

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification				DATE:				
				February 2005				
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	40.947	51.421	48.409	44.130	35.669	36.450	32.327	31.960
C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)	0.723	0.364	0.781	0.803	0.832	0.853	0.878	0.894
C1555 Light Armored Vehicle (LAV) PIP	3.877	15.130	12.179	5.482	1.391	1.387	1.417	1.441
C1901 Marine Corps Ground Weaponry PIP	9.873	3.063	6.932	9.029	7.463	7.706	7.670	7.402
C2086 Marine Enhanced Program (MEP)	2.194	2.629	2.711	2.571	2.671	2.708	2.766	2.818
B2237 Amphibious Vehicle Test Branch (AVTB)	0.000	0.804	0.836	0.855	0.884	0.903	0.929	0.947
C2503 Family of Combat Equip Support & Services	3.401	3.923	7.397	9.379	11.472	13.110	10.484	10.637
C2928 EIFGSWS (HIMARS)	6.266	2.996	4.145	6.150	2.374	0.489	0.000	0.000
C3098 Fire Support Systems	10.050	12.079	11.645	7.680	7.413	8.679	7.550	7.248
C4002 Family of Raid Reconnaissance	3.539	3.401	1.783	2.181	1.169	0.615	0.633	0.573
C9278 Integrated Digital Camera Riflescope	0.000	0.989	0.000	0.000	0.000	0.000	0.000	0.000
C9279 Body Armor Upgradera Riflescope	1.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000
C9641 LAV Integ Digital & Collaboration Enviornment	0.000	1.982	0.000	0.000	0.000	0.000	0.000	0.000
C9642 Compl Medal Oxide Semiconductor (CMOS)	0.000	0.990	0.000	0.000	0.000	0.000	0.000	0.000
C9643 Marine Advanced Combat Suit MACS)	0.000	2.081	0.000	0.000	0.000	0.000	0.000	0.000
C9644 Anti-Oxidant Micronutrients Program	0.000	0.990	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles								

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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																																																								
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <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>B. PROGRAM CHANGE SUMMARY</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY2004</u></th> <th style="text-align: right;"><u>FY 2005</u></th> <th style="text-align: right;"><u>FY 2006</u></th> <th style="text-align: right;"><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2005 President's Budget:</td> <td style="text-align: right;">41.960</td> <td style="text-align: right;">44.828</td> <td style="text-align: right;">59.852</td> <td style="text-align: right;">55.668</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> (U) Congressional/OSD Program Reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> (U) Congressional Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> (U) Congressional Increases</td> <td></td> <td style="text-align: right;">7.100</td> <td></td> <td></td> </tr> <tr> <td> (U) POM 06 Core Adjustment</td> <td></td> <td></td> <td style="text-align: right;">8.422</td> <td style="text-align: right;">4.814</td> </tr> <tr> <td> (U) Reprogrammings</td> <td style="text-align: right;">-0.404</td> <td></td> <td style="text-align: right;">-19.995</td> <td style="text-align: right;">-14.990</td> </tr> <tr> <td> (U) SBIR/STTR Transfer</td> <td style="text-align: right;">-0.609</td> <td></td> <td></td> <td></td> </tr> <tr> <td> (U) Minor Affordability Adjustment</td> <td></td> <td style="text-align: right;">-0.507</td> <td style="text-align: right;">0.130</td> <td style="text-align: right;">-1.362</td> </tr> <tr> <td>(U) FY 2006 President's Budget:</td> <td style="text-align: right;">40.947</td> <td style="text-align: right;">51.421</td> <td style="text-align: right;">48.409</td> <td style="text-align: right;">44.130</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: See Above.</p> <p>(U) Schedule:</p> <p>(U) Technical: Not Applicable.</p>					<u>FY2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	(U) FY 2005 President's Budget:	41.960	44.828	59.852	55.668	(U) Adjustments from the President's Budget:					(U) Congressional/OSD Program Reductions					(U) Congressional Rescissions					(U) Congressional Increases		7.100			(U) POM 06 Core Adjustment			8.422	4.814	(U) Reprogrammings	-0.404		-19.995	-14.990	(U) SBIR/STTR Transfer	-0.609				(U) Minor Affordability Adjustment		-0.507	0.130	-1.362	(U) FY 2006 President's Budget:	40.947	51.421	48.409	44.130
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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Systems			C1555 Light Armored Vehicle (LAV) PIP			
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
								FY 2011
Project Cost		3.877	15.130	12.179	5.482	1.391	1.387	1.417
RDT&E Articles Qty								
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>The Light Armored Vehicle Family of Vehicles (LAV FOV) consists of seven fielded LAV configurations, and one communications/intelligence-configured asset on an 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 2004	FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		3.693	1.222	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 2004	FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.184	1.424	1.118	1.345			
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 2004	FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.000	12.484	11.061	2.760			
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 2004	FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000	1.377			
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.								
(U) Total \$		3.877	15.130	12.179	5.482			

UNCLASSIFIED

UNCLASSIFIED

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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/Supporting Arms Systems	C1555 Light Armored Vehicle (LAV) PIP
(U) PROJECT CHANGE SUMMARY:		
	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2005 President's Budget	4.169	15.267
(U) Adjustments from the President's Budget:		
(U) Congressional/OSD Program Reductions		
(U) Congressional Rescissions		
(U) Congressional Increases		
(U) Reprogrammings	-0.292	-19.244
(U) SBIR/STTR Transfer		-18.265
(U) Minor Affordability Adjustment		-0.176
(U) FY 2006 President's Budget:	3.877	15.130
		12.179
		5.482
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 2004</u>	<u>FY 2005</u>
(U) PMC, 203800, LAV PIP	35.823	62.844
(U) PANMC, 138800, LAV LETHALITY		0.000
		1.351
		0.579
		5.444
		6.103
		5.645
		0
		Cont
		Cont
(U) Related RDT&E: C9641 LAV IDE	1.982	

UNCLASSIFIED

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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 voice and data transmissions. It is anticipated that 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 costs. The system architecture has been determined through a Tailored Executive Analysis. The integration of the government specified hardware and software will be conducted through a competitive process. Two contractors will be selected to fabricate prototypes which will be subjected to a limited user evaluation (LUE). The results of the LUE and firm production prices will lead to a down-selection to a single source for the completion of the System Development and Demonstration and Production phases.</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 such projects that increase LAV reliability and readiness while simultaneously reducing operations and support costs. The Marine Corps, PM-LAV, Sustainment Management 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 provide for the use of depleted uranium (DU) ammunition during combat operations to increase the lethality of the LAV 25's M242 machine gun. The Bradley Fighting Vehicle (BFV) uses the M242 and has the capability to fire DU ammunition. PM, LAV will buy standard components for the M242 and have them installed on the LAV 25's M242. 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 .</p>		

UNCLASSIFIED

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RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C1555 Light Armored Vehicle (LAV) PIP
<p>(U) E. MAJOR PERFORMERS:</p> <p>LAV SLEP/ITSS</p> <p>FY04 Raytheon Company, McKinney, TX. DT In-Process. Oct 03 DRS Corporation, Fort Walton Beach, FLA. System Technical Support (STS) Support. Oct 03. SURVICE Engineering Company, Belcamp, MD. ITSS development & test support. Oct 03. MCCDC, Quantico, VA, OT preparation. Oct 04. TACOM, Warren, MI. PMO support. Oct 04.</p> <p>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.</p> <p>LAV RAM</p> <p>FY04 Various FY05 Various FY06 Various FY07 Various</p> <p>LAV C2 Upgrade Program starts in FY 05.</p> <p>FY05-07 Major performers have not been determined as of this date.</p> <p>LAV LETHALITY Program starts in FY 07.</p> <p>FY07 Raytheon Company, McKinney, TX. Integration of DU firing tables into ITSS. Jan 07.</p>		

UNCLASSIFIED

Exhibit R-3 Cost Analysis								DATE: February 2005						
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 04 Cost	FY 04 Award Date	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														
Primary Hardware Dev Spt	CPFF	GTRI/SURVICE, Bellcamp MD	1.189									0.000	1.189	1.189
Gov't Dev Engineering	MIPR	In-House Product Dev	1.560									0.000	1.560	1.560
Product Development (ITSS)	Various	Raytheon, McKinney TX	22.034	0.835	3Q04							Cont	Cont	
Product Development (RAM)	Various	Various	2.074	0.184	VAR	1.212	VAR	0.986	VAR	1.115	VAR	Cont	Cont	
Product Development (C2-GFE)	Various	TBD				1.858	2Q05	1.941	1Q06					
Product Development (C2)	Various	TBD				9.838	3Q05	6.242	1Q06	1.081	1Q07	0.000	17.161	
CAAS	MIPR	SURVICE, Bellcamp, MD	0.275	0.275	1Q04	0.143	1Q05	0.145	1Q06				0.838	
Subtotal Product Dev			27.132	1.294		13.051		9.314		2.196		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.000			0.135	1Q05	0.147	1Q06			0.000	0.282	0.590
Subtotal Support			0.000	0.000		0.135		0.147		0.000		0.000	0.282	0.590
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	6.155	1.894	Various	0.359	Various						8.408	
Devl/Oper Test & Eval	MIPR	Aberdeen Test Center, MD	2.575										2.575	
Devl/Oper Test & Eval (SLEP/ITSS)	MIPR	MCOTEA, Quantico, VA	0.725	0.197	Various	0.604	Various						1.526	
Devl/Oper Test & Eval (C2)	MIPR	TBD					Various	1.691	Various	1.437	1Q07		3.128	
Devl/Oper Test & Eval (Lethality)	MIPR	TBD						0.730		0.730	3Q07		0.730	
Subtotal T&E			9.455	2.091		0.963		1.691		2.167		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	2.810	0.245	1Q04	0.896	Various	0.877	Various	1.024	Various	Cont	Cont	
Matrix Support	MIPR	ARDEC/NVL/TACOM, MI	0.796	0.247	Various	0.085	Various	0.150	Various	0.095	Various	Cont	Cont	
Subtotal Management			3.606	0.492		0.981		1.027		1.119		Cont	Cont	
Remarks:														
Total Cost			40.193	3.877		15.130		12.179		5.482		Cont	Cont	

R-1 SHOPPING LIST - Item No. 186

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 7 of 53)

UNCLASSIFIED

Exhibit R-4/4a Schedule Profile/Detail						DATE: February 2005					
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:	2nd Qtr, FY 2009					
<u>LAV C2</u>											
	Milestone A:	2nd Qtr, FY2000			Contract Award:	2nd Qtr, FY 2007					
	Milestone B:	2nd Qtr, FY2005			IOC:	2nd Qtr, FY 2009					
	DT / OT:	4th Qtr, FY 2006			FOC:	4th Qtr, FY 2011					
	Milestone C:	2nd Qtr, FY 2007									
<u>LAV LETHALITY</u>											
	Milestone A:	Not Required			Contract Award:	1st Qtr, FY 2008					
	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									
<u>Program Funding</u>		<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
<u>(APPN, BLI #, NOMEN)</u>											
<u>(U) RDT&E,N</u>		3.877	15.130	12.179	5.482	1.391	1.387	1.417	1.441	Cont	Cont
<u>(U) RDT&E, N #C9641 LAV IDE</u>		0.000	1.982	0.000	0.000	0.000	0.000	0.000	0.000	Cont	Cont
<u>(U) PMC, BLI# 203800 LAV</u>		35.823	62.844	59.699	32.325	42.053	36.553	6.103	5.645	Cont	Cont
<u>(U) PANMC, 138800, LAV LETHALITY</u>				0.000	1.351	0.579	5.444	5.473	0	Cont	Cont

UNCLASSIFIED

Exhibit R-4/4a Schedule Profile/Detail						DATE: February 2005				
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				
LAV SCHEDULE DETAIL		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
LAV SLEP										
Milestone III:										
Contract Award:										
IOC:			2Q							
FOC:							2Q			
LAV C2										
Milestone A:										
Milestone B:				2Q						
DT / OT:					4Q					
Milestone C:						2Q				
Contract Award:						2Q				
IOC:							2Q			
FOC:									4Q	
LAV LETHALITY										
Milestone A:										
Milestone B:						1Q				
DT / OT:						3Q				
Milestone C:						4Q				
Contract Award:							1Q			
IOC:							4Q			
FOC:								2Q		

UNCLASSIFIED

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COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost		9.873	3.063	6.932	9.029	7.463	7.706	7.670	7.402
RDT&E Articles Qty									
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
<p>(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.</p> <p>(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.</p>									
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.600	0.360				
RDT&E Articles Qty									
Automatic Rifle: This funding will provide field testing and evaluation of test results and program management in support of the program development for the new Marine Corps Automatic Rifles.									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	0.000	1.450	1.350				
RDT&E Articles Qty									
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 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000	3.308				
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.									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	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.									

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.356	0.988	0.999	1.061
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 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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.914	0.748	1.243	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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	1.088	1.091	2.240	2.112
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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	1.738	0.181	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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	-0.056	0.000	0.000
RDT&E Articles Qty				
Initial Issue: Provided to units during the initial issue of equipment for spare parts in the beginning year.				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.055	0.111	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).				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	5.722	0.000	0.000	0.000
RDT&E Articles Qty				
MCAGCC Range Instrumentation: Integrated Global Positioning System (GPS) Radio System (IGRS) display upgrades, systems integration, radio voice capture, After Action Review (AAR) integration, image tracking, Live-to-CACCTUS integration, aviation engineering analysis, systems engineering & acquisition support.				
(U) Total \$	9.873	3.063	6.932	9.029

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005					
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) PROJECT CHANGE SUMMARY:											
	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>							
(U) FY 2005 President's Budget:	8.797	3.101	4.072	4.253							
(U) Adjustments from the President's Budget:											
(U) Congressional Program Reductions											
(U) Congressional Rescissions											
(U) Congressional Increases											
(U) POM FY06 CORE Adjustment			2.696	4.961							
(U) Reprogrammings	1.242		0.150	0.150							
(U) Small Business Innovation Research	-0.166										
(U) Minor Affordability Adjustment		-0.038	0.014	-0.335							
(U) FY 2006 President's Budget:	9.873	3.063	6.932	9.029							
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 2004</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	0.000	10.638	10.219	10.261	8.905	9.069	9.214	Cont	Cont	
(U) PMC (BLI#220900) Mod Kits IWS	4.127	3.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.363	
(U) PMC (BLI#222000) Under \$5 Million	14.158	6.762	7.743	10.871	26.028	33.380	12.333	10.629	Cont	Cont	
(U) PMC (BLI#233400) Modular Weapon System	13.122	10.013	23.604	0.000	0.000	0.000	0.000	0.000	0.000	46.739	
(U) PMC (BLI#493000) Night Vision Equipment	31.447	41.639	20.795	17.285	28.668	37.899	26.438	26.182	Cont	Cont	
(U) PMC (BLI#473400) SURSS	1.820	8.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.652	
(U) PMC (BLI#474700) INTEL SP EQP SURSS	0.000	0.000	16.029	12.848	8.877	14.552	4.601	4.270	Cont	Cont	
(U) PMC (BLI# 653200) Trng Dev/Sims	42.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	42.118	
(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.											
(U) MCAGCC Range Instrumentation - Award a sole source development contract (June 04) to SRI International for IGRS Display Upgrades, Systems Integration, Radio Voice Capture/AAR Integration, Image Tracking, and Live-to-CACCTUS Integration. Awarded an Aviation Engineering Analysis contract to Sensis Corporation, Apr 04 (T&M). Award a Systems Engineering/Acquisition Support Contract to MKI Systems, Inc., April 04 (FFP).											
(U) E. MAJOR PERFORMERS:											
1Qtr 04, 1Qtr 05, 1Qtr 06, 1Qtr 07 - NSWC, Crane, IN - Product development.											
3Qtr 04 - SRI International, Menlo Park, CA - Product development.											
3Qtr 04 - Sensis Corporation, Dewitt, NY - Development support.											
3Qtr 04 - MKI Systems, Orlando, FL - Management support.											
4Qtr 04, 1Qtr 05, 1Qtr 06, 1Qtr 07 - AeroVironment, Simi Valley, CA - Product development.											

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Exhibit R-3 Cost Analysis						DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting			C1901 Marine Corps Ground Weaponry PIP									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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			0.051	1Q05	0.060	1Q06	0.051	1Q07	Cont	Cont		
Inf Wpns Mods	WR	WTBN, Quantico, VA	0.184			0.204	2Q05	0.220	1Q06	0.225	1Q07	Cont	Cont		
Inf Wpns Mods	MILSTRIP	MCSC, Quantico, VA		0.024	1Q04			0.229	2Q06	0.290	2Q07	Cont	Cont		
SURSS	RCP	AeroVironment, Simi Valley, CA		0.318	4Q04	0.360	1Q05	0.715	1Q06	0.092	1Q07	Cont	Cont		
SURSS	RCP	MCSC, Quantico, VA		0.030	4Q04							0	0.030		
Automatic Rifle	RCP	TBD						0.050	1Q06	0.010	1Q07	Cont	Cont		
Company/Battalion Mortar	RCP	TBD						0.200	1Q06	0.200	1Q07	Cont	Cont		
Company/Battalion Mortar	Var	TBD, Various						0.900	1Q06	0.800	1Q07	Cont	Cont		
Family of Individual Optics	WR/RCP	NSWC, Crane, IN								2.803	1Q07	Cont	Cont		
Nt. Vision Mod	WR/RCP	NSWC, Crane, IN	0.414	0.784	1Q04	0.684	1Q05	1.807	1Q06	1.653	1Q07	Cont	Cont		
Nt. Vision Mod	MIPR	Night Vision Lab, Ft Belvoir, VA	0.587	0.100	1Q04	0.105	1Q05	0.110	1Q06	0.115	1Q07	Cont	Cont		
TWS	MIPR	Night Vision Lab, Ft Belvoir, VA	0.262	0.055	1Q04	0.087	1Q03					Cont	Cont		
Initial Issue	MIPR	TBD				-0.056	1Q05					0	-0.056		
TUV	MIPR	Redstone Arsenal, AL		1.738	1Q04	0.181	1Q05	0.300	1Q06	0.308	1Q07	Cont	Cont		
MCAGCC Range Inst	RCP(FFP)	SRI Int'l, Menlo Park, CA		3.675	3Q04								3.675		
Subtotal Product Dev			2.314	6.724		1.616		4.591		6.547		Cont	Cont		
Remarks:															
Cost Categories (Tailor to WBS, or System/Iter Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.677	0.088	1Q04	0.150	1Q05	0.100	1Q06	0.100	1Q07	Cont	Cont		
Inf Wpns Mods	RCP	BAEST, Stafford, VA	0.739	0.108	1Q04	0.386	1Q05	0.390	1Q06	0.395	1Q07	Cont	Cont		
Inf Wpns Mods	RCP	MCSC, Quantico, VA		0.136	2Q04	0.013	1Q05					0.000	0.149		
SURSS	RCP	BAEST, Stafford, VA	0.358	0.179	1Q04	0.179	1Q05	0.179	1Q06	0.179	1Q07	Cont	Cont		
SURSS (Civ Sal)	WR	NSWC, Dahlgren, VA		0.165	1Q04	0.165	1Q05	0.165	1Q06	0.165	1Q07	Cont	Cont		
SURSS	WR	MCSC, Quantico, VA	0.034	0.007	1Q04							0.000	0.041		
SURSS	RCP	MCSC, Quantico, VA		0.090	2Q04										
SURSS	RCP	AeroVironment, Simi Valley, CA		0.094	2Q04							0.000	0.094		
SURSS	MIPR	Joint Spectrum Ctr, Annapolis, MD		0.031	1Q04	0.044	1Q05	0.044	1Q06	0.044	1Q07	Cont	Cont		
Automatic Rifle	RCP	TBD						0.200	1Q06	0.200	1Q07	Cont	Cont		
Company/Battalion Mortar	RCP	TBD						0.100	1Q06	0.100	1Q07	Cont	Cont		
Nt Vision Mod	WR	MCSC, Quantico, VA	0.179	0.126	1Q04	0.137	1Q05	0.148	1Q06	0.159	1Q07	Cont	Cont		
Nt Vision Mod	RCP	BAEST, Stafford, VA	0.297	0.053	2Q04	0.140	2Q05	0.150	1Q06	0.160	1Q07	Cont	Cont		
Family of Individual Optics	WR	MCSC, Quantico, VA								0.300	1Q07	Cont	Cont		
TWS	RCP	BAEST, Stafford, VA	0.037			0.024	2Q05					0.000	0.061		
MCAGCC Range Inst	RCP (FFP)	SENSIS Corp., Dewitt, NY		0.556	3Q04							0.000	0.556		
Subtotal Support			2.321	1.633		1.238		1.476		1.802		Cont	Cont		
Remarks:															

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Exhibit R-3 Cost Analysis						DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting			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 04 Cost	FY 04 Award Date	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			0.099	2Q05					0.000	0.239		
Inf Wpns Mods	WR	MCCDC, Quantico, VA	0.285			0.085	2Q05					0.000	0.370		
Automatic Rifle	WR	MCOTEA, Quantico, VA						0.350	1Q06	0.150	1Q07	Cont	Cont		
Company/Battalion Mortar	WR	MCOTEA, Quantico, VA						0.250	1Q06	0.250	1Q07	Cont	Cont		
SURSS	TBD	TBD						0.040	2Q06			0.000	0.040		
SURSS	MIPR	MCOTEA, Quantico, VA						0.100	2Q06			0.000	0.100		
Family of Individual Optics	WR	MCOTEA, Quantico, VA								0.205	1Q07	Cont	Cont		
Rifle Combat Optics	WR	MCOTEA, Quantico, VA						0.100	2Q06	0.050	2Q07	Cont	Cont		
Nt Vision Mods	WR	MCOTEA, Quantico, VA	0.125	0.025	2Q04	0.025	2Q05	0.025	2Q06	0.025	2Q07	Cont	Cont		
Subtotal T&E			0.550	0.025		0.209		0.865		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 04 Cost	FY 04 Award Date	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													
MCAGCC Range Inst	RCP (FFP)	MKI Systems, Orlando, FL	0.000	1.491	3Q04							0.000	1.491		
Subtotal Management			0.000	1.491		0.000		0.000		0.000		Cont	Cont		
Remarks:															
Total Cost			5.185	9.873		3.063		6.932		9.029		Cont	Cont		

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Exhibit R-4/4a Schedule Profile/Detail								DATE: February 2005	
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)													

Program Funding Summary

(APPN, BLI #, NOMEN)

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N C1901 Fam of Indiv Optics	0.000	0.000	0.000	3.308	2.410	2.453	2.498	2.542	Cont	Cont
(U) PMC, BLI# 493000 Fam of Indiv Optics	0.000	0.000	0.000	0.000	7.904	11.243	11.464	11.679	Cont	Cont

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Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
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

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Exhibit R-4/4a Schedule Profile/Detail							DATE:		February 2005																																						
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																																															
FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007															
1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4				1 2 3 4															
SYSTEM DESIGN & DEVELOPMENT				★ ISURSS Program Initiation																																											
				▲				NRL Prototype Development																																							
								★ Contract Award																																							
								▲				Option 1 System Development																																			
												▲				SURSS ORD Development																															
TESTING												▲				User Evaluations & Vendor Feedback																															
												▲				Option 2 System Production																															
												▲				Extended User Assessment																															
												▲				Option 3 System Production																															
												▲				Operational Assessment (Fly-off)																															
																★ Source Selection/MS C Decision																															
PRODUCTION & DEPLOYMENT																★ Production & Support Contract Award																															
																Initial Operational Capability (IOC)				★																											
																								Full Operational Capability (FOC)				★																			
																																								Sustainment							
Program Funding Summary												FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				To Compl		Total Cost	
(APPN, BLI #, NOMEN)																																															
(U) RDT&E,N C1901 SURSS												0.914				0.748				1.243				0.480				0.479				0.373				0.155				0.100				Cont		Cont	
(U) PMC, BLI# 473400 SURSS												1.820				8.832				0.000				0.000				0.000				0.000				0.000				0.000				Cont		Cont	
(U) PMC, BLI# 474700 SURSS												0.000				0.000				16.029				12.848				8.877				14.552				4.601				4.270				Cont		Cont	

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Exhibit R-4/4a Schedule Profile/Detail			DATE:
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	

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Exhibit R-4/4a Schedule Profile/Detail						DATE:	
February 2005							
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

ID	Task Name	Duration	Start	Finish	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
					H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
1	Pre-MS Activities	631 days	Mon 03/03/03	Mon 08/01/05																				
2	Business Case Analysis	156 days	Mon 03/03/03	Mon 10/06/03																				
3	Technology Research and analysis	457 days	Fri 10/31/03	Mon 08/01/05																				
4	RFP	430 days	Mon 10/03/05	Fri 05/25/07																				
5	Source Selection	430 days	Mon 10/03/05	Fri 05/25/07																				
6	RDT&E	400 days	Mon 10/03/05	Fri 04/13/07																				
7	Evaluation	30 days	Mon 10/03/05	Fri 11/11/05																				
8	Safety Certification	180 days	Mon 11/14/05	Fri 07/21/06																				
9	Shoot-off	90 days	Mon 07/24/06	Fri 11/24/06																				
10	Select Best Value	10 days	Mon 11/27/06	Fri 12/08/06																				
11	D/T & O/T	90 days	Mon 12/11/06	Fri 04/13/07																				
12	Modifications	30 days	Mon 04/16/07	Fri 05/25/07																				
13	LRIP	480 days	Mon 05/28/07	Fri 03/27/09																				
14	Evaluation	90 days	Mon 05/28/07	Fri 09/28/07																				
15	Modifications	90 days	Mon 10/01/07	Fri 02/01/08																				
16	RFP	300 days	Mon 02/04/08	Fri 03/27/09																				
17	Evaluations	30 days	Mon 02/04/08	Fri 03/14/08																				
18	Manufacturing	270 days	Mon 03/17/08	Fri 03/27/09																				
19	Fielding	610 days	Fri 03/27/09	Mon 08/01/11																				
20	IOC Company Mortars	0 days	Fri 03/27/09	Fri 03/27/09																				
21	FOC Company Mortars	0 days	Mon 08/01/11	Mon 08/01/11																				

Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N C1901 Co and Bn Mortars

(U) PMC, BLI# 222000 Co and Bn Mortars

FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
0.000	0.000	1.450	1.350	1.000	1.000	1.000	0.500	Cont	Cont
0.134	3.105	1.500	0.000	4.193	3.187	3.209	3.207	Cont	Cont

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Exhibit R-4/4a Schedule Profile/Detail							DATE: February 2005			
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	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Pre-MS Activities	2Q									
Business Case Analysis	2Q									
Technology Research and Analysis		1Q								
RFP				1Q						
Source Selection				1Q						
RDT&E				1Q						
Source Selection RDT&E Evaluation				1Q						
Safety Certification				1Q						
Shoot-Off				4Q						
Select Best Value					1Q					
DT & OT					1Q					
Modifications					3Q					
LRIP					3Q					
LRIP Evaluation					3Q					
LRIP Modifications						1Q				
RFP						2Q				
LRIP RFP Evaluations						2Q				
LRIP RFP Modifications						2Q				
Fielding							2Q			
IOC Company Mortars							2Q			
FOC Company Mortars									4Q	

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2005			
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)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost	2.194	2.629	2.711	2.571	2.671	2.708	2.766	2.818
RDT&E Articles Qty								
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>(U) Marine Enhancement Program (MEP) provides Research, Development, Test and Evaluation funding for low visibility, low cost items. It focuses on items of equipment which will benefit the individual Marine by reducing the load, increasing survivability, enhancing safety and improving combat effectiveness. The emphasis of the program is on non-developmental item/commercial off the shelf (NDI/COTS) available items which can be quickly evaluated and fielded. This program is coordinated with the Army's Soldier Enhancement Program and the Special Operations Command.</p> <p>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</p>								
COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	0.989	0.858	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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	0.735	0.894	0.879	0.892				
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	0.470	0.877	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 \$	2.194	2.629	2.711	2.571				

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005				
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:		FY2004	FY2005	FY2006	FY2007					
(U) FY 2005 President's Budget:		2.603	2.655	2.608	2.651					
(U) Adjustments from the President's Budget:										
(U) Congressional/OSD Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings		-0.396								
(U) SBIR/STTR Transfer		-0.013								
(U) Minor Affordability Adjustment			-0.026	0.103	-0.08					
(U) FY 2006 President's Budget:		2.194	2.629	2.711	2.571					
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 To Compl	Total Cost	
(U) PMC (BLI #221100) MEP	11.620	4.009	0.000	0.000	0.000	0.000	0.000	0.000	15.629	
(U) PMC (BLI#220800) Weapons Enhancement Pgm	0.000	0.000	5.357	5.383	5.641	9.932	5.975	6.089	Cont Cont	
(U) Related RDT&E:										
(U) D. ACQUISITION STRATEGY: NDI/COTS										

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev		February 2005
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-04 176
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)		

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Sys Dev			Corps Ground Combat Arms Systems		C2086 Marine Enhanced Program (MEP)									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	5.508	0.140	Various	0.257	Various	0.306	Various	0.257	Various	Cont	Cont	
Product Development	MIPR	RDECOM, Natick, Mass	3.764	0.164	1Q04	0.176	1Q05	0.173	1Q06	0.176	1Q07	Cont	Cont	
Product Development	WR	NFEC, Pt Hueneme, CA	1.102	0.048	3Q04	0.052	2Q05	0.051	2Q06	0.051	2Q07	Cont	Cont	
Product Development	WR	NSWC, Crane, IN	1.454	0.064	1Q04	0.069	1Q05	0.067	1Q06	0.069	1Q07	Cont	Cont	
Subtotal Product Dev			11.828	0.416		0.554		0.597		0.553		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
Operational Test & Eval	WR	2nd MARDIV, CamLej, NC	6.997	0.300	1Q04	0.322	2Q05	0.316	2Q06	0.321	2Q07	Cont	Cont	
Subtotal Support			6.997	0.300		0.322		0.316		0.321		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
Developmental Test & Eval	Various	Various	13.221	0.797	Various	0.920	Various	0.979	Various	0.864	Various	Cont	Cont	
Developmental Test & Eval	MIPR	RDECOM, Natick, Mass	8.987	0.348	1Q04	0.373	1Q05	0.367	1Q06	0.373	1Q07	Cont	Cont	
Developmental Test & Eval	WR	NFEC, Pt Hueneme, CA	3.341	0.102	3Q04	0.109	2Q05	0.108	2Q06	0.109	2Q07	Cont	Cont	
Developmental Test & Eval	WR	NSWC, Crane, IN	4.122	0.136	1Q04	0.146	1Q05	0.143	1Q06	0.146	1Q07	Cont	Cont	
Subtotal T&E			29.671	1.383		1.548		1.597		1.492		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
Program Mgmt/Tech Spt	FFP	Various	0.000	0.095	1Q04	0.205	1Q05	0.201	1Q06	0.205	1Q07	Cont	Cont	
Subtotal Management			0.000	0.095		0.205		0.201		0.205		Cont	Cont	
Remarks:														
Total Cost			48.496	2.194		2.629		2.711		2.571		Cont	Cont	

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2005

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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	3.401	3.923	7.397	9.379	11.472	13.110	10.484	10.637
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 the 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 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.912	1.049	0.000	0.000				
RDT&E Articles Qty								
Initial Issue: Exploration of new commercial technologies that can 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 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 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0	0.000	2.668	4.400				
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 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0	0.000	0.228	0.238				
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.								

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2005

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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0	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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0	0.000	0.970	1.204
RDT&E Articles Qty				
Family of Mountain Cold Weather Clothing & Equipment (MCWCEP) (Formerly part of Initial Issue): FMCWCE will provide a capability set of clothing and equipment to facilitate 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 MCWCEP.				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0	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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.674	0.833	0.936	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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.718	0.533	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.				

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2005

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 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.600	0.578	0.800	0.800	
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 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.476	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 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.021	0.496	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.					
(U) Total \$	0.000	3.401	3.923	7.397	9.379
(U) PROJECT CHANGE SUMMARY					
	FY2004	FY2005	FY2006	FY2007	
(U) FY 2005 President's Budget:	3.699	3.959	7.204	7.509	
(U) Adjustments from the President's Budget:					
(U) Congressional/OSD Program Reductions					
(U) Congressional Rescissions					
(U) Congressional Increases					
(U) Reprogrammings				1.938	
(U) SBIR/STTR Transfer	-0.038				
(U) Minor Affordability Adjustment	-0.260	-0.036	0.193	-0.068	
(U) FY 2006 President's Budget:	3.401	3.923	7.397	9.379	
CHANGE SUMMARY EXPLANATION:					
(U) Funding: Change in funding in FY07 represents reprioritizing of efforts within the USMC.					
(U) Schedule: Not Applicable.					
(U) Technical: Not Applicable.					

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2005

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 2004</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	7.072	11.333	2.459	3.214	3.226	3.307	3.430	3.496	Cont	Cont
(U) PMC Line (BLI#661300) Combat Field Feeding System	0.000	0.000	5.405	5.132	4.088	3.737	3.802	3.653	Cont	Cont

(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY:

Family of Ballistic Protection Systems, Mountain Cold Weather, Improved Loadbearing Equipment, General Property and Supt Equipment 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, 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. 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, Mountain Cold Weather, Improved Loadbearing Equipment, General Property and Supt 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
RDT&E, N /BA 7 Operational Sys Development			0206623M Marine Corps Ground Combat/Supporting Arms Systems				C2503 Initial Issue - Family of Combat Equip Support & Services							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	3.494	0.154	1Q/04	0.167	1Q/05	1.081	1Q/06	1.495	1Q/07	Cont	Cont	
Development/Tech Insertion	FFP	Various (Test Articles)		0.345	2Q/04	0.403	2Q/05	1.548	2Q/06	1.859	2Q/07	Cont	Cont	
Development/Tech Insertion	WR	NMRC,WASH DC		0.771	2Q/04	0.624	2Q/05	0.416	2Q/06	0.908	2Q/07	Cont	Cont	
Development/Tech Insertion	MIPR	Vet Affairs, Wash DC		0.510	2Q/04	0.700	2Q/05	0.657	2Q/06	1.220	2Q/07	Cont	Cont	
													0.000	
													0.000	
Subtotal Product Dev			3.494	1.780		1.894		3.702		5.482		Cont	Cont	
Remarks:														
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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				0.100	1Q/05	0.100	1Q/06	0.100	1Q/07	Cont	Cont	
Program Support	WR	NHRC, SAN DIEGO,DC				0.225	1Q/05	0.225	1Q/06				0.450	0.450
Subtotal Support			0.000	0.000		0.325		0.325		0.100		0.000	0.750	
Remarks:														
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	1.187	0.067	2Q/04	0.073	2Q/05	0.263	2Q/06	0.439	2Q/07	Cont	Cont	
Operational Test & Eval	RCP	NRMC,WASH DC	0.000	0.040	2Q/04	0.578	2Q/05	0.800	2Q/06	0.800	2Q/07	Cont	Cont	
Field User Evaluations	WR	FMF	0.767	0.485	2Q/04	0.837	2Q/05	1.894	2Q/06	1.900	2Q/07	0.000	5.883	5.883
Operational Test & Eval	WR	NSWC, INDIAN HD,MD	0.000	0.250	2Q/04								0.250	0.250
Field User Evaluations	RCP	MCSC, Quantico VA	0.000	0.568	2Q/04	0.073	2Q/05						0.641	0.641
Subtotal T&E			1.954	1.410		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 04 Cost	FY 04 Award Date	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	0.314	0.151	1Q/04	0.064	1Q/05	0.230	1Q/06	0.384	1Q/07	Cont	Cont	
Travel	DTS*	MCSC, Quantico VA	0.143	0.060		0.079		0.183		0.274		Cont	Cont	
													0.000	
Subtotal Management			0.457	0.211		0.143		0.413		0.658		Cont	Cont	
Remarks:														
*DTS (Defense Travel System) Obligates throughout the execution year														
Total Cost			5.905	3.401		3.923		7.397		9.379		Cont	Cont	

R-1 SHOPPING LIST - Item No. 186

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 29 of 53)

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development		PROGRAM ELEMENT NUMBER AND NAME 26623M Marine Corps Ground Combat/Supt Arms			PROJECT NUMBER AND NAME C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11
Project Cost	6.266	2.996	4.145	6.150	2.374	0.489	0.000	0.000
RDT&E Articles Qty								
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>HIMARS is a C-130 aircraft 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 Resupply Vehicles (w/ Materials Handling Equipment (MHE) Crane) and two Resupply Trailers, and the MFOM. HIMARS will provide the Fleet Marine Force with 24 hour ground-based, responsive General Support/General Support Reinforcing/Reinforcing (GS/GSR/R) 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. 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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	1.124	0.900	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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	1.470	0.250	0.000	0.150				
RDT&E Articles Qty								
Develop Support Equipment, Army program office support, contractor provided logistics support								
COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	1.593	0.630	0.713	2.030				
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost	2.079	1.216	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 \$	6.266	2.996	4.145	6.150				

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Development		26623M Marine Corps Ground Combat/Supt Arms		C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)	

PROJECT CHANGE SUMMARY

	FY2004	FY2005	FY2006	FY07
(U) FY 2005 President's Budget:	6.860	3.026	0.016	0.000
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) POM 06 Core Adjustment			4.04	4.022
(U) Reprogrammings	-0.494		-0.049	2.344
(U) SBIR/STTR Transfer	-0.100			
(U) Minor Affordability Adjustment		-0.030	0.138	-0.216
(U) FY 2006 President's Budget:	6.266	2.996	4.145	6.150

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 2004</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 205001), EIFGSWS (HIMARS)	17.183	16.277	0.000	0.000	0.000	0.000	0.000	0.000	0.000	33.460
(U) PMC, (BLI 304001), HIMARS ROCKETS	0.000	1.320	0.000	0.000	0.000	0.000	0.000	0.000	Cont	Cont
(U) PMC, (BLI 221200), HIMARS	0.000	0.000	176.795	212.972	61.677	95.690	85.272	75.294	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 are in-line with the US Army's acquisition strategy.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 26623M Marine Corps Ground Combat/Supt Arms	PROJECT NUMBER AND NAME C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)
<p>(U) E. MAJOR PERFORMERS:</p> <p>FY-04-07Lockheed Martin Missile, Dallas, TX. Modifications to Launcher, GMLRS Development</p> <p>FY-04-07 Lockheed Martin Missile, Dallas, TX Systems Engineering Support for Development and testing</p> <p>FY-04-Lockheed Martin Missile, Dallas, TX Contractor Logisitics Support, Contract Option</p> <p>FY-04-Oshkosh Trucking Corporation, Oshkosh, WI Upgrade to RSS Production Representative articles and Field Service Support</p>		

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Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME									
RDT&E, N /BA-7 Operational Sys Development			0206623M Marine Corps Ground Combat/Supt Arms		C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	11.054	0.162	07/04	0.750	04/05	1.313	04/06	0.085	04/07	0.500	13.864	13.864
Primary Hardware Dev	SS/CPAF	Oshkosh Truck, Oshkosh,WI	2.864	0.106	07/04							0.000	2.970	
Ancillary Hardware Dev	TBD	TBD	0.000					0.850	12/05	2.484	12/06	0.000	3.334	
Systems Engineering	WR	NSWC-Carderock,MD	0.090	0.067	10/03							0.000	0.157	0.157
Systems Engineering	WR	NSWC-Dahlgren, VA	0.582	0.462	10/03	0.150	10/04	0.350	10/05	0.350	10/06	0.470	2.364	2.364
Systems Engineering	WR	NSWC-Earle, NJ	0.250	0.192	01/04			0.354	10/05	0.275	10/06	0.000	1.071	1.071
Systems Engineering	FFP	John J. McMullen, Pittsb,PA	0.166	0.015	03/04							0.000	0.181	0.181
Systems Engineering	CPAF	Lockheed Martin, Dallas, TX	0.270	0.050	06/04			0.090	12/05	0.210	12/06	0.056	0.676	0.676
Systems Engineering	WR	NAVAIR, Point Mugu CA	0.000	0.070	10/03							0.000		
Subtotal Product Dev			15.276	1.124		0.900		2.957		3.404		1.026	24.687	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	1.090	0.400	10/03	0.150	10/04					0.000	1.640	1.640
Integ Logistics Support	WR	NSWCIHD, Earle NJ	0.000							0.150	12/06	0.000	0.150	0.150
Integ Logistics Support	CPAF	Lockheed Martin, Dallas TX	2.392	0.990	06/04							0.000	3.382	3.382
Integ Logistics Support	WR	Logistics Base-Albany, GA	0.027	0.010	10/03							0.000	0.037	0.037
Integ Logistics Support	FFP	SAIC, McLean VA	0.000	0.048	02/04							0.000	0.048	0.048
Integ Logistics Support	WR	MARFORRES, New Orleans LA	0.000	0.022	10/03	0.100	10/04					0.000	0.122	0.122
Subtotal Support			3.509	1.470		0.250		0.000		0.150		0.000	5.379	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	1.116	0.282	10/03			0.425	10/05	1.305	10/06	0.425	3.553	3.553
Dev Test & Eval	WR	Redstone Test Ctr,Huntsville,AL	0.213	0.045	01/04	0.100	12/04	0.120	12/05	0.410	12/06	0.070	0.958	0.958
Dev Test & Eval	WR	Aberdeen Proving Grounds, MD	0.853	0.650	03/04							0.000	1.503	1.503
Dev Test & Eval	WR	NSWC-Carderock, MD	0.015							0.050	10/06	0.000	0.065	0.065
Dev Test & Eval	MIPR	DAC, McAlester, OK	0.000	0.055						0.090	10/06	0.000	0.145	0.145
Dev Test & Eval	MIPR	Redstone Test Ctr,Huntsville,AL	0.000	0.203	08/04							0.200		
Operational Test & Eval	WR	MCOTEA, Quantico, VA	0.316	0.150	04/04	0.530	12/04	0.168	12/05	0.175	12/06	0.150	1.489	1.489
Operational Test & Eval	MIPR	MARFORRES, New Orleans, LA	0.096	0.025	10/03							0.000	0.121	0.121
DT/OT Support	WR	OT Test Conduct, Ft. Sill, OK	0.229	0.183	10/03							0.000	0.412	0.412
Subtotal T&E			2.838	1.593		0.630		0.713		2.030		0.845	8.649	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.994	0.300	10/03	0.242	10/04	0.225	10/05	0.316	10/06	0.442	2.519	2.519
Program Mngmnt	MIPR	US ARMY Huntsville, AL	1.042	0.200	10/03	0.150	10/04					0.000	1.392	1.392
Program Mngmnt	FFP	CEOSS, Quantico VA	2.327	1.579	10/04	0.824	10/04	0.250	10/05	0.250	10/06	0.550	5.780	5.780
Subtotal Management			4.363	2.079		1.216		0.475		0.566		0.992	9.691	
Remarks:														
Total Cost			25.986	6.266		2.996		4.145		6.150		2.863	48.406	

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Exhibit R-4/4a Schedule Profile/Detail														DATE: February 2005																			
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT														PROJECT NUMBER AND NAME														
RDT&E, N /BA-7 Operational Sys Dev					0206623M Marine Corps Ground Combat/Supt Arms														C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)														
Fiscal Year		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				
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									◆																		◆						

Program Funding Summary		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U)	RDT&E,N, 026623M, HIMARS	6.266	2.996	4.145	6.150	2.374	0.489	0.000	0.000	0.000	22.420
(U)	PMC 205001 Expeditionary Indirect Fire Support Weapons System (EIFGSWS)(HIMARS)	17.183	16.277	0.000	0.000	0.000	0.000	0.000	0.000	0.000	33.460
(U)	PMC 304001 HIMARS ROCKETS	0.000	1.320	0.000	0.000	0.000	0.000	0.000	0.000	Cont	Cont
(U)	PMC 221200 High Mobility Artillery Rocket Sys	0.000	0.000	176.795	212.972	61.677	95.690	85.272	75.294	Cont	Cont

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Exhibit R-4/4a Schedule Profile/Detail					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supt Arms			C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)				
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----	-1Q						
LRIP Deliveries		3Q----	-----	-----2Q					
Interim Capability			4Q-	-----	-----	1Q			
USMC Full Rate Production (FRP) Decision				1Q					
USMC FRP Deliveries					1Q----	-----	---2Q		
GMLRS (M30) Munitions Deliveries					3Q---	-----	-----	-----	-----
Initial Operational Capability						1Q			
Full Operational Capability							1Q		
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---	2Q---	-----4Q	
Armor Upgrades							2Q---	-----4Q	

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005			
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost		10.050	12.079	11.645	7.680	7.413	8.679	7.550	7.248
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost		0.279	0.275	0.281	0.288				
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost		1.044	1.740	1.665	1.710				
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost		0.168	1.120	0.744	0.359				
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 2004	FY 2005	FY06	FY07				
Accomplishment/Effort Subtotal Cost		1.562	1.176	0.713	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 2005	
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 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		1.1	0.000	0.000	0.000
RDT&E Articles Qty					
AN/GVS-5 Replacement - Azimuth Eye-safe Rangefinding Observation Set (AEROS): Engineering and programmatic support as well as performing an Operational Test and Evaluation (OT&E) on the AEROS system. The funding for the OT&E effort encompasses the test itself and all associated personnel and TAD costs to support the test. Additionally, integration of a P3I Enhanced Target Acquisition and Location System (ETALS) will begin.					
COST (\$ in Millions)		FY 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.357	0.181	0.000
RDT&E Articles Qty					
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.					
COST (\$ in Millions)		FY 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		3.292	0.000	0.000	0.000
RDT&E Articles Qty					
Expeditionary Fire Support System (EFSS): Conduct Analysis of Alternatives (AOA) and related concept studies necessary to identify potential EFSS solutions that meet the capability of the Mission Need Statement (MNS). Evaluate the continuum of potential solutions that are identified. Program is planned for a three phase acquisition based on current and near term technologies.					
COST (\$ in Millions)		FY 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	7.136	7.050	4.015
RDT&E Articles Qty					
Expeditionary Fire Support System (EFSS): Program proposes a Milestone B review in September 2004 and the award of a contract with cost plus award fee and firm fixed price line items. EFSS will enter the System Development and Demonstration phase with a single vendor. A Milestone C decision is planned for 2nd quarter 2005. An option for full rate production may be exercised at this time.					
COST (\$ in Millions)		FY 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	1.000	1.000
RDT&E Articles Qty					
Meteorological 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.					
COST (\$ in Millions)		FY 2004	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		2.605	0.275	0.011	0.000
RDT&E Articles Qty					
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.					
(U) Total \$		10.050	12.079	11.645	7.680

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005					
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					
(U) PROJECT CHANGE SUMMARY:			<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>					
(U) FY 2005 President's Budget:			11.099	12.201	10.199	14.008					
(U) Adjustments from the President's Budget:											
(U) Congressional Program Reductions											
(U) Congressional Rescissions											
(U) Congressional Increases											
(U) POM 06 Core Adjustment											
(U) Reprogrammings											
(U) SBIR/STTR Transfer											
(U) Minor Affordability Adjustment											
(U) FY 2006 President's Budget:			10.050	12.079	11.645	7.680					
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 2004</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 To Compl</u>	<u>Total Cost</u>
PMC BLI# 473300 Meteorological Measuring Sets (FSS)			0.000	0.000	3.346	1.460	0.000	0.000	0.000	0.000	4.806
PMC BLI# 473300 Fire Supp Sys (IPADS)			0.000	6.621	5.124	0.000	0.000	0.000	0.000	0.000	11.745
PMC BLI# 473300 FSS (Mortar Ballistic Computer)			0.000	3.554	1.898	0.000	0.000	0.000	0.000	0.000	5.452
PMC BLI# 473300 Fire Supp Sustainment			0.000	0.000	2.601	4.277	4.415	4.542	4.648	4.769	Cont
PMC BLI# 473300 AEROS (AN/GVS-5)			0.000	0.000	20.080	25.868	0.368	0.000	0.000	0.000	46.316
PMC BLI# 473300 PIAFS			0.000	0.000	0.411	0.201	0.000	0.000	0.000	0.000	0.612
PMC BLI# 206300 Mod Kits AFS (PIAFS)			0.000	2.394	0.000	0.000	0.000	0.000	0.000	0.000	2.394
PMC BLI# 206300 Mod Kits AFS (Fire Supp Sustainment)			1.599	2.446	0.000	0.000	0.000	0.000	0.000	0.000	4.045
PMC BLI# 206400 Expeditionary Fire Support Sys			0.000	0.000	5.965	7.337	5.851	9.755	10.150	0.000	39.058
PMC BLI# 493000 AN/GVS-5 (FSS)			0.000	4.941	0.000	0.000	0.000	0.000	0.000	0.000	4.941
PMC BLI# 646800 AN/GVS-5 (FSS)			0.000	0.026	0.033	0.034	0.018	0.000	0.000	0.000	0.111
PMC BLI# 646800 IPADS (FSS)			0.000	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.060
PMC BLI# 700000 INITIAL SPARES (FSS)			0.000	0.143	0.000	0.000	0.000	0.000	0.000	0.000	0.143
PMC BLI# 700000 PRIME VENDOR (FSS)			0.000	0.000	1.252	0.780	0.000	0.000	0.000	0.000	2.032
PMC BLI# 700000 PRIME VENDOR (EFSS)			0.000	0.000	0.200	0.432	0.864	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 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME								
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Systems			C3098 Fire Support Systems								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.000	0.361	1Q04							0.000	0.361	
EFSS	RCP	TBD	0.000	0.557		1.920	2Q05	1.700	1Q06	2.000	1Q07	Cont	Cont	
EFSS	VAR	TBD	0.000			0.781	2Q05	0.700	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	1Q04	0.802	1Q05	0.800	1Q06	0.700	TBD	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	TBD	0.000	0.000		0.357	1Q05	0.400	TBD	0.359	TBD	Cont	Cont	
IPADS	VAR	VARIOUS		1.409	1Q04							0.000	1.409	
MBC	VAR	VARIOUS	0.000	0.315	2Q04	0.200		0.413	TBD			0.000	0.928	
MMS Profiler	MIPR	TBD	0.000					0.800	TBD	0.800	TBD		1.600	
													0.000	
Subtotal Product Dev			0.403	3.042		4.060		4.813		4.359		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.000	0.244	2Q04							0.000	0.244	
AN/GVS-5 Replacement	RCP	CEOSS	0.000	0.295	1Q04	0.357	1Q05	0.181	1Q06			0.000	0.833	
AN/GVS-5 Replacement	MIPR	Marine Det, Ft Sill, OK		0.015	1Q04							0.000	0.015	
EFSS	RCP	CTQ, Quantico, Va	0.000	0.581	1Q04	1.342	1Q05	0.708	1Q06	0.343	1Q07	Cont	Cont	
EFSS	WR	NAWCD, Pax River, Md		0.412	1Q04	0.200	1Q05	0.200	1Q06	0.100	1Q07	Cont	Cont	
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA		0.057	1Q04	0.058	1Q05	0.281	1Q06	0.288	1Q07	Cont	Cont	
Fire Spt Mods	WR/RCP	BAEST, Stafford, VA	1.046	0.300	1Q04	0.382	1Q05	0.450	1Q06	0.500	1Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	EG&G		0.118	1Q04	0.253	TBD	0.344	1Q06			Cont	Cont	
IPADS	VAR	VARIOUS		0.250	2Q04			0.011	TBD			0.000	0.261	
MBC	VAR	VARIOUS	0.000	0.500	1Q04	0.689	TBD	0.300	TBD	0.308	1Q07	0.000	1.797	
MMS Profiler	RCP	CEOSS	0.000					0.200	1Q06	0.200	1Q07	Cont	Cont	
													0.000	
Subtotal Support			1.046	2.772		3.281		2.675		1.739		Cont	Cont	
Remarks:														

R-1 SHOPPING LIST - Item No. 186

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 39 of 53)

UNCLASSIFIED

Exhibit R-3 Cost Analysis								DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME								
RDT&E, N /BA-7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Systems			C3098 Fire Support Systems								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	0.000	0.185	2Q04							0.000	0.185	
EFSS	WR	NSWC, Indian Head, Md		0.180	2Q04	0.951	2Q05	1.592	2Q06	0.200	2Q07	Cont	Cont	
Fam Artillery Munitions	WR/RCP	NSWC, Crane, IN		0.222	2Q04	0.217	2Q05					Cont	Cont	
Fire Spt Mods	WR	MCOTEA, Quantico, VA	0.025			0.200	2Q05	0.200	1Q06	0.250	1Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	VAR	PICATINNY, NJ		0.000	2Q04	0.300	TBD					Cont	Cont	
IPADS	WR	VARIOUS		0.151	2Q04							0.000	0.151	
MBC	WR	VARIOUS	0.000	0.497	2Q04	0.287	TBD					0.000	0.784	
MMS Profiler												Cont	Cont	
													0.000	
Subtotal T&E			0.025	1.235		1.955		1.792		0.450		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	MPR	MCPD, Fallbrook, CA		0.536	2Q04	0.600	2Q05	0.700	2Q06	0.300	2Q07	Cont	Cont	
EFSS	WR	MCSC, Quantico, VA		1.026	1Q04	1.342	1Q05	1.450	1Q06	0.572	1Q07	Cont	Cont	
Fire Spt Mods	WR	MCSC, Quantico, VA	0.582	0.344	2Q04	0.356	2Q05	0.215	2Q06	0.260	2Q07	Cont	Cont	
Fire Spt Mods - Fielded Sys Readiness	RCP	BAEST, Stafford, VA		0.050	1Q04	0.210	1Q05					Cont	Cont	
IPADS	WR	MCSC, Quantico, VA		0.795	2Q04	0.275	2Q05					0.000	1.070	
MBC	WR	MCSC, Quantico VA	0.000	0.250	1Q04							0.000	0.250	
MMS Profiler												Cont	Cont	
													0.000	
Subtotal Management			0.582	3.001		2.783		2.365		1.132		Cont	Cont	
Remarks:														
Total Cost			2.056	10.050		12.079		11.645		7.680		Cont	Cont	

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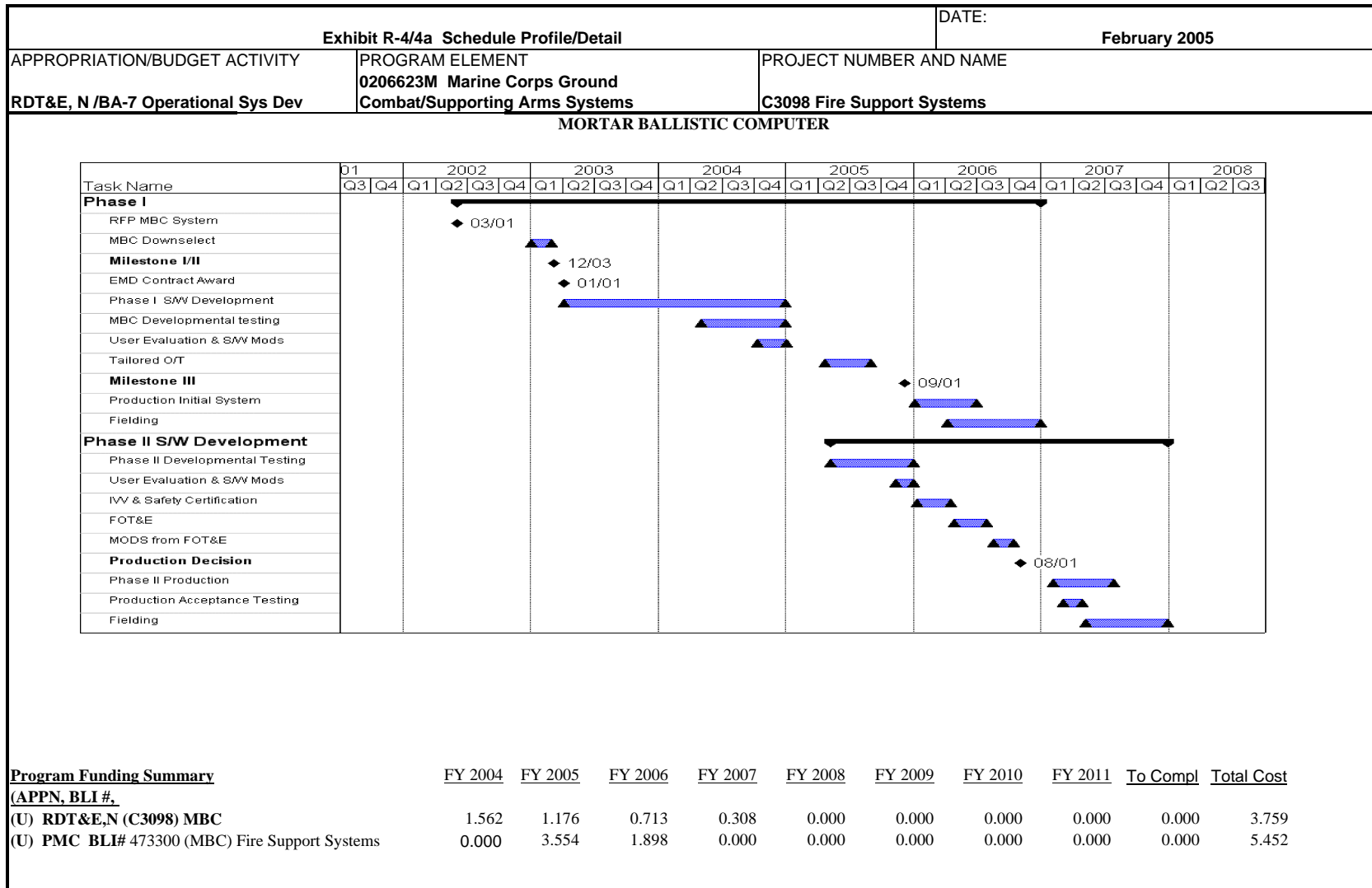
Exhibit R-4/4a Schedule Profile/Detail														DATE: February 2005																			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT								PROJECT NUMBER AND NAME																					
RDT&E, N /BA-7 Operational Sys Dev				0206623M Marine Corps Ground Combat/Supporting Arms Systems								C3098 Fire Support Systems																					
AEROS PROGRAM AN/GVS-5 Replacement																																	
ID	Task Name	2001				2002				2003				2004				2005				2006				2007				2008			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	CG Memo to Field MLE-50 UNS Qty																																
2	CG Memo to Procure TLHS Qty																																
3	ACAT IV (T) Design MDA Delegation																																
4	Milestone B Decision																																
5	Milestone C/Fielding Decision																																
6	TLDHS Blk II IOC																																
7	AEROS IOC																																
8	AEROS FOC																																
9	System Demonstration Phase																																
10	RFI Posted																																
11	RFP Posted																																
12	SSEB Approval																																
13	Contract Award																																
14	Design Reviews																																
18	Developmental Testing																																
33	TEMP																																
34	IOT&E																																
37	Programmatic Documentation																																

Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (C3098) AN/GVS-5	1.100	0.357	0.181	0.000	0.000	0.000			0.000	1.638
(U) PMC, BLI# 493000 AN/GVS-5	0.000	4.941	0.000	0.000	0.000	0.000			0.000	4.941
(U) PMC, BLI# 473300 (AN/GVS-5) CLRF	0.000	0.000	20.080	25.868	0.368	0.000			0.000	46.316
(U) PMC, BLI# 646800 1st Destination Transport.	0.000	0.026	0.033	0.034	0.018	0.000			0.000	0.111
(U) PMC Spares, BLI# 700000 AEROS (GVS-5 Re)	0.000	1.554	0.156	0.160	0.163	0.167	0.170	0.174	0.000	2.544

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Exhibit R-4/4a Schedule Profile/Detail						DATE: February 2005				
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 2005			
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									
Ballistic									
Computer									
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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Exhibit R-4/4a Schedule Profile/Detail																DATE:				
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								
IMPROVED POSITIONING AZIMUTH DETERMINING SYSTEM																				
ID	Task Name	2003			2004				2005				2006				2007			
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	Prepare Contract Documentation																			
2	RFP Release																			
3	Source Selection																			
4	Exercise EMD Contract Option																			
5	Developmental Testing																			
6	Fleet Evaluation																			
7	Milestone C																			
8	Exercise Contract Production Option																			
9	Production																			
10	IOC (I MEF)																			

Program Funding Summary										
(APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (C3098) IPADS	2.605	0.275	0.011	0.000	0.000	0.000			0.000	2.891
(U) PMC BLI# 473300 (IPADS) Fire Support Systems	0.000	6.621	5.124	0.000	0.000	0.000			0.000	11.745
(U) PMC Spares BLI# 700000 IPADS	0.000	0.143	0.000	0.000	0.000	0.000			0.000	0.143
(U) PMC 1st Des. Trans. BLI# 646800	0.000	0.000	0.060	0.000	0.000	0.000			0.000	0.060

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Exhibit R-4/4a Schedule Profile/Detail						DATE: February 2005			
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 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C3098 Fire Support Systems

Expeditionary Fire Support System (EFSS)

	FY															
	2003				2004				2005				2006			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Analysis of Alternatives (AoA)																
Mile Stone (MS) A																
Request for Proposal Preparation																
Capability Development Document (CDD)																
Request for Proposal																
Source Selection																
MS B / Contract Award																
System Development / Demonstration																
Capability Production Document (CPD)																
MS C																
IOC																
FOC - 2010																

Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)										
(U) RDT&E,N (C3098) EFSS	3.292	7.136	7.050	4.015	4.002	5.256	5.075	4.730	Cont	Cont
(U) PMC BLI# 206400 EFSS	0.000	0.000	5.965	7.337	5.851	9.755	10.150	0.000	0.000	39.058
(U) PMC BLI# 700000 Initial Spares	0.000	0.000	0.200	0.432	0.879	0.000	0.000	0.000	0.000	1.511
(U) PMC BLI# 442900 Gen. Purp. Test Equi	1.597	4.486	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.083
(U) PMC BLI# 418100 Gen. Purp. Test Equi	0.000	0.000	3.847	3.736	3.531	2.525	3.195	3.254	0.000	20.088
(U) PMC BLI# 442900 Tools, Sets and Kits	1.723	1.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.804
(U) PMC BLI# 418100 Tools, Sets and Kits	0.000	0.000	1.026	0.975	1.107	1.002	1.252	1.279	0.000	6.641

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2005																																																										
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY10	FY11																																																							
Project Cost	3.539	3.401	1.783	2.181	1.169	0.615	0.633	0.573																																																							
RDT&E Articles Qty																																																															
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>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.</p> <p>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY06</th> <th>FY07</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>1.144</td> <td>0.355</td> <td>0.865</td> <td>0.481</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>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.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY06</th> <th>FY07</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>0.513</td> <td>0.246</td> <td>0.195</td> <td>0.189</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>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.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY06</th> <th>FY07</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>1.882</td> <td>2.800</td> <td>0.723</td> <td>1.511</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>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.</p> <p>(U) Total \$</p> <table border="1"> <thead> <tr> <th></th> <th>FY 2004</th> <th>FY 2005</th> <th>FY06</th> <th>FY07</th> </tr> </thead> <tbody> <tr> <td></td> <td>3.539</td> <td>3.401</td> <td>1.783</td> <td>2.181</td> </tr> </tbody> </table>									COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	1.144	0.355	0.865	0.481	RDT&E Articles Qty					COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	0.513	0.246	0.195	0.189	RDT&E Articles Qty					COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	1.882	2.800	0.723	1.511	RDT&E Articles Qty						FY 2004	FY 2005	FY06	FY07		3.539	3.401	1.783	2.181
COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07																																																											
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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005				
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 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>				
(U) FY 2005 President's Budget:			2.545	3.440	1.225	0.552				
(U) Adjustments from the President's Budget:										
(U) Congressional Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings			1.033							
(U) Small Business Innovation Research Transfer			-0.039							
(U) Minor Affordability Adjustment				-0.039	0.558	-0.077				
(U) POM 06 Adjustments						1.706				
(U) FY 2006 President's Budget:			3.539	3.401	1.783	2.181				
CHANGE SUMMARY EXPLANATION:										
(U) Funding: Not Applicable.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI #643400 Amph Raid Equipment	9.277	15.710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.987
PMC BLI #651800 Amph Support Equipment	0.000	0.000	16.105	13.843	27.988	21.969	7.193	8.166	Cont	Cont
(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 03, Oct 04, Oct 05	Panama City, FL	Coastal Systems Station (CSS), system engineering in support of underwater reconnaissance								
Nov 03, Nov 04, Nov 05	Natick, MA	Natick Labs, system engineering								
Dec 03	Quantico, VA	Hardware Development								

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Exhibit R-3 Cost Analysis										DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME									
			0206623M Marine Corps Ground Combat/Supporting Arms Systems		C4002 Family of Raid and Reconnaissance Equipment									
RDT&E, N /BA-7 Operational Sys Dev														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	12/03					0.287	12/06	Cont	Cont	
Systems Engineering	WR	CSS, Panama City, FL		1.930	10/03	2.370	10/04	1.258	10/05	1.100	10/06	Cont	Cont	
Systems Engineering	WR	Natick Labs, Natick, MA		0.107	11/03	0.419	11/04	0.140	11/05	0.295	11/06	Cont	Cont	
Subtotal Product Development			0.000	3.230		2.789		1.398		1.682		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 04 Cost	FY 04 Award Date	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	10/03	0.305	10/04	0.075	10/05	0.250	10/06	Cont	Cont	
Subtotal Support			0.000	0.190		0.305		0.075		0.250		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 04 Cost	FY 04 Award Date	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	04/04	0.250	11/04					0.000	0.290	
Subtotal T&E			0.000	0.040		0.250		0.000		0.000		0.000	0.290	
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 04 Cost	FY 04 Award Date	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	12/03	0.057	12/04	0.310	12/05	0.249	12/06	Cont	Cont	
Subtotal Management				0.079		0.057		0.310		0.249		Cont	Cont	
Remarks: Funding for this program in prior years is provided under Project C1901 within this PE.														
Total Cost			0.000	3.539		3.401		1.783		2.181		Cont	Cont	

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Exhibit R-4/4a Schedule Profile/Detail											DATE:									
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														
ID	Task Name	Duration	Start	Finish	2003		2004		2005		2006		2007		2008		2009		2010	
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																
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	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																
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																
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																
19	Production	477 days	Mon 1/2/06	Tue 10/30/07																

Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)										
(U) RDT&E,N C4002 URC	1.882	2.800	0.723	1.511	0.535	0.060	0.000	0.000	0.000	7.511
(U) PMC, BLI# 643400 URC	0.000	6.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.464
(U) PMC, BLI# 651800 URC	0.000	0.000	7.692	6.340	7.183	4.504	0.000	0.000	0.000	25.719

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