#### **CLASSIFICATION:**

EXHIBIT R-2, RE	OT&E Budget Ite	m Justificatio	n			DATE:	Fe	ebruary 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational System Development			PROGRAM E	`	,		ing Arms Sys	•		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	41.775	38.850	35.439	70.564	53.579	43.246	34.189	29.817	Cont	Con
C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)	0.394	0.363	0.355	0.368	1.915	1.932	0.821	0.839	Cont	Con
C1555 Light Armored Vehicle (LAV) PIP	13.369	4.725	4.216	37.306	25.421	11.405	1.648	1.429	Cont	Con
C1901 Marine Corps Ground Weaponry PIP	13.475	14.245	2.946	3.112	4.084	4.263	4.369	4.148	Cont	Con
C2086 Marine Enhanced Program (MEP)	2.199	2.335	2.632	2.669	2.627	2.673	2.753	2.806	Cont	Con
B2237 Amphibious Vehicle Test Branch (AVTB)	0.685	0.733	0.808	0.814	0.830	0.846	0.872	0.889	Cont	Con
C2503 Family of Combat Equip Support & Services	1.663	1.087	3.741	3.976	7.223	7.526	9.097	10.138	Cont	Con
C2928 EIFGSWS (HIMARS)	9.990	11.624	6.943	3.038	0.019	0.000	0.000	0.000	0.000	31.614
C3098 Fire Support Systems	0.000	0.000	11.224	15.828	10.232	14.047	14.156	9.081	Cont	Con
C4002 Family of Raid Reconnaissance	0.000	0.000	2.574	3.453	1.228	0.554	0.473	0.487	Cont	Con
C9277 Target Location Designation and Handoff Sys	0.000	1.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.299
C9278 Integrated Digital Camera Riflescope	0.000	1.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.464
C9279 Body Armor Upgradera Riflescope	0.000	0.975	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.975
Quantity of RDT&E Articles										

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

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.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing and manufacturing development for upgrades of existing systems. Exhibit R-2, RDTE,N Budget Item Justification

R-1 SHOPPING LIST - Item No. 188

(Exhibit R-2, page 1 of 65)

EXHIBIT R-2, RDT	&E Budget Item	Justification			DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT (PE) NAME AND NO.						
RDT&E, N /BA-7 Operational System Development				, ,	d Combat/Supporting Arms Systems			
B. PROGRAM CHANGE SUMMARY								
	FY2002	FY2003	FY2004	FY 2005				
(U) FY 2003 President's Budget:	43.547	36.004	22.202	20.637				
(U) Adjustments from the President's Budget:								
(U) Congressional/OSD Program Reductions	-0.119	-0.984	0.731	-2.194				
(U) Congressional Rescissions								
(U) Congressional Increases		3.830						
(U) Reprogrammings	-1.136		12.510	52.130				
(U) SBIR/STTR Transfer	-0.517							
(U) Minor Affordability Adjustment			-0.004	-0.009				
(U) FY 2004 President's Budget:	41.775	38.850	35.439	70.564				
CHANGE SUMMARY EXPLANATION:								
(U) Funding: See Above.								
(U) Schedule:								
(U) Technical: Not Applicable.								

EXHIBIT R-2a,	RDT&E Project J	lustification					DATE:			
								Feb	ruary 2003	3
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NU	MBER AND N	AME		PROJECT N	JMBER AND N	NAME		
RDT&E, N /BA-7 Operational Sys Dev	0206623M M	larine Corps (	Ground Coml	bat Arms Sys	tems	B2237 Amph	ibious Vehicl	e Test Directo	orate (AVTI	D)
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	0.685	0.733	0.808	0.814	0.830	0.846	0.872	0.889	Cont	Cont
RDT&E Articles Qty										

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

(U) The Amphibious Vehicle Test Directorate (AVTD) is a one-of-a-kind Department of Defense test facility for amphibious vehicles and supports the requirements of all services. The AVTD conducts developmental, combined developmental/operational, and follow-on testing and evaluation of production hardware. It also conducts Product Assurance Testing and Substitute or alternative parts and material testing for amphibious vehicles and associated equipment. Because of its year-round temperate climate, diverse terrain, and 17 miles of coastline, the AVTD is ideal for the amphibious vehicle, as well as ship related testing. The AVTD is in close proximity to San Clemente island which is used frequently for live fire sea-to-shore testing and high-speed water testing. The AVTD is committed to testing product improvement programs, engineering change proposal design changes, and field change requests.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.526	0.569	0.641	0.644
RDT&E Articles Qty				

Maintenance, refurbishment, upgrade, and replacement of test equipment and instrumentation needed to provide program support, supplies, and services at AVTD test site to support scheduled Assault Amphibious Vehicle 7A1 (AAV7A1) "rebuild to standard" testing, Advanced Amphibious Assault Vehicle (AAAV) Development Testing, Light Armored Vehicle Service Life Extension Program as well as other Marine Corps mobility and mine warfare programs. Upgrade instrumentation for over the horizon capability in developing weapons systems to support operational maneuver from the sea. Program on-site support, supplies, and services to support Naval Sea System Command and Naval Mine Warfare Command for development testing of Navy mine countermeasures system. Provide services and support to the Department of Defense Common Test and Training Range Architecture workshops. Provide organic supply support including management operations, advertising, general accounting, and a maintenance float of equipment. Provide intermediate maintenance (third echelon) of organic non-developmental communication electronic and ordnance equipment.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.159	0.164	0.167	0.170
RDT&E Articles Qty				

Provide funding for necessary services provided by Marine Corps Base, Camp Pendleton (MCB CAMPEN), California for electricity, heating, and other power charges; and long distance telephone support. Provide funding for calibration of laboratory test equipment and maintenance services provided by MCLB Barstow and 1st Force Service Support Group (FSSG).

(U) Total \$ 0.000 0.685 0.733 0.808 0.814

EXHIBIT R-2a, RI	DT&E Project Jus	stification		•	DATE:
	T				February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMB	ER AND NAM	E	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206623M Mar	ine Corps Gr	ound Combat	Arms Systems	B2237 Amphibious Vehicle Test Directorate (AVTD)
(U) Project Change Summary:					
	FY2002	FY2003	FY2004	FY2005	
(U) FY 2003 President's Budget:	0.726	0.751	0.826	0.832	
(U) Adjustments from the President's Budget:					
(U) Congressional Program Reductions	-0.002	-0.018			
(U) Congressional Rescissions					
(U) Congressional Increases					
(U) Reprogrammings	-0.024				
(U) SBIR/STTR Transfer	-0.015				
(U) Inflation Change			-0.018	-0.018	
(U) FY 2004 President's Budget:	0.685	0.733	0.808	0.814	
CHANGE SUMMARY EXPLANATION: (U) Funding: See Above.					
<ul><li>(U) Schedule: Not Applicable.</li><li>(U) Technical: Not Applicable.</li></ul>					

### (U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

(U) Related RDT&E: PE 0603611M (Marine Corps Assault Vehicles)

#### (U) D. ACQUISITION STRATEGY:

Work will be lead in-house. Necessary contractor support will be provided by Marine Corps Base Camp Pendleton by using existing contracts. General Services Administration will be used for vehicle leasing contract.

#### (U) E. MAJOR PERFORMERS:

MCTSSA, Camp Pendleton, CA - Maintenance, refurbishment, upgrade, and replacement of test equipment. Oct 01, Oct 02, Oct 03, Oct 04

#### (U) SCHEDULE PROFILE:

Testing conducted at AVTD includes all aspects of Marine Corps Assault Amphibious Vehicles. Testing planned for FY 02 and beyond includes MK 155 Minefield Breaching System, NBC overpressure system, RAM/RS (Reliability, Availability and Maintainability/Rebuild to Standard) Operational Testing Support and Production Assurance testing. Engineering Change Proposals (ECP) as required; upgrade instrumentation for over the horizon capability in developing weapons systems to support operational maneuver from the sea, support for the Light Armored Vehicle Service Life Extension Program; C4I integrated support for AAV Communications and 7 RAM/RS. AVTD will also support the testing of the Advanced Amphibious Assault Vehicle (AAAV), as directed by DRPM AAA, during the Engineering & Manufacturing Development phase of the AAAV Program Development.

	EXHIBIT R-2a,	RDT&E Proje	ect Justification	on				DATE:		
								F	ebruary 2003	}
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUM	IBER AND NA	ME	PROJECT NU	IMBER AND N	AME			
	0206623M Ma	arine Corps G	round							
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supp	oorting Arms	Systems		C0021 Assau	It Amphibious	Vehicle 7A1	(AAV7A1)		
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	Complete	Program
Project Cost	0.394	0.363	0.355	0.368	1.915	1.932	0.821	0.839	Cont	Cont
RDT&E Articles Qty										

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

(U) The AAV7A1 RDT&E program provides for the development, test and preparation of Engineering Change Proposals (ECPs) to improve the performance, reliability, maintainability and safety of the AAV7A1 Family of Vehicles (FOV). This program also allows for the development of installation kits for the integration of communications and navigation equipment developed for integration into the AAV7A1 FOV.

(U) Beginning in FY 06, RDT&E funds will be used for development of upgrades to the AAV recovery variant, the AAVR7A1. The AAVR7A1 is the primary maintenance and recovery vehicle in the AAV FOVs and is an alternate source of maintenance and recovery for other elements of the MEF. This initiative replaces aging and discontinued unique AAVR7A1 subsystems, including the crane, winch, welder, compressor, generator, hydraulic power source, magnetic clutches and tool box. It incorporates the latest recovery, lift and maintenance technologies and will incorporate future support initiatives as a MEF asset.

#### B. ACCOMPLISHMENTS/ PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.394	0.363	0.355	0.368
RDT&E Articles Qty				

Provide engineering support for development and integration of modification kits such as engine test stands, crew heaters, and Advanced Combat Vehicle Current Power into AAV7A1 Family of Vehicles.

#### (U) PROJECT CHANGE SUMMARY:

	FY2002	FY2003	FY2004	FY2005
(U) FY 2003 President's Budget:	0.359	0.372	0.382	0.394
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.001	-0.009	-0.027	-0.026
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.045			
(U) Minor Affordability Adjustments				
(U) SBIR/STTR Transfer	-0.009			
(U) FY 2004 President's Budget:	0.394	0.363	0.355	0.368

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.(U) Schedule: Not Applicable.(U) Technical: Not Applicable.

			ONOLA							
	EXHIBIT R-2a, R	DT&E Projec	t Justification	)				DATE:		
								F	ebruary 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE			IE	PROJECT NUM	IBER AND NA	ME			
DDT9 E N /DA 7 Operational Sup Day	0206623M Mari				20024 Associate	Amphibiaua \	Vahiala 7A1	(		
RDT&E, N /BA-7 Operational Sys Dev	Combat/Suppo	orting Arms 5	ystems		C0021 Assault	Amphibious	venicie / A1	(AAV/AT)		
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	<u>Fo Compl</u>	Total Cost
(U) PMC, 202100, AAV 7A1 PIP	75 102	61.689	11 207	0.451	14.884	17.787	44 772	12 977	Continuing	Camtinuina
(U) PMC, 202100, AAV /AT PIP	75.123	01.089	11.297	9.451	14.884	17.787	44.773	43.877	Continuing	Continuing
(U) D. ACQUISITION STRATEGY:										
The second of Facilities of the development of Facilities of	- Ob	-1- 4- :		C-1-100			A = = = It A == ==	L:L: \	. 0	
These efforts focus on the development of Engineerin be acquired using existing contracts.	ig Change Propos	als to improve	performance,	reliability, ma	intainability and	safety of the	Assault Amp	nibious venici	e. Contractor	support will
be acquired using existing contracts.										
(U) E. Major Performers:										
(O) E. Major Performers.										

EXHIB	IT R-2a, RDT&E Project	t Justification	1				DATE:			
								Februar	y 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL 0206623M Ma					PROJECT NU	IMBER AND N	IAME		
RDT&E, N /BA-7 Operational Sys Dev	Systems					C1555 Light A	Armored Vehi	cle (LAV) PIP		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	13.369	4.725	4.216				1.648			J
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET	ITEM JUSTIFICATION:									
The Light Armored Vehicle Family of Vehicles (LAV	V FOV) consists of seven fi	elded LAV con	figurations, and	one communic	ations/intellige	nce-configured a	sset on an LAV	chassis (Mobile	e Electronic W	arfare
Support System). Collectively, the LAV FOV provid Improvement Program (PIP) funds the development a										

Support System). Collectively, 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 (PIP) funds the development and testing of modifications of four major programs; the LAV Service Life Extension Program (SLEP) which includes the Improved Thermal Sight System (ITSS) the LAV Anti Armor System (LAV-AAS) Program, the LAV-Command & Communication (LAV-C2) 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 Expeditionary Fire Support System (LAV-EFSS) consists of a 120mm Recoil Mortar System replacement for the LAV-Mortar variant's M252 81 mm Mortar System. The LAV-EFSS will invest in technologies currently existing on newer generations of LAVs.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.808			
RDT&E Articles Qty				
LAV SLEP Basic: Completed developmental and	operational testing (DT/OT) of SLEI	Basic prototypes for test and e	evaluation (T&E) of SLEP mode	3.
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	10.377	3.411	2.854	1.233
RDT&E Articles Qty				
LAV SLEP ITSS: Develope ITSS prototypes, PM	O & matrix support, PMO travel, CA	AS and DT/OT of ITSS prototy	pes.	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.184	1.314	1.362	1.440
RDT&E Articles Qty				
LAV RAM: Research and development of numero	us LAV RAM projects to include 2 sp	beed transfer case, tire replacem	ent initiative and transmission r	eplacement.
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	21.201
RDT&E Articles Qty				
LAV ANTI-ARMOR: LAV-AAS prototype deve	lopment, PMO & matrix support, PM	O travel, CAAS & test ammo p	rocurement in support of LAV-	AAS.
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	8.769
RDT&E Articles Qty				

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	4.663
RDT&E Articles Qty				

LAV-EFSS: System Development, Demonstration and integration efforts, PMO & matrix support, PMO travel and CAAS for the LAV-EFSS.

(U) Total \$ 0.000 13.369 4.725 4.216 37.306

EXHIBIT R-2	2a, RDT&E Project	Justification				D	ATE:			
	•							February	2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE					PROJECT NUM	IBER AND NA	ME		
RDT&E, N /BA-7 Operational Sys Dev	0206623M Mari	ne Corps Gro	ound Compat	Supporting A		C1555 Light Ar	mored Vehicl	e (I AV) PIP		
No raz, N/BA r opolational dyo box	Cyclonic					O 1000 Ligiti 7ti	inorca vernor	O (EAT) I II		
(U) PROJECT CHANGE SUMMARY:										
	FY2002	FY2003	FY2004	FY2005						
(U) FY 2003 President's Budget:	14.147	4.845	1.425	1.478						
(U) Adjustments from the President's Budget:	0.020	0.120	2.012	0.000						
(U) Congressional/OSD Program Reductions	-0.039	-0.120	2.013	-0.988						
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings	-0.732		0.778	36.816						
(U) SBIR/STTR Transfer	-0.007									
(U) Minor Affordability Adjustment	40.000									
(U) FY 2004 President's Budget:	13.369	4.725	4.216	37.306						
(U) C. OTHER PROGRAM FUNDING SUMMARY: Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
Line Item No. & Name (U) PMC, 203800, LAV PIP	FY 2002 25,192	FY 2003 52.067	FY 2004 13.191	FY 2005 51.341	FY 2006 57.399	FY 2007 78.269	FY 2008 113,454	FY 2009 82.727	To Compl Continuing	Total Cost Continuing
	20.172	02.007	15.171	01.011	07.077	70.20	110.101	02.727	Ü	ŭ
(U) Related RDT&E: Not Applicable.										

EXHIBIT F	EXHIBIT R-2a, RDT&E Project Justification					
		February 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME				
	0206623M Marine Corps Ground Combat/Supporting Arms					
RDT&E, N /BA-7 Operational Sys Dev	Systems	C1555 Light Armored Vehicle (LAV) PIP				

- (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.
- (U) D. ACQUISITION STRATEGY: The LAV AAS Program is designed to replace the existing LAV Anti Tank Emerson 901 Turret. The current turret has exhibited numerous deficiencies for many years that make it unreliable and costly to maintain. The current modification will ensure the LAV-AAS will be a viable weapons system through the service life of the LAV Family of Vehicles. This utilizes both developmental and off-the-shelf technologies to enhance survivability, lethality, and sustainability while simultaneously reducing the cost of ownership. The Marine Corps will use multi-disciplined integrated product teams consisting of engineering, logistical, contracting and financial personnel to manage the LAV AAS. LAV AAS contracts have been designed using a winner-take-all methodology in order to reduce costs and encourage competition.
- (U) D. ACQUISITION STRATEGY: The LAV C2 Program is designed to meet and maintain the command and control requirements of the ORD. The LAV-C2 Upgrade will provide a hardware and software module (Universal Communication Interface Module (UCIM)) for the LAV-C2 to support complex radio configurations. The module will provide isolation of critical communications functions in a self-contained module to support a mix of legacy radio and the Joint Tactical Radio System (JTRS). The modification will ensure that the LAV-C2 will be a viable weapons system through the service life of the the LAV Family of Vehicles. This utilizes both developmental and off-the-shelf technologies to enhance survivability, lethality, and sustainability while simultaneously reducing the cost of ownership. The Marine Corps will use multi-disciplined integrated product teams consisting of engineering, logistical, contracting and financial personnel to manage the LAV C2. LAV C2 contracts will be designed using a winner-take-all methodology to reduce costs and encourage competition.
- (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 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.
- (U) D. ACQUISITION STRATEGY: The LAV EFSS Program is designed to replace the existing LAV Mortar M 252 81mm Mortar System with a 120 mm Recoil Mortar System. The current 81mm Mortar System does not meed the Operational Requirements Document (ORD) requirements for lethality and time to emplacement. The modification will ensure that the LAV-EFSS becomes a viable weapon system through the service life of the LAV Family of Vehicles. This utilizes both developmental and off-the-shelf technologies to enhance survivability, lethality, and sustainability while simultaneously reducing the cost of ownership. The Marine Coprs will use multi-disciplined integrated product teams consisting of engineering, logistical, contracting and financial personnel to manage the LAV EFSS. LAV EFSS contracts will be designed using a winner-take-all methodology in order to reduce costs and encourage competition.

	EXHIBIT R-2a	, RDT&E Project Justification		DATE:
				February 2003
APPROPRI.	ATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		JMBER AND NAME
		0206623M Marine Corps Ground Combat/Supporting Arms		
RDT&E, N /	BA-7 Operational Sys Dev	Systems	C1555 Light A	Armored Vehicle (LAV) PIP
` '	OR PERFORMERS:			
LAV SLEP	BASIC			
FY02	Metric Systems Corporation, Fort Walton	Beach, FLA. DT/OT of SLEP Basic prototypes.		
LAV ITSS				
FY02	Raytheon Company, Mckinney, TX. ITSS	prototype development.		
FY03	Raytheon Company, Mckinney, TX. DT/O	T preparation. Oct 02.		
	SURVICE Engineering Company, Belcam	p, MD. ITSS development & test support. Oct 02.		
FY04	MCCDC, Quantico, VA, DT/OT. Oct 03.	1		
	TACOM, Warren, MI. PMO support. Oct 0			
		p, MD. ITSS development & test support. Oct 03.		
FY05	MCCDC, Quantico, VA, DT/OT completion			
	TACOM, Warren, MI. PMO support. Oct 0			
	SURVICE Engineering Company, Belcam	p, MD. ITSS development & test support. Oct 04.		
LAV RAM	Verieus			
FY02 FY03	Various Various			
FY04	Various			
FY05	Various			
	AV-C2 & LAV-EFSS			
FY05	Major performers are not determined as o	f this date.		
	.,. ,			

		Exhibit R-3 Cost Analysis						DATE:				uary 2003		
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEME 0206623M Marine		round Co	mhat/Si	innorting	ιΔrms	PROJEC	T NUMB	ER AND N	IAME			
RDT&E, N /BA 7 Operational	Sys Dev	Systems	оо. ро о.	ouna oc		.ppo.tg	, ,	C1555 L	ight Arm	ored Vehi	icle (LAV)	) PIP		
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
Product Development	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Primary Hardware Dev Spt	CPFF	GTRI/SURVICE, Bellcamp MD	0.750	0.439	1Q02						1Q05	0.000	1.189	1.80
Gov't Dev Engineering	MIPR	In-House Product Dev	1.560									0.000	1.560	
Product Development (ITSS)	Various	Raytheon, Mckinney TX	12.199	8.133	3Q02	0.200	VAR		VAR		1Q05	Cont.	Cont.	42.82
Product Development (RAM)	Various	Various		1.184	VAR	1.314	VAR	1.362	VAR	1.440	VAR	Cont.	Cont.	
Product Development (AAS)	Various	TBD								18.080	1Q05			
Product Development (C2)	Various	TBD								5.862	1Q05	Cont.	Cont.	5.86
Product Development(EFSS)	Various	TBD								3.633	1Q05	Cont.	Cont.	
CASS	MIPR	SURVICE, Bellcamp, MD	0.000							1.876	1Q05	Cont.	Cont.	
Subtotal Product Dev		, , , , , , , ,	14.509			1.514		1.362		30.891		Cont.	Cont.	44.62
Remarks:		1			1				I		I			
0.0100100100	0 1 1	In desired	T-1-1	1	E)/ 00	ı	EV 00	ı	EV 04		EV 05	1		I =
Cost Categories	Contract	Performing	Total	EV 00	FY 02	FY 03	FY 03	EV 04	FY 04	FY 05	FY 05	0	T	Target
Support	Method	Activity &	PY s	FY 02	Award		Award	FY 04	Award		Award	Cost to	Total	Value of
TOWAR - The	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TOW Missiles	FFP	TBD	0.000	0.000		0.000		0.000		0.590	1Q05	0.000	0.590	
Subtotal Support Remarks:			0.000	0.000		0.000		0.000		0.590			0.590	0.59
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
Test & Evaluation	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Devl Test & Eval	MIPR	Yuma Prv Ground, AZ	5.133			1.931	3Q03	2.01	Various			0.000	9.077	
Devl Test & Eval	MIPR	Aberdeen Test Center, MD	0.767	1.808	Various					0.865	Various	Cont.	Cont.	
Devl Test & Eval	MIPR	TACOM								1.636	Various	Cont.		
Devl Test & Eval	MIPR	MCOTEA, Quantico, VA		0.650	1Q02	0.100	3Q03			0.396	Various	Cont		
Subtotal T&E			5.900	2.458		2.031		2.013		2.897		Cont.	Cont.	
Remarks:														
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
Program Management	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Program Management	VAR	TACOM, Warren, MI	2.111	0.569		0.737	1Q03	0.693	1Q04	2.078	1Q05	Cont.	Cont.	
Matrix Support	MIPR	ARDEC/NVL/TACOM, MI		0.586	1Q02	0.443	1Q03	0.148	Various	0.850	Various	Cont.	Cont.	
Subtotal Management			2.111	1.155		1.180		0.841		2.928		Cont.	Cont.	
Remarks:														
Total Cost				13.369		4.725		4.216		37.306		Cont.	Cont.	
		II.			l				1				2 2	1

PROPRIATION/BUDGET ACTIVITY   2008623M Marine Corps Ground Combat/Supporting Arms   PROJECT NUMBER AND NAME	DDDGDDUATION		it R-4/4a Schedule Prof					DATE:			ebruary 2	003	
DTAGE, N/BA 7 Operational Sys Dev   Systems   C1555 Light Armored Vehicle (LAV) PIP	PPROPRIATION	/BUDGET ACTIVITY			Combat/Si	unnorting		PROJECT	NUMBER A	AND NAME	=		
AV SLEP	DT&E, N /BA 7	Operational Sys Dev		orps Ground	Oombaro	apporting		C1555 Lig	ht Armored	d Vehicle (	LAV) PIP		
Milestone 0: 1st Qtr, FY 1998   Milestone II: 2nd Qtr, FY 2002   September 1   September 2   Septemb	J) D. SCHEDULE	PROFILE:											
Milestone I:	LAV SLEP												
Milestone II: 2nd Qtr, FY 2000   IOC: 4th Qtr, FY 2003   DT / OT: 2nd Qtr, FY 2001   FOC: 2nd Qtr, FY 2007    LAY AAS    Contract Award: 1st Qtr, FY 2008   DT / OT: 1st Qtr, FY 2005   IOC: 4th Qtr, FY 2008   DT / OT: 1st Qtr, FY 2006   FOC: 4th Qtr, FY 2009   Milestone C: 1st Qtr, FY 2007   Milestone B: 1st Qtr, FY 2007   Milestone B: 1st Qtr, FY 2005   IOC: 4th Qtr, FY 2009   Milestone B: 1st Qtr, FY 2007   Milestone B: 1st Qtr, FY 2006   FOC: 1st Qtr, FY 2009   Milestone B: 1st Qtr, FY 2006   FOC: 1st Qtr, FY 2009   Milestone C: 1st Qtr, FY 2006   FOC: 1st Qtr, FY 2009   Milestone C: 1st Qtr, FY 2007   Milestone C: 1st Qtr, FY 2007    LAY EFSS    Milestone B: 4th Qtr, FY 2004   IOC: 4th Qtr, FY 2009   DT / OT: 1st Qtr, FY 2006   FOC: 4th Qtr, FY 2009   Milestone C: 4th Qtr, FY 2007   Milestone C: 4th Qtr, FY 2007   Milestone C: 4th Qtr, FY 2007      Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2007     Milestone C: 4th Qtr, FY 2008     Milestone C: 4th Qtr, FY 2008     Milestone C: 4th Qtr, FY 2009     Milestone C: 4th Qtr, FY			* '				~ .						
DT / OT:   2nd Qtr, FY 2001   FOC:   2nd Qtr, FY 2007						vard:							
LAV AAS													
Contract Award: 1st Qtr, FY 2007  Milestone B: 1st Qtr, FY 2005 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2009 Milestone C: 1st Qtr, FY 2007  Milestone A: Ongoing Contract Award: 1st Qtr, FY 2007 Milestone B: 1st Qtr, FY 2005 DT / OT: 1st Qtr, FY 2005 DT / OT: 1st Qtr, FY 2005 DT / OT: 1st Qtr, FY 2007 Milestone C: 1st Qtr, FY 2007 Milestone C: 1st Qtr, FY 2007  LAV EFSS  Contract Award: 1st Qtr, FY 2009  Milestone B: 4th Qtr, FY 2007  Milestone C: 4th Qtr, FY 2004 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2009  Milestone B: 4th Qtr, FY 2004 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2009  Milestone C: 4th Qtr, FY 2007  FY 2007  Milestone C: 4th Qtr, FY 2007  Milestone C:		DT / OT:	2nd Qtr, FY 2001		FOC:		2nd Qtr, FY	2007					
Milestone B:   1st Qtr, FY 2005   IOC:   4thQtr, FY 2008	LAV AAS												
DT / OT: 1st Qtr, FY 2006 Milestone C: 1st Qtr, FY 2007  LAV C2  Milestone A: Ongoing Contract Award: 1st Qtr, FY 2007 Milestone B: 1st Qtr, FY 2005 1OC: 1st Qtr, FY 2008 DT / OT: 1st Qtr, FY 2006 FOC: 1st Qtr, FY 2009 Milestone C: 1st Qtr, FY 2007 Milestone C: 1st Qtr, FY 2007  LAV EFSS  Contract Award: 1st Qtr, FY 2008 Milestone B: 4th Qtr, FY 2004 1OC: 4th Qtr, FY 2009 DT / OT: 1st Qtr, FY 2004 Milestone C: 4th Qtr, FY 2009 Milestone C: 4th Qtr, FY 2004 DT / OT: 1st Qtr, FY 2007  Milestone C: 4th Qtr, FY 2007  FYP, Milestone C: 4th Qtr, FY 2007  FYP, BLI#, NOMEN) 13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Co						vard:							
Milestone C: 1st Qtr, FY 2007    LAV C2													
LAV C2		DT / OT:			FOC:		4th Qtr, FY	2009					
Milestone A: Ongoing Contract Award: 1st Qtr, FY 2007 Milestone B: 1st Qtr, FY 2005 DT / OT: 1st Qtr, FY 2006 DT / OT: 1st Qtr, FY 2007 Milestone C: 1st Qtr, FY 2007  LAV EFSS  Contract Award: 1st Qtr, FY 2008 Milestone B: 4th Qtr, FY 2004 DT / OT: 1st Qtr, FY 2004 DT / OT: 1st Qtr, FY 2006 Milestone C: 4th Qtr, FY 2006 DT / OT: 1st Qtr, FY 2006 Milestone C: 4th Qtr, FY 2007  FOC: 4th Qtr, FY 2010  Milestone C: 4th Qtr, FY 2007  FY 2007  FY 2008  FY 2009 TO Compl. Total CO PPN, BLI #, NOMEN) D RDT&E.N  13.369  4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing C		Milestone C:	1st Qtr, FY 2007										
Milestone B: 1st Qtr, FY 2005	LAV C2												
DT / OT: 1st Qtr, FY 2006 Milestone C: 1st Qtr, FY 2007  LAV EFSS  Contract Award: 1st Qtr, FY 2008 Milestone B: 4th Qtr, FY 2004 1OC: 4th Qtr, FY 2009 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2010 Milestone C: 4th Qtr, FY 2007  FOC: 4th Qtr, FY 2009 POC: 4th Qtr, FY 2010 Milestone C: 4th Qtr, FY 2007  FY 2007  FY 2008 FY 2009 FY 2009 FY 2008 FY 2009 FY		Milestone A:	Ongoing		Contract Av	vard:	1st Qtr, FY	2007					
Milestone C: 1st Qtr, FY 2007  LAV EFSS  Contract Award: 1st Qtr, FY 2008 Milestone B: 4th Qtr, FY 2004 IOC: 4th Qtr, FY 2009 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2010 Milestone C: 4th Qtr, FY 2007  FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 To Compl Total C  PPN, BLI #, NOMEN) D RDT&EN  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Contin		Milestone B:	1st Qtr, FY 2005		IOC:		1st Qtr, FY	2008					
LAV EFSS  Contract Award: 1st Qtr, FY 2008  Milestone B: 4th Qtr, FY 2004 IOC: 4th Qtr, FY 2009  DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2010  Milestone C: 4th Qtr, FY 2007  FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 To Compl Total C  PPN, BLI #, NOMEN)  D RDT&E,N  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continuing  Contract Award: 1st Qtr, FY 2008  FY 2009 FY 2009 FY 2009  FY 2008 FY 2009 To Compl Total C  STORING TO STOR		DT / OT:	1st Qtr, FY 2006		FOC:		1st Qtr, FY	2009					
Contract Award: 1st Qtr, FY 2008 Milestone B: 4th Qtr, FY 2004 DT / OT: 1st Qtr, FY 2006 Milestone C: 4th Qtr, FY 2007   PPN, BLI #, NOMEN)  Contract Award: 1st Qtr, FY 2008 IOC: 4th Qtr, FY 2009 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2009 FY 2009 FY 2009 To Compl Total C PPN, BLI #, NOMEN) 13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continuing		Milestone C:	1st Qtr, FY 2007										
Milestone B: 4th Qtr, FY 2004 IOC: 4th Qtr, FY 2009 DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2010 Milestone C: 4th Qtr, FY 2007  **Ogram Funding Summary**  FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY2008 FY2009 To Compl Total COMPN, BLI #, NOMEN) D RDT&E,N  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing	LAV EFSS												
DT / OT: 1st Qtr, FY 2006 FOC: 4th Qtr, FY 2010  Milestone C: 4th Qtr, FY 2007  Pogram Funding Summary  FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY2008 FY2009 To Compl Total COMPN, BLI #, NOMEN)  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continuing					Contract Av	vard:	1st Qtr, FY	2008					
Milestone C: 4th Qtr, FY 2007  **Togram Funding Summary  **Page 13.369		Milestone B:	4th Qtr, FY 2004		IOC:		4th Qtr, FY	2009					
<u>rogram Funding Summary</u> FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY2008 FY2009 To Compl Total C  PPN, BLI #, NOMEN) () RDT&E,N  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continuing		DT / OT:	1st Qtr, FY 2006		FOC:		4th Qtr, FY	2010					
PPN, BLI #, NOMEN) ) RDT&E,N  13.369		Milestone C:	4th Qtr, FY 2007										
PPN, BLI #, NOMEN) ) RDT&E,N  13.369													
PPN, BLI #, NOMEN) ) RDT&E,N  13.369													
PPN, BLI #, NOMEN) ) RDT&E,N  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continu													
PPN, BLI #, NOMEN) ) RDT&E,N  13.369 4.725 4.216 37.306 25.421 11.405 1.648 1.429 Continuing Continu	rogram Funding S	Summary		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	To Compl	Total C
				<u> 2302</u>		2001		2000	<u></u>				
<u>) PMC, BLI#</u> 203800 LAV 25.192 52.067 13.191 51.341 57.399 78.269 113.454 82.727 Continuing Continu	J) <b>RDT&amp;E,N</b>			13.369	4.725			25.421	11.405	1.648			
	) <b>PMC, BLI#</b> 20	3800 LAV		25.192	52.067	13.191	51.341	57.399	78.269	113.454	82.727	Continuing	Continu

PROPRIATION/BI	Exhibi JDGET ACTIVITY	PROGRAM ELEMENT				DATE: PROJECT	NUMBER	AND NAM	ebruary 2 E	003
T&E, N /BA 7 Op	erational Sys Dev	0206623M Marine Corp Systems	os Ground Combat/S	ound Combat/Supporting Arms			jht Armore	d Vehicle	(LAV) PIP	
	LAV SCHEDULE	DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
	LAV SLEP									
	Milestone	III:	2Q							
	Contract A	ward:	3Q							
	IOC:			4Q						
	FOC:							2Q		
	LAV AAS									
	Milestone .	A:			N/A					
	Milestone	B:				1Q				
	DT / OT:						1Q			
	Milestone	C:						1Q		
	Contract A	ward:						1Q		
	IOC:								4Q	
	FOC:									4Q
	LAV C2									
	Milestone		Ongoing							
	Milestone	B:				1Q				
	DT / OT:						1Q			
	Milestone							1Q		
	Contract A	ward:						1Q		
	IOC:								1Q	
	FOC:									1Q
	LAV EFSS									
	Milestone		N/A							
	Milestone	B:			4Q					
	DT / OT:						1Q			
	Milestone							4Q		
	Contract A	ward:							1Q	
	IOC:									4Q
	FOC: (4Q	2010)								

E	XHIBIT R-2a, RD	T&E Project J	ustification		_		DATE:	_	_	
								Februar	y 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUM	IBER AND NA	ME						
	0206623M M	arine Corps G	Fround							
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supp	orting Arms	Systems		C1901 Marine	Corps Grou	nd Weaponry	PIP		
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	13.475	14.245	2.946	3.112	4.084	4.263	4.369	4.148	Cont	Cont
RDT&E Articles Qty	9	3								

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

(U) This project develops joint and Marine Corps unique improvements to infantry weapons and artillery technology, USMC unique Amphibious Armor Systems (AAS), improvements for the M1A1 Main Battle Tank and support systems, USMC Family of Small Craft, Night Vision Equipment, Underwater Reconnaissance, Family of Raid and Reconnaissance Equipment, Interim Small Unit Remote Scouting System (ISURSS) and monitors national and international weapons developments.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.823	0.000	0.000	0.000
RDT&E Articles Qty	8			

AN/GVS-5-Laser Range Finder replacement Advanced Eye Safe Range Finder and Observation System (AEROS): Funds used for engineering support and to purchase candidate systems for use in a down select. Systems will be used for developmental testing and further down select to a single engineering/manufacturing developmental (EMD) system.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.757	0.000	0.000
RDT&E Articles Qty				

AN/GVS-5 Replacement (AEROS): Funds provide engineering support and procurement of Engineering and Manufacturing Development (EMD) systems for OT&E and Developmental Testing (DT). Funds also used for software development test and integration. This program has moved to Project C3098 within this Program Element (PE).

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.317	0.000	0.000	0.000
RDT&E Articles Qty				

AN/TPQ-46 Radar Mod: Conducted analysis of U.S. Army led False Target Location Modifications (FTLM) engineering change proposal (ECP) package relative to defined requirements. Developed milestone decision documentation for FTLM ECP.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.266	0.278	0.000	0.000
RDT&E Articles Qty				

Family of Artillery Munitions (FAM): Support a production decision for the Modular Artillery Charge System, to include: Weapons Systems Explosive Safety Review Board testing, program support, and travel. Continue the active monitoring of U.S. Army artillery ammunition development programs to leverage and influence Army developmental efforts. This program has moved to Project C3098 within this PE.

EXHIBIT R-2a, RDT&E Project Justification				DATE:	
				Feb	ruary 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	MBER AND NAME		•	
	0206623M Marine Corps (	Ground			
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms	Combat/Supporting Arms Systems		C1901 Marine Corps Ground Weaponry PIP	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.452	0.000	0.000	
RDT&E Articles Qty					

Family of Raids and Reconnaissance Equipment: Continue participation with Natick Labs on refinement of Full Spectrum Battle Equipment (FSBE) program and enhancement of FSBE ensemble. Integrate logistics to standardize and improve existing close quarters battle and direct action combat equipment and all Marine Corps parachute programs. Continue on-going support to existing items that meet mission requirements for Close Quarter Battle and Parachute Operations. Continue development of Airborne systems that will allow military parachutist to carry combat equipment in various configurations and a means of supplying/re-supplying combat essentials to Marine units. Continue 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. This program has moved to Project C4002 within this PE.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.462	0.000	0.000	0.000
RDT&E Articles Qty				

<u>Family of Small Craft Mods</u>: Conducted engineering analysis and exploration of enhancements. Integration testing for a new navigation suite began. Marine Corps Programs Department (MCPD) Fallbrook continued to support Fault Analysis and Fault Isolation as needed. Past years' efforts have resulted in significant improvements to the safety of the Riverine Assault Craft.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.105	0.000	0.000
RDT&E Articles Qty				

Family of Small Craft Mods: Continue to pursue improvements for the Riverine Assault Craft and the rigid Raiding Craft. MCPD Fallbrook is the principle agency for supporting these efforts. Safety related issues will be priority, such as conducted in past years with the raw water cooling system. This program has moved to Project C4002 within this PE.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.065	0.000	0.000	0.000
RDT&E Articles Qty				

<u>Fire Support Mods</u>: Joint participation in artillery and fire support improvement projects. Specifically, developed a firing mechanism upgrade for the theodolite modification associated with the Meteorological Measuring System (MMS) as well as safety modifications and service life extension efforts.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.947	0.000	0.000
RDT&E Articles Qty				

<u>Fire Support Mods</u>: Joint participation in artillery and fire support improvement projects. Specifically, conduct life cycle analysis on the M198 Howitzer to develop Global Positioning System (GPS)-Selective Anti-Spoofing Module (SASAM) capability for the MMS and develop light Engineering Change Proposal (ECP) and software upgrades for the Firefinder Radar to include safety modifications and service life extension efforts. This program has moved to Project C3098 within this PE.

Е	DATE:					
		Febru	ary 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	PROGRAM ELEMENT NUMBER AND NAME				
	0206623M Marine Corps (	Ground				
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms	Combat/Supporting Arms Systems		C1901 Marine Corps Ground Weaponry PIP		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005		
Accomplishment/Effort Subtotal Cost	1.035	0.748	0.886	0.992		
RDT&E Articles Qty						
Infantry Weapons Mods: Joint participation	n and Marine Corps unique activitie	s for evaluation of safety, l	ethality, and technology improvement	ents for Marine Corps infantry	reconnaissance individual /crew	
served weapons. Past years' efforts have imp	pacted on the safety of M2 Machine	Guns and M249 Squad Au	tomatic Weapons and have include	ed the new M40A3 Sniper Rifle	e, the mortar systems, and the	

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 on 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 MEU(SOC) (Marine Expeditionary Unit Special Operations Capability) .45 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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.013
RDT&E Articles Qty				

Infantry Weapons Mods - FSR: Funds will be used for Life Cycle Management (LCM) issues on fielded systems. This is a roll-up line of individual modification lines.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.452	0.490	0.000	0.000
RDT&E Articles Qty				

Interim Small Unit Remote Scouting System (ISURSS): Operational system development, contractor support and program office travel.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.894	0.757
RDT&E Articles Qty				

Interim Small Unit Remote Scouting System (ISURSS): Funds will be used for development, demonstration and testing of product improvements and block upgrades to meet increasingly demanding Operational Requirements Document (ORD) thresholds. Significant increase in funding occurs after Milestone C (FY03) when the program transitions from a Science and Technology (S&T) experiment to an evolutionary acquisition program with MCSC in the lead.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.488	0.000	0.000
RDT&E Articles Qty				

<u>Interim Passenger Helicopter Aircrew Breathing Device</u>: Initiate R&D efforts in development of underwater breathing device providing limited life-saving capability. The device will allow an underwater breathing capability for Marines who find themselves in a downed helicopter scenario over water.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	7.373	4.719	0.000	0.000
RDT&E Articles Qty				

M1A1 Firepower Enhancement: Comparative assessments of competing designs and conduct system design review to finalize system performance specification. Perform EMD phase activities. Performed final integration and prove out. Procured test articles, conducted developmental test and evaluation, pre-production technical reviews/audits, and logistical support development/planning.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Ī
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.000	1
RDT&E Articles Qty					1

R-1 SHOPPING LIST - Item No. 188

	EXHIBIT R-2a, RDT&E Project J	ustification	DATE:						
					uary 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME		•	-				
	0206623M Marine Corps G	Fround							
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms		C1901 Marine Corps Grou	and Weaponry PIP					
M1A1 Firepower Enhancment (Forward					inalize system performance				
specification. Performed Final Integration a									
development/planning.		•							
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.274	0.246	0.000	0.000					
RDT&E Articles Qty	0.274	0.240	0.000	0.000					
M1A1 Armor Mods: Continued joint partic	rination and evaluation of prospective	modifications including	component enhancements, advanced	fire control systems, survive	l phility systems, combat				
identification, mobility and others. This pro					tomey systems, combat				
identification, mobility and others. This pro-	gram has moved to 110ject C2310, 1	E 0200024M, Me Combi	t service support in 1 104 and seye	nia.					
0.007 (0: 14:11: )	F)/ 0000	EV 0000	FV 0004	F)/ 0005					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.000	1.961	0.000	0.000					
RDT&E Articles Qty	DOD CC 4 : 1 1 4 / C 1	1' .' 1			I I'I I' GMDG				
Mortar Ballistic Computer (MBC): Initia	_			=					
technical firing computational software, and	integration to a commercial off-the s	shelf (COTS) hardware pla	atform. This program has moved to	Project C3098 within this Pl	Ľ.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.559	0.936	1.046	1.111					
RDT&E Articles Qty									
Night Vision Mod Line: Joint participation									
service engineering agent (ISEA) support at				Belvoir on new enhancemen	its for Image Intensification (I2)				
and fused multispectral weapon sight. Trave	el to support enhanced systems develo	pment and review of tests	•						
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.064	0.183					
RDT&E Articles Qty									
TACTICAL UNMANNED VEHICLE (T	<u>YUV):</u> Funds will be used for develo	pmental testing at Redstor	ne Arsenal.						
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.040	0.056	0.056	0.056					
RDT&E Articles Qty									
Thermal Weapons Sight (TWS)[AN/PAS	-13]: Provided for joint participation	in pre-planned product im	provement (P3I) for TWS – remote	image transfer, laser range fi	nder, aimport reticle (mechanical,				
quadrant-style sight), mounting brackets for									
	_		-		_				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005					
Accomplishment/Effort Subtotal Cost	0.497	0.000	0.000	0.000					
RDT&E Articles Qty	1								

EX	HIBIT R-2a, RDT&E Project J	ustification		DATE:	
	<u>-</u>				uary 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME		-	, <b>,</b>
	0206623M Marine Corps G	iround			
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms		C1901 Marine Corps Gro	ound Weaponry PIP	
Target Location Designation and Hand-Off					ensure interoperability with the
emerging Marine Corps tactical C4I architectur					
(Joint Variable Message Format) functionality.	e and wan outer the support plant	orms and ageneres. Conda	orea militar operational test and ex	and the real of the real	and artificity close air support
(* ;					
OOOT (0: NEW )	FV 0000	EV 0000	FV 0004	EV 0005	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	<del> </del>
Accomplishment/Effort Subtotal Cost	0.000	1.062	0.000	0.000	<del> </del>
RDT&E Articles Qty	(C) F 1 :1.16	3		. 1 . (DDD) 16 4	
Underwater Reconnaissance Capability (UR	-				
equipment (THSE) in support of Underwater R	econnaissance operations. Funds v	will also be used for suppor	t of the Program Management O	ffice. This program has move	d to Project C4002 within this
PE.					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.138	0.000	0.000	0.000	
RDT&E Articles Qty					
ATFP: Antiterrorism Force Protection funds w	vere utilized to conduct research a	nd develop for items that en	hanced the Marine Corps' capabi	lity to provide homeland defer	se, critical infrastructure
protection, and installation and operating force	security.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	$\neg$
Accomplishment/Effort Subtotal Cost	0.074	0.000	0.000	0.000	_
RDT&E Articles Qty	0.074	0.000	0.000	0.000	_
Flame Bunker Neutralization: Funds were u	tilized to conduct research and de	volonment to provide the M	foring Corns with the canability to	nanatrata and dastroy branch	walls field fortifications and
bunkers.	inized to conduct research and de-	velopilient to provide the iv.	arme Corps with the capability to	penetrate and destroy breach	wans, neid fortifications, and
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	$\neg$
Accomplishment/Effort Subtotal Cost	0.100	0.000	0.000	0.000	<del>- </del>
RDT&E Articles Qty	0.100	0.000	0.000	0.000	<del> </del>
MAGTF Expeditionary Family of Fighting	Vahicles (MFFFV): Operational	system development contr	actor support and program office	travel	
Dapentionary Lanning of Fighting	operational	system de veropinent, conti	actor support and program office		
(U) Total \$ 0.000	13.475	14.245	2.946	3.112	

	IBIT R-2a, RDT8	E Project Jus			D								
	1							February	/ 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE												
	0206623M Mar	•											
RDT&E, N /BA-7 Operational Sys Dev	Combat/Suppo	rting Arms Sy	stems		C1901 Marine Corps Ground Weaponry PIP								
U) PROJECT CHANGE SUMMARY:													
	FY2002	FY2003	FY2004	FY2005									
(U) FY 2003 President's Budget:	13.693	14.609	8.515	10.887									
(U) Adjustments from the President's Budget:													
(U) Congressional/OSD Program Reduction	-0.037	-0.364	-0.110	-0.110									
(U) Congressional Rescissions													
(U) Congressional Increases													
(U) Reprogrammings	0.088		-5.459	-7.665									
(U) Small Business Innovation Research	-0.269												
(U) Minor Affordability Adjustment	0.20)												
(U) FY 2004 President's Budget:	13.475	14.245	2.946	3.112									
CHANGE SUMMARY EXPLANATION:  (U) Funding: Change in FY 04 and FY 0  (U) Schedule: Not Applicable.  (U) Technical: Not Applicable.	5 is due to realig	nment of prog	rams within the	Marine Cor	ps during POM	04.							
<ul><li>(U) Funding: Change in FY 04 and FY 0</li><li>(U) Schedule: Not Applicable.</li><li>(U) Technical: Not Applicable.</li></ul>	_	nment of prog	rams within the	Marine Cor	ps during POM	04.							
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAN Line Item No. & Name	_	nment of progr FY 2003	rams within the	Marine Cor FY 2005	ps during POM FY 2006	04. <u>FY 2007</u>	FY 2008	FY 2009	<u>To Compl</u>				
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAI  Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh	RY: <u>FY 2002</u> 20.287	FY 2003 4.093	<u>FY 2004</u> 3.650	FY 2005 0.685	FY 2006 0.134	FY 2007 0.000	0.000	0.000	0.000	28.8			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAI  Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS	RY: <u>FY 2002</u> 20.287 1.277	FY 2003 4.093 3.229	FY 2004 3.650 6.757	FY 2005 0.685 11.877	FY 2006 0.134 10.253	FY 2007 0.000 11.746	0.000 11.590	0.000 10.269	0.000 Continuing	Total Co 28.8 Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI  Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS	RY: <u>FY 2002</u> 20.287 1.277 1.782	FY 2003 4.093 3.229 4.788	FY 2004 3.650 6.757 3.305	FY 2005 0.685 11.877 3.258	FY 2006 0.134 10.253 3.476	FY 2007 0.000 11.746 2.972	0.000 11.590 2.935	0.000 10.269 2.998	0.000 Continuing Continuing	28.8 Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAI  Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million	FY 2002 20.287 1.277 1.782 0.263	FY 2003 4.093 3.229 4.788 0.305	FY 2004 3.650 6.757 3.305 4.977	FY 2005 0.685 11.877 3.258 3.395	FY 2006 0.134 10.253 3.476 4.240	FY 2007 0.000 11.746 2.972 4.904	0.000 11.590 2.935 4.812	0.000 10.269 2.998 2.545	0.000 Continuing Continuing	28.84 Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System	FY 2002 20.287 1.277 1.782 0.263 3.881	FY 2003 4.093 3.229 4.788 0.305 23.847	FY 2004 3.650 6.757 3.305 4.977 13.712	FY 2005 0.685 11.877 3.258 3.395 10.080	FY 2006 0.134 10.253 3.476 4.240 9.964	FY 2007 0.000 11.746 2.972 4.904 0.052	0.000 11.590 2.935 4.812 0.000	0.000 10.269 2.998 2.545 0.000	0.000 Continuing Continuing Continuing 0.000	28.8 Continui Continui Continui 61.5			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#462000) Items <\$5M	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461	0.000 11.590 2.935 4.812 0.000 0.000	0.000 10.269 2.998 2.545 0.000 0.000	0.000 Continuing Continuing Continuing 0.000 Continuing	28.8 Continui Continui Continui 61.5 Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#462000) Items <\$5M U) PMC (BLI#473300) Fire Support Systems	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938	0.000 11.590 2.935 4.812 0.000 0.000 0.000	0.000 10.269 2.998 2.545 0.000 0.000	0.000 Continuing Continuing Continuing 0.000 Continuing Continuing	28.8 Continui Continui Continui 61.5 Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#462000) Items <\$5M U) PMC (BLI#473300) Fire Support Systems U) PMC (BLI#475000) Items Under \$5M (Intel)	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000	0.000 11.590 2.935 4.812 0.000 0.000 0.000	0.000 10.269 2.998 2.545 0.000 0.000 0.000	0.000 Continuing Continuing Continuing 0.000 Continuing Continuing Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#462000) Items <\$5M U) PMC (BLI#473300) Fire Support Systems U) PMC (BLI#475000) Items Under \$5M (Intel) U) PMC (BLI#493000) Night Vision Equipment	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509	0.000 11.590 2.935 4.812 0.000 0.000 0.000 0.000 13.795	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153	0.000 Continuing Continuing 0.000 Continuing Continuing Continuing Continuing Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#462000) Items <\$5M U) PMC (BLI#473300) Fire Support Systems U) PMC (BLI#475000) Items Under \$5M (Intel) U) PMC (BLI#493000) Night Vision Equipment U) PMC (BLI#643400) Amphibious Raid Equip	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521	0.000 Continuing Continuing 0.000 Continuing Continuing Continuing Continuing Continuing Continuing Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAN Line Item No. & Name (U) PMC (BLI#206200) Improved Recovery Veh (U) PMC (BLI#206300) MOD KITS AFS (U) PMC (BLI#220900) Mod Kits IWS (U) PMC (BLI#222000) Under \$5 Million (U) PMC (BLI#233400) Modular Weapon System (U) PMC (BLI#462000) Items <\$5M (U) PMC (BLI#473300) Fire Support Systems (U) PMC (BLI#475000) Items Under \$5M (Intel) (U) PMC (BLI#493000) Night Vision Equipment (U) PMC (BLI#643400) Amphibious Raid Equip (U) PMC (BLI#667000) Items Less Than \$5M	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722	0.000 Continuing Continuing 0.000 Continuing Continuing Continuing Continuing Continuing Continuing Continuing Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) Technical: Not Applicable.  (U) Technical: Not Applicable.  (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAN Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh  (U) PMC (BLI#206300) MOD KITS AFS (U) PMC (BLI#220900) Mod Kits IWS (U) PMC (BLI#2233400) Modular Weapon System (U) PMC (BLI#233400) Items <\$5M (U) PMC (BLI#473300) Fire Support Systems (U) PMC (BLI#475000) Items Under \$5M (Intel) (U) PMC (BLI#493000) Night Vision Equipment (U) PMC (BLI#643400) Amphibious Raid Equip (U) PMC (BLI#667000) Items Less Than \$5M (U) PMC (BLI#209500) M1A1 Firepower	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256 0.000	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082 0.000	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206 4.222	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196 41.979	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738 34.750	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288 17.829	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731 22.969	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722 0.000	0.000 Continuing Continuing O.000 Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAI Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh (U) PMC (BLI#206300) MOD KITS AFS (U) PMC (BLI#220900) Mod Kits IWS (U) PMC (BLI#222000) Under \$5 Million (U) PMC (BLI#233400) Modular Weapon System (U) PMC (BLI#473300) Fire Support Systems (U) PMC (BLI#475000) Items Under \$5M (Intel) (U) PMC (BLI#493000) Night Vision Equipment (U) PMC (BLI#643400) Amphibious Raid Equip	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722	0.000 Continuing Continuing 0.000 Continuing Continuing Continuing Continuing Continuing Continuing Continuing Continuing	28.8 Continui Continui 61.5 Continui Continui Continui Continui Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAN Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#473300) Fire Support Systems U) PMC (BLI#473000) Items Under \$5M (Intel) U) PMC (BLI#493000) Night Vision Equipment U) PMC (BLI#4643400) Amphibious Raid Equip U) PMC (BLI#667000) Items Less Than \$5M U) PMC (BLI#209500) M1A1 Firepower U) PMC (BLI#473400) SURSS	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256 0.000	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082 0.000	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206 4.222	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196 41.979	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738 34.750	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288 17.829	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731 22.969	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722 0.000	0.000 Continuing Continuing O.000 Continuing	28.8 Continui Continui 61.5 Continui Continui Continui Continui Continui Continui Continui Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMARIALINE Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million (U) PMC (BLI#233400) Modular Weapon System (U) PMC (BLI#473300) Fire Support Systems (U) PMC (BLI#475000) Items Under \$5M (Intel) (U) PMC (BLI#493000) Night Vision Equipment (U) PMC (BLI#4643400) Amphibious Raid Equip (U) PMC (BLI#667000) Items Less Than \$5M (U) PMC (BLI#473400) SURSS  (U) Related RDT&E:	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256 0.000 0.000	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082 0.000 0.000	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206 4.222 2.058	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196 41.979 10.092	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738 34.750 11.759	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288 17.829 0.928	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731 22.969	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722 0.000	0.000 Continuing Continuing O.000 Continuing	28.84 Continui Continui			
(U) Funding: Change in FY 04 and FY 0 (U) Schedule: Not Applicable. (U) Technical: Not Applicable.  (U) C. OTHER PROGRAM FUNDING SUMMAN Line Item No. & Name  U) PMC (BLI#206200) Improved Recovery Veh U) PMC (BLI#206300) MOD KITS AFS U) PMC (BLI#220900) Mod Kits IWS U) PMC (BLI#222000) Under \$5 Million U) PMC (BLI#233400) Modular Weapon System U) PMC (BLI#473300) Fire Support Systems U) PMC (BLI#473000) Items Under \$5M (Intel) U) PMC (BLI#493000) Night Vision Equipment U) PMC (BLI#4643400) Amphibious Raid Equip U) PMC (BLI#667000) Items Less Than \$5M U) PMC (BLI#209500) M1A1 Firepower U) PMC (BLI#473400) SURSS	FY 2002 20.287 1.277 1.782 0.263 3.881 5.159 3.584 1.995 30.159 2.267 5.256 0.000 0.000	FY 2003 4.093 3.229 4.788 0.305 23.847 18.212 34.134 4.155 22.725 21.835 9.082 0.000 0.000	FY 2004 3.650 6.757 3.305 4.977 13.712 0.463 28.444 0.000 24.428 21.404 5.206 4.222 2.058	FY 2005 0.685 11.877 3.258 3.395 10.080 0.462 12.668 0.000 38.575 30.394 5.196 41.979 10.092	FY 2006 0.134 10.253 3.476 4.240 9.964 0.461 3.800 0.000 27.724 18.968 4.738 34.750 11.759	FY 2007 0.000 11.746 2.972 4.904 0.052 0.461 1.938 0.000 32.509 6.696 6.288 17.829 0.928	0.000 11.590 2.935 4.812 0.000 0.000 0.000 13.795 3.458 6.731 22.969	0.000 10.269 2.998 2.545 0.000 0.000 0.000 0.000 19.153 3.521 6.722 0.000	0.000 Continuing Continuing O.000 Continuing	28.8 Continui Continui Continui 61.5 Continui Continui Continui Continui Continui Continui Continui Continui			

E	XHIBIT R-2a, RDT&E Project Justification		DATE:
			February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		,
	0206623M Marine Corps Ground		
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms Systems	C1901 Marine Corps Gro	und Weaponry PIP
(U) D. ACQUISITION STRATEGY:			
	shelf modifications to developmental items. TLDHS acquir		
	nd-held computer running target hand-off software develop		
	that more readily meets Marine Corps requirements. Mod ent competitively awarded two cost plus firm fixed price co		
	ost promising concept, continuing with design developmen		
exercising a firm fixed price contract option.	oot profitioning correctly, containeding with design developmen	it until production ready. Time	my, transition to production with the withing design by
a management of a management of a comment of			
(U) E. MAJOR PERFORMERS:			
	g Materials, Manual Validation and Test Support.		
Raytheon: McKinney, TX - Competitive integr	ration and demonstration for the FAR target location modif	fication.	
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									DATE:						
		Exhibit R-3 Cost Analysis			February 2003										
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEMENT				PROJE	CT NUME	SFR AND	NAME			,			
		0206623M Marine Corp	s Ground												
RDT&E, N /BA 7 Operational	Sys Dev	Combat/Supporting Arn				C1901 I	Marine C	orps Gro	ound We	aponry F	PIP				
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target	
-	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to		Value of	
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract	
PRODUCT DEVELOPMENT		SEE BELOW													
AN/GVS5 REPLACEMENT	WR	MCLB, Barstow, CA		0.034	2Q02	0.100	2Q03					Cont.	Cont.		
AN/GVS5 REPLACEMENT	WR	NSWC Dahlgren, VA		0.063	3Q02							Cont.	Cont.		
AN/GVS5 REPLACEMENT	RCP	Synetics, Inc. King George, VA				0.200	2Q03					Cont.	Cont.		
AN/GVS5 REPLACEMENT	RCP	MKI Woodbridge, VA		0.098	2Q02	0.050	2Q03					Cont.	Cont.		
AN/TPQ-46	RCP	BAEST, Stafford, VA		0.159	1Q02							Cont.	Cont.		
Fam Impr Mortars	MIPR	PM Mortars, Picatinny, NJ	0.155									Cont.	Cont.		
Fam Raid and Recon	MIPR	NATICK Labs, Natick, MA				0.258	1Q03					Cont.	Cont.		
Fam Raid and Recon	WR	CSS, Panama City, FL				0.194	1Q03					Cont.	Cont.		
Fam Small Craft Mods	WR/RCP	NSWC, Crane, IN	1.110	0.176	2Q02							Cont.	Cont.		
Fire Spt Mods	WR	Marine Det, Ft Sill, OK	0.180			0.050	1Q03					Cont.	Cont.		
Fire Spt Mods	MIPR	USArmy CECOM, Ft Monmouth, NJ	0.403			0.064	1Q03					Cont.	Cont.	1	
Fire Spt Mods	WR	NSWC, Crane, IN	0.030									Cont.	Cont.		
Fire Spt Mods	MIPR	TACOM, Rock Island, IL		0.070	4Q02							Cont.	Cont.		
Fire Spt Mods	RCP	Tallahassee Tech, FL		0.019	3Q02							Cont.	Cont.		
Fire Spt Mods	RCP	Mandus Group, San Diego, CA		0.004	1Q02							Cont.	Cont.		
Fire Spt Mods	WR	MCLB, Barstow, CA		0.115	3Q02							Cont.	Cont.		
Fire Spt Mods	WR	NSWC, Dahlgren, VA		0.043	3Q02							Cont.	Cont.		
Fire Spt Mods	VAR	VARIOUS	0.161	0.134	4Q02	0.193	2Q03					Cont.	Cont.		
Inf Weapon Mods	WR/RCP	MCCDC, Quantico, VA	0.725	0.092	1Q02	0.050	1Q03	0.050	1Q04	0.051	1Q05	Cont.	Cont.		
Inf Weapon Mods	WR	WTBN, Quantico, VA	0.008			0.176	2Q03	0.211	2Q04	0.216	2Q05	Cont.	Cont.		
ISURSS	WR	Pax River, MD		0.252	2Q02	0.229	2Q03	0.280	2Q04	0.286	2Q05	Cont.	Cont.		
MBC	RCP	TBD				0.409	2Q03					Cont.	Cont.		
M1A1 Firepower	RCP	RAYTHEON/DRS Torrance, CA	7.761	6.733	2Q02	3.000	2Q03					Cont.	Cont.		
M1A1 Firepower	MIPR	Night Vision Lab, Ft Belvoir, VA	0.400	0.200	2Q02	0.200	2Q03					Cont.	Cont.		
M1A1 Mods	RCP	Booz-Allen Hamilton, McLean, VA	0.176	0.108	1Q02	0.132	2Q03					Cont.	Cont.		
Nt. Vision Mod	WR/RCP	NSWC, Crane IN	0.095	0.041	1Q02	0.650	1Q03	0.685	1Q04	0.698	1Q05	Cont.	Cont.		
Nt. Vision Mod	MIPR	Night Vision Lab, Ft Belvoir, VA	0.150		2Q02	0.100	1Q03	0.100	1Q04	0.105	1Q05	Cont.	Cont.		
TWS	MIPR	Night Vision Lab, Ft Belvoir, VA	0.242			0.043	1Q03	0.044	1Q04	0.044	1Q05	Cont.	Cont.		
TLDHS	RCP	Synetics, Inc., King George, VA	1.990	0.180	1Q02	1				1		Cont.	Cont.		
IPHABD	MIPR	NATICK, Natick, MA				0.488	1Q03		1	1		Cont.	Cont.		
Underwater Recon (URC)	WR	CSS, Panama City, FL				0.310	2Q03		1	1		Cont.	Cont.		
Underwater Recon (URC)	RCP	CSS, Panama City, FL		1		0.248	2Q03		1	1	1	Cont.	Cont.		
TUV	WR	Redstone Arsenal, AL				5.2.0		0.064	1Q04	0.183	1Q05	Cont.	Cont.		
Flame Bunker	WR	Redstone Arsenal, AL		0.099	1Q02	1		0.004	1,007	000	1,000	0.000	0.099		
Subtotal Product Dev		. toustono rittoriai, rit	13.586	8.963	1302	7.144		1.434	†	1.583	1	Cont.	Cont.		

PROGRAM ELEMENT 0206623M Marine Corps G		Exhibit R-3 Cost Analysis										DATE: February 2003							
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ozoozom marmo corpo c	round				CT NUME														
Combat/Supporting Arms S		\$		C1901 N	larine Co	rns Gro	und Wea	nonry P	IP										
ning Tot			FY 02	0.001.1	FY 03	. po 0.0	FY 04	pomy .	FY 05			Target							
& PY		FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of							
n Co	-	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete		Contrac							
LOW	,,,,	0001	Date	0001	Bato	0001	Date	0001	Date	Complete	0001	Contract							
Quantico, VA		0.210	1Q02	0.280	1Q03					Cont.	Cont.								
, Stafford, VA		0.395	1Q02	0.425	1Q03					Cont.	Cont.								
Det, Ft Sill, OK		0.005	2Q02	0.010	2Q03					Cont.	Cont.								
F, Camp Pendleton, CA		0.010	2Q02	0.010	2000					Cont.	Cont.								
Dahlaren, VA		0.010	3Q02	0.200	2Q03					Cont.	Cont.								
, Stafford, VA		0.143	1Q02	0.200	ZQ03					Cont.	Cont.	<del> </del>							
Quantico, VA	+	0.143	1Q02							Cont.	Cont.	<u> </u>							
	0.108	0.013	1Q02	0.062	1Q03					Cont.	Cont.								
M-ARDEC, Picatinny, NJ	0.100	0.060	2Q02	0.002	1003					Cont.	Cont.	<del>                                     </del>							
, Stafford, VA		0.000	2002	0.020	Q103					Cont.	Cont.								
	0.050	0.050	1Q02	0.020	Q103					Cont.	Cont.								
	0.030	0.038	10/05							Cont.	Cont.								
	1.046	0.303	1Q02	0.440	1Q03					Cont.	Cont.								
Quantico, VA	0.347	0.230	1Q02	0.100	1Q03	0.135	1Q04	0.150	1Q05	Cont.	Cont.								
, Stafford, VA	0.096	0.230	1Q02	0.312	1Q03	0.133	1Q04	0.391	1Q05	Cont.	Cont.								
Dahlgren, VA	0.807	0.120	1Q02	0.512	1005	0.373	1004	0.551	1000	Cont.	Cont.	<del> </del>							
Albany, GA	0.007	0.120	1Q02							Cont.	Cont.								
	0.073	0.023	1Q02							Cont.	Cont.								
, Stafford, VA	0.212	0.179	1Q02	0.219	1Q03	0.179	1Q04	0.179	1Q05	Cont.	Cont.								
Quantico, VA		0.173	1002	0.213	1000	0.170	1Q04	0.140	1Q05	Cont.	Cont.								
Quantico, VA		0.019	1Q02	0.020	1Q03	0.020	1Q04	0.020	1Q05	Cont.	Cont.								
Quantico, VA		0.013	1002	0.020	1005	0.020	2Q04	0.020	2Q05	Cont.	Cont.								
						0.050	2Q04 2Q04	0.050	1Q05	Cont.	Cont.								
, Stafford, VA	0.064	0.362	2Q02			0.030	2004	0.030	1000	Cont.	Cont.	<del> </del>							
	0.004	0.302	2002	0.500	2Q03					Cont.	Cont.								
,	0.032	0.040	1Q02	0.300	ZQ03					Cont.	Cont.								
,	0.032	0.040	1Q02							Cont.	Cont.								
	0.075	0.000	1002	0.832	1Q03					Cont.	Cont.								
	0.073			0.052	1Q03	0.126	1Q04	0.138	1Q05	Cont.	Cont.								
, Stafford, VA	0.113	0.150	1Q02	0.030	2Q03	0.126	2Q04	0.136	2Q05	Cont.	Cont.	<del>                                     </del>							
Quantico, VA	0.147	0.130	Various	0.111	ZQU3	0.110	∠५∪4	0.140	2000	Cont.	Cont.	<del>                                     </del>							
, Stafford, VA	0.037	0.020	various	0.013	2Q03	0.012	2Q04	0.012	2Q05	Cont.	Cont.	<del>                                     </del>							
		0.072	Various	0.013	2000	0.012	2WU4	0.012	2000										
												<del>                                     </del>							
	0.243	0.000	various	0.108	2003							<del>                                     </del>							
Quantico, VA	+			0.100	2003			0.013	1005			<del>                                     </del>							
Stafford VA	+	0.100	1002					0.013	1000										
	1											<del>                                     </del>							
	5 244		1002	3 702		1 370		1 320				<del>                                     </del>							
, (	Stafford, VA Quantico, VA Quantico, VA Quantico, VA Stafford, VA Stafford, VA	Stafford, VA 0.396 Quantico, VA 0.243 Quantico, VA Stafford, VA	Stafford, VA         0.396         0.072           Quantico, VA         0.243         0.033           Quantico, VA         0.100           Stafford, VA         0.100           Stafford, VA         0.100	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.100         1Q02           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108         2Q03           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108         2Q03           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108         2Q03           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108         2Q03           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various           Quantico, VA         0.243         0.033         Various           Quantico, VA         0.108         2Q03           Stafford, VA         0.100         1Q02           Stafford, VA         0.100         1Q02	Stafford, VA         0.396         0.072         Various         Cont.           Quantico, VA         0.243         0.033         Various         Cont.           Quantico, VA         0.108         2Q03         Cont.           Stafford, VA         0.100         1Q02         0.000           Stafford, VA         0.100         1Q02         0.000	Stafford, VA         0.396         0.072         Various         Cont.         Cont.           Quantico, VA         0.243         0.033         Various         Cont.         Cont.           Quantico, VA         0.108         2Q03         Cont.         Cont.           Quantico, VA         0.013         1Q05         Cont.         Cont.           Stafford, VA         0.100         1Q02         0.000         0.100           Stafford, VA         0.100         1Q02         0.000         0.100							

R-1 SHOPPING LIST - Item No. 188

APPROPRIATIONEUDGET ACTIVITY			Exhibit R-3 Cost Analysis				DATE: February 2003								
Contact   Combat/Supporting Arms Systems	APPROPRIATION/BUDGET A	CTIVITY					PROJEC	CT NUME	BER AND	NAME	<u> </u>				
ROTAE, N. BA 7 Operational Sys Dev Condat/Supporting Arms Systems Cost Categories Contact Performing Total Tallo fro tw BS, or System/Hem Method Requirements) Requirements VPR NAIVEY-S-E Replacement WR MCDTEA, Quantico, VA 0.085 2002 0.093 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095 0.095		•		ps Ground											
Cost Calegories	RDT&E. N /BA 7 Operational	Svs Dev		-			C1901 N	larine Co	orps Gro	und Wea	nonry P	IP			
Cast						FY 02			1		.pomy :				Target
Requirements   Stype   Location	3				FY 02	_			FY 04	_	FY 05		Cost to	Total	Value o
SEE BELOW				_					_						Contrac
ANGVS-5 Replacement   WR   MCOTEA, Quantico, VA   0.095   2002   0.200   2.003     Cont.   Cont.   ANGVS-5 Replacement   WR   MCOTEA, Quantico, VA   0.023   3.002   0.192   2.003     Cont.   Cont.   Fam Arrillery Munitions   WIRRCP   NSWC, Crane, IN   0.122   0.000   1.002   0.151   1.003     Cont.   Cont.   Family Small Craft Mods   WR   NSWC, Crane, IN   0.231   0.092   1.002     Cont.   Family Small Craft Mods   WR   NSWC, Crane, IN   0.231   0.092   1.002     Cont.   Family Small Craft Mods   WR   Controok, Can   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.025   0.083   0.093   0.067   2.004   0.099   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.076   0.010   Various, 0.069   2.003   0.067   2.004   0.099   2.005   Cont.   Fire Spt Mods   WR   MCCDEA, Quantico, VA   0.170   0.065   Various, 0.069   2.003   0.067   2.004   0.099   2.005   Cont.   Fire Spt Mods   WR   MCCDEA, Quantico, VA   0.170   0.065   Various, 0.069   2.003   0.067   2.004   0.099   2.005   Cont.   Fire Spt Mods   WR   MCCDEA, Quantico, VA   0.170   0.065   Various, 0.069   2.003   0.067   2.004   0.085   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.170   0.065   Various, 0.069   2.003   0.050   2.004   0.085   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.050   0.045   1.002   0.025   2.003   0.050   2.004   0.085   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.050   0.045   1.002   0.025   2.003   0.050   2.004   0.085   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.050   0.012   Various, 0.050   0.025   2.004   0.025   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.050   0.012   Various   0.025   2.003   0.025   2.004   0.025   2.005   Cont.   Fire Spt Mods   WR   MCOTEA, Quantico, VA   0.050   0.025   2.003   0.025   2.004   0.025   2.005   Cont.   Fire Spt Mods   WR		ш туро		0001	0001	Date		Date	0001	Buto	0001	Date	Complete	0001	Contrac
AMCUS-S. Replacement RCP Asbury Int., Steffing, VA 0.023 3002 0.092 2003		WR			0.095	2002	0.200	2003					Cont.	Cont.	
Fam Arillery Munitions															
Family Small Craft Mods   WR   NSWC, Crane, IN   0.231   0.992   1.002     0.000   2.003     Cont.   Cont.   Cont.   Eamily Small Craft Mods   WR   Earderook, MD     0.025   1.003     Cont.   Cont		_	, <u>U</u>	0.182											
Family Small Craft Mods			NSWC, Crane, IN				0.101	1 000							
Family Small Craft Mods				0.201	0.002	. 402	0.080	2003						_	
Fire Spt Modes															
Inf Wigh Mods				0.025											
Int Wiph Mods					0.010	Various			0.067	2004	0.099	2005			
MBC															
MIA1 Firepower				0.170	0.000	Various			0.000	LQ01	0.000	2400			
M1A1 Firepower   WR   MCOTEA, Quantico, VA   0.100   0.927   2Q03     Cont.   Cont.   Cont.   M1A1 Mods   MIPR   Yuma Proving Grds, Yuma, AZ   0.090   1Q02   Cont.				0.050	0.045	1002									
M1A1 Mods   MIPR	M1A1 Firepower				0.010	1002									
N. Vision Mods				0.100	0.090	1002	0.021	LQUU							
TWS				0.075			0.025	2003	0.025	2004	0.025	2005			
TLDHS   WR   NSWC, Dahlgren, VA   0.596   0.085   1.002   Cont.   Cont.   Cont.   Cont.   Subtotal T&E   Cont Categories   Contract (Tailor to WBS, or System/Item/Method Activity & PY's   FY 02   Award Cost   Award Cost   Award PY 05   Award PY 05   Award PY 05   Award Cost   Date   Cost   Date   Cost   Cost							0.020	LQUU	0.020	LQ01	0.020	LQUU			
TLDHS	_														
Subtotal T&E   Cont.															
Remarks:		****	MOOTEN, Quantios, VII			LGOL	2.258		0.142		0.209			_	
Cailor to WBS, or System/Item   Method & Type   Location   Cost   Cost   Cost   Cost   Cost   Cost   Date   Cost   Cost   Date					0.0	1	0		V=		0.200				1
Cation to WBS, or System/Item   Method & Type   Location   Cost   Cost   Cost   Cost   Cost   Cost   Date   Cost   Cost   Date	Cost Categories	Contract	Performing	Total		FY 02	FY 03	FY 03		FY 04		FY 05			Target
Requirements   State   Location   Cost   Cost   Date   Date   Cost   Date   D			<u> </u>		FY 02	_			FY 04	_	FY 05		Cost to	Total	Value o
MANAGEMENT         SEE BELOW         0.095         2Q02         0.100         1Q03         Cont.							0000								Contrac
AN/GVS-5 REPLACEMENT RCP BAEST, Stafford, VA 0.095 2Q02 0.100 1Q03		ш туро		0001	0001	Date		Date	0001	Buto	0001	Date	Complete	0001	Contrac
Fam Artillery Munitions         WR         MCSC, Quantico, VA         0.12         1Q02         Cont.         Cont.         Cont.           Fam Artillery Munitions         MIPR         TACOM, Rock Island, IL         0.006         3Q02         Cont.		RCP			0.095	2002	0.100	1003					Cont	Cont	
Fam Artillery Munitions         MIPR         TACOM, Rock Island, IL         0.006         3Q02           Cont.         Cont.           Fire Supt Mods         WR         MCSC, Quantico, VA         0.582         0.149         1Q02         0.080         1Q03          Cont.         Cont.           Fire Supt Mods         WR         Marine Det, Ft Sill, OK         0.032         1Q02           Cont.		_					0.100	1000							
Fire Supt Mods         WR         MCSC, Quantico, VA         0.582         0.149         1Q02         0.080         1Q03         Cont.         Cont.           Fire Supt Mods         WR         Marine Det, Ft Sill, OK         0.032         1Q02         Cont.         Cont.         Cont.           Fire Supt Mods         WR         Various         0.027         Various         Cont.         Con	,														
Fire Supt Mods         WR         Marine Det, Ft Sill, OK         0.032         1Q02         Cont.         Cont.         Cont.           Fire Supt Mods         WR         Various         0.027         Various         Cont.				0.582			0.080	1003							
Fire Supt Mods         WR         Various         0.027         Various         Cont.				0.002			0.000	. 300	<b>†</b>						<u> </u>
Inf Wpns Mods			, ,						<b>†</b>						
MBC         RCP         BAEST, Stafford, VA         0.260         1Q03         Cont.         Cont.           M1A1 MOD KIT         RCP         BAEST, Inc, Dumfries, VA         0.011         0.120         1Q03         Cont.         Cont.           M1A1 Firepower         RCP         BAEST, Stafford, VA         0.011         0.069         2Q02         0.185         2Q03         Cont.         Cont.           Underwater Recon (URC)         RCP         BAEST, Stafford, VA         0.396         2Q03         Cont.         Cont.         Cont.           Fam of Raid and Recon         WR         MCSC, Quantico, VA         Cont.         Cont.         Cont.         Cont.           TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.				0 273	0.021	V 411043			t						t
M1A1 MOD KIT         RCP         BAEST, Inc, Dumfries, VA         0.011         0.120         1Q03         Cont.         Cont.         Cont.           M1A1 Firepower         RCP         BAEST, Stafford, VA         0.011         0.069         2Q02         0.185         2Q03         Cont.         Cont.         Cont.           Underwater Recon (URC)         RCP         BAEST, Stafford, VA         0.396         2Q03         Cont.         Cont.         Cont.           Fam of Raid and Recon         WR         MCSC, Quantico, VA         Cont.         Cont.         Cont.         Cont.           TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:				0.210		t	0.260	1003	t						t
M1A1 Firepower         RCP         BAEST, Stafford, VA         0.011         0.069         2Q02         0.185         2Q03         Cont.         Cont.         Cont.           Underwater Recon (URC)         RCP         BAEST, Stafford, VA         0.396         2Q03         Cont.         Cont.         Cont.           Fam of Raid and Recon         WR         MCSC, Quantico, VA         Cont.         Cont.         Cont.         Cont.         Cont.           TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:				0.011		<u> </u>			<u> </u>						
Underwater Recon (URC)         RCP         BAEST, Stafford, VA         0.396         2Q03         Cont.         Cont.           Fam of Raid and Recon         WR         MCSC, Quantico, VA         Cont.         Cont.         Cont.           TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:				0.0	0.069	2002			t						t
Fam of Raid and Recon         WR         MCSC, Quantico, VA         Cont.         Cont.         Cont.           TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:		_		3.011	0.000										
TLDHS         RCP         BAEST, Stafford, VA         0.013         0.005         Various         Cont.         Cont.         Cont.           Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:	, ,						0.000	_400							
Subtotal Management         0.890         0.503         1.141         0.000         0.000         Cont.         Cont.           Remarks:				0.013	0.005	Various			t						t
Remarks:			2.120., 0.0.1010, 771			. 011000	1.141		0.000		0.000				
T.(10.)			l	3.000	2.300	1			1 5.500	l .	1.500	<u> </u>		30.76	<u> </u>
10tal Cost	Total Cost				13.475		14.245		2.946		3.112		Cont.	Cont.	

			DATE:
	Exhibit R-4/4a Schedule Profile/Detail		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT N	NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C1901 Mari	ne Corps Ground Weaponry PIP

# THERMAL WEAPON SIGHT (TWS)

Fiscal Year	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total
OMNI Cntr Awd (Jul 98)													
USA MS II (Aug 98)													
OT&E (Bridge) USA		Fel	00-Mar	0									
IOT&E (USMC)		•	Aug 00										
Indep Log Assessment			Sep 00										
MCOTEA IER			Sep 00	-Nov 00									
ULSS			Sep	00 -Jan 0									
USMC ADM (MS I/III)			•	Aug 01									
Awd OMNI Cntr Options			•	Sept01	Oct 02	Oct 03	Oct 04						
TWS Production							July 02-	Aug 04					
Fielding Decision					Oct 02								
IOC					•	Sept03							
FOC - Medium					l		Sep 04						

Program Funding Summary (APPN, BLI #, NOMEN)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N	0.040	0.056	0.056	0.056	0.000	0.000	0.000	0.000	0.000	0.208
(U) PMC, BLI# 493000 Night Vision Equip	17.923	18.341	19.111	13.924	0.000	0.000	0.000	0.000	0.000	69.299

		JLASSII						
Exhibit R-4/4a Schedul	e Profile/Deta	ail				DATE:	Februa	ry 2003
PROGRAM ELEMENT					PROJECT N	NUMBER AN	ID NAME	<u>,                                    </u>
0206623M Marine Corps Gi	ound Comba	at/Supportin	g Arms Syst	ems	C1901 Mari	ne Corps G	round Weap	onry PIP
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
	1st QTR							
		1st QTR						
		4th QTR						
			4th QTR					
		0206623M Marine Corps Ground Comba t SCHEDULE DETAIL FY 2002	0206623M Marine Corps Ground Combat/Supportin           t SCHEDULE DETAIL         FY 2002         FY 2003           1st QTR         1st QTR	0206623M Marine Corps Ground Combat/Supporting Arms Systems SCHEDULE DETAIL FY 2002 FY 2003 FY 2004  1st QTR  1st QTR  4th QTR	0206623M Marine Corps Ground Combat/Supporting Arms Systems           t SCHEDULE DETAIL         FY 2002         FY 2003         FY 2004         FY 2005           1st QTR         1st QTR         4th QTR	0206623M Marine Corps Ground Combat/Supporting Arms Systems         C1901 Marine Corps Ground Combat/Supporting Arms Systems           t SCHEDULE DETAIL         FY 2002         FY 2003         FY 2004         FY 2005         FY 2006           1st QTR         1st QTR         4th QTR         4th QTR         4th QTR	0206623M Marine Corps Ground Combat/Supporting Arms Systems         C1901 Marine Corps G           t SCHEDULE DETAIL         FY 2002         FY 2003         FY 2004         FY 2005         FY 2006         FY 2007           1st QTR         1st QTR         4th QTR         4th QTR         4th QTR         4th QTR	0206623M Marine Corps Ground Combat/Supporting Arms Systems         C1901 Marine Corps Ground Weap           t SCHEDULE DETAIL         FY 2002         FY 2003         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008           1st QTR         1st QTR         4th QTR         4th QTR         4th QTR         4th QTR

E	XHIBIT R-2a, RDT&E	Project Just	ification				DATE:			
								Februai	y 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUI	MBER AND N	IAME						
RDT&E, N /BA-7 Operational Sys Dev	0206623M M	arine Corps	<b>Ground Com</b>	bat Arms Sy	stems	C2086 Marir	ne Enhancem	ent Program	n (MEP)	
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	2.199	2.335	2.632	2.669	2.627	2.673	2.753	2.806	Cont	Cont
•										
RDT&E Articles Qty										

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

(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.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.185	0.722	0.873	0.853
RDT&E Articles Qty				

Explore NDI equipment that will improve the combat effectiveness and enhance safety and survivability of the Individual Marine.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.355	0.844	0.864	0.898
RDT&E Articles Qty				

Explore clothing and individual equipment NDI categories.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.659	0.769	0.895	0.918
RDT&E Articles Qty				

Explore ground weapons, communications and command and control equipment NDI categories.

(U) Total \$ 2.199 2.335 2.632 2.669

EXHIBI	ΓR-2a, RDT&E P	Project Justif	ication				DATE:	February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	EMENT NUME	BER AND NA	ME				rebruary 2003	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Mar	ine Corps G	ound Comb	at Arms Syst	ems	C2086 Marine	Enhanceme	ent Program (MEP)	
(U) Project Change Summary:	FY2002	FY2003	FY2004	FY2005					
(U) FY 2003 President's Budget:	2.532	2.392	2.708	2.747					
(U) Adjustments from the President's Budget:									
(U) Congressional/OSD Program Reductions	-0.007	-0.057	-0.076	-0.078					
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-0.301								
(U) SBIR/STTR Transfer	-0.025								
(U) Minor Affordability Adjustment (U) FY 2004 President's Budget:	2.199	2.335	2.632	2,669					
(U) Schedule: Not Applicable. (U) Technical: Not Applicable.									
(U) C. OTHER PROGRAM FUNDING SUMMARY: <u>Line Item No. &amp; Name</u>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 To Compl	Total Cost
(U) PMC (BLI #221100) MEP	2.487	7.977	6.898	4.036	3.837	3.828	3.954	4.027 Continuing	Continuing
(U) Related RDT&E: PE 0604713A (Combat Feedi	ng, Clothing and	Equipment)							
(U) D. ACQUISITION STRATEGY: NDI/COTS									

		EXH	IBIT R-2a, RDT&E	Project Justification		DATE:
			·	-		February 2003
APPROPRIATION/BU	<b>JDGET ACTIVITY</b>		PROGRAM EL	EMENT NUMBER AND NAME		
RDT&E, N/BA-7 Ope	rational Sys Dev	,	0206623M Ma	rine Corps Ground Combat Arms Systems	C2086 Mari	ne Enhancement Program (MEP)
(U) E. MAJOR PERF	ORMERS:		•		•	
Performer	<u>Effort</u>	<u>FY</u>	Award Date	<u>\$ Amt</u>		
USA, SBCCOM, Natick Mass	Product Development	FY02	Dec-01	151		
USA, SBCCOM, Natick Mass	DT&E	FY02	Mar-02	290		
USA, SBCCOM, Natick Mass	Product Development	FY03	Dec-02	71		
USA, SBCCOM, Natick Mass	DT&E	FY03	Mar-03	290		
NSWC, Crane Indiana	Product Development	FY03	Dec-02	90		
NSWC, Crane Indiana	DT&E	FY03	Dec-02	249		
NAWC, Pax River, Maryland	Product Development	FY03	Dec-02	63		
NAWC, Pax River, Maryland	DT&E	FY03	Dec-02	276		
USA, SBCCOM, Natick Mass	Product Development	FY04	Dec-03	142		
USA, SBCCOM, Natick Mass	DT&E	FY04	Jan-03	299		
USA, SBCCOM, Natick Mass	Product Development	FY05	Dec-04	143		
USA, SBCCOM, Natick Mass	DT&E	FY05	Dec-04	308		
NSWC, Crane Indiana	Product Development	FY05	Dec-04	97		
NSWC, Crane Indiana	DT&E	FY05	Dec-04	347		
NAWC, Pax River, Maryland	Product Development	FY05	Dec-04	72		
NAWC, Pax River, Maryland	DT&E	FY05	Dec-04	373		

I e	Sys Dev Contract	PROGRAM ELEMEN 0206623M Marine ( Combat Arms System			חחס ובנ				Feb	ruary 20	03			
RDT&E, N /BA 7 Operational S Cost Categories	Sys Dev Contract	0206623M Marine (												
Cost Categories	Contract			_	PROJEC	CT NUMB	ER AND	NAME						
Cost Categories	Contract	Combat Arme Syct	•	und				_						
I			1	1		larine Er		Program		Т	I	1		
č		Performing	Total		FY 02	=> / 0.0	FY 03		FY 04		FY 05			Target
	Method	Activity &	PY s	FY 02	Award		Award		Award		Award	Cost to	Total	
Product Development 19	& Type	Location	Cost	Cost	Date	Cost	Date		Date	Cost	Date	Complete	Cost	Contract
	WR	Lexington-Bluegrass, Lex, KY	2.447	0.052		0.049		0.051	1Q04	0.053	1Q05	Cont.	Cont.	
	WR	NOC PacDiv, Fallbrook, CA	0.238			0.036		0.038	1Q04	0.041	1Q05	Cont.	Cont.	
		MCTSSA, CamPen, CA	0.613			0.006		0.056	1Q04	0.056		Cont.	Cont.	
-		NCTRF, Aberdeen, MD	0.498			0.119		0.114	1Q04	0.115		Cont.	Cont.	
	MIPR	NATICK, Natick, MA	1.408		1Q02	0.071	1Q03	0.142	1Q04	0.143		Cont.	Cont.	
	MIPR	ARL/APG Aberdeen, MD	0.262			0.010		0.017	1Q04	0.017	1Q05	Cont.	Cont.	
	MIPR	NSMA, Washington DC	0.362	0.020		0.020		0.020	1Q04	0.020		Cont.	Cont.	ļ
	MIPR	TACOM, Warren MI	0.088			0.012		0.012	1Q04	0.013		Cont.	Cont.	
		2nd MARDIV, CamLej, NC	0.427	0.038		0.030		0.036	1Q04	0.036		Cont.	Cont.	
	WR	2nd MARDIV, CamLej, NC	0.072	0.008		0.005		0.008	1Q04	0.008		Cont.	Cont.	
	WR	NCCOSC, San Diego, CA	0.247			0.014		0.020	1Q04	0.020		Cont.	Cont.	
	WR	NCSS, Panama City, FL	1.900	0.035		0.030		0.033	1Q04	0.034		Cont.	Cont.	
	WR	NSWC, Crane, IN	2.072	0.097		0.090		0.096	1Q04	0.097	1Q05	Cont.	Cont.	
Product Development	WR	NAWC Air Div, Pax River, MD	0.335	0.072	1Q02	0.063	1Q03	0.071	1Q04	0.072	1Q05	Cont.	Cont.	
Product Development	WR	II MEF, CamLej, NC	0.090	0.010	1Q02	0.007	1Q03	0.018	1Q04	0.019	1Q05	Cont.	Cont.	
Subtotal Product Dev			11.059	0.632		0.562		0.732		0.744		Cont.	Cont.	
Remarks:			1 11000				I			• • • • • • • • • • • • • • • • • • • •	ı			
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
9	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
[6	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Integrated Logistics Support	WR	MCCDC, Quantico, VA	2.113	0.095		0.050	1Q03	0.098	1Q04	0.099	1Q05	Cont.	Cont.	
	Various	MISC	4.609				Various		Various		Various	Cont.	Cont.	
Subtotal Support			6.722	0.165		0.110		0.168		0.175				

Exhibit R-3 Cost Analysis					DATE:				For	oruary 20	ากร			
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEME	NIT			T NUME	ED VVID	NAME	I CL	Jiuaiy Zu	<i>,</i> 03			
AFFROFRIATION/BUDGET A	CIIVIII				PROJEC	JI NOWE	DEK AND	INAIVIE						
DDT0E N. /DA 7 Outside and	0 - 5	0206623M Marine		ouna	00000			<b>D</b>	(14ED)					
RDT&E, N /BA 7 Operational		Combat Arms Syst				larine Er		Program		1	T=	T T		
Cost Categories		Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
	Method	Activity &	PY s	FY 02		FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Developmental Test & Eval		MCTSSA, CamPen, CA	1.866			0.055	1Q03	0.055	1Q04	0.057	1Q05	Cont.	Cont.	
Developmental Test & Eval		NCTRF, Aberdeen, MD	0.861	0.018		0.020		0.022	1Q04	0.023	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	NATICK, Natick, MA	2.780			0.290		0.299	1Q04	0.308	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	ARL/APG Aberdeen, MD	0.827			0.180		0.038	1Q04	0.040	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	PPSC, Phjladelphia, PA	0.055			0.026		0.027	1Q04	0.028	1Q05	Cont.	Cont.	
Developmental Test & Eval		MCAGCC 29 Palms, CA	0.369			0.019		0.032	1Q04	0.033	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	NSMA, Washington DC	0.581			0.035		0.038	1Q04	0.038	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	TACOM, Warren MI	0.241	0.031	1Q02	0.033		0.034	1Q04	0.034	1Q05	Cont.	Cont.	
Developmental Test & Eval	MIPR	NHRC, Crane, IN	1.980			0.352		0.238	1Q04	0.239	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	2nd MARDIV, CamLej, NC	0.248			0.026		0.027	1Q04	0.028	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	NCCOSC, San Diego, CA	0.746			0.045		0.057	1Q04	0.057	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	NCSS, Panama City, FL	6.222		1Q02	0.030	1Q03	0.028	1Q04	0.029	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	NSWC, Crane, IN	7.015	0.019	1Q02	0.135	1Q03	0.247	1Q04	0.347	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	NAWC Air Div, Pax River, MD	1.126	0.231	1Q02	0.276		0.274	1Q04	0.373	1Q05	Cont.	Cont.	
Developmental Test & Eval	WR	NSWC, Indian Head, MD	0.576			0.021	3Q03	0.02	1Q04	0.021	1Q05	Cont.	Cont.	
Developmental Test & Eval	Various	MISC	9.194	0.237	Various	0.120	Various	0.296	Various	0.095	Various	Cont.	Cont.	
Subtotal T&E			34.687	1.402		1.663		1.732		1.750	)	Cont.	Cont.	
Remarks:						_		-	_					
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
_	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Subtotal Management			0.000	0.000		0.000		0.000		0.000	)	Cont.	Cont.	
Remarks:	•		-	•		•		-	•	•	•			
Total Cost			52.468	2.199		2.335		2.632		2.669	9	Cont.	Cont.	
	1	1			L		L		·		<u> </u>		<b>0</b> 0.10.	

E	XHIBIT R-2a, R	DT&E Projec	t Justificatio	n				DATE:		
									February 2	003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM I	ELEMENT N	JMBER AND	NAME	PROJECT N	UMBER AND	NAME			
	0206623M M	Marine Corps	Ground							
RDT&E, N /BA-7 Operational Sys Development	Combat/Sup	porting Arm	s Systems		C2503 FAMI	LY OF COM	BAT EQUIPM	MENT SUPPO	ORT AND SE	RVICES
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	1.663	1.087	3.741	3.976	7.223	7.526	9.097	10.138	Cont	Cont
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. 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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.178	0.770	1.039	1.062
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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.181	0.000	0.875	1.373
RDT&E Articles Qty				

Family of Field Medical Equipment: Development of new Authorized Dental and Medical Allowance Lists (AMALs and ADALs) for new technology insertion and to significantly reduce the weight and cube size to enhance support of the operational forces and comply with expeditionary maneuver warfare.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.050	0.125	0.718	0.533
RDT&E Articles Qty				

Family of Field Medical Equipment: Testing of Commerical-off-the-shelf/Non-developmental item (COTS/NDI), medical equipment for the enroute care to evaluate functionality of the patient transportation.

E	XHIBIT R-2a, RDT	「&E Project 、	Justification				DATE:
	 				Inno 1505 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL			AME	PROJECT NUMBER AN	O NAME	
	0206623M Ma						
RDT&E, N /BA-7 Operational Sys Development	Combat/Supp	orting Arms	Systems		C2503 FAMILY OF COM	IBAT EQUIPN	MENT SUPPORT AND SERVICES
COST (\$ in Millions)	FY 200	02	FY 200	)3	FY 2004		2005
Accomplishment/Effort Subtotal Cost	0.254	4	0.000		0.600	0.5	500
RDT&E Articles Qty							
Family of Field Medical Equipment: Explore avai	lable technology to	ascertain the h	uman/medical e	effects of the	e Thermobaric Warfare threa	t on operationa	ll forces.
COST (\$ in Millions)	FY 200	02	FY 200	)3	FY 2004	FY 2	2005
Accomplishment/Effort Subtotal Cost	0.000		0.119		0.436	0.4	
RDT&E Articles Qty							
Family of Field Medical Equipment: Minimization	n of the Forward Re	suscitative Sur	gery System to	support trai	nsportation into one V-22B (	Osprey.	
COST (\$ in Millions)	FY 200	n2 T	FY 200	13	FY 2004	EV 1	2005
Accomplishment/Effort Subtotal Cost	0.000		0.073		0.073	0.0	
	0.000	,	0.073	<u>'                                    </u>	0.073	0.0	713
RDT&E Articles Qty  Family of Shelters and Shelter Equipment: Desig  Corps shelter programs.	n and engineering to	o increase capa	bility, reduce w	eight, cost	l and cube of soft wall shelter	s. Explore and	test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig	n and engineering to	) increase capa	bility, reduce w	veight, cost	and cube of soft wall shelters 3.741	s. Explore and	test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.	1.663		1.087	eight, cost			test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000		p increase capa	·	reight, cost	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000	1.663		1.087		3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget:	1.663 FY2002	FY2003	1.087 FY2004	FY2005	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget:	1.663 FY2002 1.284	FY2003 1.113	1.087 FY2004 1.139	FY2005 1.162	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions	1.663 FY2002 1.284	FY2003 1.113	1.087 FY2004 1.139	FY2005 1.162	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases	1.663 FY2002 1.284	FY2003 1.113	1.087 FY2004 1.139	FY2005 1.162	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Design Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions	1.663 FY2002 1.284 -0.004	FY2003 1.113	1.087  FY2004 1.139 -0.091	FY2005 1.162 -0.092	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  U) Total \$ 0.000  U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer	1.663  FY2002 1.284 -0.004	FY2003 1.113	1.087  FY2004 1.139 -0.091	FY2005 1.162 -0.092	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment	1.663  FY2002 1.284 -0.004	FY2003 1.113	1.087  FY2004 1.139 -0.091	FY2005 1.162 -0.092	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment (U) FY 2004 President's Budget:	1.663  FY2002 1.284 -0.004  0.394 -0.011	FY2003 1.113 -0.026	1.087  FY2004 1.139 -0.091 2.693	<b>FY2005 1.162</b> -0.092 2.906	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment (U) FY 2004 President's Budget: CHANGE SUMMARY EXPLANATION:	1.663  FY2002 1.284 -0.004  0.394 -0.011	FY2003 1.113 -0.026	1.087  FY2004 1.139 -0.091 2.693	<b>FY2005 1.162</b> -0.092 2.906	3.741		test new technologies to insert into the Mar
Family of Shelters and Shelter Equipment: Desig Corps shelter programs.  (U) Total \$ 0.000  (U) PROJECT CHANGE SUMMARY  (U) FY 2003 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment (U) FY 2004 President's Budget:	1.663  FY2002 1.284 -0.004  0.394 -0.011	FY2003 1.113 -0.026	1.087  FY2004 1.139 -0.091 2.693	<b>FY2005 1.162</b> -0.092 2.906	3.741		test new technologies to insert into the Mar

EX	DATE:					
			February 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME				
	0206623M Marine Corps Ground					
RDT&E, N /BA-7 Operational Sys Development	Combat/Supporting Arms Systems	C2503 FAMILY OF COMBAT EQUIPMENT SUPPORT AND SERVICES				
(U) C. OTHER PROGRAM FUNDING SUMMARY:		,				

Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	<b>Total Cost</b>
(U) PMC Line (BLI#652200) Field Med Equip	12.531	10.236	1.975	6.044	2.438	3.184	3.186	3.257	Cont	Cont

<sup>\*\*</sup> FY 02/FY 03 Forward Resuscitative Surgery System & Digital Radiography are the procurement programs contained within PMC Field Medical Equipment associated with Initial Issue.

(U) Related RDT&E: Not Applicable.

#### (U) D. ACQUISITION STFRATEGY:

**INITIAL ISSUE**: Items are all non-ACAT programs and utilize various acquisition strategies. Initial Issue 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 Initial Issue R&D 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. Various strategies are utilized.

### (U) E. MAJOR PERFORMERS:

INITIAL ISSUE: U.S. Army Natick Research, Development and Engineering Center, Natick, Mass.

**SHELTERS:** TBD based on current technology being pursued in FY-03-FY05.

FAMILY OF FIELD MEDICAL EQUIPMENT: TBD base on current technology being pursued in FY04-FY05.

(U) SCHEDULE PROFILE: Not Applicable.

							DATE:							
		Exhibit R-3 Cost Analysis									ary 2003			
APPROPRIATION/BUDGET ACTIVITY				M ELEME					PROJECT NUMBER AND NAME					
			0206623N	/ Marine (	Corps Gr	ound Com	nbat/Supp	oorting						
RDT&E, N /BA 7 Operationa	I Sys Deve	elopment	Arms Sys	stems						nitial Issue	•			
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Development/Tech Insertion	MIPR	USASSCOM Natick, MA	2.156	0.811	1Q/02	0.522	1Q/03	0.553	1Q/04	0.717	1Q/05	Cont.	Cont.	
Development/Tech Insertion	FFP	TBD						1.439	2Q/04	1.263	2Q/05	Cont.	Cont.	
<del> </del>														
Subtotal Product Dev			2.156	0.811		0.522		1.992		1.980		Cont.	Cont.	
Remarks:	l		2.100	0.011	l.	0.022	1	1.002	l	1.500	1	Oont.	Oont.	1
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Subtotal Support			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Operational Test & Eval	MIPR	USASSCOM Natick, MA	0.500	0.439	3Q/02	0.260	2Q/03	0.269	2Q/04	0.359	2Q/05	Cont.	Cont.	
Field User Evaluations	WR	FMF	0.342	0.283	2Q/02	0.142	2Q/03	1.300	2Q/04	1.452	2Q/05	0.000	3.519	
Subtotal T&E			0.842	0.722		0.402		1.569		1.811		Cont.	Cont.	
Remarks:														
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Contractor Eng Suppt	FFP/O	QUANTICO, VA	0.207	0.068	1Q/02	0.039	1Q/03	0.051	1Q/04	0.064	1Q/05	Cont.	Cont.	
Travel	WR	MCSC	0.040	0.062	1Q/02	0.041	1Q/03	0.046	1Q/04	0.038	1Q/05	Cont.	Cont.	
Labor	WR	MCSC				0.083	1Q/03	0.083	1Q/04	0.083	1Q/05			
Subtotal Management			0.247	0.130		0.163		0.180		0.185		Cont.	Cont.	
Remarks:	•	•	•		•		•				•	•	•	•
Total Cost				1.663		1.087	1	3.741		3.976		Cont.	Cont.	1
ı														

EXHIBIT R-2a, RDT&E Project Justification										
					ı	February 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT NUM	BER AND NAI	ΜE	PROJECT NU	MBER AND N	AME			
RDT&E, N /BA-7 Operational Sys Development	26623M Marin	26623M Marine Corps Ground Combat/Supt Arms			C2928 HIGH N	MOBILITY ART	TILLERY ROC	KET SYSTEM	(HIMARS)	
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	9.990	11.624	6.943	3.038	0.019	0.000	0.000	0.000	0.000	31.614
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET I	TEM JUSTIFICA	ATION:								
HIMARS is a C-130 transportable, wheeled, indire	ot firo rookot/mi	ecilo evetom co	anable of firing	all rockets an	d missiles in the	current and fu	iture Multiple I	aunch Rocket	System Fam	ilv of

HIMARS is a C-130 transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System Family of Munitions (MFOM). The system includes 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 (45+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.

### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	4.116	3.828	0.837	1.053
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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	2.570	1.935	1.954	0.175
RDT&E Articles Qty				

Develop Support Equipment, Army program office support, contractor provided logistics support

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.404	2.686	2.803	0.830
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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.900	3.175	1.349	0.980
RDT&E Articles Qty				

Program Management at Quantico, USMC Liason Office at Army Progam, USMC Test Unit at Ft Sill, and contractor support.

(U) Total \$ 9.990 11.624 6.943 3.038

EXHIBIT R-2a, RDT&E Project Justification					DATE:					
					Fe	ebruary 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUM	IBER AND NAI	ME			
RDT&E, N /BA-7 Operational Sys Developme	nt 26623M Marine	Corps Ground	d Combat/Sup	t Arms	C2928 HIGH M	OBILITY ARTI	LLERY ROCK	ET SYSTEM	(HIMARS)	
PROJECT CHANGE SUMMARY										
NODEOT OFFANOE COMMANT	FY2002	FY2003	FY2004	FY2005						
(U) FY 2003 President's Budget:	10.614	11.922	7.207	3.137						
(U) Adjustments from the President's Budget:										
(U) Congressional/OSD Program Reduction	ns -0.029	-0.298	-0.264	-0.131						
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings				0.032						
(U) SBIR/STTR Transfer										
(U) Minor Affordability Adjustment	-0.595									
(U) FY 2004 President's Budget:	9.990	11.624	6.943	3.038						
CHANGE SUMMARY EXPLANATION:										
(U) Funding: See Above.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
U) C. OTHER PROGRAM FUNDING SUMMA	DV.									
Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
<u> 3 Hamo</u>	<u>. 1 2002</u>	<u> 2000</u>	2004	2000	<u> 2000</u>	<u> 2001</u>	2000	2000	. C C 51111 pr	
(U) PMC, 205001,EIFGSWS (HIMARS)	0.000	7.706	17.954	16.387		190.522	0.000	0.000	CONT	369.863
(U) PMC, 304001,HIMARS ROCKETS	0.000	0.000	0.000	1.329	32.812	55.050	69.348	54.510	CONT	213.049

(U) Related RDT&E: Not Applicable.

#### (U) D. ACQUISITION STRATEGY:

USMC HIMARS is procuring the Army rocket launcher, the current / future MFOM and developing an Medium Tactical Vehicle Replacement (MTVR)-based Resupply System (truck(s) with associated trailer(s)). USMC 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. USMC Resupply System requirements are unique. Accordingly, the USMC is an integrator and must ensure the required warfighting capability is fielded to the USMC 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 USMC is establishing the training and support methodologies that will result in associated skill sets required within the Marine Corps.

EXHIBIT R-2a, R	RDT&E Project Justification	DATE:
		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N7BA-7 Operational Sys Developmen	nt  26623M Marine Corps Ground Combat/Supt Arms	C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)
(U) E. MAJOR PERFORMERS:		
FY-03-Lockheed Martin Missile, Dallas, TX. N	odifications to Launcher FEB 03	
FY-03-Lockheed Martin Missile, Dallas, TX. G	Buided Multiple Launch Rocket System Development JA	N 03
FY-03- Lockheed Martin Missile, Dallas, TX S	ystems Engineering Support for Development and test	ng OCT 02
FY-03-Lockheed Martin Missile, Dallas, TX De	evelop and provide Launcher training, Contract Award C	Oct 02
FY-03-Lockheed Martin Missile, Dallas, TX Co	ontractor Logisitics Support, Contract Award Oct 02	
FY-04-Lockheed Martin Missile, Dallas, TX. N	Iodifications to Launcher JAN 04	
FY-04-Lockheed Martin Missile, Dallas, TX. G	uided Multiple Launch Rocket System Development JA	N 04
FY-04- Lockheed Martin Missile, Dallas, TX S	ystems Engineering Support for Development and test	ng OCT 03
FY-04-Lockheed Martin Missile, Dallas, TX De	velop and provide Launcher training, Contract Award C	Oct 03
FY-04-Lockheed Martin Missile, Dallas, TX Co	ontractor Logisitics Support, Contract Award Oct 03	

						DATE:								
Exhibit R-3 Cost Analysis										February	2003			
APPROPRIATION/BUDGE	T ACTIVITY	PROGRAM ELEMENT				•	PROJE	CT NUME	BER AND	NAME				
RDT&E, N /BA-7 Operation	nal Sys Dev	relopment 0206623M Marine Corps	Ground	Combat/s	Supt Arr	ns	C2928	HIGH MO	BILITY A	ARTILLER	RY ROC	KET SYSTE	EM (HIMAF	RS)
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
_	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Primary Hardware Dev	SS/CPAF	Lockheed Martin, Dallas, TX	10.003	1.840	06/02	0.852	02/03	0.437	01/04	0.703	01/05	0.000	13.835	13.835
Systems Engineering	FFP	GA Tech Rsch Inst., Huntsville, AL				0.100	10/02					0.000	0.100	0.100
Primary Hardware Dev	FFP	TACOM, Warren, MI	0.000	0.070	03/02							0.000	0.070	0.070
Ancillary Hardware Dev	SS/CPAF	Lockheed Martin, Dallas, TX	0.300	0.400	11/01	0.400	01/03	0.100	01/04			0.000	1.200	1.200
Primary Hardware Dev	SS/CPAF	Oshkosh Truck Corp, Oshkosh, WI	2.054	1.252	11/01	1.050	10/02					0.000	4.356	
Systems Engineering	WR	NSWC-Carderock,MD	0.028	0.062	10/01	0.062	10/02					0.000	0.152	
Systems Engineering	WR	NSWC-Dahlgren, VA	0.311	0.387	10/01	0.271	10/02	0.100	10/03	0.150	10/04	0.000	1.219	
Systems Engineering	WR	NSWC-Earle, NJ				0.250	12/02					0.000	0.250	
Systems Engineering	FFP	John J. McMullen Assocs, Pittsb., PA	0.129	0.000								0.000	0.129	
Systems Engineering	CPAF	Lockheed Martin, Dallas, TX		0.000		0.700	01/03	0.200	10/03	0.200	10/04	0.000	1.100	
Systems Engineering	WR	SPAWAR, Charleston, SC		0.060		0.071	10/02					0.000	0.131	
Systems Engineering	FFP	NAVSEA, Wash., DC		0.045										
Systems Engineering	MIPR	TARDEC, Detroit, MI		0.000		0.072	10/02					0.000	0.072	
Subtotal Product Dev		2, 22.23,	12.825			3.828		0.837		1.053		0.000	22.659	
Remarks:	I		· ·	u .		1		1.0	II.			11		l .
Cost Categories	Contract	Performing	Total	1	FY 02		FY 03	1	FY 04		FY 05	1	l	Target
Cost Categories	Method	Activity &		FY 02	Award	FY 03	Award	FY 04		FY 05	Award	Cost to	Total	Value of
	& Type	Location		Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete		Contract
Dev Support Equip	WR	MARCORSYSCOM,Quantico, VA	0.699			0.300	10/02	COSt	Date	COSI	Date	0.000		
Dev Support Equip	WR	MCCDC, Quantico, VA	0.945			0.000	10/02	0.100	10/03			0.000		
Dev Support Equip	WR	NSWC_Carderock, MD	0.0.0	0.000		0.104	10/02	0.100	10/03			0.000	0.204	
Program Support	MIPR	US Army-MSL,Huntsville, AL	0.450			0.095	10/02	0.100	10/03			0.000		
Launcher Training	FFP	Lockheed Martin, Dallas TX	0.974			0.186	12/02	0.329	10/03			0.000		
Integ Logistics Support	FFP	BAE Systems, Stafford, VA	0.368			0.250	10/02	0.225	10/03	0.175	10/04	0.000	1.018	
Integ Logistics Support	CPAF	Lockheed Martin, Dallas TX		1.606		0.850	10/02	1.000	01/04				3.456	
Integ Logistics Support	WR	Logistics Base-Albany, GA		0.027	05/02	0.100	02/03						0.127	
Integ Logistics Support	FFP	Oshkosh Truck Corp, Oshkosh,WI				0.050	02/03	0.100	10/03				0.150	
Integ Logistics Support	FFP	SAIC, McLean, VA		0.105	05/02									
Subtotal Support			3.436	2.570		1.935	:	1.954		0.175		0.000	10.070	
Remarks:		1	J. <del>1</del> 30	2.570	1	1.500	<u>'I</u>	1.504	`I	0.173	1	0.000	10.070	l
Normanio.														

						DATE:								
Exhibit R-3 Cost Analysis										February	2003			
APPROPRIATION/BUDGET	Γ ACTIVITY	PROGRAM ELEMENT					PROJE	CT NUME	BER AND	NAME				
RDT&E, N /BA-7 Operation	nal Sys Dev	velopment 0206623M Marine Corp	s Ground	Combat/S	Supt Arr	ns	C2928	HIGH MO	BILITY A	ARTILLE	RY ROC	KET SYSTE	EM (HIMAF	RS)
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Dev Test & Eval	WR	NSWC-Dahlgren, VA		0.216		1.055	10/02					0.000	1.271	
Dev Test & Eval	FFP	KTR Spt TMI, Wash., DC		0.190								0.000	0.190	0.190
Dev Test & Eval	WR	Redstone Tech Test Ctr, Huntsville, A	.L	0.043	10/01	0.301	01/03	0.250	10/03	0.100	10/04	0.000	0.694	0.694
Dev Test & Eval	FFP	AMRDEC, Huntsville, VA		0.546								0.000	0.546	0.546
Dev Test & Eval	WR	Logistics Base, Albany, GA		0.162										
Dev Test & Eval	MIPR	TACOM, Detroit, MI		0.085										
Dev Test & Eval	WR	Aberdeen Proving Grd, Aberdeen, MD	0.063			0.943	10/02	0.250	10/03	0.100	10/04	0.000		
Dev Test & Eval	WR	NSWC-Carderock, MD		0.000		0.068	10/02	0.100	10/03			0.000		
Operational Test & Eval	WR	MCOTEA, Quantico, VA		0.136		0.140	10/02	0.402	10/03	0.300	10/04	0.000		
Operational Test & Eval	MIPR	MARFORRES, New Orleans, LA		0.026		0.050	10/02	0.351	10/03	0.100	10/04	0.000	0.527	
Operational Test & Eval	WR	OT Test Conduct, Ft. Sill, OK		0.000		0.129	10/02	1.450	10/03	0.230	10/04	0.000	1.809	
													0.000	
Subtotal T&E			0.063	1.404		2.686		2.803		0.830		0.000	7.786	
Remarks:														
Cost Categories	Contract	Performing	Total		FY 02	1	FY 03		FY 04		FY 05			Target
Cost Categories	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04		FY 05	Award	Cost to	Total	Value of
	Mictilioa	/ totivity &			Date		Date	Cost	Date	Cost	Date	Complete		Contract
	& Type	Location	Cost	1200		Cost				0031				Contract
Program Mngmnt	& Type	Location MCSC Quantico VA	Cost	Cost		Cost		0000				0 0		2 047
Program Mngmnt	WR	MCSC, Quantico, VA	0.116	0.685	10/02	1.246	10/02						2.047	
Program Mngmnt	WR MIPR	MCSC, Quantico, VA US ARMY Huntsville, AL	0.116 0.050	0.685 0.116	10/02 11/01	1.246 0.600	10/02 10/02	0.200	10/03	0.300	10/04	0.000	2.047 1.266	1.266
Program Mngmnt Program Mngmnt	WR MIPR MIPR	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK	0.116 0.050 0.010	0.685 0.116 0.040	10/02 11/01 12/01	1.246 0.600 0.129	10/02 10/02 10/02	0.200 0.149	10/03	0.300	10/04		2.047 1.266 0.328	1.266
Program Mngmnt Program Mngmnt Program Mngmnt	WR MIPR MIPR FFP	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK BAE Systems, Stafford, VA	0.116 0.050	0.685 0.116 0.040 1.035	10/02 11/01 12/01 10/01	1.246 0.600	10/02 10/02	0.200	10/03				2.047 1.266	1.266
Program Mngmnt Program Mngmnt	WR MIPR MIPR	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK	0.116 0.050 0.010	0.685 0.116 0.040	10/02 11/01 12/01 10/01	1.246 0.600 0.129	10/02 10/02 10/02	0.200 0.149	10/03	0.300	10/04		2.047 1.266 0.328 4.007	1.266
Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt	WR MIPR MIPR FFP	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK BAE Systems, Stafford, VA	0.116 0.050 0.010 0.092	0.685 0.116 0.040 1.035 0.024	10/02 11/01 12/01 10/01 05/02	1.246 0.600 0.129 1.200	10/02 10/02 10/02 10/02	0.200 0.149 1.000	10/03 10/03 10/03	0.300	10/04	0.000	2.047 1.266 0.328 4.007	1.266
Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt Subtotal Management	WR MIPR MIPR FFP	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK BAE Systems, Stafford, VA	0.116 0.050 0.010	0.685 0.116 0.040 1.035 0.024	10/02 11/01 12/01 10/01 05/02	1.246 0.600 0.129	10/02 10/02 10/02 10/02	0.200 0.149	10/03 10/03 10/03	0.300	10/04		2.047 1.266 0.328 4.007	1.266
Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt	WR MIPR MIPR FFP	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK BAE Systems, Stafford, VA	0.116 0.050 0.010 0.092	0.685 0.116 0.040 1.035 0.024	10/02 11/01 12/01 10/01 05/02	1.246 0.600 0.129 1.200	10/02 10/02 10/02 10/02	0.200 0.149 1.000	10/03 10/03 10/03	0.300	10/04	0.000	2.047 1.266 0.328 4.007	1.266
Program Mngmnt Program Mngmnt Program Mngmnt Program Mngmnt Subtotal Management	WR MIPR MIPR FFP	MCSC, Quantico, VA US ARMY Huntsville, AL TRNG, Fort Sill, OK BAE Systems, Stafford, VA	0.116 0.050 0.010 0.092	0.685 0.116 0.040 1.035 0.024	10/02 11/01 12/01 10/01 05/02	1.246 0.600 0.129 1.200	10/02 10/02 10/02 10/02	0.200 0.149 1.000	10/03 10/03 10/03	0.300	10/04	0.000	2.047 1.266 0.328 4.007 0.000 7.672	1.266

		DATE:
Exhil	pit R-4/4a Schedule Profile/Detail	February 2003
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	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Quarter	I II III IV							
MS A								
Mat Launcher	•							
Delivery								
MS B		•						
US Army/USMC								
DT			· ·					
USMC OA	+		-					
MS C/LRIP								
Decision		•						
RSV/RST System		+						
Demo								
LRIP GMLRS		•						
Decision								
LRIP GMLRS		•			-			
LRIP Launcher			•					
Delivery								
USMC OT			•	•				
Interim Capability				•		•		
FRP					•			
IOC						+		
FOC							•	

Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) 026623M, RDT&E,N (U) PMC, 205001, Expeditionary Indirect Fire Ground Support Weapons System (EIFGSWS) (HIMARS)	9.990 0.000	11.624 7.706	6.943 17.954	3.038 16.387	0.019 137.294	0.000 190.522	0.000	0.000 0.000	0.000 0.000	31.614 369.863
(U) PMC, 304001, HIMARS ROCKETS	0.000	0.000	0.000	1.329	32.812	55.050	69.348	54.510	CONT	213.049

 Exhibit R-4/4a Schedule Profile	/Detail				DATE:			Febru	ary 2003	
N/BUDGET ACTIVITY PROGRAM ELEMENT Operational Sys Dev 0206623M Marine Corps	Ground Co					PROJECT NUMBER AND NAME C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM				
HIMARS SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Maturation Launcher Delivery	4Q									
Milestone B		1Q								
US Army/ USMC Developmental Testing		2Q								
USMC Operational Assesment	4Q		2Q							
Milestone C/ Low Rate Initial Production Decision		4Q								
US Army/USMC Developmental Testing		2Q								
Resupply Vehicle/Resupply Trailer System Demons	tration	2Q								
LRIP Guided Multiple Launch Rocket System Decis	ion	4Q								
LRIP GMLRS			1Q		4Q					
LRIP Launcher Delivery			3Q							
USMC Operational Testing			4Q	1Q						
Interim Capability				2Q		3Q				
Full Rate Production Decision					1Q					
Initial Operational Capability						3Q				
Full Operational Capability							3Q			

EXHIE	BIT R-2a, RDT&E Pr	oject Justif	ication				DATE:					
								Februa	ry 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	PROGRAM ELEMENT NUMBER AND NAME PROJECT					NUMBER AND	O NAME				
	0206623M	0206623M Marine Corps Ground				0206623M Marine Corps Ground						
RDT&E, N /BA-7 Operational Sys Dev	Combat/Su	Combat/Supporting Arms Systems C3098 Fire Support Systems					ort Systems					
									Cost to	Total		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	006 FY 2007 FY 2008 FY 2009 Com			Complete	Program		
Project Cost	Cost 0.000 0.000 11.224 15.828 10				10.232	14.047	14.156	9.081	Cont	Con		
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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.276	0.285
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. Funding for this program in FY02 and FY03 was provided under Project C1901 within this PE.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.144	1.756
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 for the Meteorological Measuring System (MMS) and develop Electronic Meteorological Theodolite (EMT) capability. Funding for this program in FY02 and FY03 was provided under Project C1901 within this PE.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.731	1.130
RDT&E Articles Qty				

Fire Support Mods - 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.

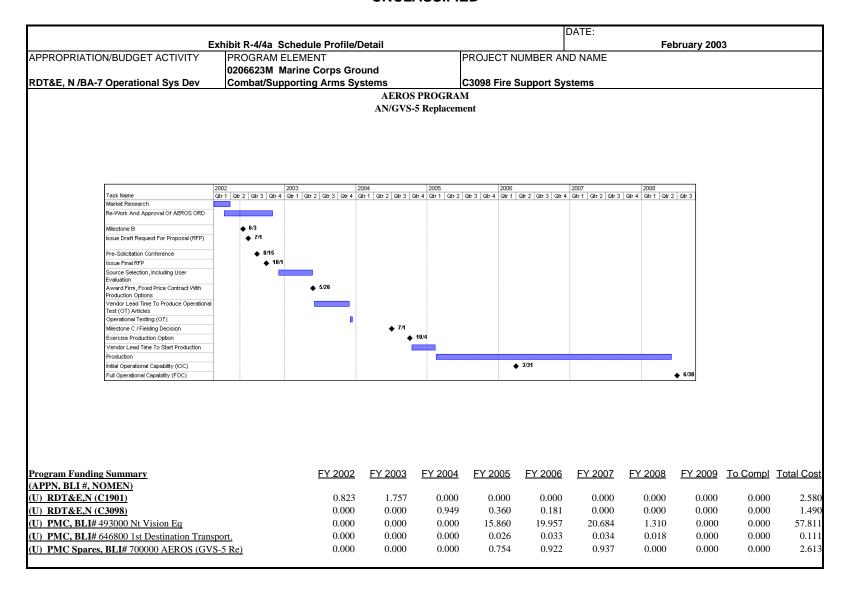
		UNCLASSIFIED			
EXHIBI	T R-2a, RDT&E Project Justif	ication		DATE:	
				Febru	ary 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	NUMBER AND NAME	PROJEC <sup>-</sup>	NUMBER AND NAME	
	0206623M Marine Cor	ps Ground			
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting A	rms Systems	C3098 Fi	re Support Systems	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.698	4.765	7
RDT&E Articles Qty					7
Mortar Ballistic Computer (MBC): Integration platform. Prepare for and conduct combined Dev Milestone C decision. Funding for this program i	elopmental Testing (DT) and Open n FY03 was provided under Project	rational Testing to include I	Live Fire User Evaluation	. Conduct Interim Progress Ro	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.949	0.000	
RDT&E Articles Qty					
OT&E effort encompasses the test itself and all as PE.					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	_
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	0.000	0.000	0.000	0.360	4
AN/GVS-5 Replacement (AEROS): Engineering effort will be the integration of the Enhanced Targoffice of Naval Research (ONR). The research and the second sec	get Acquisition and Location Syste	em (ETALS) in the AEROS	. ETALS is a Science an	d Technology (S&T) effort that	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	7
Accomplishment/Effort Subtotal Cost	0.000	0.000	3.605	0.000	7
RDT&E Articles Qty					7
Expeditionary Fire Support System (EFSS): F	rogram support. Conduct analyse	s, studies and life-cycle cos	t estimates.	,	_
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	7
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	7.254	7
RDT&E Articles Qty					7
Expeditionary Fire Support System (EFSS) - S	hort Term (ST) and Long Term	(LT): Conduct comparati	ve assessments of compet	ing designs and conduct system	m design review to finalize
system performance specification.	_	_	-		_
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.000	2.821	0.278	
RDT&E Articles Qty					
Improved Position Azimuth Determination Systems Development effort in support of the Milestone C	decision.		. ,		and system integration.
(U) Total \$ 0.000	0.000	0.000	11.224	15.828	

UNCLASSII ILD												
EXHIBIT R-2	a, RDT&E Pro	ject Justific	ation				DATE:					
								Februa	ry 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E		-	O NAME		PROJECT N	JMBER AND	NAME				
	0206623M N	•										
RDT&E, N /BA-7 Operational Sys Dev	Combat/Sup					C3098 Fire S	upport Syst	ems				
(U) PROJECT CHANGE SUMMARY:	FY 2002	<b>FY 2003</b>	FY 2004	FY 2005								
(U) FY 2003 President's Budget:	0.000	0.000	0.000	0.000								
(U) Adjustments from the President's Budget:												
(U) Congressional/OSD Program Reductions			-0.602 -	0.653								
(U) Congressional Rescissions												
(U) Congressional Increases												
(U) Reprogrammings			11.826	16.481								
(U) SBIR/STTR Transfer												
(U) Minor Affordability Adjustment												
(U) FY 2004 President's Budget:	0.000	0.000	11.224	15.828								
CHANGE SUMMARY EXPLANATION:	!!			4								
(U) Funding: This project was created due to the realignment of programs within the Marine Corps.												
(U) Schedule: Not Applicable. (U) Technical: Not Applicable.												
(b) reclinical. Not Applicable.												
(U) C. OTHER PROGRAM FUNDING SUMMARY:												
Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	<b>Total Cost</b>		
PMC BLI#493000 Night Vision Eq (AEROS)	0.000	0.000	0.000	15.860	19.957	20.684	1.310	0.000	0.000	57.811		
PMC BLI# 473300 Fire Supp Sys (IPADS)	0.000	0.000	0.000	12.668	0.310	0.000	0.000	0.000	0.000	12.978		
PMC BLI# 473300 FSS (Mortar Ballistic Computer)	0.000	0.000	0.000	0.000	3.490	1.938	0.000	0.000	0.000	5.428		
PMC BLI# 206400 Expeditionary Fire Support Sys	0.000	0.000	0.000	0.000	2.717	6.356	6.358	0.000	0.000	15.431		
PMC BLI# 220900 Mod Kits IWS (Fire Supp Mod Line)	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.993		
PMC BLI# 206300 Mod Kits AFS (Fire Supp Mod Line)	0.000	0.000	2.089	2.472	2.601	4.242	4.342	4.447	U	Continuing		
PMC BLI#646800 First Dest Transp (AEROS)	0.000	0.000	0.000	0.026	0.033	0.034	0.018	0.000	0.000	0.111		
PMC BLI# 220900 Mod Kits IWS (Theodolites)	0.000	1.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.162		
PMC BLI# 206300 Mod Kits AFS (PIAFS)	0.000	0.000	0.000	2.410	0.410	0.200	0.000	0.000	0.000	3.020		
(U) Related RDT&E:												
(U) D. ACQUISITION STRATEGY: These programs redevelopmental programs to create a system that more corps requirements. EFSS will use an evolutionary acception of the program of the progra	readily meets N	Marine Corps	requiremen	ts. Modificat	tion covers	safety, reliabi	lity, and techi	nology up-gr	ades to mee	t Marine		
(U) E. MAJOR PERFORMERS:												

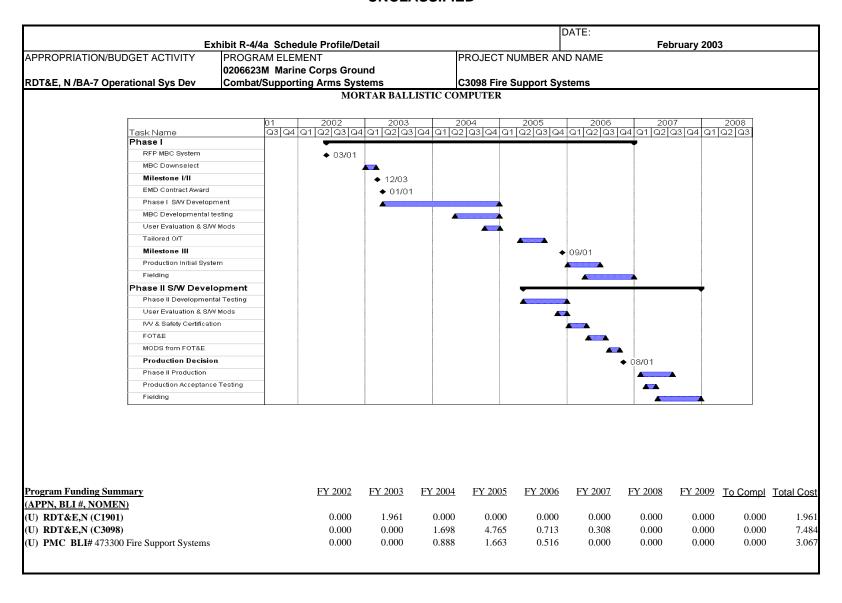
Exhibit R-3 Cost Analysis											February 20	003		
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEMENT					PROJE	CT NUME	BER ANI	D NAME				
		0206623M Marine Corps												
RDT&E, N /BA-7 Operational		Combat/Supporting Arm		s				Fire Supp						
		Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
		Activity &	PY s	FY 02	Award			FY 04		FY 05		Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
PRODUCT DEVELOPMENT		SEE BELOW												
AN/GVS-5 Replacement	RCP	MKI Woodbridge, VA	0.000					0.050	1Q04			Cont.	Cont.	
EFSS	RCP	TBD	0.000							1.950	TBD	Cont.	Cont.	
EFSS	VAR	TBD	0.000							0.776	TBD	Cont.	Cont.	
Fire Spt Mods	MIPR	USArmy CECOM, Ft Monmouth NJ	0.403									0.000	0.403	
Fire Spt Mods	RCP	Smith Industries, Grand Rapids, MI						0.400	1Q04	0.800	1Q05	Cont.	Cont.	
Fire Spt Mods - Fielded Sys														
Readiness	VAR	TBD						0.200	TBD	0.367	TBD	Cont.	Cont.	
IPADS	RCP	TBD						1.674				Cont.	Cont.	
MBC	VAR	VARIOUS	0.000					0.250		1.900		Cont.	Cont.	
Subtotal Product Dev			0.403	0.000		0.000		2.574		5.793		Cont.	Cont.	
	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
		Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Cost Categories		Location	Cost	Cost	Date		Date	Cost	Date	Cost	Date		Cost	Contract
PROGRAM SUPPORT		SEE BELOW										Cont.	Cont.	
AN/GVS-5 Replacement	WR	MCSC, Quantico, VA	0.000					0.249	2Q04			Cont.	Cont.	
AN/GVS-5 Replacement	RCP	BAEST, Stafford, VA	0.000					0.450	1Q04	0.360	1Q05	Cont.	Cont.	
AN/GVS-5 Replacement	MIPR	Marine Det, Ft Sill, OK						0.015	1Q04			Cont.	Cont.	
EFSS	RCP	TBD	0.000					1.605	TBD	0.777	TBD	Cont.	Cont.	
EFSS	VAR	TBD								0.900		Cont.	Cont.	
Fam Artillery Munitions		BAEST, Stafford, VA						0.054	1Q04	0.060		Cont.	Cont.	
Fire Spt Mods	WR/RCP	BAEST, Stafford, VA	1.046					0.400	1Q04	0.400	1Q05	Cont.	Cont.	
Fire Spt Mods - Fielded Sys														
Readiness	VAR	TBD						0.161	TBD	0.253	TBD	Cont.	Cont.	
IPADS		MCSC, Quantico, VA						0.157				Cont.	Cont.	
MBC	RCP	BAEST, Stafford, VA	0.000					0.676	TBD	0.819	TBD	Cont.	Cont.	
Subtotal Support			1.046	0.000		0.000		3.767		3.569			8.382	
Remarks:														

DATE:

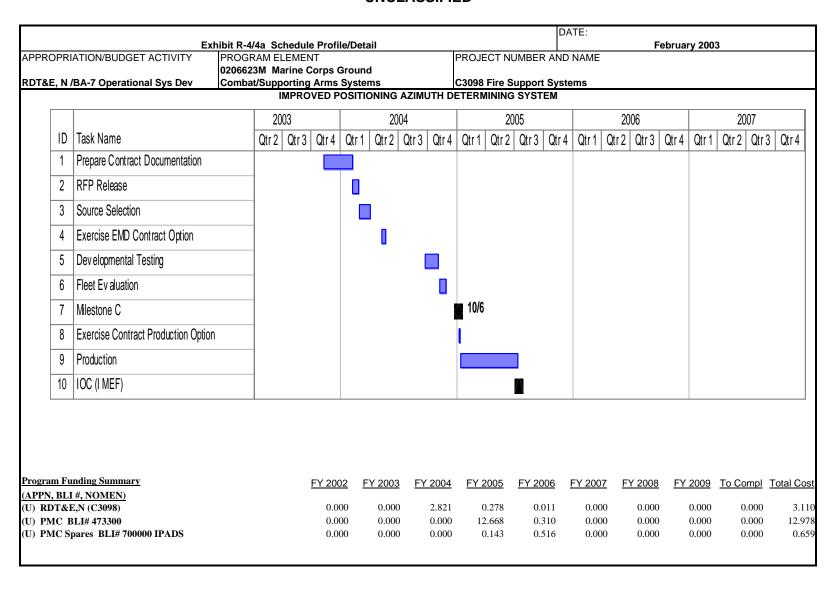
									DATE:				
	Exhibit R-3 Cost Analy	/sis									February 20	003	
CTIVITY	PROGRAM ELEMENT					PROJE	CT NUME	BER AN	D NAME				
	0206623M Marine Corps	Ground											
		s System	ıs				Fire Supp	ort Sys					
Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
	SEE BELOW											Cont.	
WR	MCOTEA, Quantico, VA	0.000					0.185	2Q04			Cont.	Cont.	
VAR	TBD								0.951	TBD	Cont.	Cont.	
WR/RCP	NSWC, Crane, IN						0.222	2Q04			Cont.		
WR		0.025							0.200		Cont.		
	,												
VAR	TBD						0.170	TBD	0.300	TBD	Cont.	Cont.	.
WR	MCOTEA, Quantico, VA										Cont.	Cont.	
WR		0.000							1.796	TBD			
		0.025	0.000		0.000		1.294		3.472		Cont.	Cont.	
•		•		•		•	•	•		•			
Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
	SEE BELOW										Cont.	Cont.	
VAR	TBD						2.000	TBD	0.900	TBD	Cont.	Cont.	
	TBD												
	MCSC, Quantico, VA	0.582					0.344	2Q04	0.356	2Q05	Cont.		
	,												
RCP	BAEST, Stafford, VA						0.200	1Q04	0.210	1Q05	Cont.	Cont.	
WR											Cont.	Cont.	
WR		0.000					0.250				Cont.	Cont.	
	,				0.000								
		•											
	T	0.592	0.000		0.000		11 224		15 929		Cont	Cont	
<u> </u>	<u> </u>	0.302	0.000	1	0.000	l	11.224	1	13.020	l	Cont.	COIII.	1
	Method & Type  WR VAR WR/RCP WR VAR WR WR WR WR WR  Contract Method & Type  VAR VAR VAR RCP	ACTIVITY  PROGRAM ELEMENT 0206623M Marine Corps Combat/Supporting Arm  Contract Method & Type Location  SEE BELOW  WR MCOTEA, Quantico, VA  VAR TBD  WR/RCP NSWC, Crane, IN  WR MCOTEA, Quantico, VA  VAR TBD  WR MCOTEA, Quantico, VA  WR VARIOUS  Contract Method Activity & & Type Location  SEE BELOW  VAR TBD  VAR TBD  VAR TBD  WAR MCSC, Quantico, VA  WR MCSC, Quantico, VA	Sys Dev Combat/Supporting Arms System    Contract   Performing   Method   Activity & PY s	PROGRAM ELEMENT   0206623M Marine Corps Ground   Combat/Supporting Arms Systems	PROGRAM ELEMENT   0206623M Marine Corps Ground   Combat/Supporting Arms Systems	PROGRAM ELEMENT   O206623M Marine Corps Ground   Combat/Supporting Arms Systems   FY 02   Activity & PY s   FY 02   Award   FY 03   Date   Cost	PROGRAM ELEMENT	PROGRAM ELEMENT   0206623M Marine Corps Ground   Combat/Supporting Arms Systems   C3098 Fire Supporting Arms Systems   FY 02	PROJECT NUMBER AN   O206623M Marine Corps Ground   Combat/Supporting Arms Systems   C3098 Fire Support Systems   C3098 Fire Suppor	Exhibit R-3 Cost Analysis   PROJECT NUMBER AND NAME   PROJECT NUMBER	Exhibit R-3 Cost Analysis   PROJECT NUMBER AND NAME   Octoor   O	Exhibit R-3 Cost Analysis	Exhibit R-3 Cost Analysis



								DATE:			
		xhibit R-4/4a Scheo	dule Profile	/Detail					F	ebruary 200	3
APPROPRIATIO	N/BUDGET ACTIVITY	PROGRAM ELEM	IENT			PROJECT	NUMBER A	ND NAME			
		0206623M Marin									
RDT&E, N /BA-7	7 Operational Sys Dev	Combat/Support		ystems		C3098 Fire	Support Sy	/stems			
	<b>AEROS SCHEDULE</b>	DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
	Market Research		2Q								
	Re-Work and Approval o	f AEROS ORD	2Q								
	Milestone B		3Q								
	Issue Draft Request for F		4Q								
	Pre-Solicitation Conferer	nce	4Q								
	Issue Final RFP			1Q							
	Source Selection, Include	ing User Evaluation		1Q							
	Award Firm Fixed Price (			100							
	Production Options	Sonita of Willi		3Q							
	Vendor Lead Time to Pro	oduce Operational									
	Test (OT) Articles			3Q							
	Operational Testing (OT)	)			1Q						
	Milestone C / Fielding De	ecision			4Q						
	Exercise Production Opti					1Q					
	Vendor Lead Time to Sta	art Production				1Q					
	Production					2Q					
	Initial Operational Capab						2Q				
	Full Operational Capabili	ty (FOC)							3Q		
						-					
•											
•				•			•				



BUDGET ACTIVITY PROGRAM EI		_		PROJECT I	NUMBER A	ND NAME		-
	arine Corps Gr			00000 Fire	0			
	orting Arms S			C3098 Fire				
MBC SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Phase I	2Q							
RFP Mortar Ballistic Computer								
(MBC)System	2Q							
MBC Down Select	4Q							
Milestone I/II		1Q						
EMD Contract Award		1Q						
Phase I Software (SW) Development		1Q						
MBC Developmental Testing			2Q					
User Evaluation & SW Mods			3Q					
Tailored Operational Testing (OT)				1Q				
Milestone III				4Q				
Production Initial System				4Q				
Fielding					1Q			
Phase II - SW Development				1Q				
Phase II Developmental Testing				1Q				
User Evaluation & SW Mods				4Q				
IW & Safety Certification					1Q			
FOT&E					2Q			
Mods from FOT&E					3Q			
Production Decision					4Q			
Phase II Production						1Q		
Production Acceptance Testing						1Q		
Fielding						2Q		



								DATE:			
	E	xhibit R-4/4a Sche	dule Profile	/Detail		February 2003					3
APPROPRIATIO	N/BUDGET ACTIVITY	PROGRAM ELEM	/IENT			PROJECT	NUMBER A	ND NAME			
		0206623M Marin	e Corps Gr	ound							
RDT&E, N/BA-7	Operational Sys Dev	Combat/Support				C3098 Fire	Support Sy	/stems			
	IPADS SCHEDULE		FY 2002		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
	Prepare Contract Docum	nentation		4Q							
	RFP Release				1Q						
	Source Selection				1Q						
	Exercise EMD Contract (	Option			2Q						
	Developmental Testing				3Q						
	Fleet Evaluation				4Q	_					
	Milestone C					1Q					
	Exercise Contract Produ	ction Option				1Q					
	Production	Title (LAMEE)				1Q					
	Initial Operational Capab	ility (I MEF)				3Q					
			-								

						DATE:				
	Exhibit R-4/4a Schedule Profile/D	Detail					Fe	bruary 200	3	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT		F	PROJECT N	IUMBER AN	ID NAME				
	0206623M Marine Corps Gro									
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms Sys				Support Sys	stems				
	EXPED	TIONARY I	IRE SUPPO	ORT SYSTE	M					
Milestone A: 1st QTR FY-04										
Milestone B: 1st QTR FY-05										
Milestone C (phase 1): 1st QTR FY-06										
Milestone C (phase 2): 1st QTR FY-09										
IOC (phase 1): 2nd QTR FY-08 FOC (phase 1): 4th QTR FY-09										
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N (C3098) (U) PMC BLI# 206400 EFSS	0.000 0.000	0.000 0.000	3.605 0.000	7.254 0.000	6.514 2.717	11.252 6.356	11.609 6.358	6.516 0.000	Continuing 0.000	Continuing 15.431

	Exhibit R-4/4a Sche	dule Profile	/Detail				DATE:	F	ebruary 200	3
APPROPRIATION/BUDGET ACTIVITY  RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEM 0206623M Marin Combat/Support	MENT ne Corps Gr	ound		PROJECT  C3098 Fire					<del>-</del>
EFSS SCHEDULE D		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Milestone A				1Q						
Milestone B					1Q					
Milestone C (Phase 1)						1Q				
Milestone C (Phase 2)	(5)								1Q	
Initial Operational Capal								2Q	40	
Full Operational Capabi	iity (Phase 1)							-	4Q	
								1		

EXHIBIT R-2a	EXHIBIT R-2a, RDT&E Project Justification									
								Februai	ry 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	<b>ELEMENT</b> I	NUMBER AN	ND NAME		PROJECT I	NUMBER ANI	D NAME		
	0206623M Marine Corps Ground C400							& Amphibio	us Systems	& Support
RDT&E, N /BA-7 Operational Sys Dev	Combat/Su	pporting Ar	ms Systems	S		Equipment				
									Cost to	Total
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
pject Cost 0.000 0.000 2.574 3.453 1.228						0.554	0.473	0.487	Cont	Cont
RDT&E Articles Qty										

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

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

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.395	0.361
RDT&E Articles Qty				

Family of Raids and Reconnaissance Equipment: Integrate logistics to standardize and improve existing close quarters battle and direct action combat equipment and all Marine Corps parachute programs. On-going support to existing items that meet mission requirements for close quarter battle and parachute operations. Development of airborne systems that will allow military parachutists to carry combat equipment in various configurations and a means of supplying/re-supplying combat essentials to Marine units. Development on High Altitude High Opening (HAHO) navigation board, improved jumpers helmet, oxygen (O2) console system integrated with V-22 Osprey, and High Altitude Low Opening (HALO)/HAHO jumpers kit. Funding for this program in FY03 is provided under Project C1901 within this PE.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.244	0.249
RDT&E Articles Qtv				

Family of Small Craft: Conduct engineering analysis and exploration of enhancements. Integration testing for a new navigation suite. Marine Corps Programs Department (MCPD) Fallbrook support for fault analysis and fault isolation as needed. Past years' efforts have resulted in significant improvements to safety of the Riverine Assault Craft (RAC). Funding for this program in FY02 and FY03 is provided under Project C1901 within this PE.

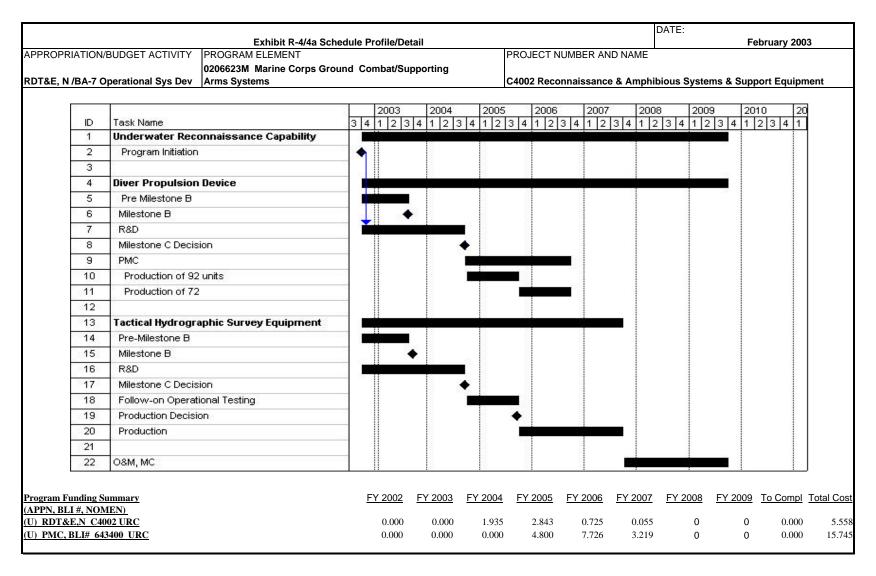
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.935	2.843
RDT&E Articles Qty				

**Underwater Reconnaissance Capability (URC):** Concept exploration and development of prototypes for Divers Propulsion Device (DPD) and for the Tactical Hydrographic Survey Equipment (THSE) in support of underwater reconnaissance operations. Funding for this program in FY03 is provided under Project C1901 within this PE.

(U) Total \$ 0.000 0.000 2.574 3.453

	EXHIBIT R-2a, RDT&E Proj	ect Justificat	ion				ATE:	Fahrus	2002	
APPROPRIATION/BUDGET ACTIVITY  RDT&E, N /BA-7 Operational Sys Dev	PROGRAM I 0206623M I Combat/Sup	Marine Corp	s Ground	D NAME		PROJECT NO C4002 Recor Equipment				& Support
(U) PROJECT CHANGE SUMMARY:	FY 2002	FY 2003	FY 2004	FY 2005						
(U) FY 2003 President's Budget:	0.000	0.000	0.000	0.000						
(U) Adjustments from the President's Bu	udget:									
(U) Congressional/OSD Program R	eductions		-0.097 -	0.101						
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings			2.671	3.554						
(U) Small Business Innovation Res	earch Transfer									
(U) Minor Affordability Adjustment										
(U) FY 2004 President's Budget: CHANGE SUMMARY EXPLANAT	0.000	0.000	2.574	3.453						
	the realignment of programs with	in the Marin	e Corps							
(U) Schedule: Not Applicable.	and realignment of programe that		о со.ро.							
(U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING S <u>Line Item No. &amp; Name</u> PMC BLI #643400 Amphibious Raid Equ	FY 2002	FY 2003 21.835	FY 2004 21.404	<b>FY 2005</b> 30.394	FY 2006		FY 2008 3.458	FY 2009 3.521	<u>To Compl</u> 0.000	<u>Total Cost</u>
(U) Related RDT&E: Not Applicable.										
(U) D. ACQUISITION STRATEGY: The acquisition strategy consists of mark capabilities/specifications and establishr conducted.										red to be
(U) E. MAJOR PERFORMERS:										
Dec 03, Dec 04 TBD Oct 03, Oct 04 Panama City, FL Nov 03, Nov 04 Natick, MA	Hardware Development Coastal Systems Statior Natick Labs, system eng	n, system en	gineering in :	support of ur	nderwater	reconnaissanc	e			

										DATE:				
		Exhibit R-3 Cost Ana	lysis				I			L		Fel	oruary 20	003
APPROPRIATION/BUDGET AC	TIVITY	PROGRAM ELEMENT					PROJE	CT NUME	BER AND	NAME				
		0206623M Marine Cor	rps Ground											
RDT&E, N /BA-7 Operational Sy	ys Dev	Combat/Supporting A	rms System	าร			C4002	Reconna	issance	& Amphi		ystems & S	upport E	quipmen
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Hardware development	TBD	TBD						1.103	12/03	1.899	12/04	Cont.	Cont.	
Systems Engineering	WR	CSS, Panama City, FL						0.435	10/03	0.430	10/04	Cont.	Cont.	
Systems Engineering	WR	Natick Labs, Natick, MA						0.436	11/03	0.431	11/04	Cont.	Cont.	
, , , , , , , , , , , , , , , , , , , ,		, ,												
Subtotal Product Development			0.000	0.000		0.000		1.974		2.760		Cont.	Cont.	
Remarks:				•	•					•	•			
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Integrated Logistics Support	RCP	BAE Inc, Stafford, VA						0.200	10/03	0.200	10/04	Cont.	Cont.	
Subtotal Support			0.000	0.000		0.000		0.200		0.200		Cont.	Cont.	
Remarks:	•	1												
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04	1	FY 05			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 02	Award	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Developmental Testing/Eval	RCP	TBD						0.150	12/03	0.150	12/04	Cont.	Cont.	
Operational T&E	WR	MCOTEA, Quantico, VA						0.100	11/03	0.100	12/04	Cont.	Cont.	
Subtotal T&E			0.000	0.000		0.000		0.250		0.250		Cont.	Cont.	
Remarks:	1	l	0.000	0.000		0.000	1	0.200	1	0.200		Cont.	OOH.	
Cost Categories	Contract	Performing	Total		FY 02		FY 03		FY 04		FY 05	1		Target
(Tailor to WBS, or System/Item	Method	Activity &		FY 02	Award	FY 03		FY 04	Award	FY 05		Cost to	Total	Value of
Requirements)	& Type	Location		Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Management	TBD	MARCORSYSCOM, Quantico, VA						0.150		0.243		Cont.	Cont.	
Subtotal Management		, , , , , , , , , , , , , , , , , , , ,		0.000		0.000		0.150		0.243		Cont.	1	
Remarks:														
Total Cost			0.000	0.000		0.000		2.574		3.453		Cont.	Cont.	



		DATE:	-	port Equipment FY 2009					
PROPRIATION/BUDGET ACTIVITY	Exhibit R-4/4a Schedule Profile/I	Detail		PROJECT	NUMBER A	ND NAME		<u> </u>	ebruary 200.
	0206623M Marine Corps Ground Combat/9	Supporting							
DT&E, N /BA-7 Operational Sys Dev									
URC SCHEDULE DETA	<u>IL</u>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Diver Propulsion Device									
Program Initiation		4Q							
Milestone B			4Q						
Milestone C				4Q					
Tactical Hydrographic Surve	y Equipment								
Program Initiation		4Q							
Milestone B			4Q						
Milestone C				4Q					
OT				4Q	1Q-3Q				
Production Decision					4Q				

EXHIBIT R-2a	, RDT&E Project J	ustification			DATE:							
							Februai	ry 2003				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUM	IBER AND NA	ME	PROJECT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Systems	026623M Mar	ine Corps Gr	ound Combat	/Support								
Development	Arms Sys				C9277 Target Location Designator							
					Cost to					Total		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	05 FY 2006 FY 2007 FY 2008 FY 2009 Comple					Program		
Project Cost	0.000	1.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.29		
RDT&E Articles Qty												
(U) A. MISSION DESCRIPTION AND BUDG	SET ITEM JUSTIFIC	ATION:										

The Marine Corps Systems Command will develop and test the Naval Surface Fire Support (NSFS) capability within the Target Hand-Off System (THS), incorporate additional Close Air Support features, enhance system interoperability by accelerating level of Common Operating Environment from V to VII. Target Location Development Hand-off System (TLDHS) will provide increased functionality to interoperate between integrated systems and develop follow-on releases of THS software to maintain compatibility with follow-on fire support applications.

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost		1.299		
RDT&E Articles Qty				
TLDHS: Develop, test and integrate systems.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost				
RDT&E Articles Qty				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
accomplishment/Effort Subtotal Cost				
DT&E Articles Qty				
ADTAL ATTICIES QLY				
LOTAL ATTICLES QLY				
U) Total \$	0.000	1.299	0.000	0.000
,	0.000	1.299	0.000	0.000

EXHIBIT R-2a, RD	T&E Project Jus	stification			DATE:					
	T						February	2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Systems Development	PROGRAM ELE 026623M Marin Arms Sys	_			PROJECT NUM					
	,	EW2002	EX/2004	FY2005	C9277 Target L	ocation Desig	gnator			
	FY2002	FY2003	FY2004	FY2005						
(U) Project Change Summary										
(U) FY 2003 President's Budget:	0.000	0.000	0.000	0.000						
(U) Adjustments from the President's Budget:										
(U) Congressional/OSD Program Reduction	S	-0.031								
(U) Congressional Rescissions										
(U) Congressional Increases		1.330								
(U) Reprogrammings										
(U) SBIR/STTR Transfer										
(U) FY 2004 President's Budget:	0.000	1.299	0.000	0.000						
CHANGE SUMMARY EXPLANATION: (U) Funding: See Above. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMAR	XY:									
Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
PMC BLI# 473300 TLDHS	3.584	34.134	28.444	0.000	0.000	0.000	0.000	0.000	0.000	66.162
(U) Related RDT&E: Not Applicable.										
(U) D. ACQUISITION STRATEGY: (U) TLDHS: Funds applied to the ACS/Synetics	Incorporated cor	ntract for softw	vare developme	nt and syst	em integration.					
(U) E. MAJOR PERFORMERS: FY 03 ACS/SYNETICS, King George, VA.	Software develo	opment and int	tegration.							
(U) SCHEDULE PROFILE:										

CDAM EI											
CDAME						Februa	ry 2003				
					PROJECT NUMBER AND NAME						
323M Mari	ine Corps Gr	ound Combat	/Supporting								
rms Systems C9278 Integrated Digital Camera Riflescope											
								Cost to	Total		
/ 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program		
0.000	1.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.464		
5	23M Mar s System	23M Marine Corps Gr s Systems 2002 FY 2003	23M Marine Corps Ground Combat s Systems 2002 FY 2003 FY 2004	23M Marine Corps Ground Combat/Supporting s Systems  2002 FY 2003 FY 2004 FY 2005	23M Marine Corps Ground Combat/Supporting S Systems C9278 Integral C9202 FY 2003 FY 2004 FY 2005 FY 2006	23M Marine Corps Ground Combat/Supporting Systems C9278 Integrated Digital Ca 22002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007	23M Marine Corps Ground Combat/Supporting Systems C9278 Integrated Digital Camera Riflesc C9202 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008	23M Marine Corps Ground Combat/Supporting S Systems C9278 Integrated Digital Camera Riflescope  22002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009	23M Marine Corps Ground Combat/Supporting Systems C9278 Integrated Digital Camera Riflescope  C9278 Integrated Digital Camera Riflescope  Cost to Complete		

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

The Marine Corps will assess the possibility of integrating a digital camera into a rifle scope. The purpose of this system will be to increase objectivity of user evaluations during testing of optic systems. The test evaluator will be able to "see" what the operator sees and determine if the operator assessment of the systems accurately reflects the capability offered by the optic or reflects the need for additional training in the use of the optic to complete an objective assessment.

### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost		1.464		
RDT&E Articles Qty				

Funding is in excess of what is required to accomplish this effort. The estimated cost to develop this effort is \$1K.

(U) Total \$ 0.000 1.464 0.000 0.000

EXHIBIT R-2a, R	DT&E Project Just	tification			DATE:
					February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBI	ER AND NAME	Ē	PROJECT NUMBER AND NAME
	026623M Marine	Corps Grou	nd Combat/Su	upporting	
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems				C9278 Integrated Digital Camera Riflescope
(U) Project Change Summary	FY2002	FY2003	FY2004	FY2005	
(U) FY 2003 President's Budget:	0.000	0.000	0.000	0.000	
(U) Adjustments from the President's Budget:					
(U) Congressional/OSD Program Reduction	ns				
(U) Congressional Rescissions					
(U) Congressional Increases		1.464			
(U) Reprogrammings					
(U) SBIR/STTR Transfer					
(U) FY 2004 President's Budget:	0.000	1.464	0.000	0.000	
CHANGE SUMMARY EXPLANATION: (U) Funding: See Above. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.					
(U) C. OTHER PROGRAM FUNDING SUMMA	RY: Not applicable	ı.			
(U) Related RDT&E: Not Applicable.					
(U) D. ACQUISITION STRATEGY:					
` '	required to accomp	olish this effort	. This is a mir	nor develop	ment that can be accomplished by the manufacturer at an estimated \$1K.
(U) E. MAJOR PERFORMERS:					
FY 03 TBD					
(U) SCHEDULE PROFILE:  TBD					

EXHIBIT R-2a,	RDT&E Project .	Justification			DATE:							
	_				February 2003							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT N	UMBER AND N	NAME	PROJECT NUMBER AND NAME							
	026623M M	arine Corps	Ground									
RDT&E, N /BA-7 Operational Sys Dev	Combat/Su	pporting Arm	ns Systems		C9279 Body Armor Upgrade							
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Cost to Complete	Total Program					
Project Cost	0.000	0.975	0.000	0.000	000 0.000 0.000 0.000 0.000					0.97		
RDT&E Articles Qty												
(U) A. MISSION DESCRIPTION AND BUDG	ET ITEM JUSTIF	ICATION:										

### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

FY 2002	FY 2003	FY 2004	FY 2005
	0.975		
ms.			
FY 2002	FY 2003	FY 2004	FY 2005
FY 2002	FY 2003	FY 2004	FY 2005
0.000	0.975	0.000	0.000
	FY 2002	0.975  ms.  FY 2002  FY 2003  FY 2003	0.975  Pms.  FY 2002 FY 2003 FY 2004  FY 2002 FY 2003 FY 2004

EXHIBIT R-2a, RDT	&E Project	Justification			DATE:				
	_						February 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	/ ELEMENT N	IUMBER AND I	NAME	PROJE	CT NUMBER AND NAME			
	026623M F	Marine Corps	Ground						
RDT&E, N /BA-7 Operational Sys Dev	Combat/S	upporting Arn	ns Systems			Body Armor Upgrade			
(U) Project Change Summary	FY2002	FY2003	FY2004	FY2005	;				
(U) FY 2003 President's Budget:	0.000	0.000	0.000	0.000	,				
(U) Adjustments from the President's Budget:									
(U) Congressional /OSD Reductions		-0.025	)						
(U) Congressional Rescissions									
(U) Congressional Increases		1.000	)						
(U) Reprogrammings									
(U) SBIR/STTR Transfer									
(U) OSD Mark									
(U) FY 2004 President's Budget:	0.000	0.975	0.000	0.000	1				
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) C. OTHER PROGRAM FUNDING SUMMAR	Y:								
Line Item No. & Name		FY 2003	FY 2004	FY 2005	FY 200	6 FY 2007 FY 2	2008 FY 2009	To Compl	Total Cost
PE# 0206623M Project# C2503 Initial Issue	1.178	0.77	1.039	1.062	4.082	4.137 5.37	6.126	Continuing	Continuing
41) B. L. ( 188705   1.00000014.00500									
(U) Related RDT&E: 1 0206623M C2503									
(U) D. ACQUISITION STRATEGY:									
Acquisition Strategy is to modify non-development	al items (NI	DI) and adopt (	Commercial-Of	f-The-Shelf (C	OTS) ite	ems.			
	•				•				
(U) E. MAJOR PERFORMERS:									
U.S. Army Natick Research, Development and En	gineering C	enter, Natick, I	Mass.						
(U) SCHEDULE PROFILE:									
Not Applicable.									
тост привави.									