EXHIBIT R-2, RDT&E Budget	EXHIBIT R-2, RDT&E Budget Item Justification								
						F	February 2004	ı	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EL	, ,						
RDT&E, N /BA-7 Operational System Development		0206623M Mai	rine Corps Gı	round Comba	bat/Supporting Arms Systems				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	37.552	41.960	44.828	59.852	55.668	36.541	29.805	Cont	Cont
C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)	0.351	0.351	0.367	1.910	1.928	0.820	0.840	Cont	Cont
C1555 Light Armored Vehicle (LAV) PIP	4.304	4.169	15.267	31.790	23.923	4.060	1.430	Cont	Cont
C1901 Marine Corps Ground Weaponry PIP	15.212	8.797	3.101	4.072	4.253	4.363	4.149	Cont	Cont
C2086 Marine Enhanced Program (MEP)	2.117	2.603	2.655	2.608	2.651	2.734	2.790	Cont	Cont
B2237 Amphibious Vehicle Test Branch (AVTB)	0.733	0.799	0.812	0.828	0.844	0.871	0.890	Cont	Cont
C2503 Family of Combat Equip Support & Services	1.070	3.699	3.959	7.204	7.509	9.087	10.143	Cont	Cont
C2928 EIFGSWS (HIMARS)	9.891	6.860	3.026	0.016	0.000	0.000	0.000	0.000	19.793
C3098 Fire Support Systems	0.000	11.099	12.201	10.199	14.008	14.134	9.077	Cont	Cont
C4002 Family of Raid Reconnaissance	0.000	2.545	3.440	1.225	0.552	0.472	0.486	Cont	Cont
C9277 Target Location Designation and Handoff Sys	1.485	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.485
C9278 Integrated Digital Camera Riflescope	1.433	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.433
C9279 Body Armor Upgradera Riflescope	0.956	1.038	0.000	0.000	0.000	0.000	0.000	0.000	1.994
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, RDT&E B	udget Item Justif	fication		DATE:
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational System Development			MENT (PE) NAME	February 2004 AND NO. Combat/Supporting Arms Systems
3. PROGRAM CHANGE SUMMARY				
	FY2003	FY2004	FY 2005	
(U) FY 2004 President's Budget:	38.850	35.439	70.564	
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.018	-0.009		
(U) Congressional Rescissions				
(U) Congressional Increases		5.950		
(U) Reprogrammings	0.949		-25.796	
(U) SBIR/STTR Transfer	-0.269	-0.004	-0.001	
(U) Minor Affordability Adjustment	-1.960	0.584	0.061	
(U) FY 2005 President's Budget:	37.552	41.960	44.828	
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See Above.				
(U) Schedule:				
(U) Technical: Not Applicable.				

EXHIBIT R-2a	EXHIBIT R-2a, RDT&E Project Justification									
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME							MBER AND N	AME		
RDT&E, N /BA-7 Operational Sys Dev	0206623M M	0206623M Marine Corps Ground Combat Arms Systems B2237 Amphi						Test Director	ate (AVTD)	
									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		0.733	0.799	0.812	0.828	0.844	0.871	0.890	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		0.569	0.634	0.642
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		0.164	0.165	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 \$ 0.733 0.799 0.812

EXHIBIT R-2a, F	RDT&E Project Justification				DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBE	R AND NAME		PROJECT N	NUMBER AND NAME		
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems			B2237 Amph	nibious Vehicle Test Directorate (AVTD)		
(U) Project Change Summary:							
	FY2003	FY2004	FY2005				
(U) FY 2004 President's Budget:	0.751	0.808	0.814				
(U) Adjustments from the President's Budget:							
(U) Congressional Program Reductions	-0.018	-0.009					
(U) Congressional Rescissions							
(U) Congressional Increases							
(U) Reprogrammings							
(U) SBIR/STTR Transfer							
(U) Inflation Change			-0.002				
(U) FY 2005 Presidential Budget:	0.733	0.799	0.812				
CHANGE SUMMARY EXPLANATION:							
(U) Funding: See Above.							
(U) Schedule: Not Applicable.							
(U) Technical: Not Applicable.							

(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 03, Oct 04, Oct 05

(U) SCHEDULE PROFILE:

Testing conducted at AVTD includes all aspects of Marine Corps Assault Amphibious Vehicles. Testing is planned for MK 155 Minefield Breaching System, RAM/RS (Reliability, Availability and Maintainability/Rebuild to Standard) 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 RAM/RS. AVTD will support the testing of the Advanced Amphibious Assault Vehicle (AAAV), as directed by DRPM AAA, during the phase of the AAAV Program Development.

Exhibit R-2a, RDT,N_Project Justification (Exhibit R-2a, page 4 of 58)

	EXHIBIT R-2a, RDT&E Project Justification								DATE:		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBE	ME								
	0206623M Mari	0206623M Marine Corps Ground Combat/Supporting									
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems				C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)						
								Cost to	Total		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	Complete	Program		
Project Cost	0.351	0.351	0.367	1.910	1.928	0.820	0.840	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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.351	0.351	0.367
RDT&E Articles Qty			

0.351

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:

(U) FY 2005 President's Budget:

	FY2003	FY2004	FY2005
(U) FY 2004 President's Budget:	0.363	0.355	0.368
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings			
(U) Minor Affordability Adjustments			
(U) SBIR/STTR Transfer	-0.012	-0.004	-0.001

0.351

CHANGE SUMMARY EXPLANATION:

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

0.367

		'	UNCLASS	ILIED					
	EXHIBIT R-2a, RD	T&E Project Ju	ustification			D/	ATE:		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM 0206623M Marine				PROJECT NUMBI	ER AND NAME		ebruary 2004	
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems	Oorps Oround	Тоотправоарр		C0021 Assault A	nphibious Veh	icle 7A1 (AA\	/7A1)	
(U) C. OTHER PROGRAM FUNDING SUM									
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	<u>ro Compl</u>	Total Cost
(U) PMC, 202100, AAV 7A1 PIP	117.235	104.156	58.596	10.574	17.807	44.841	44.029	Continuing	Continuing
(U) D. ACQUISITION STRATEGY:									
These efforts focus on the development of E support will be acquired using existing contr		posals to impro	ve performance	, reliability, m	naintainability and s	afety of the Ass	ault Amphibio	us Vehicle. Co	ontractor
(U) E. Major Performers:									

EXHIBIT R-2a, RDT	EXHIBIT R-2a, RDT&E Project Justification								
							F	ebruary 200	4
						PROJECT NUMBER AND NAME			
	0206623M Marine Corps Ground Combat/Supporting Arms								ſ
RDT&E, N /BA-7 Operational Sys Dev	Systems					C1555 Light Armored Vehicle (LAV) PIP			
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	4.304	4.169	15.267	31.790	23.923	4.060	1.430	Cont	Cont
RDT&E Articles Qty									İ

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

The Light Armored Vehicle Family of Vehicles (LAV FOV) consists of seven fielded LAV configurations, and one communications/intelligence-configured asset on an LAV chassis. The LAV FOV provides a logistically self-contained, highly mobile, and lethal combined arms combat system to the Marine Air-Ground Task Force (MAGTF). The LAV Product Improvement Program funds the development and testing of modifications of four programs; the LAV Service Life Extension Program (SLEP) which includes the Improved Thermal Sight System (ITSS), the LAV Anti Armor System (LAV-AAS) Program, the LAV-Command & Communication (LAV-C2) Program, the LAV Expeditionary Fire Support System (LAV-EFSS), 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 EFSS consists of a 120mm Recoil Mortar System replacement for the LAV-Mortar variant's M252 81 mm Mortar System.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	3.414	2.821	1.233
RDT&E Articles Qty			

LAV SLEP ITSS: Develope ITSS prototypes, PMO & matrix support, PMO travel, Contracted Advisory Assistance Services (CAAS) and DT/OT of ITSS prototypes.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.890	1.348	1.440
RDT&E Articles Qty			

LAV RAM: Research and development of numerous LAV RAM projects to include 2 speed transfer case, tire replacement initiative and transmission replacement.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	7.931
RDT&E Articles Qty			

LAV C2: LAV-C2 prototype development, PMO & matrix support, PMO travel, CAAS & test ammo procurement in support of LAV-C2.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	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.

0.000 4.304 4.169 15.267

(U) Total \$

EXHIBIT R-2a, RDT	&E Project Justifi	cation				DATE:				
, in the second		February 2004								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms					PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	Systems	-				C1555 Light Armored Vehicle (LAV) PIP				
(U) PROJECT CHANGE SUMMARY:					•					
	FY2003	FY2004	FY2005							
(U) FY 2004 President's Budget:	4.725	4.216	37.306							
(U) Adjustments from the President's Budget:										
(U) Congressional/OSD Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings			-22.201							
(U) SBIR/STTR Transfer	-0.036									
(U) Minor Affordability Adjustment	-0.385	-0.047	0.162							
(U) FY 2005 President's Budget:	4.304	4.169	15.267							
CHANGE SUMMARY EXPLANATION: (U) Funding: See Above. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u> (U) PMC, 203800, LAV PIP	<u>FY 2003</u> 49.802	FY 2004 36.213	FY 2005 41.588	FY 2006 59.252	FY 2007 39.606	FY 2008 82.118	FY 2009 To Compl 86.516 Continuing	Total Cost Continuing		
(U) Related RDT&E: Not Applicable.	7.00				37.000					

EXHIBIT R-2a, RD	EXHIBIT R-2a, RDT&E Project Justification					
		February 2004				
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 C2 Program is designed to meet and maintain the command and control requirements of the Operational Requirements Document (ORD). The LAV-C2 Upgrade will provide a hardware and software module 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 Corps 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&	EXHIBIT R-2a, RDT&E Project Justification						
		February 2004					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms	PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Dev	Systems	C1555 Light Armored Vehicle (LAV) PIP					

(U) E. MAJOR PERFORMERS:

LAV ITSS

FY03 Raytheon Company, Mckinney, TX. DT/OT preparation. Oct 02.

Metric Systems Corporation, Fort Walton Beach, FLA.

SURVICE Engineering Company, Belcamp, MD. ITSS development & test support. Oct 02.

FY04 Raytheon Company, Mckinney, TX. DT/OT preparation.

Metric Systems Corporation, Fort Walton Beach, FLA. MCCDC, Quantico, VA, DT/OT completion. Oct 04.

TACOM, Warren, MI. PMO support. Oct 03.

SURVICE Engineering Company, Belcamp, MD. ITSS development & test support. Oct 03.

FY05 MCCDC, Quantico, VA, DT/OT completion. Oct 04.

TACOM, Warren, MI. PMO support. Oct 04.

SURVICE Engineering Company, Belcamp, MD. ITSS development & test support. Oct 04.

LAV RAM

FY03 Various FY04 Various FY05 Various

LAV-C2 & LAV-EFSS

FY05 Major performers are not determined as of this date.

	Exhil	oit R-3 Cost Analysis				DATE:			Febru	ary 2004		
APPROPRIATION/BUDGET AC	TIVITY	PROGRAM ELEME 0206623M Marine		round Co	mbat/S	1	•••					
RDT&E, N /BA 7 Operational S	Sys Dev	Systems						C1555 Ligh		d Vehicle (L/	AV) PIP	
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
Product Development	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Primary Hardware Dev Spt	CPFF	GTRI/SURVICE, Bellcamp MD	1.189							0.000	1.189	1.189
Gov't Dev Engineering	MIPR	In-House Product Dev	1.560							0.000	1.560	1.560
Product Development (ITSS)	Various	Raytheon, Mckinney TX	20.332	1.702	VAR	0.238				Cont.	Cont.	
Product Development (RAM)	Various	Various	1.184	0.890	VAR	1.348	VAR	1.240	VAR	Cont.	Cont.	
Product Development (C2)	Various	TBD						7.362	1Q05	4.678	12.040	
Product Development(EFSS)	Various	TBD						3.800	1Q05	7.902	11.702	
CASS	MIPR	SURVICE, Bellcamp, MD	0.000	0.275							0.275	
Subtotal Product Dev		•	24.265	2.867		1.586	5	12.402	2	Cont.	Cont.	
Remarks:					•							
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
Support	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TOW Missiles	FFP	TBD	0.000							0.000	0.000	0.590
Subtotal Support			0.000	0.000		0.000		0.000)		0.000	0.590
Remarks:					•	•						
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
Test & Evaluation	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Devl/Oper Test & Eval	MIPR	Yuma Prv Ground, AZ	5.133	1.022	3Q03	1.180	Various	1.233	Various	5.000	13.568	
Devl/Oper Test & Eval	MIPR	Aberdeen Test Center, MD	2.575							8.535	11.110	
Devl/Oper Test & Eval	MIPR	TACOM								0.500	0.500	
Devl/Oper Test & Eval	MIPR	MCOTEA, Quantico, VA	0.650	0.075	3Q03	0.870	Various	0.250	Various	Cont.	Cont.	
Subtotal T&E			8.358	1.097		2.050		1.483	3	Cont.	Cont.	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
Program Management	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Program Management	VAR	TACOM, Warren, MI	2.680		1Q03	0.385	1Q04	1.023	1Q05	Cont.	Cont.	
Matrix Support	MIPR	ARDEC/NVL/TACOM, MI	0.586		1Q03	0.148	Various		Various	Cont.	Cont.	
Subtotal Management			3.266	0.340		0.533		1.382	2	Cont.	Cont.	
Remarks:												
Total Cost				4.304		4.169		15.267	7	Cont.	Cont.	

R-1 SHOPPING LIST - Item No. 183

Exhibit R-4/4a Schedule Profile/Detail						DATE:			February 200)4
APPROPRIATION	PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms			PROJECT I	NUMBER A	ND NAME				
RDT&E, N /BA 7	DT&E, N /BA 7 Operational Sys Dev Systems				C1555 Ligh	t Armored	l Vehicle (L	.AV) PIP		
(U) D. SCHEDULE	PROFILE:									
LAV SLEP										
	Milestone 0:	1st Qtr, FY 1998	Milestone I		2nd Qtr, FY					
	Milestone I:	2nd Qtr, FY 1999	Contract Av	vard:	3rd Qtr, FY					
	Milestone II:	2nd Qtr, FY 2000	IOC:		2nd Qtr, FY					
	DT / OT:	2nd Qtr, FY 2001	FOC:		4th Qtr, FY	2009				
LAV C2										
	Milestone A:	Ongoing	Contract Av	vard:	1st Qtr, FY	2007				
	Milestone B:	3rd Qtr, FY2004	IOC:		1st Qtr, FY	2009				
	DT / OT:	3rd Qtr, FY 2006	FOC:		1st Qtr, FY	2010				
	Milestone C:	1st Qtr, FY 2007								
LAV EFSS										
			Contract Av	vard:	1st Qtr, FY					
	Milestone B:	3rd Qtr, FY 2004	IOC:		1st Qtr, FY					
	DT / OT:	1st Qtr, FY2007	FOC:		1st Qtr, FY	2011				
	Milestone C:	1st Qtr, FY2008								
Program Funding S (APPN, BLI #, NO		<u>FY 20</u>	003 FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	To Compl	Total Cost
(APPN, BLI#, NO. (U) RDT&E,N	VIII/I)	4.3	304 4.169	15.267	31.790	23.923	4.060	1.430	Continuing	Continuing
(U) PMC, BLI# 20	3800 LAV	49.				39.606	82.118	86.516	Continuing	Continuing
					-		0			

	Exhibit R-4/4a Schedule Profile/Detail PROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Ari N /BA 7 Operational Sys Dev Systems			Arms	DATE: February 2004 PROJECT NUMBER AND NAME C1555 Light Armored Vehicle (LAV) PIP				004			
	AV SCHEDULE	· *	FY 2003	FY 2003 FY 2004 FY 200								
<u> </u>	AV SLEP											
	Milestone	III:										
	Contract A	Award:										
	IOC:			2Q								
	FOC:								4Q			
<u> </u>	-AV C2											
	Milestone	A:										
	Milestone	B:		3Q								
	DT / OT:					3Q						
	Milestone	C:					1Q					
	Contract A	Award:					1Q					
	IOC:								1Q			
1	AV EFSS											
	Milestone	A:										
	Milestone	B:		3Q								
	DT / OT:						1Q					
_	Milestone	C:						1Q				
	Contract A	Award:						1Q				
	IOC:									1Q10		

EXI	EXHIBIT R-2a, RDT&E Project Justification								
							F	ebruary 2004	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME									
0206623M Marine Corps Ground Combat/Supporting									
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems	Arms Systems				C1901 Marine Corps Ground Weaponry PIP			
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	15.212	8.797	3.101	4.072	4.253	4.363	4.149	Cont	Cont
RDT&E Articles Qty	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 development.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.999	0.000	0.000
RDT&E Articles Qty			

AN/GVS-5 Replacement (AEROS): Funds used for engineering support and to purchase candidate systems for use in a down select. Systems were used for developmental testing and further down select to a single Engineering/Manufacturing Development (EMD) system. This program has moved to Project C3098 within this Program Element (PE).

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.261	0.000	0.000
RDT&E Articles Qty			

Family of Artillery Munitions (FAM): Supported a production decision for the Modular Artillery Charge System to include Weapons Systems Explosive Safety Review Board testing, program support, and travel. Continued 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.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.864	0.000	0.000
RDT&E Articles Qty			

Family of Raids and Reconnaissance Equipment: Continued participation with Natick Labs on refinement of Full Spectrum Battle Equipment (FSBE) program and enhancement of FSBE ensemble. Integrated logistics to standardize and improve existing close quarters battle and direct action combat equipment and all Marine Corps parachute programs. Continued ongoing support to existing items that meet mission requirements for Close Quarter Battle and Parachute Operations. Continued 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. Continued 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.

EXI	IIBIT R-2a, RDT&E F	Project Justification			DATE:	
						February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	PROGRAM ELEMENT NUMBER AND NAME				
	0206623M Mar	ine Corps Ground Combat/S	upporting			
RDT&E, N /BA-7 Operational Sys Dev				C1901 Marine	PIP	
COST (\$ in Millions)		FY 2003	FY:	2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.145	0.0	000	0.000	
RDT&E Articles Qty						
Family of Small Craft Mods: Continued to	pursue improvements fe	or the Riverine Assault Craft and th	e rigid Raiding (Craft. MCPD Fal	lbrook is the principle agency for	or supporting these

<u>Family of Small Craft Mods</u>: Continued 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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.988	0.000	0.000
RDT&E Articles Qty			

Fire Support Mods: Joint participation in artillery and fire support improvement projects. Specifically conducted life cycle analysis on the M198 Howitzer develop Global Positioning System (GPS)-Selective Anti-Spoofing Module (SASM) capability for the MMS. Conducted analyses and studies on Expeditionary Fire Support System (EFSS). 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. Researched safety concerns related to M198 Howitzer, and designed and developed material solution to those concerns. This program has moved to Project C3098 within this PE.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.705	0.865	1.000
RDT&E Articles Qty			

Infantry Weapons Mods: Joint participation and Marine Corps unique activities for evaluation of safety, lethality, and technology improvements for Marine Corps infantry/reconnaissance individual /crew-served weapons. Past years' efforts have impacted 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 Marine Expeditionary Unit Special Operations Capability (MEU SOC) .45 Caliber pistol efforts. Issues particularly related to safety are recurring events from year to year that require immediate attention to maintain an operational readiness posture. Likewise, we will continue to pursue potential technological advances that will significantly enhance the operational utility of both individual and crew-served weapon systems.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.579	0.873	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 Marine Corps Systems Command (MCSC) in the lead.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.460	0.000	0.000
RDT&E Articles Qty			

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

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	4.244	0.000	0.000
RDT&E Articles Qty			

M1A1 Firepower Enhancement: Comparative assessments of competing designs and conducted system design review to finalize system performance specification. Performed EMD phase activities. Performed final integration and prove out. Procured test articles, conducted developmental test and evaluation, pre-production technical reviews/audits, logistical support, and development/planning. This program has moved to Project C2316, PE26624M, Marine Corps Combat Service Support.

	(HIBIT R-2a, RDT&E Proje	ct Justification		DATE:	
				Fe	bruary 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMEN	NT NUMBER AND NAME			
	0206623M Marine (Corps Ground Combat/S	upporting		
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems	•	•	rine Corps Ground Weaponry PIP	
COST (\$ in Millions)	, , , , , , , , , , , , , , , , , , ,	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.236	0.000	0.000	
RDT&E Articles Qty					
M1A1 Armor Mods: Continued joint partic	cipation and evaluation of pro-	spective modifications include	ing component enhancements	advanced fire control systems, survivabil	itv systems.
combat identification, mobility and others.		*	· ·	•	., .,
compact recitation, modified and others.	This program has moved to Tr	oject 02310, 12 020002 iiii,	ivic compar service suppor	t in 1 101 and beyond.	
0007 (6.1.14111)		51,0000	5 1/2001		
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		1.797	0.000	0.000	
RDT&E Articles Qty					
Mortar Ballistic Computer (MBC): Initiat	ed R&D efforts in developme	nt (including programmatic d	locumentation and support), c	coding, evaluation, independent verification	n and
validation of MBC technical firing computa	tional software, and integratio	n to a Commercial Off-The S	helf (COTS) hardware platfo	rm. This program has moved to Project Ca	3098 within
this PE.	_		•		
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.463	0.989	1.105	
RDT&E Articles Qty		0.400	0.000	11100	
Night Vision Mod Line: Joint participation	and Marina Come unique est	ivitias for avaluation of sofate	, lethelity and technology in	massamenta for Marina Coma Night Vision	Davissa
Provides for in-service engineering agent (IS					at Ft. Beivoir
	ion (12) and fused multispectr				
on new enhancements for Image Intensificat	. ,	ai weapon signi. Travel to su	pport ennanced systems deve	iopment and review of tests.	
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost					
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost		FY 2003 0.000	FY 2004 0.064	FY 2005	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		FY 2003 0.000	FY 2004 0.064	FY 2005	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun		FY 2003 0.000 ntal testing at Redstone Arser	FY 2004 0.064 nal.	FY 2005 0.183	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions)		FY 2003 0.000 ntal testing at Redstone Arser FY 2003	FY 2004 0.064 nal.	FY 2005 0.183	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost		FY 2003 0.000 ntal testing at Redstone Arser	FY 2004 0.064 nal.	FY 2005 0.183	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	ds will be used for developme	FY 2003 0.000 ntal testing at Redstone Arser FY 2003 0.020	FY 2004 0.064 nal. FY 2004 0.056	FY 2005 0.183 FY 2005 0.056	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Thermal Weapons Sight (TWS)[AN/PAS	ds will be used for developme -13]: Provided for joint partici	FY 2003 0.000 Intal testing at Redstone Arser FY 2003 0.020 Ipation in Pre-Planned Product	FY 2004 0.064 nal. FY 2004 0.056 et Improvement (P3I) for TW	FY 2005 0.183 FY 2005 0.056 S – remote image transfer, laser range find	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	ds will be used for developme -13]: Provided for joint partici	FY 2003 0.000 Intal testing at Redstone Arser FY 2003 0.020 Ipation in Pre-Planned Product	FY 2004 0.064 nal. FY 2004 0.056 et Improvement (P3I) for TW	FY 2005 0.183 FY 2005 0.056 S – remote image transfer, laser range find	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Thermal Weapons Sight (TWS)[AN/PAS	ds will be used for developme -13]: Provided for joint partici	FY 2003 0.000 Intal testing at Redstone Arser FY 2003 0.020 Ipation in Pre-Planned Product	FY 2004 0.064 nal. FY 2004 0.056 et Improvement (P3I) for TW	FY 2005 0.183 FY 2005 0.056 S – remote image transfer, laser range find	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Tactical Unmanned Vehicle (TUV): Fun COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty Thermal Weapons Sight (TWS)[AN/PAS reticle (mechanical, quadrant-style sight), m	ds will be used for developme -13]: Provided for joint partici	FY 2003 0.000 Intal testing at Redstone Arser FY 2003 0.020 Ipation in Pre-Planned Product	FY 2004 0.064 nal. FY 2004 0.056 et Improvement (P3I) for TW	FY 2005 0.183 FY 2005 0.056 S – remote image transfer, laser range find	

Underwater Reconnaissance Capability (URC): Funds provided for 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. Funds were also used for support of the program management office. This program has moved to Project C4002 within this PE.

FY 2003

1.031

COST (\$ in Millions)

Accomplishment/Effort Subtotal Cost

RDT&E Articles Qty

FY 2005

0.000

FY 2004

0.000

EXI	HIBIT R-2a, RDT&E Project Justification		DATE:	
	•			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			
	0206623M Marine Corps Ground Combat/s	Supporting		
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems	C1901 Marine	Corps Ground Weaponry F	PIP
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.036	0.000	0.000	
RDT&E Articles Qty				
	vere used to meet urgent needs in support of the 1st Mari		Eye UAV (Unmanned Aerial V	Pehicle) systems
were upgraded to like-new status and provide	ed to 1st MarDiv as a temporary loan for use in Operation	ı Iraqi Freedom (OIF).		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.384	0.000	0.000	
RDT&E Articles Qty				
MAGTF Expeditionary Family of Fightin	g Vehicles (MEFFV): Operational system development	, contractor support and program of	fice travel.	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	5.950	0.000	
RDT&E Articles Qty				
	rvice forces to seamlessly train across range boundaries a apponent training at Marine Corps major bases and trainin 15.212		3.101	ii oi some racacai

EXHIBIT R-2a, RDT&E Project Justification						DATE:					
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME							Fe	bruary 2004			
APPROPRIATION/BUDGET ACTIVITY											
DDTSE N/DA 7 Operational Sup Day	0206623M Marine	Corps Ground	d Combat/Supp	oorting	C1001 Marina	Carno Craund W	namannı DID				
RDT&E, N /BA-7 Operational Sys Dev (U) PROJECT CHANGE SUMMARY:	Arms Systems				C 1901 Marine	Corps Ground We	eaponry PIP				
(U) PROJECT CHANGE SUMMART:		TT									
(II) EV 2004 Procident's Budgets	<u>FY2003</u> 14.245	<u>FY2004</u> 2.946	<u>FY2005</u> 3.112								
(U) FY 2004 President's Budget: (U) Adjustments from the President's Budget:	14.243	2.946	3.112								
. , ,											
(U) Congressional Program Reductions											
(U) Congressional Rescissions											
(U) Congressional Increases	4.700	5.95									
(U) Reprogrammings	1.706										
(U) Small Business Innovation Research	-0.221		0.044								
(U) Minor Affordability Adjustment	-0.518	-0.099	-0.011								
(U) FY 2005 President's Budget:	15.212	8.797	3.101								
CHANGE SUMMARY EXPLANATION:											
(U) Funding: See above.											
(U) Schedule: Not Applicable.											
(U) Technical: Not Applicable.											
(U) C. OTHER PROGRAM FUNDING SUMMA	RY:										
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cos		
(U) PMC (BLI#206200) Improved Recovery Veh	3.420	3.623	0.000	0.000		0.000	0.000	0.000	7.04		
(U) PMC (BLI#206300) MOD KITS AFS	3.884	15.007	11.844	10.229	11.728	11.596	10.294	Continuing	Continuin		
(U) PMC (BLI#220900) Mod Kits IWS	4.102	3.281	3.248	3.467	2.967	2.936	3.005	Continuing	Continuin		
(U) PMC (BLI#222000) Under \$5 Million	3.181	14.122	4.888	5.711	4.897	4.814	2.551	Continuing	Continuin		
(U) PMC (BLI#233400) Modular Weapon System	24.645	13.611	10.051	9.939		0.000	0.000	0.000	58.29		
(U) PMC (BLI#462000) Items <\$5M	22.613	0.460	0.461	0.460		0.000	0.000	Continuing	Continuin		
(U) PMC (BLI#473300) Fire Support Systems	33.376	28.235	10.215	2.193		0.000	0.000	Continuing	Continuin		
(U) PMC (BLI#475000) Items Under \$5M (Intel)	4.154	0.000	0.000	0.000		0.000	0.000	Continuing	Continuin		
(U) PMC (BLI#493000) Night Vision Equipment	24.403	30.006	26.100	27.655		12.851	19.199	Continuing	Continuin		
(U) PMC (BLI#643400) Amphibious Raid Equip	18.625	21.247	15.771	16.105		3.429	3.497	Continuing	Continuin		
(U) PMC (BLI#667000) Items Less Than \$5M	0.000	13.955	5.713	4.687		6.688	6.690	Continuing	Continuin		
(U) PMC (BLI#209500) M1A1 Firepower	0.000	4.191	36.873	33.168		22.980	0.000	Continuing	Continuin		
(U) PMC (BLI#473400) SURSS	0.000	2.043	8.866	11.730	0.927	0.954	0.971	Continuing	Continuin		
(U) Related RDT&E:											
• •	tion Creatomer Arms M	ova Air Force C	oast Guard and S	nagial Onesa	ions Commond						
(U) All Ground Weapons and Ground Ammuni	nuon systems: Army, N	avy, All Force, C	oast Guard, and S	peciai Operai	ions Command						

EXH	IIBIT R-2a, RDT&E Project Justification		DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting		
RDT&E, N /BA-7 Operational Sys Dev	Arms Systems	C1901 Marine	Corps Ground Weaponry PIP
(U) D. ACQUISITION STRATEGY:		•	
and Rangefinder (LLDR) being developed by power enhancement used selected upgrades reliability, and technology up-grades to meet I design, integration and demonstration of Non-	helf modifications to developmental items. Target Location Design the Army. This component is integrated with hand-held computer from Army developmental programs to create a system that more Marine Corps requirements. M1A1 Fire Power Enhancement com -Developmental Item (NDI) technology. Down select to a single c ransition to production with the winning design by exercising a firm	running target ha readily meets Ma petitively awarde ontractor with the	and-off software developed by the Marine Corps. Fire arine Corps requirements. Modification covers safety, id two cost plus firm fixed price contracts to conduct parallel most promising concept, continuing with design
(U) E. MAJOR PERFORMERS: NSWC, Dahlgren, VA - Preparation of Trainin	g Materials, Manual Validation and Test Support.		
	ation and demonstration for the far target location modification.		

						DATE:							
		Exhibit R-3 Cost Analysis				February 2004							
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
		0206623M Marine Corp											
RDT&E, N /BA 7 Operationa		Combat/Supporting Arn		_	1	C1901 M	larine Corp	os Ground		y PIP		_	
Cost Categories	Contract	Performing	Total	E) (00	FY 03	E)/ 04	FY 04	E)/ 0E	FY 05	0	T. (.)	Target	
	Method & Type	Activity & Location	PY s Cost	FY 03 Cost	Award Date	FY 04 Cost	Award Date	FY 05 Cost	Award Date	Cost to Complete		Value o	
PRODUCT DEVELOPMENT	α rype	SEE BELOW	COSI	Cosi	Date	COSI	Date	COSI	Date	Complete	COSI	Contrac	
AN/GVS5 REPLACEMENT	WR	MCLB, Barstow, CA	0.034	0.100	2Q03					Cont.	Cont.		
AN/GVS5 REPLACEMENT	RCP	Synetics, Inc. King George, VA	0.054	0.136	2Q03					Cont.	Cont.		
AN/GVS5 REPLACEMENT	RCP	MKI Woodbridge, VA	0.098	0.050	2Q03					Cont.	Cont.		
DRAGON EYE COW	RCP	NASC, Pax River, MD	0.030	0.036	3Q03					Cont.	Cont.		
Fam Raid and Recon	RCP	NSWDG, Va Beach, VA		0.196	1Q03					Cont.	Cont.		
Fam Raid and Recon	MIPR	NATICK Labs, Natick, MA		0.163	1Q03					Cont.	Cont.		
Fam Raid and Recon	WR	CSS. Panama City. FL		0.163	1Q03	1	1			Cont.	Cont.	<u> </u>	
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.		
Fire Spt Mods	WR	NSWC, Crane, IN	0.030	0.047	2Q03					Cont.	Cont.		
Fire Spt Mods	MIPR	TACOM, Rock Island, IL	0.070	0.085	2Q03					Cont.	Cont.		
Fire Spt Mods	RCP	Tallahassee Tech, FL	0.019	0.600	3Q03					Cont.	Cont.		
Fire Spt Mods	RCP	Mandus Group, San Diego, CA	0.004	0.666	3Q03					Cont.	Cont.		
Fire Spt Mods	WR	MCLB, Barstow, CA	0.115	0.092	2Q03					Cont.	Cont.		
Fire Spt Mods	VAR	VARIOUS	0.295	0.050	2Q03					Cont.	Cont.		
Inf Weapon Mods	WR/RCP	MCCDC, Quantico, VA	0.817	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	0.385	2Q03	0.280	2Q04	0.286	2Q05	Cont.	Cont.		
MBC	RCP	Picatinny Arsenal, Picatinny, NJ		0.553	2Q03					Cont.	Cont.		
M1A1 Firepower	RCP	RAYTHEON/DRS Torrance, CA	14.494	3.811	2Q03					Cont.	Cont.		
M1A1 Mods	RCP	Booz-Allen Hamilton, McLean, VA	0.284	0.166	2Q03					Cont.	Cont.		
M1A1 Mods	MIPR	US Army CECOM, Ft Monmouth NJ		0.009	2Q03					Cont.	Cont.		
Nt. Vision Mod	WR/RCP	NSWC, Crane, IN	0.136	0.278	1Q03	0.685	1Q04	0.698	1Q05	Cont.	Cont.	1	
Nt. Vision Mod	MIPR	Night Vision Lab, Ft Belvoir, VA	0.493	0.094	1Q03	0.100	1Q04	0.105	1Q05	Cont.	Cont.		
TWS	MIPR	Night Vision Lab, Ft Belvoir, VA	0.242	0.020	1Q03	0.044	1Q04	0.044	1Q05	Cont.	Cont.		
IPHABD	MIPR	NATICK, Natick, MA		0.460	1Q03	1				Cont.	Cont.	1	
Underwater Recon (URC)	WR	CSS, Panama City, FL		0.320	2Q03					Cont.	Cont.		
Underwater Recon (URC)	RCP	CSS, Panama City, FL		0.243	2Q03					Cont.	Cont.		
TUV	WR	Redstone Arsenal, AL				0.064	1Q04	0.183	1Q05	Cont.	Cont.		
MCAGCC Range Inst	RCP	NSWC Corona Div, Corona, CA				2.925	2Q04						
MCAGCC Range Inst	TBD	TBD				2.900	3Q04						
Subtotal Product Dev			17.974	9.153		7.259		1.583		Cont.	Cont.		
Remarks:	1	1	1	0.100	1	203			1	33111.		1	

		Exhibit R-3 Cost Analysis				DATE:			F	ebruary 200	14	
APPROPRIATION/BUDGET		PROGRAM ELEMENT 0206623M Marine Cor	•				Γ NUMBER		ΛΕ.		/ -	
RDT&E, N /BA 7 Operationa				1	1	C1901 Marine Corps Ground Weaponry PIP						
Cost Categories		Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter		Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
PROGRAM SUPPORT	14/5	SEE BELOW	2.212	0.000	4000						0 1	
AN/GVS-5	WR	MCSC, Quantico, VA	0.210	0.280	1Q03					Cont.	Cont.	_
AN/GVS-5	RCP	BAEST, Stafford, VA	0.395	0.786	1Q03					Cont.	Cont.	
AN/GVS-5	MIPR	Marine Det, Ft Sill, OK	0.005	0.010	2Q03					Cont.	Cont.	
AN/GVS-5	WR	NSWC, Dahlgren, VA	0.095	0.200	2Q03					Cont.	Cont.	
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA	0.188	0.039	1Q03					Cont.	Cont.	
Fam of Raid and Recon	RCP	Quantico, VA		0.302	1Q03					Cont.	Cont.	
Fam of Raid and Recon	WR	MCSC, Quantico, VA		0.031	1Q03					Cont.	Cont.	
Fire Supt Mods	WR/RCP	BAEST, Stafford, VA	1.349	0.191	1Q03					Cont.	Cont.	
Inf Wpns Mods	WR	MCSC, Quantico, VA	0.577	0.100	1Q03	0.135	1Q04	0.150	1Q05	Cont.	Cont.	
Inf Wpns Mods	RCP	BAEST, Stafford, VA	0.470	0.269	1Q03	0.352	1Q04	0.386	1Q05	Cont.	Cont.	
INF Wpns Mods	WR/RCP	TBD						0.013	1Q05	Cont.	Cont.	
ISURSS	RCP	BAEST, Stafford, VA	0.179	0.179	1Q03	0.179	1Q04	0.179	1Q05	Cont.	Cont.	
ISURSS (Civ Sal)	WR	MCSC, Quantico, VA				0.140	1Q04	0.140	1Q05	Cont.	Cont.	
ISURSS	WR	MCSC, Quantico, VA	0.019	0.015	1Q03	0.020	1Q04	0.020	1Q05	Cont.	Cont.	
ISURSS	RCP	TBD				0.204	2Q04	0.082	2Q05	Cont.	Cont.	
ISURSS (Analysis)	RCP	TBD				0.050	2Q04	0.050	1Q05	Cont.	Cont.	
M1A1 Firepower	MIPR	GDLS, Warren, MI/ARDEC/NVL	0.972	0.049	2Q03					Cont.	Cont.	
M1A1 Firepower	WR	MCSC, Quantico, VA		0.334	1Q03					Cont.	Cont.	
M1A1 Mods	WR	MCSC, Quantico, VA	0.196	0.061	1Q03					Cont.	Cont.	
MBC	WR	MCSC, Quantico, VA	0.075	0.572	1Q03					Cont.	Cont.	
Nt Vision Mod	WR	MCSC, Quantico, VA	0.113	0.066	1Q03	0.126	1Q04	0.137	1Q05	Cont.	Cont.	1
Nt Vision Mod	RCP	BAEST, Stafford, VA	0.297	0.000	2Q03	0.053	2Q04	0.140	2Q05	Cont.	Cont.	
TWS	RCP	BAEST, Stafford, VA	0.037	2.300		0.012	2Q04	0.012	2Q05	Cont.	Cont.	1
Underwater Recon (URC)	WR	MCSC, Quantico, VA	0.007	0.073	2Q03	0.0.2		0.0.2		Cont.	Cont.	1
MEFFV	RCP	BAEST, Stafford, VA	0.100	0.384	1Q03					0.000	0.484	1
			5.277	3.941		1.271		1.309		Cont.	Cont.	

			UNCLA	ASSIT IL	. <u>U</u>							
		Exhibit R-3 Cost Analysis				DATE:			F	ebruary 200	14	
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEMENT	a Cuarrad			PROJECT	NUMBER	AND NAM		bruary 20	· ·	
RDT&E, N /BA 7 Operational	I Sve Dov	0206623M Marine Corps Combat/Supporting Arn				C1901 Ma	rine Corp	s Ground	Weanonry	, DID		
Cost Categories	Contract	Performing	Total	FY 03	FY 03	01301 WIC	FY 04	3 Orouna	FY 05	, <u> </u>		Target
(Tailor to WBS, or System/Iten		Activity &	PY s	COST	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location	Cost		Date	Cost	Date	Cost	Date	Complete	l l	Contrac
T&E		SEE BELOW										
AN/GVS-5 Replacement	WR	MCOTEA, Quantico, VA	0.095	0.145	2Q03					Cont.	Cont.	
AN/GVS-5 Replacement	RCP	Asbury Int., Sterling, VA	0.023	0.192	2Q03					Cont.	Cont.	
Fam Artillery Munitions	WR/RCP	NSWC, Crane, IN	0.182	0.222	1Q03					Cont.	Cont.	
Family Small Craft Mods	WR	NSWC, Crane, IN	0.323	0.020	1Q03					Cont.	Cont.	
Family Small Craft Mods	WR	Carderock, MD		0.044	1Q03					Cont.	Cont.	
Fire Spt Mods	WR	MCOTEA, Quantico, VA	0.025	0.063	2Q03					Cont.	Cont.	
Inf Wpn Mods	WR	MCOTEA, Quantico, VA	0.080	0.060	2Q03	0.067	2Q04	0.099	2Q05	Cont.	Cont.	
Inf Wpn Mods	WR	MCCDC, Quantico, VA	0.235	0.050	2Q03	0.050	2Q04	0.085	2Q05	Cont.	Cont.	
MBC	WR	NSWC, Crane, IN/ Ft Monmouth, NJ		0.412	2Q03					Cont.	Cont.	
M1A1 Firepower	MIPR	ARDEC, Rock Island, IL	0.095	0.025	2Q03					Cont.	Cont.	
Nt Vision Mods	WR	MCOTEA, Quantico, VA	0.100	0.025	2Q03	0.025	2Q04	0.025	2Q05	Cont.	Cont.	
Subtotal T&E			1.158	1.258		0.142		0.209		Cont.	Cont.	
Remarks:			1.100	1.200		0.142		0.200		Oont.	Oont.	
Cost Categories	Contract	Performing	Total	FY 03	FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iten	Method	Activity &	PY s	Cost	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost		Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
MANAGEMENT		SEE BELOW										
AN/GVS-5 REPLACEMENT	RCP	BAEST, Stafford, VA	0.095	0.100	1Q03					Cont.	Cont.	
Fire Supt Mods	WR	MCSC, Quantico, VA	0.731	0.080	1Q03					Cont.	Cont.	
MBC	RCP	BAEST, Stafford, VA		0.260	1Q03					Cont.	Cont.	
M1A1 Firepower	RCP	BAEST, Stafford, VA	0.080	0.025	2Q03					Cont.	Cont.	
Underwater Recon (URC)	RCP	BAEST, Stafford, VA		0.395	2Q03					Cont.	Cont.	
MCAGCC Range Inst	WR	NSWC Corona Div, Corona, CA				0.125	2Q04					
Subtotal Management			0.906	0.860		0.125		0.000		Cont.	Cont.	
Remarks:		•				-						
T			T	15.212		8.797	<u> </u>	3.101		Cont.	Cont.	
Total Cost												

			DATE:
	Exhibit R-4/4a Schedule Profile/Detail		February 2004
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			Ĭ	Sept01	Oct 02	Oct 03	Oct 04						
TWS Production							July 02-	Aug 04					
Fielding Decision					Oct 02								
IOC						Sept03							
FOC - Medium						l `ı	Sep 04						
						ľ							

Program Funding Summary (APPN, BLI #, NOMEN)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N	0.020	0.056	0.056	0.000	0.000	0.000	0.000	0.000	0.132
(U) PMC, BLI# 493000 Night Vision Equip	17.393	18.911	13.924	0.000	0.000	0.000	0.000	0.000	50.228

A 7 Operational Sys Dev 0206623M Marine Corps Gro Thermal Weapon Sight SCHEDULE DETAIL Fielding Decision IOC	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	round Weaponry FY 2009	y PIP
Fielding Decision	112003	112004	1 1 2003	1 1 2000	1 1 2007	1 1 2000		
							2000	
							1	
	1st QTR							
	4th QTR							
FOC		4th QTR						
							1	
							-	

EXHIBI*	ΓR-2a, RDT&E Proje	ct Justification	on			DATE:			
							Februar	y 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUI	MBER AND NA	AME					
RDT&E, N /BA-7 Operational Sys Dev	0206623M M	arine Corps	Ground Comb	oat Arms Sys	tems	C2086 Marin	e Enhancem	ent Program	(MEP)
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	2.117	2.603	2.655	2.608	2.651	2.734	2.790	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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.750	0.873	0.854
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.722	0.864	0.898
RDT&E Articles Qty			

Explore clothing and individual equipment NDI categories.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.645	0.866	0.903
RDT&E Articles Qty			

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

(U) Total \$ 2.117 2.603 2.655

EXHIBIT R-2a	ı, RDT&E Project	Justification				DATE:	February	2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELE 0206623M Mai				ms	C2086 Marine Enhancement Program (MEP)				
(U) Project Change Summary:	FY2003	FY2004	FY2005							
(U) FY 2004 President's Budget:	2.335	2.632	2.669							
(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) FY03 Update (U) FY 2005 Presbud: CHANGE SUMMARY EXPLANATION: (U) Funding: See Above (U) Schedule: Not Applicable.	0.150 -0.368 2.117	-0.029 2.603	-0.014 2.655							
(U) Technical: Not Applicable. (U) C. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 T	o Compl	Total Cos	
(U) PMC (BLI #221100) MEP	7.131	6.847	4.024	3.827	3.822	3.956	4.037	Continuing	Continuin	
(U) Related RDT&E: PE 0604713A (Combat Feeding	ng, Clothing and E	quipment)								
(U) D. ACQUISITION STRATEGY: NDI/COTS										
		2.4.CHODDIN				Evhilit D	2a. RDTE.N I	Dualage III-	lification	

Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 26 of 58)

	EXHIBIT R-2	a, RDT&E Project Justification	DATE:
			February 2004
APPROPRIATION/BUDGET ACT	TVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sy	rs Dev	0206623M Marine Corps Ground Combat Arms Systems	C2086 Marine Enhancement Program (MEP)
(U) E. MAJOR PERFORMERS:			
Performer	Effort	FY Award Date (\$000) Am	ıt

<u>Performer</u>	<u>Effort</u>	<u>FY</u>	Award Date	(\$000) Amt
USA, SBCCOM, Natick Mass	Product Development	2003	Dec-02	183
USA, SBCCOM, Natick Mass	DT&E	2003	Mar-03	290
NSWC, Crane Indiana	Product Development	2003	Dec-02	52
NSWC, Crane Indiana	DT&E	2003	Dec-02	249
NAWC, Pax River, Maryland	Product Development	2003	Dec-02	63
NAWC, Pax River, Maryland	DT&E	2003	Dec-02	276
USA, SBCCOM, Natick Mass	Product Development	2004	Dec-03	142
USA, SBCCOM, Natick Mass	DT&E	2004	Jan-04	299
USA, SBCCOM, Natick Mass	Product Development	2005	Dec-04	144
USA, SBCCOM, Natick Mass	DT&E	2005	Dec-04	308
NSWC, Crane Indiana	Product Development	2005	Dec-04	97
NSWC, Crane Indiana	DT&E	2005	Dec-04	100
NAWC, Pax River, Maryland	Product Development	2005	Dec-04	72
NAWC, Pax River, Maryland	DT&E	2005	Dec-04	373

					DATE:								
Exhibit R-3 Cost Analysis									Februar	y 2004			
APPROPRIATION/BUDGET A	CTIVITY		PROGRAM ELEME			PROJEC	CT NUMB	ER AND	NAME				
			Ground Combat Ar	ms									
RDT&E, N /BA 7 Operationa	I Sys Dev		Systems				<u>larine Er</u>	hanced	Program				
Cost Categories	Contract	Performing		Total		FY 03		FY 04		FY 05			Target
	Method	Activity &		PY s	FY 03		FY 04	Award		Award	Cost to	Total	
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Product Development	WR		lluegrass, Lex, KY	2.499	0.049		0.051		0.053		Cont.	Cont.	
Product Development	WR		v, Fallbrook, CA	0.278			0.038		0.041		Cont.	Cont.	
Product Development	_	MCTSSA, C	•	0.631	0.006		0.056		0.056		Cont.	Cont.	
Product Development		NCTRF, Ab		0.533	0.081	1Q03	0.114		0.115		Cont.	Cont.	
Product Development	MIPR	NATICK, Na		1.559	0.183		0.142		0.144		Cont.	Cont.	
Product Development	MIPR		berdeen, MD	0.284	0.010	2Q03	0.017	1Q04	0.017		Cont.	Cont.	
Product Development	MIPR	NSMA, Was		0.382	0.020		0.020		0.020		Cont.	Cont.	
Product Development	MIPR	TACOM, Wa	arren MI	0.100	0.012	2Q03	0.012	1Q04	0.013	1Q05	Cont.	Cont.	
Product Development	MIPR	2nd MARDI	V, CamLej, NC	0.465	0.030	2Q03	0.036	1Q04	0.036	1Q05	Cont.	Cont.	
Product Development	WR	2nd MARDI	V, CamLej, NC	0.080	0.005	1Q03	0.008	1Q04	0.008	1Q05	Cont.	Cont.	
Product Development	WR	NCCOSC, S	San Diego, CA	0.269	0.014	2Q03	0.020	1Q04	0.020	1Q05	Cont.	Cont.	
Product Development	WR	NCSS, Pana	ama City, FL	1.935	0.030	1Q03	0.033	1Q04	0.034	1Q05	Cont.	Cont.	
Product Development	WR	NSWC, Cra	ne, IN	2.169	0.050	1Q03	0.067	1Q04	0.097	1Q05	Cont.	Cont.	
Product Development	WR	NAWC Air E	Div, Pax River, MD	0.407	0.063	1Q03	0.071	1Q04	0.057	1Q05	Cont.	Cont.	
Product Development	WR	II MEF, Can	nLej, NC	0.100	0.007	1Q03	0.018	1Q04	0.019	1Q05	Cont.	Cont.	
<u> </u>													
Subtotal Product Dev				11.691	0.596		0.703		0.730		Cont.	Cont.	
Remarks:				•	•	!	•	•	•	•			
Cost Categories	Contract	Performing		Total		FY 03		FY 04		FY 05			Target
-	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Integrated Logistics Support	WR	MCCDC, Q	uantico, VA	2.208			0.098	1Q04	0.099	1Q05	Cont.	Cont.	
Integrated Logistics Support	Various	MISC		4.679	0.060	Various	0.070	Various	0.076	Various	Cont.	Cont.	
0.11.110				0.00=	0.440		0.400		0.477				
Subtotal Support Remarks:				6.887	0.110		0.168		0.175				

R-1 SHOPPING LIST - Item No. 183

	PROGRAM ELEME Ground Combat As Systems Performing	-	1		T NUMB	ER AND	Februar NAME	, 2007			
Sys Dev Contract	Ground Combat Air Systems	-			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	21(7(1)	,				
Contract	Systems										
Contract					C2086 Marine Enhanced Program (MED)						
			FY 03	C2086 Marine Enhanced Program (MEP) FY 03 FY 04 FY 05 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII						Target	
	Activity &	Total PY s	FY 03	Award	FY 04		FY 05	Award	Cost to	Total	Value of
	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
	MCTSSA, CamPen, CA	1.920			0.055	1Q04	0.057	1Q05	Cont.	Cont.	Contrac
									Cont.	Cont.	
									Cont.		
							0.239	1Q05	Cont.	Cont.	
					0.027		0.028	1Q05	Cont.	Cont.	
	NCCOSC, San Diego, CA	0.792			0.057		0.057	1Q05	Cont.	Cont.	
WR	NCSS, Panama City, FL	6.249			0.028	1Q04	0.029	1Q05	Cont.	Cont.	
WR	NSWC, Crane, IN	7.034	0.135	1Q03	0.247	1Q04	0.347	1Q05	Cont.	Cont.	
WR	NAWC Air Div, Pax River, MD	1.357	0.276	1Q03	0.274	1Q04	0.373	1Q05	Cont.	Cont.	
WR	NSWC, Indian Head, MD	0.596	0.021	3Q03	0.02	1Q04	0.021	1Q05	Cont.	Cont.	
Various	MISC	9.431	0.120	Various	0.296	Various	0.095	Various	Cont.	Cont.	
		36.089	1.411		1.732		1.750		Cont.	Cont.	
	36.089.00	n									
Contract				FY 03		FY 04		FY 05			Target
			FY 03		FY 04		FY 05		Cost to	Total	Value of
											Contract
<u>,ре</u>		10001	000.	2 4.10	000.	2 4.10	•••	2 0.10		000.	00
		0.000	0.000		0.000		0.000		Cont.	Cont.	
		54.667	2.117		2.603		2.655		Cont.	Cont.	
	MIPR MIPR MIPR WR/RCP MIPR MIPR MIPR WR WR WR WR WR WR WR WC WR	MIPR ARL/APG Aberdeen, MD MIPR PPSC, Phjladelphia, PA WR/RCP MCAGCC 29 Palms, CA MIPR NSMA, Washington DC MIPR TACOM, Warren MI MIPR NHRC, Crane, IN WR 2nd MARDIV, CamLej, NC WR NCCOSC, San Diego, CA WR NCSS, Panama City, FL WR NSWC, Crane, IN WR NAWC Air Div, Pax River, MD WR NSWC, Indian Head, MD Various MISC Contract Performing Method Activity &	MIPR NATICK, Natick, MA 3.070 MIPR ARL/APG Aberdeen, MD 0.862 MIPR PPSC, Phjladelphia, PA 0.079 WR/RCP MCAGCC 29 Palms, CA 0.389 MIPR NSMA, Washington DC 0.616 MIPR TACOM, Warren MI 0.272 MIPR NHRC, Crane, IN 2.270 WR 2nd MARDIV, CamLej, NC 0.273 WR NCCOSC, San Diego, CA 0.792 WR NCSS, Panama City, FL 6.249 WR NSWC, Crane, IN 7.034 WR NAWC Air Div, Pax River, MD 1.357 WR NSWC, Indian Head, MD 0.596 Various MISC 9.431 36,089.000 Contract Performing Total Method Activity & PY s & Type Location Cost	MIPR NATICK, Natick, MA 3.070 0.290 MIPR ARL/APG Aberdeen, MD 0.862 0.180 MIPR PPSC, Phjladelphia, PA 0.079 0.026 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 MIPR NSMA, Washington DC 0.616 0.035 MIPR TACOM, Warren MI 0.272 0.033 MIPR NHRC, Crane, IN 2.270 0.100 WR 2nd MARDIV, CamLej, NC 0.273 0.026 WR NCCOSC, San Diego, CA 0.792 0.045 WR NCSS, Panama City, FL 6.249 0.030 WR NSWC, Crane, IN 7.034 0.135 WR NAWC Air Div, Pax River, MD 1.357 0.276 WR NSWC, Indian Head, MD 0.596 0.021 Various MISC 9.431 0.120 Contract Performing Total Method Activity & PY s FY 03 K Type Location Cost Cost	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 MIPR NSMA, Washington DC 0.616 0.035 1Q03 MIPR TACOM, Warren MI 0.272 0.033 1Q03 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 WR 2nd MARDIV, CamLej, NC 0.273 0.026 1Q03 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 WR NCSS, Panama City, FL 6.249 0.030 1Q03 WR NSWC, Crane, IN 7.034 0.135 1Q03 WR NSWC, Indian Head, MD 0.596 0.021 3Q03 Various MISC 9.431 0.120 Various 36,089.000 Contract PY s FY 03 <td< td=""><td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 WR 2nd MARDIV, CamLej, NC 0.273 0.026 1Q03 0.027 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 WR NSWC, Spanama City, FL 6.249 0.030 1Q03 0.224 WR NSWC, Indian Head, MD 0.596 0.021 3Q03 0.02 WR NSWC, Indian Head, MD 0.596 0.021 3Q03 Award FY 03</td><td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 WR NCSS, Panama City, FL 6.249 0.030 1Q03 0.028 1Q04 WR NSWC, Crane, IN 7.034 0.135 1Q03 0.247 1Q04 WR NSWC, Indian Head, MD 0.596 0.021 3Q03</td><td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.033 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.038 1Q04 0.034 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.034 MIPR NHRC, Crane, IN 2.273 0.026 1Q03 0.027 1Q04 0.028 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 0.029 WR NSWC, Crane, IN 7.034 0.135 1Q03</td><td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 1Q05 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 0.034 1Q05 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.034 1Q05 WR 2nd MARDIV, CamLej, NC 0.273 0.026 1Q03 0.027 1Q04 0.028 1Q05 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057</td></td<> <td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 Cont. MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.038 1Q05 Cont. MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 Cont. MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 0.034 1Q05 Cont. MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.239 1Q05 Cont. WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 0.057 1Q05</td> <td>MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 Cont. Cont. MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 Cont. Cont. Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 Cont. Cont. WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 1Q05 Cont. Cont. Cont. MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 Cont. Cont. Cont. MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.038 1Q04 0.038 1Q05 Cont. Con</td>	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 WR 2nd MARDIV, CamLej, NC 0.273 0.026 1Q03 0.027 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 WR NSWC, Spanama City, FL 6.249 0.030 1Q03 0.224 WR NSWC, Indian Head, MD 0.596 0.021 3Q03 0.02 WR NSWC, Indian Head, MD 0.596 0.021 3Q03 Award FY 03	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 WR NCSS, Panama City, FL 6.249 0.030 1Q03 0.028 1Q04 WR NSWC, Crane, IN 7.034 0.135 1Q03 0.247 1Q04 WR NSWC, Indian Head, MD 0.596 0.021 3Q03	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.033 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.038 1Q04 0.034 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.034 MIPR NHRC, Crane, IN 2.273 0.026 1Q03 0.027 1Q04 0.028 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 0.029 WR NSWC, Crane, IN 7.034 0.135 1Q03	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 1Q05 MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 0.034 1Q05 MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.034 1Q05 WR 2nd MARDIV, CamLej, NC 0.273 0.026 1Q03 0.027 1Q04 0.028 1Q05 WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 Cont. MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.038 1Q05 Cont. MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 Cont. MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.034 1Q04 0.034 1Q05 Cont. MIPR NHRC, Crane, IN 2.270 0.100 2Q03 0.238 1Q04 0.239 1Q05 Cont. WR NCCOSC, San Diego, CA 0.792 0.045 2Q03 0.057 1Q04 0.057 1Q05	MIPR NATICK, Natick, MA 3.070 0.290 2Q03 0.299 1Q04 0.308 1Q05 Cont. Cont. MIPR ARL/APG Aberdeen, MD 0.862 0.180 2Q03 0.038 1Q04 0.040 1Q05 Cont. Cont. Cont. MIPR PPSC, Phjladelphia, PA 0.079 0.026 3Q03 0.027 1Q04 0.028 1Q05 Cont. Cont. WR/RCP MCAGCC 29 Palms, CA 0.389 0.019 2Q03 0.032 1Q04 0.033 1Q05 Cont. Cont. Cont. MIPR NSMA, Washington DC 0.616 0.035 1Q03 0.038 1Q04 0.038 1Q05 Cont. Cont. Cont. MIPR TACOM, Warren MI 0.272 0.033 1Q03 0.038 1Q04 0.038 1Q05 Cont. Con

EXHIBIT	R-2a, RDT&E	Project Justi	fication	-	-		DATE:	_	
	February 2004								
APPROPRIATION/BUDGET ACTIVITY	NAME	NAME							
	0206623M Marine Corps Ground C2503 FAMILY OF COMB								RT AND
RDT&E, N /BA-7 Operational Sys Development	Combat/Sup	Combat/Supporting Arms Systems SERVICES							
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	1.070	3.699	3.959	7.204	7.509	9.087	10.143	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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.835	1.027	1.058
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.845	1.361
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.116	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.

FYHIRIT	R-2a, RDT&E Pr	niect Justific	ration		DATE:			
EXHIBIT	IN Zu, NDIGETT	oject oustine	cation		DATE.	February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM EL 0206623M Ma Combat/Suppo	rine Corps G	Ground		PROJECT NUMBER AND NAME C2503 FAMILY OF COMBAT EQUIPMENT SUP SERVICES			
COST (\$ in Millions)		FY 200	03	FY 2004	FY 2005			
Accomplishment/Effort Subtotal Cost		0.000		0.600	0.500			
RDT&E Articles Qty								
Family of Field Medical Equipment: Explore avail	lable technology to a	ascertain the hu	uman/medical ef	fects of the Thermobaric	Warfare threat on operation	nal forces.		
COST (\$ in Millions)		FY 200	03	FY 2004	FY 2005			
Accomplishment/Effort Subtotal Cost		0.119	9	0.436	0.434			
RDT&E Articles Qty								
Family of Field Medical Equipment: Minimization	of the Forward Res					_		
COST (\$ in Millions)		FY 200		FY 2004	FY 2005	_		
Accomplishment/Effort Subtotal Cost		0.000	0	0.073	0.073			
RDT&E Articles Qty								
Family of Shelters and Shelter Equipment: Design the Marine Corps shelter programs.	n and engineering to	increase capat	bility, reduce we	eight, cost and cube of soi	tt wall shelters. Explore an	d test new technologies to insert into		
(U) Total \$ 0.000		1.070		3.699	3.959			
(U) PROJECT CHANGE SUMMARY								
	FY2003	FY2004	FY2005					
(U) FY 2004 President's Budget:	1.087	3.741	3.976					
(U) Adjustments from the President's Budget:								
(U) Congressional/OSD Program Reductions								
(U) Congressional Rescissions								
(U) Congressional Increases								
` '								
(U) Reprogrammings	0.022							
(U) SBIR/STTR Transfer	-0.022	0.040	-0.017					
(U) Minor Affordability Adjustment	0.005	-0.042	-0.01/					
(U) FY03 Update		2 (00	2.050					
(U) FY 2005 OSD Budget:	1.070	3.699	3.959					
CHANGE SUMMARY EXPLANATION:								
(U) Funding: See Above.								
(U) Schedule: Not Applicable. (U) Technical: Not Applicable.								
TO TACUNICAL MOTANNICANA								

R-1 SHOPPING LIST - Item No. 183

EXHIBIT	R-2a, RDT&E Project Justification		DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND	NAME
	0206623M Marine Corps Ground	C2503 FAMILY OF COM	BAT EQUIPMENT SUPPORT AND
RDT&E, N /BA-7 Operational Sys Development	Combat/Supporting Arms Systems	SERVICES	
	-	<u> </u>	

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 To	o Compl	Total Cost
(U) PMC Line (BLI#652200) Field Med Equip	11.671	4.144	6.027	2.432	3.179	3.188	3.265	Cont	Cont

^{**} FY 02/FY 03 Forward Resuscitative Surgery System, Enroute Care 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-04-FY05.

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

(U) SCHEDULE PROFILE: Not Applicable.

			<u> </u>	10LA3								
					DATE:							
		-3 Cost Analysis	1				_		ry 2004			
APPROPRIATION/BUDGET <i>F</i>	ACTIVITY			M ELEMEN			PROJEC	T NUMBER	R AND NAI	ME		
				Marine Co								
RDT&E, N /BA 7 Operationa	I Sys Dev	elopment	Combat/S	supporting A	Arms Sys	tems	C2503 In	itial Issue				
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contra
Development/Tech Insertion	MIPR	USASSCOM Natick, MA	2.967	0.527	1Q/03	0.553	1Q/04	0.717	1Q/05	Cont.	Cont.	
Development/Tech Insertion	FFP	TBD				1.397	2Q/04	1.246	2Q/05	Cont.	Cont.	
Subtotal Product Dev			2.967	0.527		1.950		1.963		Cont.	Cont.	
Remarks:		1	2.007	0.021		1.000	ļ	1.000		001111	00111	
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contra
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter		Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Operational Test & Eval	MIPR	USASSCOM Natick, MA	0.939			0.269		0.359		Cont.	Cont.	
Field User Evaluations	WR	FMF	0.625	0.142	2Q/03	1.300	2Q/04	1.452	2Q/05	0.000	3.519	
Subtotal T&E			1.564	0.390		1.569		1.811		Cont.	Cont.	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Iter		Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Contractor Eng Suppt	FFP/O	QUANTICO, VA	0.275	0.039		0.051	1Q/04	0.064		Cont.	Cont.	
Travel	WR	MCSC	0.102		1Q/03	0.046		0.038	1Q/05	Cont.	Cont.	
Labor	WR	MCSC		0.073	1Q/03	0.083	1Q/04	0.083	1Q/05	Cont.	Cont.	
Subtotal Management			0.377	0.153		0.180		0.185		Cont.	Cont.	
Remarks:												
Total Cost			4.908	1.070		3.699		3.959		Cont.	Cont.	

R-1 SHOPPING LIST - Item No. 183

EXHIBIT R-2a, RDT&E	Project Justific	ation		DATE:					
				February 2004					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT NUMB	ER AND NAME	ND NAME PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development	26623M Marin	M Marine Corps Ground Combat/Supt Arms C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIM							1 (HIMARS)
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	9.891	6.860	3.026	0.016	0.000	0.000	0.000	0.000	19.793
RDT&E Articles Qty									

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

HIMARS is a C-130 aircraft transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System Family of Munitions (MFOM). The system includes 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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	3.251	1.853	0.546
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.451	1.782	0.175
RDT&E Articles Qty			

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

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	2.195	1.119	1.333
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	2.994	2.106	0.972
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 \$ 9.891 6.860 3.026

Exhibit R-2a, RDTE,N Project Justification

EXHIBIT R-2a, RDT&E	Project Justification	on	DA	ATE:					
					February :	2004			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	IENT NUMBER	AND NAME		PROJECT NUMB				
RDT&E, N /BA-7 Operational Sys Development	26623M Marine C	orps Ground C	Combat/Supt A	rms	C2928 HIGH MOE	BILITY ARTILL	ERY ROCK	ET SYSTEM	(HIMARS)
PROJECT CHANGE SUMMARY									
	FY2003	FY2004	FY2005						
(U) FY 2004 President's Budget:	11.624	6.943	3.038						
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-1.044								
(U) SBIR/STTR Transfer									
(U) Minor Affordability Adjustment	-0.689	-0.083	-0.012						
(U) FY 2005 President's Budget:	9.891	6.860	3.026						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(I) 0 0 0 1 1 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
(U) C. OTHER PROGRAM FUNDING SUMMAR		EV 2004	EV 2005	EV 000	5 FV 2007	EV 2002	EV 2022	T- 0	Tatal Ca
Line Item No. & Name	FY 2003	FY 2004	<u>FY 2005</u>	FY 2000	FY 2007	<u>FY 2008</u>	FY 2009	To Compl	Total Cos
(U) PMC, 205001,EIFGSWS (HIMARS)	7.791	17.822	16.340	136.95	3 190.233	0.000	0.000	0.000	369.13

(U) Related RDT&E: Not Applicable.

(U) PMC, 304001, HIMARS ROCKETS

(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.

1.325

32.731

54.967

69.381

0.000

0.000

54.640

CONT

CONT

EXHIBIT R-2a, RDT&E Project Justification	DATE:						
EXHIBIT K-za, KDT&E Project Justification	February 2004						
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME							
RDT&E, N /BA-7 Operational Sys Development 26623M Marine Corps Ground Combat/Su	upt Arms C2928 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)						
(U) E. MAJOR PERFORMERS:							
FY-03-Lockheed Martin Missile, Dallas, TX. Modifications to Launcher May 03							
FY-03- Lockheed Martin Missile, Dallas, TX Systems Engineering Support for Development and testing Jan 03							
FY-03-Lockheed Martin Missile, Dallas, TX Develop and provide Launcher training, Contri	tract Award Dec 02						
FY-03-Lockheed Martin Missile, Dallas, TX Contractor Logisitics Support, Contract Option	on Jun 03						
FY-03-Oshkosh Truck Corporation (OTC), Oshkosh, WI Re-Supply System (RSS) Develop	ppment, Testing and Support Oct 02						
FY-03-OTC, Oshkosh, WI Modifications to RSS Jun 03							
FY-04-Lockheed Martin Missile, Dallas, TX. Modifications to Launcher Apr 04							
FY-04- Lockheed Martin Missile, Dallas, TX Systems Engineering Support for Developme	nent and testing OCT 03						
FY-04-Lockheed Martin Missile, Dallas, TX Develop and provide Launcher training, Contr	tract Award Oct 03						
FY-04-Lockheed Martin Missile, Dallas, TX Contractor Logisitics Support, Contract Option	on Jun 04						
FY-04-OTC, Oshkosh, WI Upgrade to RSS Production Representative articles with Field S							

					DATE:								
Exhibit R-3 Cost Analysis								F	ebruary 2	2004			
APPROPRIATION/BUDGE	T ACTIVITY		PROGRAM ELEMENT			PROJEC	T NUMBE	R AND NA	AME				
			0206623M Marine Corps	Ground									
RDT&E, N /BA-7 Operation	nal Sys Dev	elopment	Combat/Supt Arms			C2928 H	IGH MOBI	LITY ART	ILLERY R	OCKET S	YSTEM (H	IMARS)	
Cost Categories	Contract	Performing	-	Total		FY 03		FY 04		FY 05			Target
C .	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Primary Hardware Dev	SS/CPAF	Lockheed M	artin, Dallas, TX	10.003	1.051	05/03	0.400	04/04			0.000	11.454	11.454
Primary Hardware Dev	FFP	TACOM, Wa	arren, MI	0.000	0.100						0.000	0.100	0.100
Ancillary Hardware Dev	SS/CPAF	Lockheed M	artin, Dallas, TX	0.300	0.362	06/03					0.000	0.662	0.662
Primary Hardware Dev	SS/CPAF	Oshkosh Tr	uck Corp, Oshkosh,WI	2.054	0.810	10/02	0.600	01/03			0.000	3.464	3.464
Systems Engineering	WR	NSWC-Card	lerock,MD	0.028	0.062	10/02	0.030	10/03			0.000	0.120	0.120
Systems Engineering	WR	NSWC-Dah	gren, VA	0.311	0.271	10/02	0.503	10/03	0.146	10/04	0.016	1.247	1.247
Systems Engineering	WR	NSWC-Earle	e, NJ		0.250	03/03	0.150	10/03			0.000	0.400	0.400
Systems Engineering	FFP	John J. McN	fullen Assocs,Pittsb.,PA	0.129	0.037	04/03					0.000	0.166	0.166
Systems Engineering	CPAF	Lockheed M	artin, Dallas, TX		0.270	01/03	0.080	04/03	0.400	10/04	0.000	0.750	0.750
Systems Engineering	WR	SPAWAR, C	Charleston, SC								0.000	0.000	0.000
Systems Engineering	FFP	NAVSEA, W	•									0.000	
Systems Engineering	MIPR	TARDEC, D			0.038	10/02					0.000	0.038	0.038
Systems Engineering	WR		int McGu, CA				0.090	10/03				0.090	0.090
Subtotal Product Dev			·	12.825	3.251		1.853		0.546		0.016	18.491	
Remarks:	•	•		•	•	•	•	•	•				
Cost Categories	Contract	Performing		Total		FY 03		FY 04		FY 05		T	Target
3	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to		Value of
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Dev Support Equip	WR	MARCORS'	/SCOM,Quantico, VA	0.699	0.138	10/02	0.100	10/03			0.000	0.937	0.937
Dev Support Equip	WR	MCCDC, Qu	uantico, VA	0.945							0.000	0.945	0.945
Dev Support Equip	WR	NSWC_Care	derock, MD		0.104	10/02					0.000	0.104	0.104
Program Support	MIPR		SL,Huntsville, AL	0.995		10/02	0.214	10/03			0.000	1.304	1.304
Launcher Training	FFP	Lockheed M	artin, Dallas TX	1.261	0.078	12/02	0.163	10/03			0.000		1.502
Integ Logistics Support	FFP		ns, Stafford, VA	0.368		10/02	0.180	10/03	0.175	10/04	0.000		
Integ Logistics Support	CPAF		artin, Dallas TX	1.606	0.786	06/03	0.991	05/03				3.383	
Integ Logistics Support	WR		se-Albany, GA	0.027			0.034	10/03				0.061	0.061
Integ Logistics Support	FFP		uck Corp, Oshkosh,WI		0.000	10/02	0.100	10/03				0.100	0.100
Integ Logistics Support	FFP	SAIC, McLe	an, VA	0.105								0.105	
				6.006	1.451		1.782					0.000	
Subtotal Support							4 700		0.175	1	0.000	9.414	i .

R-1 SHOPPING LIST - Item No. 183

Meti & Ty	iys Developme intract Perform thod Activity iype Locatio R NSWC- R KTR Sp R Redsto P AMRDE	ning & n Dahlgren, VA bt TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	Total PY s Cost 0.216 0.190		C2928 H FY 03 Award Date	T NUMBE IGH MOBI FY 04 Cost	R AND NA	ILLERY R		SYSTEM (H		Target Value of
RDT&E, N /BA-7 Operational Sy Cost Categories Con Meti & Ty Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval FFP Dev Test & Eval FFP Dev Test & Eval WR	iys Developme intract Perform thod Activity iype Locatio R NSWC- R KTR Sp R Redsto P AMRDE	0206623M Marine Corps Combat/Supt Arms ning & n Dahlgren, VA ot TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	Total PY s Cost 0.216 0.190	Cost 0.900	C2928 H FY 03 Award Date	IGH MOBI	LITY ART	ILLERY R	FY 05	•		
Cost Categories Con Meth & Ty Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	ntract Perform thod Activity ype Locatio R NSWC- KTR Sp R Redsto P AMRDE	nt Combat/Supt Arms ing & n Dahlgren, VA pt TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	Total PY s Cost 0.216 0.190	Cost 0.900	FY 03 Award Date	FY 04	FY 04		FY 05	•		
Cost Categories Con Metl & Ty Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	ntract Perform thod Activity ype Locatio R NSWC- KTR Sp R Redsto P AMRDE	hing & n Dahlgren, VA bt TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	PY s Cost 0.216 0.190	Cost 0.900	FY 03 Award Date	FY 04	FY 04		FY 05	•		
Meti & Ty	thod Activity Type Location R NSWC- P KTR Sp R Redsto P AMRDE	& n Dahlgren, VA ot TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	PY s Cost 0.216 0.190	Cost 0.900	Award Date					Cost to		
& Ty Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	NSWC-P KTR Sp R Redsto R AMRDE	n Dahlgren, VA ot TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	Cost 0.216 0.190	Cost 0.900	Date		Award	FY 05	Award	Cost to	Total	Value of
Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	R NSWC- P KTR Sp R Redsto P AMRDE	Dahlgren, VA ot TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	0.216 0.190	0.900		Coot					i Otai	value oi
Dev Test & Eval FFP Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	R Redsto	ot TMI, Wash., DC ne Tech Test Ctr,Huntsville,AL	0.190			Cost	Date	Cost	Date	Complete	Cost	Contract
Dev Test & Eval WR Dev Test & Eval FFP Dev Test & Eval WR	R Redsto	ne Tech Test Ctr, Huntsville, AL			10/02					0.000	1.116	1.116
Dev Test & Eval FFP Dev Test & Eval WR	P AMRDE									0.000	0.190	0.190
Dev Test & Eval WR			0.043	0.170	10/02	0.080	10/03	0.100	10/04	0.000	0.393	0.393
	l onistic	EC, Huntsville, VA	0.546							0.000	0.546	0.546
	Logistic	s Base, Albany, GA	0.162								0.162	0.162
Dev Test & Eval MIP	PR TACON	1, Detroit, MI	0.085								0.085	0.085
Dev Test & Eval WR	R Aberde	en Proving Grd,Aberdeen,MD	0.063	0.790	10/02	0.400	10/03	0.100	10/04	0.000	1.353	1.353
Dev Test & Eval WR	R NSWC-	Carderock, MD		0.015	10/02	0.045	10/03			0.000	0.060	0.060
Dev Test & Eval FFP	NATC,	Silver Springs,NV		0.070	03/03					0.000	0.070	0.070
Dev Test & Eval MIP	PR DAC, M	IcAlester, OK				0.142	12/03			0.000	0.142	0.142
Operational Test & Eval WR	R MCOTE	A, Quantico, VA	0.136	0.180	10/02	0.402	10/03	0.550	10/04	0.000	1.268	1.268
Operational Test & Eval MIP	PR MARFO	ORRES, New Orleans, LA	0.026	0.070	10/02	0.050	10/03	0.250	10/04	0.000	0.396	0.396
Operational Test & Eval WR	R OT Tes	t Conduct, Ft. Sill, OK						0.333	10/04	0.000	0.333	0.333
Subtotal T&E			1.467	2.195		1.119		1.333		0.000	6.114	
Remarks:												
Cost Categories Con	ntract Perform	ning	Total		FY 03		FY 04		FY 05			Target
Meti	thod Activity	&	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
& T _\	ype Locatio	n	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Program Mngmnt WR	MCSC,	Quantico, VA	0.801	0.193	10/02	0.075	10/03				1.069	1.069
Program Mngmnt MIP		MY Huntsville, AL	0.166	0.876	10/02	0.648	10/03	0.300	10/04	0.000	1.990	1.990
Program Mngmnt MIP	PR TRNG	Jnit, Fort Sill, OK	0.050	0.179	10/02	0.163	10/03				0.392	0.392
Program Mngmnt FFP	BAE Sy	stems, Stafford, VA	1.127	1.200	10/02						2.327	2.327
Program Mngmnt FFP			0.024	0.044		0.020	11/03				0.088	0.088
Program Mngmnt FFP		McLean,VA		0.120	11/02						0.120	0.120
Program Mngmnt BPA	A CEOSS	3		0.382	05/03	1.200	11/03	0.672	11/04		2.254	2.254
Subtotal Management			2.168	2.994		2.106		0.972		0.000	8.240	
Remarks:	·											
Total Cost				9.891		6.860		3.026		0.016	19.793	

		DATE:
Exhib	it R-4/4a Schedule Profile/Detail	February 2004
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		-	Y02	2			FYO	3			F١	7 04				FYO!	5			F	Y06			ı	Y0	7			F	Y08			F١	Y09	
Quarter	1	П	Ш	Ľ	/	1 11	П	1 1	V	ı	П	Ш	IV	I	П	Ш		V	ı	П	Ш	IV	I	П	Ш	l I	V	ı	П	Ш	IV	ı	П	Ш	IV
MS A																																			
Mat Launcher Delivery				•																															
MS B IPR						4	•																												
US Army/USMC DT	-				+							-																							-
USMC OA				•	#					_	•																								
MS C/LRIP Decision					t				•																										
RSV/RST System Demo							•																												
LRIP GMLRS Decision										•																									
LRIP GMLRS										•										→															
LRIP Launcher Delivery													•																						
USMC OT													+	•																					
Interim Capability																_							-		•										
FRP																			•																-
IOC																									•										
FOC																														•					

Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N, 026623M, HIMARS (U) PMC, 205001, Expeditionary Indirect Fire Ground Support Weapons System (EIFGSWS) (HIMARS)	9.891 7.791	6.860 17.822	3.026 16.340	0.016 136.953	0.000 190.233	0.000 0.000	0.000 0.000	0.000 0.000	19.793 369.139
(U) PMC, 304001, HIMARS ROCKETS	0.000	0.000	1.325	32.731	54.967	69.381	54.640	CONT	213.044

R-1 SHOPPING LIST - Item No. 183

				DATE:			
Exhibit R-4/4a Schedule Profile/Detail PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT					NIIIMRED	AND NAME	Febr
DT&E, N /BA-7 Operational Sys Dev 0206623M Marine Corps Ground Co	ombat/Supt	Arms					ERY ROCI
HIMARS SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Maturation Launcher Delivery							
Milestone B IPR	2Q						
US Army/ USMC Developmental Testing		3Q					
USMC Operational Assesment		2Q					
Milestone C/ Low Rate Initial Production Decision	4Q						
US Army/USMC Developmental Testing	2Q						
Resupply Vehicle/Resupply Trailer System Demonstration	2Q						
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	

EXHIBIT	ΓR-2a, RDT&E Projec	t Justificatio	n	-		DATE:		-	_		
							Februa	ry 2004			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E						NAME				
	0206623M M	larine Corps	Ground								
RDT&E, N /BA-7 Operational Sys Dev	Combat/Sup	-					C3098 Fire Support Systems				
								Cost to	Total		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program		
Project Cost	0.000	11.099	12,201	10.199	14.008	14.134	9.077	Cont	Cont		
1 10,000 0000	0.000	111000	12.201	10.100	14.000	14.104	0.011	Joint	Com		
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.276	0.277
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 (\$266K) and FY03 (\$261K) was provided under Project C1901 within this PE.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	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 and upgrade of MET processing computer for the Meteorological Measuring System (MMS) and develop Electronic Meteorological Theodolite (EMT) capability . Funding for this program in FY02 (\$1.065M) and FY03 (\$2.634M) was provided under Project C1901 within this PE.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	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.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.673	1.187
RDT&E Articles Qty			

Mortar Ballistic Computer (MBC): Integration effort of Government-Furnished Equipment (GFE) software with CHS hardware platform. Prepare for and conduct combined Developmental Testing (DT) and Operational Testing to include Live Fire User Evaluation. Conduct Interim Progress Review (IPR). Prepare for Milestone C decision. Requirements review to determine evolution to future block upgrades. Funding for this program in FY03 (\$1.845M) was provided under Project C1901 within this PE.

Exhibit R-2a, RDTE,N Project Justification

(Exhibit R-2a, page 41 of 58)

		UNCLASSIFIE	D		
EXHIBIT	ΓR-2a, RDT&E Project J	ustification		DATE:	
				Febr	uary 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBER AND NAM	ME PROJECT	NUMBER AND NAME	
	0206623M Mari	ne Corps Ground			
RDT&E, N /BA-7 Operational Sys Dev	Combat/Suppor	rting Arms Systems	C3098 Fire	e Support Systems	
COST (\$ in Millions)	·	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.000	0.944	0.000	
RDT&E Articles Qty					
AN/GVS-5 Replacement (AEROS): Engineer	ng and programmatic suppo	rt as well as performing an O	perational Test and Evalu	ation (OT&E) on the AEROS	system. The funding for the
OT&E effort encompasses the test itself and all	associated personnel and TA	D costs to support the test. I	Funding for this program i	in FY02 (\$823K) and FY03 (\$	1.638M) was provided under
Project C1901 within this PE. Additionally, into	gration of a P3I Enhanced 7	Target Acquisition and Locati	on System (ETALS) will	begin.	
OOOT (A : NA:II:)		E)/ 0000	F)/ 000 /	F)/ 0005	\neg
COST (\$ in Millions)		FY 2003 0.000	FY 2004 0.000	FY 2005 0.360	_
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		0.000	0.000	0.360	_
,		11 11 11 11	C 1 1 1 1	(POI) and AED	
AN/GVS-5 Replacement (AEROS): Engineer					
P3I effort will be the integration of ETALS in the				through the Office of Naval R	lesearch (ONR). The research
and development effort is being performed by the	e Naval Surface Warfare Ce	enter (NSWC), Dahlgren, Virg	ginia.		
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	\neg
Accomplishment/Effort Subtotal Cost		0.000	3.554	0.000	
RDT&E Articles Qty		5.555		0.000	
Expeditionary Fire Support System (EFSS):	Conduct Analysis of Alterna	atives (AOA) and related cond	cept studies necessary to i	dentify potential EESS solution	ons that meet the capability of
the Mission Need Statement (MNS). Evaluate the					
technologies.	no community of potential so		ogram is planted for a m	or prince acquisition cuses of	
toomio10g1esi					
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.000	0.000	7.213	
RDT&E Articles Qty					
Expeditionary Fire Support System (EFSS) -	Short Term (ST) and Long	Term (LT): Conduct comp	arative assessments of cor	mpeting designs and conduct s	system design review to finalize
system performance specification. Evaluate Con	nmercial Off the Shelf (CO?	TS)/Government Off the Shel	f (GOTS) system/compon	ents for consideration to meet	Milestone C and subsequent
IOC.					
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost		0.000	2.777	0.278	
RDT&E Articles Qty					
Improved Position Azimuth Determination Sy	stem (IPADS): Program st	ipport, contractor design effor	rt, and the procurement of	systems for developmental/op	perational testing and system
integration. Development effort in support of the	e Milestone C decision.				
(U) Total \$ 0.000		0.000	11.099	12.201	

EXHIBIT R-2a	, RDT&E Project	Justification				ATE:			
A DDD ODDIATION/DUD OFT, A OTDI/ITV			255 4115 144	<u> </u>		4DED 4ND N	Februa	ry 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELI			/IE I	PROJECT NUI	MBEK AND N	AME		
DDT9F N /DA 7 Onevetional Cure Day	0206623M Ma	-			22000 Fire C.				
RDT&E, N /BA-7 Operational Sys Dev	Combat/Suppo		•		C3098 Fire Su	pport Systen	ns		
(U) PROJECT CHANGE SUMMARY: (U) FY 2004 President's Budget:	FY 2003 0.000	FY 2004 11.224	FY 2005 15.828						
(U) Adjustments from the President's Budget:	0.000	11.224	15.828						
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings			-3.578						
(U) SBIR/STTR Transfer									
(U) Minor Affordability Adjustment		-0.125	-0.049						
(U) FY 2005 President's Budget:	0.000	11.099	12.201						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) C. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cos
PMC BLI#493000 Night Vision Eq (AEROS)	0.000	0.000	4.960	19.957	25.584	0.360	0.000	0.000	50.86
PMC BLI# 473300 Fire Supp Sys (IPADS)	0.000	0.000	6.647	0.308	0.000	0.000	0.000	0.000	6.95
PMC BLI# 473300 FSS (Mortar Ballistic Computer)	0.000	0.000	3.568	1.885	0.000	0.000	0.000	0.000	5.45
PMC BLI# 206400 Expeditionary Fire Support Sys	0.000	0.000	0.000	2.710	6.346	6.361	0.000	0.000	15.41
PMC BLI# 220900 Mod Kits IWS (Fire Supp Mod Line)	0.929	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.929
PMC BLI# 206300 Mod Kits AFS (Fire Supp Mod Line)	0.000	2.073	2.465	2.596	4.236	4.344	4.459	Continuing	Continuin
PMC BLI#646800 First Dest Transp (AEROS)	0.000	0.000	0.026	0.033	0.034	0.018	0.000	0.000	0.11
PMC BLI# 220900 Mod Kits IWS (Theodolites)	0.952	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.95
PMC BLI# 206300 Mod Kits AFS (PIAFS)	0.000	0.000	2.403	0.409	0.199	0.000	0.000	0.000	3.01
(U) Related RDT&E:									
(U) D. ACQUISITION STRATEGY: These programs	range from off the	shalf modifica	itions to deval	onmental itor	ne Fire nowo	r enhanceme	nt usad sala	cted upgrada	e from Arm

developmental programs to create a system that more readily meets Marine Corps requirements. Modification covers safety, reliability, and technology up-grades to meet Marine Corps requirements. EFSS will use an evolutionary acquisition approach fielding a near term capability in FY08 while leveraging emerging technologies to mature the technology by FY09 and beyond.

(U) E. MAJOR PERFORMERS:

Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 43 of 58)

			CITOLA									
		Evhikit D 2 Coot Analysis						DATE:		Sobruces 200	04	
A DDD ODDIATION/DUDGET	ACTIVITY	Exhibit R-3 Cost Analysis	·			DDO IEC	TAILIMDE	R AND NA		ebruary 200	U 4	
APPROPRIATION/BUDGET A	ACTIVITY	PROGRAM ELEMENT				PROJEC	INUMBE	K AND NA	AIVIE			
DDT0F N/DA 7 On and the self-	O D	0206623M Marine Corp		_		00000 F:	0	0	_			
RDT&E, N /BA-7 Operational		Combat/Supporting Arr		5	EV 00	C3098 FI		rt System:			1	T
	Contract	II — — — — — — — — — — — — — — — — — —	Total	EV 00	FY 03	E)/ 0.4	FY 04	E)/ 05	FY 05			Target
0	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	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					1.909		Cont.		_
EFSS	VAR	TBD	0.000					0.776	TBD	Cont.		_
Fire Spt Mods	MIPR	USArmy CECOM, Ft Monmouth NJ	0.403	1						0.000		_
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	VAR	VARIOUS				1.674	TBD			Cont	. Cont.	
MBC	VAR	VARIOUS	0.000			0.250		0.200		Cont.	. Cont.	
Subtotal Product Dev			0.403	0.00	00	2.574	,	4.052	<u> </u>	Cont	. Cont.	
Remarks:				1							•	
	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
PROGRAM SUPPORT	7.	SEE BELOW								Cont	. Cont.	
AN/GVS-5 Replacement	WR	MCSC, Quantico, VA	0.000			0.244	2Q04			Cont.		
AN/GVS-5 Replacement	RCP	CEOSS	0.000			0.450		0.360	1Q05	Cont.		
AN/GVS-5 Replacement	MIPR	Marine Det, Ft Sill, OK	11111			0.015				Cont		
EFSS	RCP	TBD	0.000			1.554		0.777	TBD	Cont.		
EFSS	VAR	TBD						0.900		Cont	_	
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA				0.054	1Q04	0.060	1Q05	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	VAR	VARIOUS				0.157	2Q04			Cont	. Cont.	
MBC	VAR	VARIOUS	0.000			0.676	TBD	0.700	TBD	Cont.	. Cont.	
			1									

Remarks:

Subtotal Support

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0.000

3.711

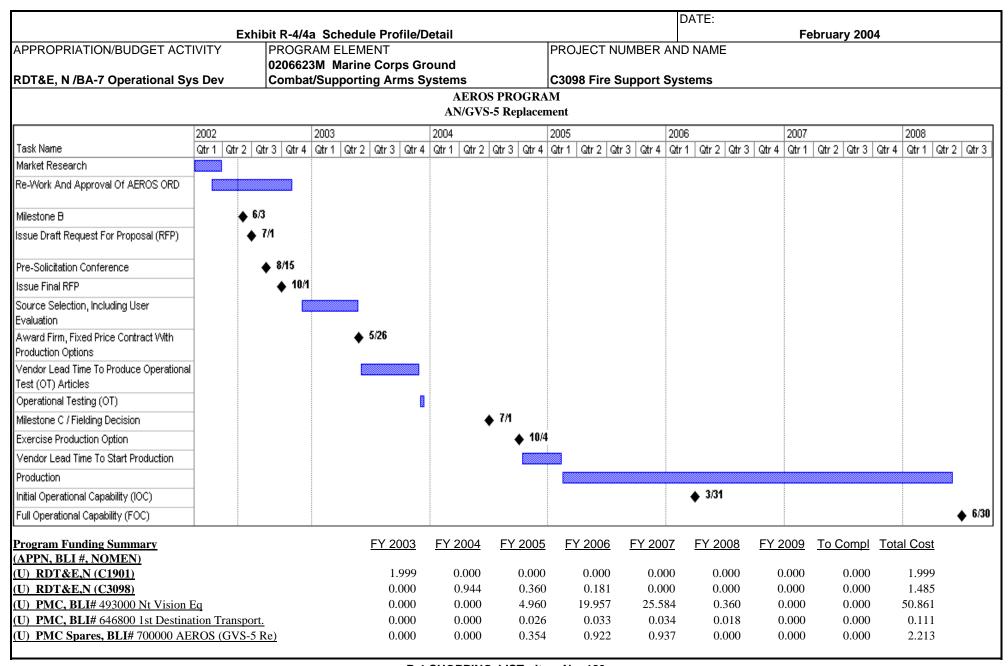
3.450

1.046

Cont.

Cont.

								DATE:				
		Exhibit R-3 Cost Ana	alysis						F	ebruary 200)4	
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM ELEME				PROJEC	T NUMBE	R AND NA				
		0206623M Marine	Corps Ground									
RDT&E, N /BA-7 Operationa	l Sys Dev	Combat/Supportin		5		C3098 Fi	re Suppo	rt Systems	3			
		Performing	Total		FY 03		FY 04		FY 05			Target
	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Cost Categories		Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
T&E		SEE BELOW							<u> </u>	Cont.	Cont.	
AN/GVS-5 Replacement	WR	MCOTEA, Quantico, VA	0.000			0.185	2Q04			Cont.	Cont.	
EFSS		TBD						0.951	TBD	Cont.		
Fam Artillery Munitions	WR/RCP	NSWC, Crane, IN				0.222	2Q04	0.217	2Q05	Cont.	Cont.	
Fire Spt Mods		MCOTEA, Quantico, VA	0.025					0.200		Cont.	Cont.	
Fire Spt Mods - Fielded Sys												
Readiness	VAR	TBD				0.170	TBD	0.300	TBD	Cont.	Cont.	
IPADS	WR	VARIOUS				0.151	2Q04			Cont.	Cont.	
MBC		VARIOUS	0.000			0.497	TBD	0.287	TBD	Cont.	Cont.	
Subtotal T&E			0.025	0.000)	1.225		1.955		Cont.	Cont.	
Remarks:												
rtomants.												
Tromano.	Contract	Performing	Total		FY 03		FY 04		FY 05	<u> </u>]	Target
Tremarks.	Contract Method	Performing Activity &	Total PY s	FY 03	FY 03 Award	FY 04	FY 04 Award	FY 05	FY 05 Award	Cost to	Total	Target Value of
Cost Categories	Method			FY 03 Cost		FY 04	_	FY 05 Cost		Cost to		Value of
	Method & Type	Activity &	PY s		Award	FY 04	Award		Award			Value of Contract
Cost Categories	Method & Type	Activity & Location	PY s		Award	FY 04	Award Date		Award Date	Complete	Cost	Value of Contract
Cost Categories MANAGEMENT	Method & Type VAR	Activity & Location SEE BELOW	PY s		Award	FY 04 Cost	Award Date	Cost	Award Date	Complete Cont.	Cost Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS	Method & Type VAR	Activity & Location SEE BELOW TBD	PY s		Award	FY 04 Cost	Award Date	0.900	Award Date TBD TBD	Complete Cont. Cont.	Cost Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods	Method & Type VAR VAR	Activity & Location SEE BELOW TBD TBD	PY s Cost		Award	FY 04 Cost	Award Date TBD	0.900 1.000	Award Date TBD TBD	Complete Cont. Cont. Cont.	Cost Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS	Method & Type VAR VAR WR	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA	PY s Cost		Award	FY 04 Cost	Award Date TBD 2Q04	0.900 1.000	Award Date TBD TBD 2Q05	Complete Cont. Cont. Cont.	Cost Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness	Wethod & Type VAR VAR WR	Activity & Location SEE BELOW TBD TBD	PY s Cost		Award	2.000 0.344	Award Date TBD 2Q04	0.900 1.000 0.356	Award Date TBD TBD 2Q05	Complete Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys	Wethod & Type VAR VAR WR	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	PY s Cost	Cost	Award	2.000 0.344	Award Date TBD 2Q04 1Q04 2Q04	0.900 1.000 0.356	Award Date TBD TBD 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA	PY s Cost	Cost	Award	2.000 0.344 0.200 0.795	Award Date TBD 2Q04 1Q04 2Q04	0.900 1.000 0.356	Award Date TBD TBD 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	PY s Cost	Cost	Award	2.000 0.344 0.200 0.795	Award Date TBD 2Q04 1Q04 2Q04	0.900 1.000 0.356	Award Date TBD TBD 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	PY s Cost	Cost	Award Date	2.000 0.344 0.200 0.795	Award Date TBD 2Q04 1Q04 2Q04 TBD	0.900 1.000 0.356	Award Date TBD TBD 2Q05 1Q05 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS MBC	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	0.582	Cost	Award Date	2.000 0.344 0.200 0.795 0.250	Award Date TBD 2Q04 1Q04 2Q04 TBD	0.900 1.000 0.356 0.210 0.278	Award Date TBD TBD 2Q05 1Q05 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS MBC Subtotal Management	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	0.582	Cost	Award Date	2.000 0.344 0.200 0.795 0.250	Award Date TBD 2Q04 1Q04 2Q04 TBD	0.900 1.000 0.356 0.210 0.278	Award Date TBD TBD 2Q05 1Q05 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract
Cost Categories MANAGEMENT EFSS EFSS Fire Supt Mods Fire Spt Mods - Fielded Sys Readiness IPADS MBC Subtotal Management	Wethod & Type VAR VAR WR RCP	Activity & Location SEE BELOW TBD TBD MCSC, Quantico, VA BAEST, Stafford, VA MCSC, Quantico, VA	0.582	0.000	Award Date	2.000 0.344 0.200 0.795 0.250	Award Date TBD 2Q04 1Q04 2Q04 TBD	0.900 1.000 0.356 0.210 0.278	Award Date TBD TBD 2Q05 1Q05 2Q05	Complete Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Cost Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont. Cont.	Value of Contract

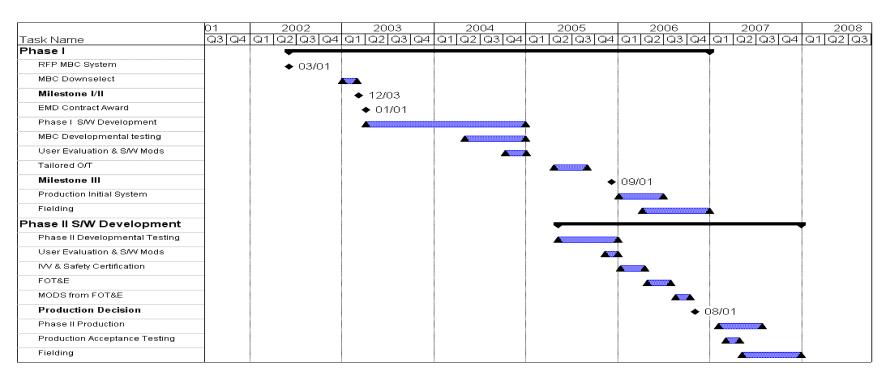


R-1 SHOPPING LIST - Item No. 183

Ex	hibit R-4/4a Sched	dule Profile	/Detail				DATE:	Fel	bruary 2004
ON/BUDGET ACTIVITY	PROGRAM ELE	MENT			PROJECT	NUMBER AN	ND NAME		•
7 Operational Sys Dev	0206623M Mar Combat/Suppo				C3098 Fire	Support Sy	stems		
AEROS SCHEDULE D	DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Market Research									
Re-Work and Approval of A	AEROS ORD								
Milestone B									
Issue Draft Request for Pro	oposal (RFP)								
Pre-Solicitation Conference	е								
Issue Final RFP		1Q							
Source Selection, Including	g User Evaluation	3Q							
Award Firm Fixed Price Co Production Options		4Q							
Vendor Lead Time to Prod Test (OT) Articles	uce Operational	4Q							
Operational Testing (OT)			2Q						
Milestone C / Fielding Deci	ision		3Q						
Exercise Production Option	n			1Q					
Vendor Lead Time to Start	Production			1Q					
Production				1Q					
Initial Operational Capabilit	ty (IOC)				4Q				
Full Operational Capability	(FOC)						3Q		

DATE: Exhibit R-4/4a Schedule Profile/Detail February 2004 PROGRAM ELEMENT PROJECT NUMBER AND NAME APPROPRIATION/BUDGET ACTIVITY 0206623M Marine Corps Ground RDT&E, N /BA-7 Operational Sys Dev Combat/Supporting Arms Systems C3098 Fire Support Systems

MORTAR BALLISTIC COMPUTER



Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(APPN, BLI #, NOMEN) (U) RDT&E,N (C1901)	1.797	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.797
(U) RDT&E,N (C3098)	0.000	1.673	1.187	0.713	0.308	0.000	0.000	0.000	3.881
(U) PMC BLI# 473300 Fire Support Systems	0.000	0.000	3.568	1.885	0.000	0.000	0.000	0.000	5.453

	Ex	hibit R-4/4a Sch	nedule Profile	/Detail				DATE:	Febr	uary 2004
	/BUDGET ACTIVITY Operational Sys Dev	PROGRAM E 0206623M M Combat/Sup	LEMENT arine Corps (Ground		PROJECT N				
	MBC SCHEDULE DET		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
-	Phase I									
ľ	RFP Mortar Ballistic Comp (MBC)System	uter								
	MBC Down Select									
l l	Milestone I/II		1Q							
	EMD Contract Award		1Q							
	Phase I Software (SW) De	velopment	1Q							
<u> </u>	MBC Developmental Testi	ng		2Q						
Ļ	User Evaluation & SW Mod	ds		3Q						
Ļ	Tailored Operational Testir	ng (OT)		3Q						
<u> </u>	Milestone III				1Q					
	Production Initial System				1Q					
	Fielding				3Q					
-	Phase II - SW Developme	un4			1Q					
I-	Phase II Developmental Te				1Q 1Q					
l T	User Evaluation & SW Mod				4Q					
I-	IW & Safety Certification	<u> </u>			73	1Q				
T	FOT&E					2Q				
l-	Mods from FOT&E					3Q				
	Production Decision					4Q				
Ī	Phase II Production						1Q			
	Production Acceptance Te	sting					1Q			
	Fielding						2Q			

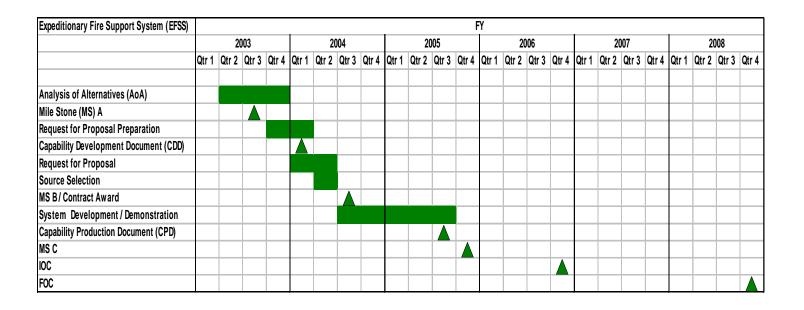
	Evh	nibit R-4/4a Schedule Prof	ile/Detail			D/	ATE:	Fa	ebruary 200	м	
	PRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT 0206623M Marine Corps	s Ground			UMBER AND			bidaiy 200	, -	
DT&E,	N /BA-7 Operational Sys Dev	Combat/Supporting Arm	ns Systems POSITIONING			Support System	ems				
							T	2000		0007	
ID	Task Name	2003 Qtr 2 Qtr 3 Qtr 4	200- Qtr 1 Qtr 2 (005 Qtr 3 Qtr 4	Qtr 1	2006 Qtr 2 Qtr 3	Qtr 4 Qtr	2007 1 Qtr 2 Qtr 3	3 Qtr 4
1	Prepare Contract Documentation					4 0 4	<u> </u>		4	.	<u> </u>
2	RFP Release										
3	Source Selection										
4	Exercise EMD Contract Option										
5	Dev elopmental Testing										
6	Fleet Ev aluation										
7	Milestone C				10/6						
8	Exercise Contract Production Option										
9	Production										
10	IOC (I MEF)					\triangle					
	Funding Summary BLI #, NOMEN)	FY 200	03 FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost	
J) RDT	7&E,N (C3098)	0.0		0.278	0.011	0.000	0.000		0.000		
	C BLI# 473300 C Spares BLI# 700000 IPADS	0.0 0.0		6.647 0.143	0.308 0.516	0.000 0.000	0.000		0.000		
, I IVIC	Spares DLIT /VVVVV IF ADS	0.0	0.000	0.143	0.510	0.000	0.000	0.000	0.000	0.039	

R-1 SHOPPING LIST - Item No. 183

PROPRIATION/BUDGET ACTIVITY DROGRAM ELEMENT 0206623M Marine Corps Ground Combat/Supporting Arms Systems C3098 Fire Support	D206623M Marine Corps Ground Combat/Supporting Arms Systems C3098 Fire Support Systems			chibit R-4/4a Scl		/Detail			DATE:	Fe	ebruary 2004
IPADS SCHEDULE DETAIL FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 Prepare Contract Documentation Image: Contract Option or Contra	IPADS SCHEDULE DETAIL FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 Prepare Contract Documentation Image: Contract Option or Contra			0206623M N	larine Corps (
RFP Release 1Q Source Selection 3Q Exercise EMD Contract Option ————————————————————————————————————	RFP Release 1Q Source Selection 3Q Exercise EMD Contract Option ————————————————————————————————————	,					FY 2005			FY 2009	
Source Selection 3Q Exercise EMD Contract Option	Source Selection 3Q Exercise EMD Contract Option		Prepare Contract Docume	entation							
Exercise EMD Contract Option 1Q Developmental Testing/OT 1Q Fleet Evaluation 4Q Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q	Exercise EMD Contract Option Developmental Testing/OT Fleet Evaluation Milestone C Exercise Contract Production Option Production 1Q 1Q 1Q 1Q 1Q		RFP Release		1Q						
Developmental Testing/OT 1Q Fleet Evaluation 4Q Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q	Developmental Testing/OT 1Q Fleet Evaluation 4Q Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q		Source Selection		3Q						
Fleet Evaluation 4Q Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q	Fleet Evaluation 4Q		Exercise EMD Contract C	ption							
Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q	Milestone C 1Q Exercise Contract Production Option 1Q Production 1Q		Developmental Testing/O	Т		1Q					
Exercise Contract Production Option Production 1Q	Exercise Contract Production Option Production 1Q		Fleet Evaluation			4Q					
Production 1Q	Production 1Q		Milestone C				1Q				
			Exercise Contract Produc	tion Option							
Initial Operational Capability (I MEF) 3Q	Initial Operational Capability (I MEF) 3Q 3Q		Production				1Q				
			Initial Operational Capabi	lity (I MEF)			3Q				

			DATE:
Exhi	bit R-4/4a Schedule Profile/Detail		February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AN	ID NAME
	0206623M Marine Corps Ground		
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supporting Arms Systems	C3098 Fire Support Sy	stems

Expeditionary Fire Support System



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)	0.000	0.000	3.554	7.213	6.488	11.221	11.596	6.521	Continuing	Continuing
(U) PMC BLI# 206400 EFSS	0.000	0.000	0.000	0.000	2.710	6.346	6.361	0.000	0.000	15.417

		xhibit R-4/4a Sch		/Detail				DATE:	Fel	oruary 2004
	TION/BUDGET ACTIVITY	PROGRAM EL 0206623M Ma Combat/Supp	arine Corps (Ground		PROJECT I				
KDI&E, N/B	A-7 Operational Sys Dev EFSS SCHEDULE DE		FY 2003	FY 2004	FY 2005	C3098 Fire FY 2006	FY 2007	FY 2008	FY 2009	
	EF33 3CHEDULE DI	<u> </u>	F1 2003	F1 2004	F1 2005	F1 2006	F1 2001	F1 2006	F1 2009	
	Milestone A			1Q						
	Milestone B				1Q					
	Milestone C (Phase 1)					1Q				
	Milestone C (Phase 2)								1Q	
	Initial Operational Capabi	lity (Phase 1)						2Q		
	Full Operational Capability	y (Phase 1)							4Q	

EXHIBIT	ΓR-2a, RDT&E Project	Justification				DATE:			
							Februa	ry 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUM	IBER AND NA	ME	PROJECT NU	JMBER AND	NAME		
	0206623M M	arine Corps G	round						
RDT&E, N /BA-7 Operational Sys Dev	Combat/Supp	orting Arms	Systems		C4002 Family	of Raid and	Reconnaiss	sance Equip	ment
								Cost to	Total
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
Project Cost	0.000	2.545	3.440	1.225	0.552	0.472	0.486	Cont	Con
RDT&E Articles Qty									

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

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

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.395	0.360
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.244	0.249
RDT&E Articles Qty			

Family of Small Craft: Conduct engineering analysis and exploration of enhancements for modifications of the Family of Small Craft programs. The Small Unit Riverine Craft (SURC), Small Unit Riverine Craft Escort (SURC-E), Raid Open Water Safety Craft (ROWSC), Combat Rubber Reconnaissance Craft (CRRC), Non-Gasoline Burning Outboard Engines (NBOE), and other small craft items will be supported in the future as new craft and engines are fielding. Funding for this program in FY03 is provided under Project C1901 within this PE.

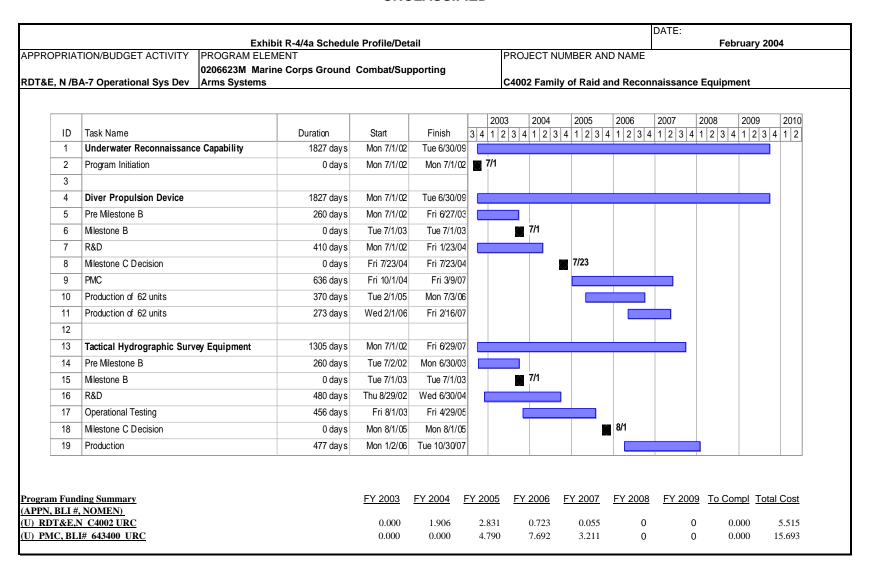
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.906	2.831
RDT&E Articles Qty			

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 2.545 3.440

EXHIBIT R-2a	ı, RDT&E Project J	ustification				DATE:	Eobrua	ry 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELE 0206623M Mar Combat/Suppo	ine Corps Gr	ound		PROJECT NUMBER AND NAME C4002 Family of Raid and Reconnaissance Equipment					
(U) PROJECT CHANGE SUMMARY: (U) FY 2004 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) Small Business Innovation Research Transfer (U) Minor Affordability Adjustment (U) FY 2005 President's Budget: CHANGE SUMMARY EXPLANATION: (U) Funding: Not Applicable. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.	<u>FY 2003</u> 0.000	FY 2004 2.574 -0.029 2.545	FY 2005 3.453 -0.013 3.440							
(U) C. OTHER PROGRAM FUNDING SUMMARY: <u>Line Item No. & Name</u> PMC BLI #643400 Amphibious Raid Equipment (U) Related RDT&E: Not Applicable.	FY 2003 18.625	FY 2004 21.247	FY 2005 15.771	FY 2006 16.105	FY 2007 6.658	FY 2008 3.429	<u>FY 2009</u> 3.497	<u>To Compl</u> 0.000	Total Cost 85.332	
(U) D. ACQUISITION STRATEGY: The acquisition strategy consists of market surveys to ider capabilities/specifications and establishment of the trade s conducted.									iired to be	
(U) E. MAJOR PERFORMERS:										
Nov 03, Nov 04 Natick, MA Natick La	Systems Station (Cabs, system engine e Development		engineering in s	support of und	derwater recon	naissance				

								DATE:	_			
		Exhibit R-3 Cost Analysis							F	ebruary 200)4	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
		0206623M Marine Corps	Ground									
RDT&E, N /BA-7 Operational S	ys Dev	Combat/Supporting Arms Systems				amily of Ra	aid and Re	connaissa	nce Equip	ment		
Cost Categories	Contract	Performing	Total		FY 03	_	FY 04		FY 05			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Hardware development	RCP	MARCORSYSCOM, Quantico, VA				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				0.407	11/03	0.419	11/04	Cont.	Cont.	
		,										
Subtotal Product Development			0.000	0.000		1.945		2.748		Cont.	Cont.	
	am in FY03	is provided under Project C1901 within		1 2.222		11212	Į					
rtemamer i anamg ter ane pregi		To provided disact respect creek mains										
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Integrated Logistics Support	RCP	BAE Inc, Stafford, VA				0.200	10/03	0.199	10/04	Cont.	Cont.	
		2, 2 22, 2 2,										
Subtotal Support			0.000	0.000		0.200		0.199		Cont.	Cont.	
	am in FY03	is provided under Project C1901 within	this PE.					•		•		•
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Developmental Testing/Eval	WR	NSWC Carderock Div, Bethesda, MD				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		0.250		0.250		Cont.	Cont.	
Remarks: Funding for this progr	am in FY03	is provided under Project C1901 within	this PE.	•	•			•	•	•		
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contrac
Management	RCP	MARCORSYSCOM, Quantico, VA				0.150	12/03	0.243	12/04	Cont.	Cont.	
Subtotal Management				0.000		0.150		0.243		Cont.	Cont.	
Remarks: Funding for this progr	am in FY03	is provided under Project C1901 within	this PE.									
Total Cost			0.000	0.000		2.545		3.440		Cont.	Cont.	
	1	1					-1					



								DATE:			
Exhibit R-4/4a Schedule Profile/Detail PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NUMBER AND NAME								February 2004			
PPROPRIATION/BUDGET ACTIVITY	0206623M Marine Corps Ground Combat/	Cunnortina		PROJECT	MUMBER A	ND NAME					
DT&E, N /BA-7 Operational Sys Dev	Arms Systems	Supporting		C4002 Fan	nily of Raid	and Recon	naissance	Equipment			
URC SCHEDULE DET		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009			
Diver Propulsion Device											
Milestone B		4Q									
Milestone C			4Q								
Tactical Hydrographic Surve	ey Equipment										
Milestone B		4Q									
ОТ		4Q	1Q-4Q	1Q-3Q							
Milestone C				4Q							