAGTF Tactical Warfare Simulation (MTWS) Enhancements, and Joint National Training Center (JNTC) Investment. These training systems provide tactical weapons and decision-making skill training from entry level through Marine Air-Ground Task Force (MAGTF) staff level. Systems will be interoperable and will allow for mission planning, mission rehearsal and concept evaluation in a valid synthetic environment with objective, timely feedback. Through live, virtual and constructive simulation, the Marine Corps will have the means to train jointly, educate, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations and define operational requirements.</p> <p>NOTE: FY05 and FY06 funding is in PE 0206313M.</p>							
B. ACCOMPLISHMENTS/PLANNED PROGRAM:							
COST (\$ in Millions)	FY 2005		FY 2006		FY 2007		
Accomplishment/Effort Subtotal Cost	0.000		0.000		3.046		
RDT&E Articles Qty							
<p>CACCTUS: Initial Proto-type installed at 29 Palms, CA for verification and validation testing by Tactical Training Exercise Control Group (TTECG). Transitioning continues from test bed to target simulation engine. Integration of operation C4I systems with sim. Development and integration of sim interfaces and visualization tools.</p>							
COST (\$ in Millions)	FY 2005		FY 2006		FY 2007		
Accomplishment/Effort Subtotal Cost	0.000		0.000		1.720		
RDT&E Articles Qty							
<p>MILES: Continue developing the Wireless RD detector belt capability, and integrate the Moving Target System (MITS) with Deployable Target System (DTS).</p>							
COST (\$ in Millions)	FY 2005		FY 2006		FY 2007		
Accomplishment/Effort Subtotal Cost	0.000		0.000		2.603		
RDT&E Articles Qty							
<p>MTWS Enhancements: The MTWS support initiative includes software and system development support, training network infrastructure support, and hardware support to include: Develop an HLA interface between MTWS and other simulation models, such as Joint Conflict and Tactical Simulation (JCATS) and other selected models. Develop MTWS-C4I interoperability with Command and Control PC (C2PC), Army Field Artillery Tactical Data System (AFATDS), Theater Battle Management Coprs System (TBMCS), and Common Aviation Command and Control System (CAC2S). Enhanced man machine interface for efficient exercise generation and execution processes, and reduce the number of exercise operators and controllers. Refresh computer hardware training suites, and supporting training communication network infrastructure. Develop Course of Actions and Analyses (COAA) capability. Rules of Engagement for multi-sided warfare and organizations. Airborne Electronic Warfare and Advanced synthetic natural environment upgrade.</p>							
(U) Total \$	0.000		0.000		7.369		

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

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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			C2315 Training Devices/Simulators						
(U) PROJECT CHANGE SUMMARY:	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>							
(U) FY 2006 President's Budget:	0.000	0.000	7.333							
(U) Adjustments from the President's Budget:										
(U) Congressional/OSD Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings										
(U) SBIR/STTR Transfer										
(U) Minor Affordability Adjustment								0.036		
(U) FY 2007 President's Budget:	0.000	0.000	7.369							
(U) Funding: FY's 07-11 funding realigned to PE 0206623M for execution. Prior year funding is under PE 0206313M.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
* NOTE: FY05 and FY06 Funding in PE 0206313M.										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>	
(U) PMC, BLI# 653200 Trng Dev/Sims	96.546	57.581	13.797	30.651	55.935	17.889	18.609	Cont	Cont	
(U) RDT&E, PE 0206313M, C2315 Trng Dev/Sims	4.173	8.806	0.000	0.000	0.000	0.000	0.000	0.000	12.979	

(U) D. ACQUISITION STRATEGY:

- (U) **CACCTUS** - Competitive Cost plus Fixed Fee contract (CPFF).
- (U) **MILES** - Sole Source Fixed Price development contract.
- (U) **MTWS Enhancements** - Competitively award Cost Plus Incentive Fee (CPIF) development contract.
- (U) **Manpower Training Analysis** - Competitively Award Service Contract.

(U) E. MAJOR PERFORMERS:

Not Applicable for any programs with Training Devices/Simulators, C2315.

Exhibit R-3 Cost Analysis							DATE: February 2006					
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				C2315 Training Devices/Simulators					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Dev - MILES	SS/FP	Saab, Orlando, FL (Wireless)	0.000					0.331	12/06	Cont	0.331	
Product Dev - MILES	SS/FP	Saab, Orlando, FL (MITS)	0.000					0.300	12/06	Cont	Cont	
Subtotal Product Dev			0.000	0.000		0.000		0.631		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SW Dev - Miles	SS/FP	Saab, Orlando, FL (Wireless)	0.000					0.331	12/06	Cont	0.331	
SW Dev - Miles	SS/FP	Saab, Orlando, FL (MITS)	0.000					0.300	12/06	Cont	Cont	
Software Dev-CACCTUS	CPFF*	PM TRASYS, Orlando, FL	0.000					2.879	10/06	Cont	Cont	
SW Dev, CACCTUS	CPFF*	NAWC, Orlando, FL	0.000					0.167	10/06	0.000	0.167	4.453
SW Dev, CACCTUS	MIPR	PEO STRI, Orlando FL	0.000							0.000	0.000	4.325
Dev Support - MTWS	SS/T&M	PM TRASYS, Orlando, FL	0.000					2.353	10/06	Cont	Cont	
Subtotal SW Dev Support			0.000	0.000		0.000		6.030		Cont	Cont	
Remarks: CACCTUS CPFF (Hub Zone)												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T & E - MILES	WR	MCSC, VA	0.000					0.200	04/06	Cont	Cont	
Subtotal Dev T&E			0.000	0.000		0.000		0.200		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Support - MTWS	SS/T&M	MCSC, Quantico, VA	0.000					0.250	10/06	Cont	Cont	
Program Support - MILES	WR	MCSC, Quantico, VA						0.258	10/06	Cont	Cont	
Subtotal Management Spt			0.000	0.000		0.000		0.508		Cont	Cont	
Remarks:												
Total Cost			0.000	0.000		0.000		7.369		Cont	Cont	

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Exhibit R-4/4a Schedule Profile/Detail

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators
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CACCTUS PROGRAM SCHEDULE

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Proto-type Install & validation 29 Palms, CA	◆ 11 Jan 04							
Proto-type development , hardware installation Camp Lejeune and 29 Palms. Software integration 29 Palms/Camp Lejeune. Test interoperabilty and functionality between 2 sites and Orlando.		◇ Sep 05						
Proto-type developmet and installation of hardware installation Camp Pendleton.			◇ Dec 06					
Proto-type development , retrofit to 29 Palms/Camp Lejeune/Pendleton. Test interoperabilty and functionality between 3 sites, 1 virtual sim.			◇ Sep 06					
Proto-type development , retrofit to 29 Palms. Install at MCAS Kaneohe Bay and Camp Hansen. Test interoperabilty and functionality between 5 sites.				◇ Sep 07				
Initial Operational Capability , Proto-type development for L/V/C integration, test and validation/ FOC				◇ Sep 07		◇ Sep 09		
Proto-type development , JNTC Test and Validation, retrofit all sites							◇ Sep 10	
FOC CACCTUS/JNTC								◇ Sep 11

Other Program Funding Summary

<u>(APPN, BLI #, NOMEN)</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
<u>(U) RDT&E,N (CACCTUS) PE 26313M C2315</u>	2.876	5.666							
<u>(U) RDT&E,N (CACCTUS) PE 26623M C2315</u>			3.046	5.528	6.028	6.106	5.580	Cont	Cont
<u>(U) PMC, BLI# 653200 Trng Dev/Sims (CACCTUS)</u>	4.946	4.716	3.599	4.808	4.782	4.909	4.913	Cont	Cont

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Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators

CACCTUS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Software Development	1Q/3Q							
Proto-type Functionality Evaluation User Input	1Q/2Q/ 3Q/4Q							
Hardware Integration/Installation/Test								
TTECG 29 Palms	1Q							
Hardware Integration/Installation/Test								
Camp Lejeune		4Q						
Hardware Integration/Installation/Test								
Camp Pendleton			1Q					
Camp Hansen			3Q					
MCAS Kaneohe Bay				1Q				
Proto-type Hardware Installation/Test all Site			3Q	3Q	3Q	3Q	3Q	3Q
P3I 29 Palms				1Q				
P3I Camp Lejeune/Camp Pendleton				4Q				
P31 MCAS Kaneohe Bay/Camp Butler					4Q			
P3I 29 Palms						4Q	4Q	4Q
IOC				4Q				
CACCTUS FOC						4Q		
CACCTUS/JNTC FOC								4Q

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Exhibit R-4/4a Schedule Profile/Detail

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators
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MILES PROGRAM SCHEDULE

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
RF Capibility (Wireless Capability)				◆					
Integrate MITS w/DTS					◆				
Dry Fire Trigger				◆					
ASAAF				◆					
Program Support									
Test and Evaluation			◆		◆				

Other Program Funding Summary

<u>(APPN, BLI #, NOMEN)</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N (MILES) PE 26313M C2315	0.369	1.582							
(U) RDT&E,N (MILES) PE 26623M C2315			1.720	0.742	0.402	0.201	0.050	Cont	Cont
(U) PMC, BLI# 653200 Trng Dev/Sims (MILES)	2.081	1.399	2.279	1.155	0.679	0.012	0.015	Cont	Cont

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Exhibit R-4/4a Schedule Profile/Detail

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators
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MILES SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
RD Capability (Wireless)				2Q			
Integrate MITS with DTS					1Q		
Dry Fire Trigger				2Q			
ASAAF				2Q			
Program Support				1Q	1Q		
Test and Evaluation					3Q		

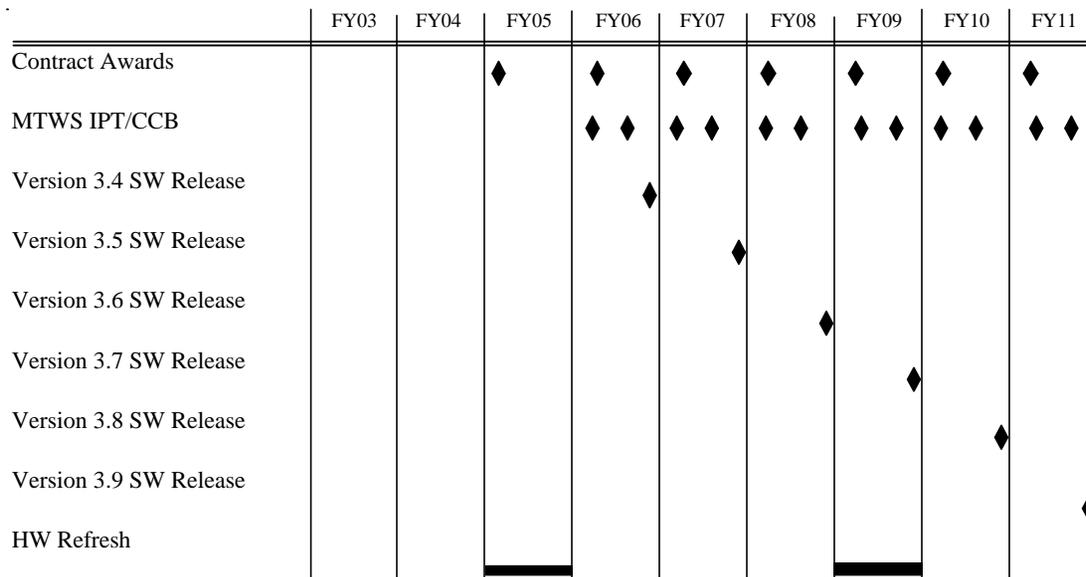
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Exhibit R-4/4a Schedule Profile/Detail

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators
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MTWS PROGRAM SCHEDULE



Other Program Funding Summary

(APPN, BLI #, NOMEN)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (MTWS Enhancements) PE 26313M C2315	0.540	1.558							
(U) RDT&E,N (MTWS Enhancements) PE 26623M C2315			2.603	3.814	2.579	2.199	2.978	Cont	Cont
(U) PMC, BLI# 653200 Trng Dev/Sims (MTWS)	2.000								

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Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Development	PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2315 Training Devices/Simulators

MTWS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Contract Award		2Q	2Q	2Q	2Q	2Q		
MTWS IPT/CCB			2-4Q	2-4Q				
Version 3.4 SW Release			4Q					
Version 3.5 SW Release				4Q				
Version 3.6 SW Release					4Q			
Version 3.7 SW Release						4Q		
Version 3.8 SW Release							4Q	
Version 3.9 SW Release								4Q
HW Refresh		1-4Q				1-4Q		

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES					
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	3.593	7.286	9.424	11.539	13.185	10.546	10.700
RDT&E Articles Qty							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.923	0.000	0.000
RDT&E Articles Qty			

Initial Issue: Explored new commercial technologies that could be inserted into current body armor, load bearing equipment, footwear and clothing systems to reduce weight, increase survivability, lethality and mobility. Both torso and head/neck ballistic studies were conducted to assess blunt trauma/shock forces on the body and how ballistic materials/designs could afford the most protection while reducing weight. Modeling and simulation initiatives baselined the current equipment and enabled configuration/compatibility management of new equipment.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	2.624	4.422
RDT&E Articles Qty			

Family of Ballistic Protection (Formerly part of Initial Issue): 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.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	0.228	0.117
RDT&E Articles Qty			

Family of Improved Loadbearing Equipment (Formerly part of Initial Issue): This program supports the Marine Corps requirements for a replacement load bearing system and to provide funding to support continual system improvement throughout the life-cycle of the equipment.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms Systems	PROJECT NUMBER AND NAME C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.000	0.087	0.086	
RDT&E Articles Qty				
Family of General Property and Support Equipment (Formerly part of Initial Issue): The purpose of General Property and Combat Support Equipment is to enhance or improve unit operational capabilities and enhance unit morale. In addition, some items such as the individual water purifier, field tarp and poncho will greatly enhance survivability, mobility and provide significantly improved field equipment to Marines.				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.000	0.953	1.088	
RDT&E Articles Qty				
Family of Mountain Cold Weather Clothing & Equipment (FMCWCE) (Formerly part of Initial Issue): 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.				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.000	0.400	0.305	
RDT&E Articles Qty				
Family of Combat Field Feeding Systems (Formally part of Initial Issue): 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).				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.463	0.886	2.273	
RDT&E Articles Qty				
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.				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.534	0.800	0.000	
RDT&E Articles Qty				
Family of Field Medical Equipment: Testing of Commerical-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.				

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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 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.578	0.800	0.818
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 for casualty rescue, extraction and transport as required for the Casualty Evacuation (CASEVAC) system.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.434	0.435	0.000
RDT&E Articles Qty				
Family of Field Medical Equipment: Minimization of the Forward Resuscitative Surgery System to support transportation into one V-22B Osprey.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.661	0.073	0.073
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.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.242
RDT&E Articles Qty				
Marine Recruit Seabag: Pursue designs, prototyping , user surveys, textile and physical properties testing and the full range of clothing design in response to new uniform initiatives.				
(U) Total \$		3.593	7.286	9.424
(U) PROJECT CHANGE SUMMARY				
		FY2005	FY2006	FY2007
(U) FY 2006 President's Budget:		3.923	7.397	9.379
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases/PBD604 Inflation				
(U) Reprogrammings				
		-0.302		
(U) SBIR/STTR Transfer				
		-0.026		
(U) Minor Affordability Adjustment				
		-0.002	-0.111	0.045
(U) FY 2007 President's Budget:		3.593	7.286	9.424
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See above.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

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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

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC Line (BLI#652200) Field Med Equip	7.974	12.228	3.224	0.636	3.318	3.441	3.511	Cont	Cont
(U) PMC Line (BLI#661300) Combat Field Feeding System	0.071	5.118	5.148	4.101	3.749	3.814	3.668	Cont	Cont

(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY:

Family of Ballistic Protection Systems, Family of Mountain Cold Weather Clothing and Equipment, Improved Loadbearing Equipment, General Property and Support Equipment, Marine Recruit Seabag and Combat Field Feeding Systems (formerly Initial Issue): 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 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.

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.

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.

(U) E. MAJOR PERFORMERS:

Family of Ballistic Protection Systems, Family of Mountain Cold Weather Clothing and Equipment, Improved Loadbearing Equipment, Marine Recruit Seabag, and General Property and Support Equipment (formerly Initial Issue): U.S. Army Natick Research, Development and Engineering Center, Natick, Mass.

Shelters: TBD based on current technologies.

Family of Field Medical Equipment: TBD based on current technologies.

(U) SCHEDULE PROFILE: Not Applicable.

Exhibit R-3 Cost Analysis						DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT		PROJECT NUMBER AND NAME						
RDT&E, N /BA 7 Operational Sys Development				0206623M Marine Corps Ground		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 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Development/Tech Insertion	MIPR	USASSCOM Natick, MA	3.648	0.167	1Q/05	1.020	1Q/06	1.522	1Q/07	Cont	Cont	
Development/Tech Insertion	FFP	Various (Test Articles)	0.345	0.403	2Q/05	1.548	2Q/06	1.859	2Q/07	Cont	Cont	
Development/Tech Insertion	WR	NMRC, WASH DC	0.771	0.624	2Q/05	0.416	2Q/06	0.908	2Q/07	Cont	Cont	
Development/Tech Insertion	MIPR	Vet Affairs, Wash DC	0.510	0.369	2Q/05	0.607	2Q/06	1.220	2Q/07	Cont	Cont	
Subtotal Product Dev			5.274	1.563		3.591		5.509		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Support	WR	NRMC, WASH DC	0.000	0.100	1Q/05	0.100	1Q/06	0.118	1Q/07	Cont	Cont	
Program Support	WR	NHRC, SAN DIEGO,DC	0.000	0.226	1Q/05	0.225	1Q/06			0.000	0.451	0.450
Subtotal Support			0.000	0.326		0.325		0.118		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Operational Test & Eval	MIPR	USASSCOM Natick, MA	1.254	0.073	2Q/05	0.263	2Q/06	0.439	2Q/07	Cont	Cont	
Operational Test & Eval	RCP	NRMC, WASH DC	0.040	0.578	2Q/05	0.800	2Q/06	0.800	2Q/07	Cont	Cont	
Field User Evaluations	WR	FMF	1.252	0.837	2Q/05	1.894	2Q/06	1.900	2Q/07	0.000	5.883	5.883
Field User Evaluations	RCP	MCSC, Quantico VA	0.568	0.073	2Q/05					0.000	0.641	0.641
Subtotal T&E			3.114	1.561		2.957		3.139		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Contractor Eng Suppt	FFP/O	MCSC, Quantico VA	0.465	0.064	1Q/05	0.230	1Q/06	0.384	1Q/07	Cont	Cont	
Travel	DTS*	MCSC, Quantico VA	0.203	0.079		0.183		0.274		Cont	Cont	
Subtotal Management			0.668	0.143		0.413		0.658		Cont	Cont	
Remarks:												
*DTS (Defense Travel System) Obligates throughout the execution year												
Total Cost			9.056	3.593		7.286		9.424		Cont	Cont	

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006			
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 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost	2.725	4.083	6.179	2.388	0.492	0.000	0.000
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 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)		FY 2005	FY06	FY07			
Accomplishment/Effort Subtotal Cost		0.786	2.957	3.404			
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)		FY 2005	FY06	FY07			
Accomplishment/Effort Subtotal Cost		0.458	0.000	0.150			
RDT&E Articles Qty							
Develop Support Equipment, Army program office support, contractor provided logistics support							
COST (\$ in Millions)		FY 2005	FY06	FY07			
Accomplishment/Effort Subtotal Cost		0.630	0.651	2.059			
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)		FY 2005	FY06	FY07			
Accomplishment/Effort Subtotal Cost		0.851	0.475	0.566			
RDT&E Articles Qty							
Program Management at Quantico, USMC Liason Office at Army Program, USMC Test Unit at Ft Sill, and contractor support.							
(U) Total \$		2.725	4.083	6.179			

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supt Arms	PROJECT NUMBER AND NAME C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)
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PROJECT CHANGE SUMMARY

	FY2005	FY2006	FY07
(U) FY 2006 President's Budget:	2.996	4.145	6.150
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) POM 06 Core Adjustment			
(U) Reprogrammings	-0.233		
(U) SBIR/STTR Transfer	-0.037		
(U) Minor Affordability Adjustment	-0.001	-0.062	0.029
(U) FY 2007 President's Budget:	2.725	4.083	6.179

CHANGE SUMMARY EXPLANATION:

- (U) Funding: Change in funding in FY06/07 represents reprioritizing of efforts within the USMC.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC, (BLI 205000), EIFGSWS (HIMARS)	15.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.864
(U) PMC, (BLI 304001), HIMARS ROCKETS (COMBINED WIT	1.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.279
(U) PMC, (BLI 221200), HIMARS SYSTEMS AND ROCKETS	0.000	177.405	57.524	45.452	109.624	93.181	19.351	Cont	Cont

(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY:

USMC HIMARS is procuring the Army rocket launcher, the current / future Multiple Launch Rocket System Family of Munitions (MFOM) and developing an Medium Tactical Vehicle Replacement (MTVR)-based Resupply System (truck(s) with associated trailer(s)). The Marine Corps launcher and ammo requirements closely match U.S. Army requirements. The US Army HIMARS program received increased funding so that it is now an ACAT IC level program. Marine Corps Resupply System requirements are unique. Accordingly, the Marine Corps is an integrator and must ensure the required warfighting capability is fielded to the Marine Corps operating forces. The USMC has aligned funds to reflect an emphasis on not only hardware development, but also the integration of these principle end items while providing associated evaluation and oversight. Additionally, the Marine Corps program is establishing the training and support methodologies that will result in associated skill sets required within the Marine Corps. The Marine Corps strategy is incorporating Evolutionary Acquisition and capability upgrades to both the systems and rocket munitions. These improvements parallel the US Army's acquisition strategy.

(U) E. MAJOR PERFORMERS:

FY-04-07 Lockheed Martin Missile, Dallas, TX. Modifications to Launcher, GMLRS Development

FY-04-07 Lockheed Martin Missile, Dallas, TX Systems Engineering Support for Development and testing

FY-04-Lockheed Martin Missile, Dallas, TX Contractor Logistics Support, Contract Option

FY-04-Oshkosh Trucking Corporation, Oshkosh, WI Upgrade to RSS Production Representative articles and Field Service Support

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Exhibit R-3 Cost Analysis					DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER					
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 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Dev	SS/CPAF	Lockheed Martin, Dallas, TX	11.216	0.075	04/05	1.600	04/06	0.085	04/07	0.500	13.476	13.476
Primary Hardware Dev	SS/CPAF	Oshkosh Truck, Oshkosh,WI	2.970							0.000	2.970	2.970
Ancillary Hardware Dev	MIPR	RTTC, Redstone, AL	0.000			0.500	02/06	2.484	12/06	0.000	2.984	2.984
Systems Engineering	WR	NSWC-Carderock,MD	0.157							0.000	0.157	0.157
Systems Engineering	WR	NSWC-Dahlgren, VA	1.044	0.632	10/04	0.350	10/05	0.350	10/06	0.470	2.846	2.846
Systems Engineering	WR	NSWC-Earle, NJ	0.442	0.079	02/05	0.354	10/05	0.275	10/06	0.000	1.150	1.150
Systems Engineering	FFP	John J. McMullen, Pittsb,PA	0.181							0.000	0.181	0.181
Systems Engineering	CPAF	Lockheed Martin, Dallas, TX	0.320			0.090	12/05	0.210	12/06	0.056	0.676	0.676
Systems Engineering	WR	NAVAIR, Point Mugu CA	0.070							0.000	0.070	0.070
Subtotal Product Dev			16.400	0.786		2.894		3.404		1.026	24.510	24.510
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ILS Program Support	MIPR	US Army-MSL,Huntsville, AL	1.490	0.350	10/04					0.000	1.840	1.840
Integ Logistics Support	WR	NSWC/HD, Earle NJ	0.000					0.150	12/06	0.000	0.150	0.150
Integ Logistics Support	CPAF	Lockheed Martin, Dallas TX	3.382							0.000	3.382	3.382
Integ Logistics Support	WR	Logistics Base-Albany, GA	0.037							0.000	0.037	0.037
Integ Logistics Support	FFP	SAIC, McLean VA	0.048	0.028	11/04					0.000	0.076	0.076
Integ Logistics Support	WR	MARFORRES, New Orleans LA	0.022	0.080	10/04					0.000	0.102	0.102
Subtotal Support			4.979	0.458		0.000		0.150		0.000	5.587	5.587
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Dev Test & Eval	WR	NSWC-Dahlgren, VA	1.398			0.500	10/05	1.305	10/06	0.425	3.628	3.628
Dev Test & Eval	WR	Redstone Test Ctr,Huntsville,AL	0.258	0.150	12/04	0.120	12/05	0.410	12/06	0.070	1.008	1.008
Dev Test & Eval	WR	Aberdeen Proving Grounds, MD	1.503							0.000	1.503	1.503
Dev Test & Eval	WR	NSWC-Carderock, MD	0.015					0.079	10/06	0.000	0.094	0.094
Dev Test & Eval	MIPR	DAC, McAlester, OK	0.055					0.090	10/06	0.000	0.145	0.145
Dev Test & Eval	MIPR	Redstone Test Ctr,Huntsville,AL	0.203							0.200	0.403	0.403
Operational Test & Eval	WR	MCOTEA, Quantico, VA	0.466	0.480	12/04	0.195	12/05	0.175	12/06	0.150	1.466	1.466
Operational Test & Eval	MIPR	MARFORRES, New Orleans, LA	0.121							0.000	0.121	0.121
DT/OT Support	WR	OT Test Conduct, Ft. Sill, OK	0.412							0.000	0.412	0.412
Subtotal T&E			4.431	0.630		0.815		2.059		0.845	8.780	8.780
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Mngmnt	WR	MCSC, Quantico, VA	1.294	0.100	10/04	0.225	10/05	0.316	10/06	0.459	2.394	2.394
Program Mngmnt	MIPR	US ARMY Huntsville, AL	1.242	0.151	10/04					0.000	1.393	1.393
Program Mngmnt	FFP	CEOSS, Quantico VA	3.906	0.600	10/04	0.149	10/05	0.250	10/06	0.550	5.455	5.455
Subtotal Management			6.442	0.851		0.374		0.566		1.009	9.242	9.242
Remarks:												
Total Cost			32.252	2.725		4.083		6.179		2.880	48.119	48.119

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Exhibit R-4/a Schedule Profile/Detail					DATE: February 2006																											
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)																											
Fiscal Year	FY04				FY05				FY06				FY07				FY08				FY09				FY10				FY11			
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
MS C/LRIP Decision	♦																															
US Army/USMC OT					←	→																										
LRIP Delivery		♦				♦					♦																					
FRP											♦																					
FRP System Deliveries											←	→																				
M30 FRP Munitions Delivers																																
Interim Capability									←	→																						
IOC																																
FOC																																
USMC GMLRS Unitary DT, Army DT/OT											←	→																				
GMLRS Unitary FRP																																
Unitary FRP Munitions Deliveries																																
HIMARS P3I											←	→																				

<u>Program Funding Summary</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N, 0206623M, HIMARS	2.725	4.083	6.179	2.388	0.492	0.000	0.000	0.000	15.867
(U) PMC, (BLI 205000), EIFGSWS (HIMARS)	15.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.864
(U) PMC, (BLI 304001), HIMARS ROCKETS (COMBINED WITH 221200)	1.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.279
(U) PMC, (BLI 221200), HIMARS SYSTEMS AND ROCKETS	0.000	177.405	57.524	45.452	109.624	93.181	19.351	Cont	Cont

HIMARS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
MC C/LRIP Decision	1Q							
US Army/ USMC Operational Testing	3Q----	-2Q						
LRIP Deliveries	3Q----	-----	-----2Q					
Interim Capability			1Q-----	-----	-----3Q			
USMC Full Rate Production (FRP) Decision			1Q					
USMC FRP Deliveries				1Q----	-----	---2Q		
GMLRS (M30) Munitions Deliveries					3Q---	-----	-----	-----
Initial Operational Capability					3Q			
GMLRS Unitary Munitions								
USMC DT, US Army DT/OT				1Q-----	-----	-----4Q		
GMLRS Unitary FRP						1Q		
Unitary FRP Deliveries							2Q---	-----
HIMARS Pre-Planned Product Improvements (P3I)								
Carrier Upgrades				2Q---	-----4Q			
Comm Upgrades (Cordless VIS, JTRS)				2Q---	-----	2Q---	-----4Q	
Armor Upgrades						2Q---	-----4Q	

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EXHIBIT R-2a, RDT&E Project Justification

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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/Supt Arms	PROJECT NUMBER AND NAME C3098 Fire Support Systems
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COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost	19.835	11.470	7.717	7.456	8.719	7.571	7.258
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. The AN/GVS-5 Laser Range Finder, Family of Artillery Munitions, Fire Support Mods, and the Mortar Ballistic Computer moved to this project from project C1901 within this Program Element.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.281	0.276	0.289
RDT&E Articles Qty			

Family of Artillery Munitions (FAM): Support a production decision for the Multi Option Fuze Artillery (MOFA), and Portable Inductive Artillery Fuze Setter (PIAFS) to include: Weapons Systems Explosive 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 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	1.653	1.637	1.719
RDT&E Articles Qty			

Fire Support Mods: Joint participation in artillery and fire support improvement projects. Specific projects include phase-in/phase-out of M198 Howitzer / LW 155mm Howitzer and development of Global Positioning System-Selective Availability Anti-Spoofing Module (GPS-SAASM) capability and upgrade of Meteorological (MET) processing computer for the Meteorological Measuring System (MMS) and develop Electronic Meteorological Theodolite (EMT) capability.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	1.029	0.732	0.361
RDT&E Articles Qty			

Fire Support Sustainment - Fielded Sys Readiness: Research operational and logistical deficiencies on fielded systems and equipment, such as M198 Howitzers, Position and Azimuth Determining Systems (PADS), and Modular Universal Laser Equipment (MULE) Laser Designators. Develop and field modifications to improve system safety, enhance operational efficiency, and reduce life cycle costs.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	1.068	0.701	0.308
RDT&E Articles Qty			

Mortar Ballistic Computer (MBC): Integration effort of Government-Furnished Equipment (GFE) software with a common hardware suite (CHS) platform. Prepare for and conduct combined Developmental Testing (DT) and Operational Testing (OT) to include Live Fire User Evaluation. Conduct Interim Progress Review (IPR). Prepare for Milestone C decision. Requirements review to determine evolution to future block upgrades.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006		
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 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.306	0.181	0.000
RDT&E Articles Qty				
<p>AN/GVS-5 Replacement (AEROS): Engineering and programmatic support as well as the integration of a pre-planned product improvement (P3I) to the AEROS program. The focus of the P3I effort will be the integration of ETALS in the AEROS. ETALS is a Science and Technology (S&T) effort that is being funded through the Office of Naval Research (ONR). The research and development effort is being performed by the Naval Surface Warfare Center (NSWC), Dahlgren, Virginia.</p>				
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		15.042	6.932	4.040
RDT&E Articles Qty				
<p>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 scheduled for November 2005 and the Critical Design Review for March 2006. Operation Testing (OT) shall be completed by August 2006 and the IOC is scheduled for late FY06.</p>				
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	1.000	1.000
RDT&E Articles Qty				
<p>Metorological Measuring Sets (MMS Profiler): The RDT&E dollars listed above will be used to develop, and test a network centric meteorological capability that removes the balloon from the battlefield, enhances artillery accuracy, expands the coverage of meteorological information, and supports future firing systems. This is a collaborative effort being conducted with the Meteorological/Oceanographic departments of the other services with the intent of acquiring cost-effective, interoperable, network-centric information infrastructure that supports the operational requirements of the war fighter.</p>				
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.456	0.011	0.000
RDT&E Articles Qty				
<p>Improved Position Azimuth Determination System (IPADS): Program support, contractor design effort, and the procurement of systems for developmental/operational testing and system integration. Development effort supports the Milestone C decision.</p>				
(U) Total \$		19.835	11.470	7.717

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supt Arms	PROJECT NUMBER AND NAME C3098 Fire Support Systems
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(U) PROJECT CHANGE SUMMARY:	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) FY 2006 President's Budget:	12.079	11.645	7.680
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			

(U) Congressional Rescissions			
(U) Congressional Increases			
(U) POM 06 Core Adjustment			
(U) Reprogrammings	8.011		
(U) SBIR/STTR Transfer	-0.248		
(U) Minor Affordability Adjustment	-0.007	-0.175	0.037
(U) FY 2007 President's Budget:	19.835	11.470	7.717
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 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI# 473300 Meteorological Measuring Sets (FSS)	0.000	3.012	1.460	0.000	0.000	0.000	0.000	0.000	4.472
PMC BLI# 473300 Fire Supp Sys (IPADS)	7.774	4.891	0.000	0.000	0.000	0.000	0.000	0.000	12.665
PMC BLI# 473300 FSS (Mortar Ballistic Computer)	0.373	1.635	0.000	0.000	0.000	0.000	0.000	0.000	2.008
PMC BLI# 473300 Fire Supp Sustainment	0.000	1.777	4.277	4.429	4.557	4.663	4.789	Cont	Cont
PMC BLI# 473300 AEROS (AN/GVS-5) / CLRF	0.590	20.000	25.870	0.369	0.000	0.000	0.000	0.000	46.829
PMC BLI# 473300 PIAFS	0.000	0.368	0.201	0.000	0.000	0.000	0.000	0.000	0.569
PMC BLI# 206300 Mod Kits AFS (PIAFS)	1.629	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.629
PMC BLI# 206300 Mod Kits AFS (Fire Supp Sustainment)	2.325	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.325
PMC BLI# 206400 Expeditionary Fire Support Sys	0.000	5.648	7.361	5.870	9.785	10.156	0.000	0.000	38.820
PMC BLI# 493000 AN/GVS-5 (FSS)	5.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.300
PMC BLI# 646800 AN/GVS-5 (FSS)	0.026	0.033	0.034	0.018	0.000	0.000	0.000	0.000	0.111
PMC BLI# 646800 IPADS (FSS)	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.060
PMC BLI# 700000 PRIME VENDOR - IPADS (FSS)	0.146	0.516	0.000	0.000	0.000	0.000	0.000	0.000	0.662
PMC BLI# 700000 PRIME VENDOR (CLRF)	0.728	0.736	0.780	0.000	0.000	0.000	0.000	0.000	2.244
PMC BLI# 700000 PRIME VENDOR (EFSS)	0.000	0.200	0.432	0.864	0.000	0.000	0.000	0.000	1.496

(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 FY08 while leveraging emerging technologies to mature the technology by FY09 and beyond.

(U) E. MAJOR PERFORMERS:

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Exhibit R-3 Cost Analysis

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground		C3098 Fire Support Systems							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT			SEE BELOW									
AN/GVS-5 Replacement	RCP	MKI Woodbridge, VA	0.361							0.000	0.361	
EFSS	RCP	GDOTS	0.557	10.232	2Q05	2.700	1Q06	2.000	1Q07	Cont	Cont	
EFSS	VAR	VARIOUS	0.000	0.600	2Q05	0.590	2Q06	0.500	2Q07	Cont	Cont	
Fire Spt Mods	MIPR	CECOM, Ft Monmouth NJ	0.403							0.000	0.403	
Fire Spt Mods	RCP	Smith Indus, Gd Rapids, MI	0.400	0.802	1Q05	0.800	1Q06	0.700	TBD	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	TBD	0.000	0.260	1Q05	0.400	TBD	0.361	TBD	Cont	Cont	
IPADS	VAR	VARIOUS	1.409							0.000	1.409	
MBC	VAR	VARIOUS	0.315	0.200	2Q05	0.413	TBD			0.000	0.928	
MMS Profiler	MIPR	TBD	0.000			0.800	TBD	0.800	TBD	0.000	1.600	
Subtotal Product Dev			3.445	12.094		5.703		4.361		Cont	Cont	

Remarks:

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PROGRAM SUPPORT			SEE BELOW									
AN/GVS-5 Replacement	WR	MCSC, Quantico, VA	0.244							0.000	0.244	
AN/GVS-5 Replacement	RCP	CEOSS	0.295	0.306	1Q05	0.181	1Q06			0.000	0.782	
AN/GVS-5 Replacement	MIPR	Marine Det, Ft Sill, OK	0.015							0.000	0.015	
EFSS	RCP	CTQ, Quantico, Va	0.581	1.463	1Q05	0.708	1Q06	0.343	1Q07	Cont	Cont	
EFSS	WR	NSWCDD, Dahlgren, Va.	0.412	0.500	1Q05	0.200	1Q06	0.100	1Q07	Cont	Cont	
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA	0.057	0.059	1Q05	0.276	1Q06	0.289	1Q07	Cont	Cont	
Fire Spt Mods	WR/RCP	BAEST, Stafford, VA	0.241	0.380	1Q05	0.450	1Q06	0.500	1Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	EG&G	0.118	0.255	2Q05	0.332	1Q06			Cont	Cont	
IPADS	VAR	VARIOUS	0.250			0.011	TBD			0.000	0.261	
MBC	VAR	VARIOUS	0.500	0.580	2Q05	0.288	TBD	0.308	1Q07	0.000	1.676	
MMS Profiler	RCP	CEOSS	0.000			0.200	1Q06	0.200	1Q07	Cont	Cont	
Subtotal Support			2.713	3.543		2.646		1.740		Cont	Cont	

Remarks:

UNCLASSIFIED

Exhibit R-3 Cost Analysis

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground		C3098 Fire Support Systems							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T&E			SEE BELOW									
AN/GVS-5 Replacement	WR	MCOTEA, Quantico, VA	0.185							0.000	0.185	
EFSS	WR	NSWCDD, Dahlgren, Va.	0.180	0.500	2Q05	0.592	2Q06	0.200	2Q07	Cont	Cont	
Fam Artillery Munitions	WR/RCP	NSWC, Crane, IN	0.222	0.222	2Q05					Cont	Cont	
Fire Spt Mods	WR	MCOTEA, Quantico, VA	0.000	0.200	2Q05	0.200	1Q06	0.246	1Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	PICATINNY, NJ	0.000	0.304	2Q05					Cont	Cont	
IPADS	WR	VARIOUS	0.151	0.180	2Q05					0.000	0.331	
MBC	WR	VARIOUS	0.497	0.288	2Q05					0.000	0.785	
MMS Profiler			0.000							Cont	Cont	
Subtotal T&E			1.235	1.694		0.792		0.446		Cont	Cont	

Remarks:

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MANAGEMENT			SEE BELOW									
EFSS	WR	MCPD, Fallbrook, CA	0.536	0.152	2Q05	0.692	2Q06	0.325	2Q07	Cont	Cont	
EFSS	RCP	GDOTS, St. Petersburg, FL.	1.026	1.595	1Q05	1.450	1Q06	0.572	1Q07	Cont	Cont	
Fire Spt Mods	WR	MCSC, Quantico, VA	0.000	0.271	2Q05	0.187	2Q06	0.273	2Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	RCP	BAEST, Stafford, VA	0.050	0.210	1Q05					Cont	Cont	
IPADS	WR	MCSC, Quantico, VA	0.795	0.276	2Q05					0.000	1.071	
MBC	WR	MCSC, Quantico VA	0.240							0.000	0.240	
MMS Profiler			0.000							Cont	Cont	
Subtotal Management			2.647	2.504		2.329		1.170		Cont	Cont	

Remarks:

Total Cost			10.040	19.835		11.470		7.717		Cont	Cont	
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Exhibit R-4/4a Schedule Profile/Detail

DATE:

February 2006

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

AEROS SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011
CG Memo to Fielding MLE-50 UNS	Q3								
CG Memo to Procure TLDHS AEROS Qty	Q1								
Program ACAT IV (T) Designation		Q1							
Milestone B		Q2							
Issue Draft Request for Proposal (RFP)	Q2								
Pre-Solicitation Conference	Q2								
Issue Final RFP	Q2								
Source Selection, Including User Evaluation	Q3								
Award Firm Fixed Price Contract with Production Options	Q3								
Developmental Testing	Q4 through	Q3							
Operational Testing (OT)		Q2							
Milestone C / Fielding Decision		Q4							
Exercise Production Option		Q4							
Production		Q4							
Initial Operational Capability (IOC)			Q4						
Full Operational Capability (FOC)					Q4				

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Exhibit R-4/4a Schedule Profile/Detail

DATE:

February 2006

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

MBC SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011
Phase I								
RFP Mortar								
Ballistic								
Select								
I/II								
Contract								
Software								
Developme	2Q							
Evaluation	3Q							
Operational	3Q							
Milestone III		1Q						
Initial		1Q						
Fielding		3Q						
Phase II -		1Q						
Developme		1Q						
Evaluation		4Q						
Certification			1Q					
FOT&E			2Q					
FOT&E			3Q					
Decision			4Q					
Production				1Q				
Acceptance				1Q				
Fielding				2Q				

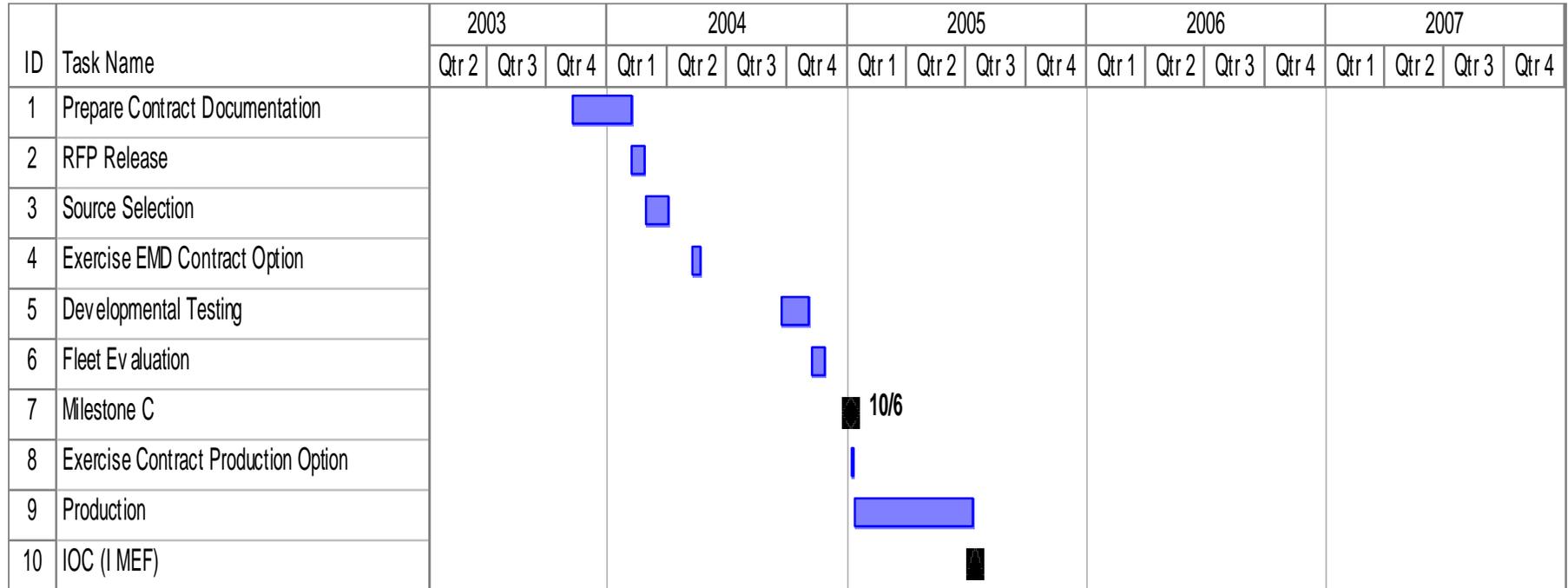
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DATE: **February 2006**

Exhibit R-4/4a Schedule Profile/Detail

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 C3098 Fire Support Systems
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IMPROVED POSITIONING AZIMUTH DETERMINING SYSTEM



Program Funding Summary

(APPN, BLI #, NOMEN)

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N (C3098) IPADS	0.456	0.011	0.000	0.000	0.000			0.000	0.467
PMC BLI# 473300 Fire Supp Sys (IPADS)	7.774	4.891	0.000	0.000	0.000	0.000	0.000	0.000	12.665
PMC BLI# 700000 PRIME VENDOR - IPADS (FSS)	0.146	0.516	0.000	0.000	0.000	0.000	0.000	0.000	0.662
PMC BLI# 646800 IPADS (FSS)	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.060

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Exhibit R-4/4a Schedule Profile/Detail

DATE:

February 2006

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

IPADS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Prepare Contract Documentation								
RFP Release								
Source Selection								
Exercise EMD Contract Option								
Developmental Testing/OT	1Q							
Fleet Evaluation	4Q							
Milestone C		1Q						
Exercise Contract Production Option								
Production		1Q						
Initial Operational Capability (I MEF)		3Q						

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Exhibit R-4/4a Schedule Profile/Detail

DATE:

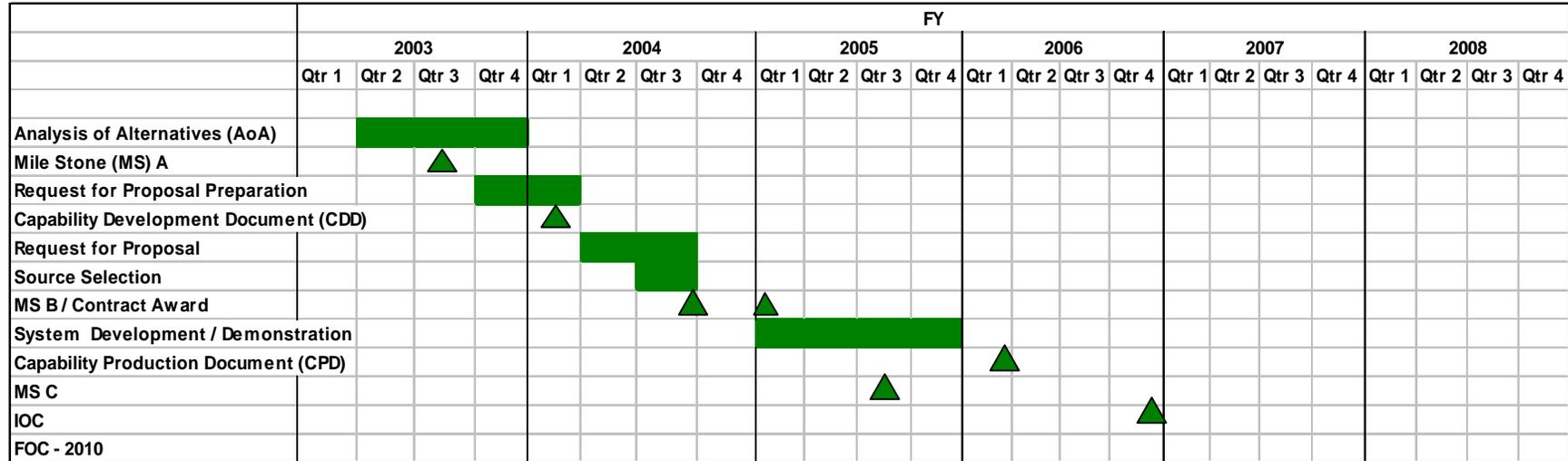
February 2006

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
C3098 Fire Support Systems

Expeditionary Fire Support System (EFSS)



Program Funding Summary
(APPN, BLI #, NOMEN)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (C3098) EFSS	15.043	6.932	4.040	4.002	5.256	5.075	4.730	Cont	Cont
PMC BLI# 206400 Expeditionary Fire Support Sys	0.000	5.648	7.361	5.870	9.785	10.156	0.000	0.000	38.820
PMC BLI# 700000 PRIME VENDOR (EFSS)	0.000	0.200	0.432	0.864	0.000	0.000	0.000	0.000	1.496

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

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		C4002 Family of Raid and Reconnaissance Equipment				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost	3.216	1.756	0.680	1.175	0.168	0.163	0.160
RDT&E Articles Qty							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Family of Raid and Reconnaissance Equipment program supports the research, development, and procurement actions for multiple airborne/parachuting and specialized reconnaissance related programs. This line focuses on immediate capability enhancements to numerous insertion and personnel equipment shortfalls currently existing in reconnaissance units throughout the operating forces. This will include improving airborne capability equipment and items for direct action missions that use this specialized raid equipment.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.610	0.852	0.488
RDT&E Articles Qty			

Family of Raids and Reconnaissance Equipment: Integrate logistics to standardize and improve existing close quarters battle and direct action combat equipment and all Marine Corps parachute programs. On-going support to existing items that meet mission requirements for close quarter battle and parachute operations. Development of airborne systems that will allow military parachutists to carry combat equipment in various configurations and a means of supplying/re-supplying combat essentials to Marine units. Development on High Altitude High Opening (HAHO) navigation board, improved jumpers helmet, oxygen (O2) console system integrated with V-22 Osprey, and High Altitude Low Opening (HALO)/HAHO jumpers kit.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.000	0.192	0.192
RDT&E Articles Qty			

Family of Small Craft: Conduct engineering analysis and exploration of enhancements for modifications of the Family of Small Craft programs. The Small Unit Riverine Craft (SURC), Raid Open Water Safety Craft (ROWSC), Combat Rubber Reconnaissance Craft (CRRC), Non-Gasoline Burning Outboard Engines (NBOE), and other small craft items will be supported in the future as new craft and engines are fielded.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	2.606	0.712	0.000
RDT&E Articles Qty			

Underwater Reconnaissance Capability (URC): Concept exploration and development of prototypes for Divers Propulsion Device (DPD) and for the Tactical Hydrographic Survey Equipment (THSE) in support of underwater reconnaissance operations.

(U) Total \$	3.216	1.756	0.680
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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

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	C4002 Family of Raid and Reconnaissance Equipment

(U) PROJECT CHANGE SUMMARY:	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) FY 2006 President's Budget:	3.401	1.783	2.181
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	-0.159		
(U) Small Business Innovation Research Transfer	-0.024		
(U) Minor Affordability Adjustment	-0.002	-0.027	-1.501
(U) FY 2007 President's Budget:	3.216	1.756	0.680
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 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI #643400 Amph Raid Equipment	62.223	0.000	0.000	0.000	0.000	0.000	0.000	0.000	62.223
PMC BLI #651800 Amph Support Equipment	0.000	15.250	13.218	15.415	24.950	12.794	13.007	Cont	Cont

FY 05 column includes approved supplemental request
(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY:
 The acquisition strategy consists of market surveys to identify off-the-shelf/non-developmental item baseline competitors. This will be followed by a release of desired capabilities/specifications and establishment of the trade space parameters. Project dependent, expect to down-select to best value. Follow-on testing/evaluations as required to be conducted.

(U) E. MAJOR PERFORMERS:

Oct 05, Oct 06	Panama City, FL	Coastal Systems Station (CSS), system engineering in support of underwater and parachute reconnaissance operations.
Nov 05, Nov 06	Natick, MA	Natick Labs, system engineering
Jan 06	Suffolk, VA	NSWC, Carderock, system engineering

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Exhibit R-3 Cost Analysis

DATE: February 2006

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			C4002 Family of Raid and Reconnaissance Equipment							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Hardware development	RCP	MCSC, Quantico, VA	1.193					0.000		Cont	Cont	
Systems Engineering	WR	CSS, Panama City, FL	1.930	2.649	10/04	1.077	10/05	0.377	10/06	Cont	Cont	
Systems Engineering	WR	Natick Labs, Natick, MA	0.107	0.142	11/04	0.116	11/05	0.000		Cont	Cont	
Systems Engineering	WR	NSWC, Suffolk, VA				0.175	01/06	0.173	11/06			
Systems Engineering	WR	NAWC, Patuxent River, MD				0.013	01/06					
Subtotal Product Development			3.230	2.791		1.381		0.550		Cont	Cont	

Remarks: Funding for this program in prior years is provided under Project C1901 within this PE.

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	RCP	BAE Inc, Stafford, VA	0.190	0.305	10/04	0.000		0.000		Cont	Cont	
Subtotal Support			0.190	0.305		0.000		0.000		Cont	Cont	

Remarks: Funding for this program in prior years is provided under Project C1901 within this PE.

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Operational Testing/Eval	RCP	MCOTEA, Quantico, VA	0.040	0.000	11/04	0.000				0.000	0.040	
Subtotal T&E			0.040	0.000		0.000		0.000		0.000	0.040	

Remarks: Funding for this program in prior years is provided under Project C1901 within this PE.

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Management	RCP	MCSC, Quantico, VA	0.079	0.120	12/04	0.375	12/05	0.130	12/06	Cont	Cont	
Subtotal Management			0.079	0.120		0.375		0.130		Cont	Cont	

Remarks: Funding for this program in prior years is provided under Project C1901 within this PE.

Total Cost			3.539	3.216		1.756		0.680		Cont	Cont	
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DATE: **February 2006**

Exhibit R-4/4a Schedule Profile/Detail

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 C4002 Family of Raid and Reconnaissance Equipment
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ID	Task Name	Duration	Start	Finish	2003		2004		2005		2006		2007		2008		2009		2010					
					3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
1	Underwater Reconnaissance Capability	1827 days	Mon 7/1/02	Tue 6/30/09																				
2	Program Initiation	0 days	Mon 7/1/02	Mon 7/1/02	■	7/1																		
3																								
4	Diver Propulsion Device	1827 days	Mon 7/1/02	Tue 6/30/09																				
5	Pre Milestone B	260 days	Mon 7/1/02	Fri 6/27/03																				
6	Milestone B	0 days	Tue 7/1/03	Tue 7/1/03	■ 7/1																			
7	R&D	410 days	Mon 7/1/02	Fri 1/23/04																				
8	Milestone C Decision	0 days	Fri 7/23/04	Fri 7/23/04	■ 7/23																			
9	PMC	636 days	Fri 10/1/04	Fri 3/9/07																				
10	Production of 62 units	370 days	Tue 2/1/05	Mon 7/3/06																				
11	Production of 62 units	273 days	Wed 2/1/06	Fri 2/16/07																				
12																								
13	Tactical Hydrographic Survey Equipment	1305 days	Mon 7/1/02	Fri 6/29/07																				
14	Pre Milestone B	260 days	Tue 7/2/02	Mon 6/30/03																				
15	Milestone B	0 days	Tue 7/1/03	Tue 7/1/03	■ 7/1																			
16	R&D	480 days	Thu 8/29/02	Wed 6/30/04																				
17	Developmental/Operational Testing	456 days	Fri 8/1/03	Fri 4/29/05																				
18	Milestone C Decision	0 days	Mon 8/1/05	Mon 8/1/05	■ 8/1																			
19	Production	477 days	Mon 1/2/06	Tue 10/30/07																				

Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N C4002 URC

(U) PMC, BLI# 643400 URC

(U) PMC, BLI# 651800 URC

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
<u>(U) RDT&E,N C4002 URC</u>	2.606	0.712	0.000	0.535	0.060	0.000	0.000	0.000	3.913
<u>(U) PMC, BLI# 643400 URC</u>	5.307	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.307
<u>(U) PMC, BLI# 651800 URC</u>	0.000	7.692	6.340	2.883	4.504	0.000	0.000	0.000	21.419

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supt Arms			PROJECT NUMBER AND NAME C9999 FY06 Congressional Adds			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost	0.000	25.300	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.000	0.600	0.000
RDT&E Articles Qty			

AntiOxidant Micronutrients Pgm 9644C: The micronutrients/antioxidants is a dietary supplement program that has the efficacy of reducing the level of oxidation damage and oxidative stress found in stressful situations/environments and posttraumatic wounding/injuries. The dietary supplement is a special daily vitamin formulary being researched to provide stress relief/reduction of heat, NBC and posttraumatic wounding/injuries.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.000	11.000	0.000
RDT&E Articles Qty			

Expeditionary Fire Support System 9867N: Obtain Insensitive Munitions (IM) compliant Ammunition for qualification, safety certification, to support operational testing, Developmental testing Jan-Jul 2006, Initial Safety Certification for Operational Testing NLT Aug 2006. Operational Test Sept-Dec 2006. Final IM safety certification Feb 2007.

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.000	1.000	0.000
RDT&E Articles Qty			

M200 Long Range Rifle Sys 9868N:

COST (\$ in Millions)	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	0.000	2.600	0.000
RDT&E Articles Qty			

MC LAV Integrated Digital/Collab Envir 9641C: Continuation of the effort started in FY05 to stand up an IDE service center which will allow key LAV maintenance and support data accessibility and sharing across the USMC enterprise.

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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 FY06 Congressional Adds		
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	5.000	0.000
RDT&E Articles Qty				
Multi-Role Intermediate Supt Craft 9869N: Conduct initial evaluations of existing COTS variants of the Surface Planning Wet Submersible (SPWS) Craft leading to procurement of a medium sized fixed rigid hull craft that can operate on the surface and in an underwater concealment mode. Marine Corps reconnaissance and other designated units will employ the MRISC in littoral combat operations to execute the full range of Marine Expeditionary Unit (MEU)-Special Operations Capable (SOC) missions in support of MAGTF.				
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	2.100	0.000
RDT&E Articles Qty				
Solid St Laminate Metal-Ceramic Armor 9870N: Determine the applicability of using ultrasonic consolidation technology to develop improved metal-matrix armor packages for Light Armored Vehicles.				
COST (\$ in Millions)		FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	3.000	0.000
RDT&E Articles Qty				
Ultrasonic Consolid Embedded Sensors 9871N: Determine whether ultrasonic consolidation technology can successfully embed vehicle health monitoring sensors in a variety of components in support of the LAV Sense and Respond effort.				
(U) Total \$		0.000	25.300	0.000