

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:			
							June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational System Development				PROGRAM ELEMENT (PE) NAME AND NO. 0206623M Marine Corps Ground Combat/Supporting Arms Systems						
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost	29.020	39.061	43.935	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)	0.385	0.402	0.362	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C1555 Light Armored Vehicle (LAV) PIP	7.354	9.759	14.273	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C1901 Marine Corps Ground Weaponry PIP	14.276	7.999	13.815	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2086 Marine Enhanced Program (MEP)	1.472	1.640	2.555	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2237 Amphibious Vehicle Test Branch (AVTB)	0.598	0.717	0.732	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2503 Initial Issue	2.007	1.403	1.307	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2667 Shortstop Electronic Protection System	2.928	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.928
C2928 EIFGSWS (HIMARS)	0.000	17.141	10.891	0.000	0.000	0.000	0.000	0.000	0.000	28.032
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, product improvements to the family of LAVs and the development effort for the LAV-AD variant. 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.										

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational System Development		PROGRAM ELEMENT (PE) NAME AND NO. 0206623M Marine Corps Ground Combat/Supporting Arms Systems	
B. PROGRAM CHANGE SUMMARY			
	FY2000	FY2001	FY2002
(U) FY 2001 President's Budget:	28.679	22.124	19.088
(U) Adjustments from the President's Budget:			
(U) SBIR/STTR Transfer	-0.450	0.000	0.000
(U) Execution Adjustment	-0.216	0.000	0.000
(U) Minor Affordability Adjustment	-0.141	-0.204	-0.514
(U) Program Adjustment	1.148	17.141	25.361
(U) FY 2002 President's Budget:	29.020	39.061	43.935
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See Above.			
(U) Schedule: See Project C2503 Initial Issue R-2a.			
(U) Technical: Not Applicable.			

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EXHIBIT R-2a, RDT&E Project Justification								DATE:		
								June 2001		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems				C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	0.385	0.402	0.362	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>(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.</p> <p>PROGRAM ACCOMPLISHMENTS AND PLANS</p> <p>FY 2000 Accomplishments:</p> <ul style="list-style-type: none"> (U) \$ 0.385 Provided engineering support for integration of modification kits into AAV7A1 Family of Vehicles. <p>(U) Total \$ 0.385</p> <p>FY 2001 Planned Program</p> <ul style="list-style-type: none"> (U) \$ 0.391 Continue providing engineering support for development and integration of modification kits into AAV7A1 Family of Vehicles. (U) \$ 0.011 SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638. <p>(U) Total \$ 0.402</p> <p>FY 2002 Planned Program</p> <ul style="list-style-type: none"> (U) \$ 0.362 Continue providing engineering support for development and integration of modification kits into AAV7A1 Family of Vehicles. <p>(U) Total \$ 0.362</p>										

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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Systems			C0021 Assault Amphibious Vehicle 7A1 (AAV7A1)				
(U) PROJECT CHANGE SUMMARY:									
		FY2000	FY2001	FY2002					
(U) FY 2001 President's Budget:		0.396	0.406	0.357					
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer		-0.011							
(U) Execution Adjustment									
(U) Minor Affordability Adjustment		-0.002	-0.004	0.001					
(U) Program Adjustment		0.002		0.004					
(U) FY 2002 President's Budget:		0.385	0.402	0.362					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY									
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) PMC, 202100, AAV PIP	80.703	82.607	77.087	0.000	0.000	0.000	0.000	0.000 Continuing	Continuing
(U) Related RDT&E: PE 0603611M (Marine Corps Assault Vehicles)									
(U) C. ACQUISITION STRATEGY:									
These efforts focus on the development of Engineering Change Proposals to improve performance, reliability, maintainability and safety of the Assault Amphibious Vehicle. Contractor support will be acquired using already existing contracts.									
(U) D. SCHEDULE PROFILE: N/A									

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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev		PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms Systems				PROJECT NUMBER AND NAME C1555 Light Armored Vehicle (LAV) PIP				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	7.354	9.759	14.273	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

(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 (Mobile Electronic Warfare Support System). Collectively, the LAV FOV provides a logistically self-contained, highly mobile, and lethal combined arms combat system to the Marine Air-Ground Task Force (MAGTF). This project funds for the development and testing of modifications falling within the purview of the LAV Service Life Extension Program (SLEP) (See PMC: LAV SLEP (FY 2002-FY 2005)) Product Improvement Program. LAV SLEP will ensure 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 SLEP will essentially invest in technologies currently existing on newer generations of Light Armored Vehicles and other weapons systems.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments:

- (U) \$ 4.400 Developed 5 LAV SLEP operational system prototypes for developmental & operational test and evaluation of SLEP modifications.
- (U) \$ 1.518 Continued study, analysis, and development of existing and other alternative technological solutions for the LAV Service Life Extension Program.
- (U) \$ 0.448 Continued and completed developmental and operational test planning for the LAV Service Life Extension Program Test Planning
- (U) \$ 0.988 Conducted research and development of LAV C2 architectural and systems interoperability requirements.

(U) Total \$ 7.354

FY 2001 Planned Program

- (U) \$ 1.200 Complete development of LAV SLEP operational system prototypes for test and evaluation of SLEP modifications.
- (U) \$ 4.252 Commence developmental and operational testing and evaluation of 5 LAV SLEP modification prototypes.
- (U) \$ 2.529 Continue development of LAV Service Life Extension Program to include fielding requirements, training, ILS, future maintenance requirements, and impacts to depot-level maintenance program.
- (U) \$ 1.778 Conduct research and development of LAV RAM projects to include a one time installation and operational test of prototype two-speed transmissions prior to fielding.

(U) Total \$ 9.759

FY 2002 Planned Program

- (U) \$ 1.507 Complete developmental and operational testing (DT/OT) of SLEP operational system prototypes for test and evaluation (T&E) of SLEP mods.
- (U) \$ 7.425 Development of 7 Thermal Sight Systems (TSS) prototypes for developmental and operational T&E of TSS modifications.
- (U) \$ 4.054 Continue operational systems developmental and program management requirements for LAV SLEP and TSS.
- (U) \$ 1.287 Conduct research and development of LAV RAM projects.

(U) Total \$ 14.273

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP				
(U) PROJECT CHANGE SUMMARY:									
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>						
(U) FY 2001 President's Budget:	8.328	9.849	6.219						
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer	-0.176								
(U) Execution Adjustment	-0.613								
(U) Minor Affordability Adjustment	-0.046	-0.090	-0.206						
(U) Program Adjustment	-0.139		8.260						
(U) FY 2002 President's Budget:	7.354	9.759	14.273						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) PMC, 203800, LAV PIP	1.640	1.693	25.783	0.000	0.000	0.000	0.000	0.000 Continuing	Continuing
(U) Related RDT&E: Not Applicable.									
<p>(U) C. ACQUISITION STRATEGY: The LAV Service Life Extension Program (SLEP) 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 is being done by utilizing both developmental and off-the-shelf technologies to enhance survivability, lethality, mobility and sustainability while simultaneously reducing the cost of ownership. PM, LAV 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. PM, LAV retains oversight of the SLEP procurement.</p> <p>(U) C. 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. PM, LAV 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. PM, LAV retains oversight of all LAV RAM projects.</p>									

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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME																																						
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Systems			C1555 Light Armored Vehicle (LAV) PIP																																						
<p>(U) D. SCHEDULE PROFILE:</p> <p><u>LAV SLEP</u></p> <table> <tr> <td>Milestone 0:</td> <td>1st Qtr, FY 1998</td> <td>Milestone III:</td> <td>2nd Qtr, FY 2002</td> </tr> <tr> <td>Milestone I:</td> <td>2nd Qtr, FY 1999</td> <td>Contract Award:</td> <td>2nd Qtr, FY 2002</td> </tr> <tr> <td>Milestone II:</td> <td>2nd Qtr, FY 2000</td> <td>IOC:</td> <td>1st Qtr, FY 2005</td> </tr> <tr> <td>DT / OT:</td> <td>2nd Qtr, FY 2001</td> <td>FOC:</td> <td>1st Qtr, FY 2009</td> </tr> </table>											Milestone 0:	1 st Qtr, FY 1998	Milestone III:	2 nd Qtr, FY 2002	Milestone I:	2 nd Qtr, FY 1999	Contract Award:	2 nd Qtr, FY 2002	Milestone II:	2 nd Qtr, FY 2000	IOC:	1st Qtr, FY 2005	DT / OT:	2 nd Qtr, FY 2001	FOC:	1 st Qtr, FY 2009																	
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<p>Program Funding Summary</p> <table> <thead> <tr> <th>(APPN, BLI #, NOMEN)</th> <th>FY 2000</th> <th>FY 2001</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY 2006</th> <th>FY 2007</th> <th>To Compl</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>(U) RDT&E,N</td> <td>6.366</td> <td>7.981</td> <td>12.986</td> <td>0</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>Continuing</td> </tr> <tr> <td>(U) PMC, BLI# 203800 LAV SLEP</td> <td>1.640</td> <td>1.693</td> <td>25.783</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>Continuing</td> <td>Continuing</td> </tr> </tbody> </table>											(APPN, BLI #, NOMEN)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost	(U) RDT&E,N	6.366	7.981	12.986	0	0.000	0.000	0.000	0.000	0.000	Continuing	(U) PMC, BLI# 203800 LAV SLEP	1.640	1.693	25.783	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
(APPN, BLI #, NOMEN)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost																																	
(U) RDT&E,N	6.366	7.981	12.986	0	0.000	0.000	0.000	0.000	0.000	Continuing																																	
(U) PMC, BLI# 203800 LAV SLEP	1.640	1.693	25.783	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing																																	

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Exhibit R-3 Cost Analysis								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development											0.000	
Primary Hardware Dev	C/FF	Dies Div, GM	0.915							0.000	0.915	0.915
Primary Hardware Dev	CPFF	NRL	0.509	0.691						0.000	1.200	1.200
Primary Hardware Dev	CPIF	Metric Systems		4.500	03/00	0.310				0.000	4.810	4.810
Primary Hardware Dev	CPFF	GTRI		0.350	03/00	0.400	2Q01	0.450		0.000	1.200	1.200
Gov't Dev Engineering	MIPR	In-House Product Dev	0.735	0.201	1Q00	0.624	1Q01	0.731		Continuing	Continuing	
Product Development	Various	Other	9.711	0.215	Various	3.000	Various	7.345		Continuing	Continuing	
Subtotal Product Dev			11.870	5.957		4.334		8.526		Continuing	Continuing	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Support												
Subtotal Support			0.000	0.000		0.000		0.000				
Remarks:												

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Exhibit R-3 Cost Analysis								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Systems				C1555 Light Armored Vehicle (LAV) PIP					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Test & Eval (T&E)												
Developmental Test & Eval	MIPR	LAV Test Dir, Yuma Prv Grnd	4.655	0.478	Various	4.429	Various	1.507		Continuing	Continuing	
Subtotal T&E			4.655	0.478		4.429		1.507		Continuing	Continuing	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Management												
Program Management	WR	PMO LAV, Tacom, MI	23.799	0.919	1Q00	0.996	1Q01	4.240	1Q02	Continuing	Continuing	
Subtotal Management			23.799	0.919		0.996		4.240		0.000	29.954	
Remarks:												
Total Cost				7.354		9.759		14.273		Continuing	Continuing	

R-1 SHOPPING LIST - Item No. 191

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EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME									
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys					C1901 Marine Corps Ground Weaponry PIP				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	14.276	7.999	13.815	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>(U) This Project develops joint and Marine Corps unique improvements to infantry weapons and artillery technology, USMC unique Amphibious Armor Systems (AAS), improvements for the M1A1 Main Battle Tank and support systems, USMC Family of Small Craft, Night Vision Equipment, Underwater Reconnaissance, Family of Raid and Reconnaissance Equipment, Interim Small Unit Remote Scouting System (ISURSS) and monitors national and international weapons developments.</p> <p>PROGRAM ACCOMPLISHMENTS AND PLANS</p> <p>FY 2000 Accomplishments:</p> <ul style="list-style-type: none"> • (U) \$ 0.148 Family of Artillery Munitions (FAM): Supported a production decision for the M795 HE projectile, to include: Weapons Systems Explosive Safety Board testing, program support, and travel. Continued the active monitoring of U.S. Army artillery ammunition development programs in order to leverage off of and influence Army • (U) \$ 0.163 Family of Improved Mortars: In conjunction with U.S. Army Program Manager for Mortars, conducted concept exploration initiatives to determine the feasibility of alternative concepts for the Pointing Device (PD) for the Mortar Fire Control System (Light) (MFCS). The PD provides precise deflection, elevation, and Global Positioning System interface for the MFCS. Down selection will be made for no more than two alternatives for further development. • (U) \$ 0.754 Family of Small Craft: Provided Fault Analysis and Fault Isolation (FAFI) for the Riverine Assault Craft (RAC) through MCPD, Fallbrook, CA. Engineering support for a raw water cooling system. • (U) \$ 1.138 Fire Support Mods: Continued joint participation in artillery and fire support improvement projects including joint sustainment of the M198 Howitzer and Meteorological Measuring Set (MMS). Continued software analysis and integration. Provided support to the Marine Corps Warfighting Lab for the development, evaluation and rapid transition of fire support initiatives. • (U) \$ 0.461 Improved Recovery Vehicle: Conducted Landing Craft Air Cushion (LCAC) testing of Improved Recovery Vehicle, and design, fabrication and testing of deep water fording equipment. • (U) \$ 2.050 Infantry Wpns Mods: Continued joint participation and Marine Corps unique activities for evaluation of safety, lethality, and technology improvements for Marine Corps infantry/reconnaissance individual and crew served weapons. Pursued solutions to integrate weapons systems with existing and planned night vision and sighting technologies including revisions of mounts and interfaces. • (U) \$ 1.647 M1A1 Firepower Enhancements: Conducted trade studies identifying the most cost effective upgrades to the tank fire control system. Initiated preliminary design of integrated Non-Developmental Item (NDI) package to include improved thermal sight and north-finding/far target location capability. Conduct fabrication/ testing of prototype integrated systems. Developed preliminary system specification, interface control documents, item development specification, conduct System Requirements • (U) \$ 4.472 M1A1 Firepower Enhancements (Forward Finance): - Continue preliminary design of NDI package to include improved thermal sight and north-finding/far target location capability. 										

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RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys	C1901 Marine Corps Ground Weaponry PIP
<ul style="list-style-type: none"> • (U) \$ 0.421 M1A1 Armor Mods: Conducted joint evaluation of modifications including component enhancements, Advanced Fire Control Systems, Survivability Systems, Operations and Support Cost Reduction opportunities, Combat Identification and others. • (U) \$ 0.275 Night Vision Mod Line: Continued joint participation and Marine Corps unique activities for evaluation of safety, lethality and technology improvements for Marine Corps Night Vision Devices. Provided In Service Engineering Activity (ISEA) at Naval Surface Weapons Center (NSWC), Crane, IN. Participated with ARMY PM-Night Vision at Ft Belvoir, VA on new enhancements for Image Intensification (I2) and Thermal Imagery. Travel/Temporary Assignment of Duty (TAD) to support enhanced • (U) \$ 0.154 Thermal Weapons Sight (TWS)[AN/PAS-13]: Successfully completed Marine Corps unique testing of the TWS. Completing preparation for MS III. • (U) \$ 2.593 Target Location Designation and Hand-Off System (TLDHS): Continued Joint-service, U.S. Army-led engineering, management, and development (EMD) of the Lightweight Laser Designator Rangefinder (LLDR). Completed initial systems integration between the LLDR and the Target Hand-off System Software and RHC computer. Continued incremental refinement, coding, evaluation and Independent Verification & Validation (IV&V) of the TLDHS-specific software application to ensure interoperability with emerging Marine Corps tactical Command, Control, Communications, Computers, & Intelligence (C4I) architecture and with other fire 		
(U) Total \$	14.276	
FY 2001 Planned Program		
<ul style="list-style-type: none"> • (U) \$ 0.169 Family of Artillery Munitions (FAM): Support a production decision for the Modular Artillery Charge System, to include Weapons Systems Explosive Safety Review Board testing, program support, and travel. Continue the active monitoring of U.S. Army artillery ammunition development programs in order to leverage off of and influence Army developmental efforts. • (U) \$ 0.581 Family of Small Craft: Provide Fault Analysis and Fault Isolation (FAFI) for the Riverine Assault Craft (RAC) and the Rigid Raiding Craft (RRC) and associated equipment at MCPD, Fallbrook, CA. Engineering analysis and development for the replacement Intercom System for the RAC and noise reduction. • (U) \$ 1.021 Fire Support Mods: Continue joint participation in artillery and fire support improvement projects. Specifically, continue joint sustainment of the M198 Howitzer, Metrological Measuring System and Firefinder Radar to include safety modifications and service life extension efforts. Provide support to the Marine Corps Warfighting Lab for the development, evaluation and rapid transition of fire support initiatives. • (U) \$ 1.002 Infantry Wpns Mods: Continue joint participation and Marine Corps unique activities to improve the safety, lethality, and technology of Marine Corps infantry/reconnaissance individual and crew served weapons and equipment. Seeking to integrate weapons systems with existing and planned night vision and thermal sighting technologies including revisions of mounts and interfaces. Continue weapon system integration into the Integrated Infantry Combat System (IICS) to enhance the efficiency, effectiveness and safety of the Combat System. Supporting CMC initiatives to improve safety of Helicopter Borne Ground Combat Marines and assess • (U) \$ 3.582 Firepower Enhancements: Complete preliminary design of integrated NDI package to include improved thermal sight, and north-finding/ far target location capability. Finalize fabrication//testing of prototypes. • (U) \$ 0.000 M1A1 Firepower Enhancements (Forward Finance FY 00 Funding): Complete preliminary design of NDI package to include improved thermal sight and north-finding/far target location capability. 		

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		June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys	C1901 Marine Corps Ground Weaponry PIP
• (U) \$	0.263 M1A1 Armor Mods: Continue joint evaluation of modifications including Component Enhancements, Advanced Fire Control Systems, Survivability Systems, Combat Identification and others.	
• (U) \$	0.443 Night Vision Mod Line: Continue joint participation and Marine Corps unique activities for evaluation of safety, lethality and technology improvements for Marine Corps Night Vision Devices. Provides for In Service Engineering Activity (ISEA) at NSWC, Crane, IN. Participate with ARMY PM-Night Vision at Ft Belvoir on new enhancements for Image Intensification I2. Travel/TAD to support enhanced systems development and review of tests.	
• (U) \$	0.113 Thermal Weapons Sight (TWS)[AN/PAS-13]: Provide for joint participation in Pre-Planned Product Improvement (P3I) for TWS – remote image transfer, laser range finder, aimport reticle, mounting brackets for future small arms weapons, vertical angle measurement, automated aimport reticle.	
• (U) \$	0.728 Target Location Designation and Hand-Off System (TLDHS): Continue incremental refinement, coding, evaluation and IV&V of the TLDHS-specific software application to ensure interoperability with the emerging Marine Corps tactical C4I architecture and with other fire support platforms and agencies. Conduct initial operational test & evaluation (IOT&E) of the LLDR and artillery/close-air-support (JVMF format) functionality.	
• (U) \$	0.097 SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.	
(U) Total \$	7.999	
FY 2002 Planned Program		
• (U) \$	1.460 AN/GVS-5 Replacement (AEROS): Funds will be used for engineering support and to purchase candidate systems for use in a down select. Systems will be used for developmental testing and further down select to a single EMD system.	
• (U) \$	0.366 AN/TPQ-46 Radar Mod: Conduct analysis of U.S. Army led False Target Location Modifications (FTLM) engineering change proposal (ECP) package relative to defined requirements. Develop Milestone decision documentation for FTLM ECP.	
• (U) \$	0.268 Family of Artillery Munitions (FAM): Support a production decision for the Modular Artillery Charge System, to include: Weapons Systems Explosive Safety Review Board testing, program support, and travel. Continue the active monitoring of U.S. Army artillery ammunition development programs in order to leverage off of and influence army developmental efforts.	
• (U) \$	0.594 Family of Small Craft: Provide Fault Analysis and Fault Isolation (FAFI) for the Riverine Assault Craft (RAC) and Rigid Raiding Craft and associated equipment at MCPD, Fallbrook, CA. Engineering analysis and development for upgraded weapons systems/sights.	
• (U) \$	0.838 Fire Support Mods: Continue joint participation in artillery and fire support improvement projects. Specifically, continue joint sustainment of the M198 Howitzer and Metrological Measuring System to include safety modifications and service life extension efforts. Provide support to the Marine Corps Warfighting Lab for the development, evaluation and rapid transition of fire support initiatives.	
• (U) \$	0.820 Infantry Wpns Mods: Continue joint participation and Marine Corps unique activities for evaluation of safety, lethality, and technology improvements for Marine Corps infantry/reconnaissance individual and crew served weapons. Pursue solutions to integrate weapons systems with existing and planned night vision and sighting technologies including revisions of mounts and interfaces. Continue weapon system integration into the Integrated Infantry Combat System (IICS) to enhance the efficiency, effectiveness and safety of the Combat System.	
• (U) \$	0.501 Interim Small Unit Remote Scouting System (ISURSS): Funds will be used for Operational System Development, Contractor support and Program Office Travel.	
• (U) \$	7.762 M1A1 Firepower Enhancement: Conduct comparative assessments of competing designs and conduct system design review to finalize system performance specification. Perform Final Integration and Prove out. Procurement of test articles, conduct developmental test and evaluation, pre-production technical reviews/audits, and logistical	

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EXHIBIT R-2a, RDT&E Project Justification				DATE:	
				June 2001	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Sys		C1901 Marine Corps Ground Weaponry PIP	
<ul style="list-style-type: none">• (U) \$ 0.000 <u>M1A1 Firepower Enhancement (Forward Financing 1.190 of FY01 Funds)</u>• (U) \$ 0.298 <u>M1A1 Armor Mods</u>: Continue joint participation and evaluation of prospective modifications including Component Enhancements, Advanced Fire Control Systems, Survivability Systems, Combat Identification, mobility and others.• (U) \$ 0.441 <u>Night Vision Mod Line</u>: Continue joint participation and Marine Corps unique activities for evaluation of safety, lethality and technology improvements for Marine Corps Night Vision Devices. Provides for In Service Engineering Activity (ISEA) at NSWC, Crane. Participate with ARMY PM-Night Vision at Ft Belvoir on new enhancements for Image Intensification I2. Travel/TAD to support enhanced systems development and review of tests.• (U) \$ 0.118 <u>Thermal Weapons Sight (TWS)[AN/PAS-13]</u>: Provide for joint participation in P3I for TWS – remote image transfer, laser range finder, aimport reticle, mounting brackets for future small arms weapons, vertical angle measurement, automated aimport reticle.• (U) \$ 0.349 <u>Target Location Designation and Hand-Off System (TLDHS)</u>: Continue incremental refinement, coding, evaluation and IV&V of the TLDHS-specific software application to ensure interoperability with the emerging Marine Corps tactical C4I architecture and with other fire support platforms and agencies. Conduct IOT&E of the LLDR and artillery/close-air-support (JVMF format) functionality.					
(U) Total \$		13.815			
		FY2000	FY2001	FY2002	
(U) FY 2001 President's Budget:		13.244	8.073	7.878	
(U) Adjustments from the President's Budget:					
(U) SBIR/STTR Transfer		-0.200			
(U) Execution Adjustment					
(U) Minor Affordability Adjustment		-0.067	-0.074	-0.242	
(U) Program Adjustment		1.299		6.179	
(U) FY 2002 President's Budget:		14.276	7.999	13.815	
CHANGE SUMMARY EXPLANATION:					
(U) Funding: See Above.					
(U) Schedule: Not Applicable.					
(U) Technical: Not Applicable.					

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EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME								
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat/Supporting Arms Sys					C1901 Marine Corps Ground Weaponry PIP			
(U) B. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>		FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) PMC (BLI#206200) Improved Recovery Veh		0.000	42.232	21.026					0.000	63.258
(U) PMC (BLI#206300) Mod Kits (Tracked Veh)		82.256	20.625	3.825					Continuing	Continuing
(U) PMC (BLI#220900) Mod Kits (Arty & Other)		3.674	3.855	1.478					Continuing	Continuing
(U) PMC (BLI#222000) Under \$5 Million		5.893	0.411	0.274					Continuing	Continuing
(U) PMC (BLI#233400) Modular Weapon System				7.501					0.000	7.501
(U) PMC (BLI#462000) <\$5M (Comm&Electrnics)		10.131	8.244	9.028					Continuing	Continuing
(U) PMC (BLI#473300) Fire Support Systems		4.965	15.203	16.152					Continuing	Continuing
(U) PMC (BLI#475000) Items Under \$5M (Intel)		2.225	0.398	1.654					Continuing	Continuing
(U) PMC (BLI#493000) Night Vision Equipment		12.900	21.155	22.374					Continuing	Continuing
(U) PMC (BLI#643400) Amphibious Raid Equip				2.349					Continuing	Continuing
(U) PMC (BLI#667000) Items Less Than \$5M		16.160	6.530	7.684					Continuing	Continuing
(U) Related RDT&E:										
(U) All Ground Weapons and Ground Ammunition Systems: Army, Navy, Air Force, Coast Guard, and Special Operations Command										
(U) C. ACQUISITION STRATEGY:										
<p>(U) This line covers programs ranging from Off-The-Shelf modifications to Developmental Items. TLDHS acquires the Laser Locator Designator and Rangefinder being developed by the Army. This component is combined with a radio and hand-held computer running software developed by the Marine Corps. Fire Power Enhancement used selected upgrades from Army 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. M1A1 Fire Power Enhancement - Competitively Awarded 2 Cost Plus Firm Fixed contracts to conduct parallel design, integration and demonstration of NDI technology for the M1A1 Firepower Enhancement. Down select to a single contractor with the most promising concept, continuing with design development until production ready. Finally, transition to production with the winning design by exercising a Firm Fixed Price contract option.</p>										

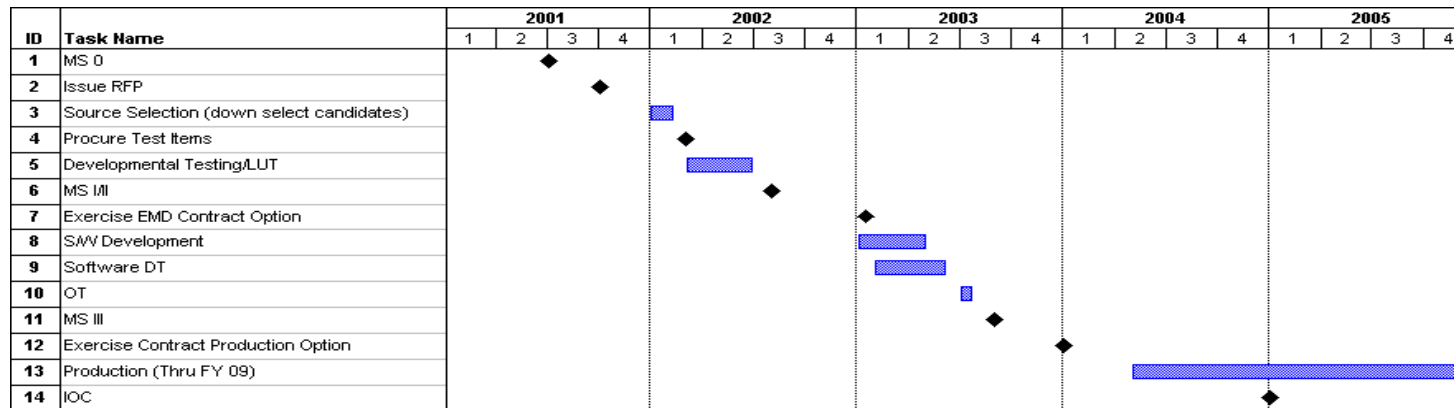
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EXHIBIT R-2a, RDT&E Project Justification		DATE:
		June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys	C1901 Marine Corps Ground Weaponry PIP

(U) D. SCHEDULE PROFILE:

AEROS PROGRAM (ANGVS-5 Replacement)



Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N

(U) PMC, BLI# 493000 Nt Vision Eq

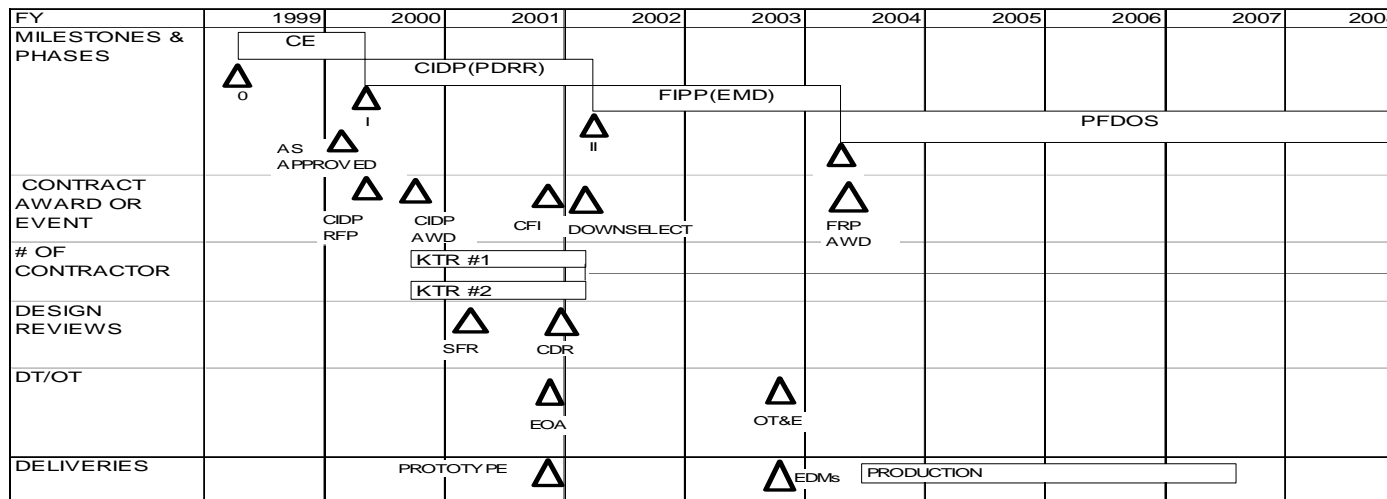
<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
		1.460	0.000					0.000	Continuing
				0.000	0.000	0.000	0.000	Continuing	Continuing

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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys	C1901 Marine Corps Ground Weaponry PIP

MIA1 Firepower Enhancement Program (FEP)



Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N

(U) PMC BLI# 206300 Mod Kits (Tracked

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U) RDT&E,N	6.119	3.582	7.762	0.000					0.000	Continuing
(U) PMC BLI# 206300 Mod Kits (Tracked					0.000	0.000	0.000	0.000	Continuing	Continuing

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-2a, RDTE,N Project Justification

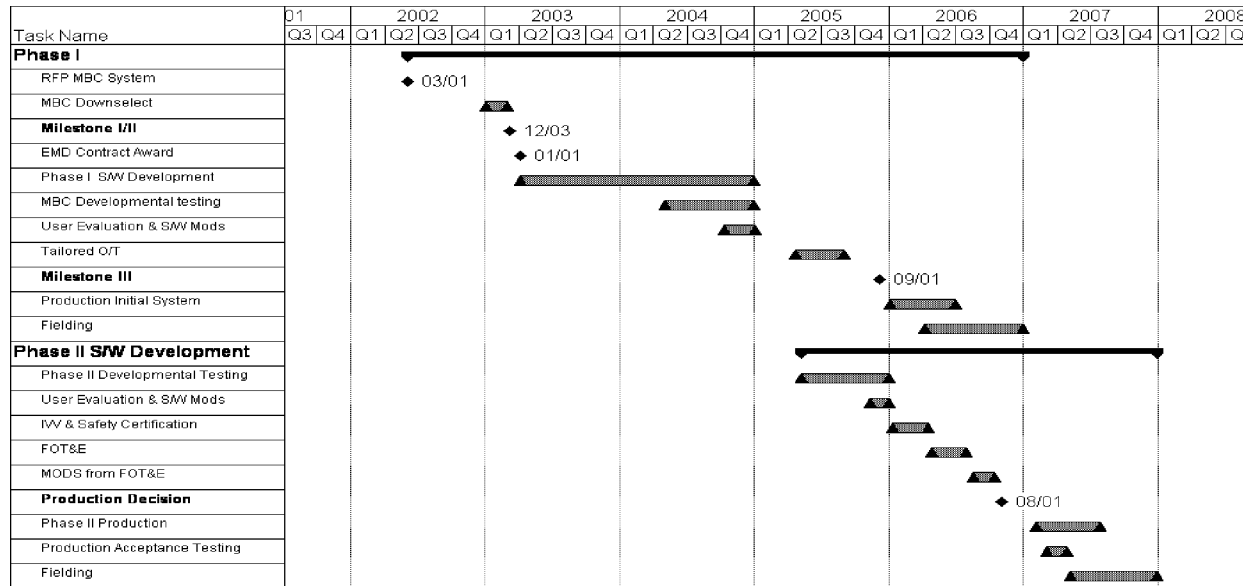
(Exhibit R-2a, page 16 of 41)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys	C1901 Marine Corps Ground Weaponry PIP

MORTAR BALLISTIC COMPUTER



Program Funding Summary

(APPN, BLI #, NOMEN)

(U) RDT&E,N

(U) PMC BLI# 473300 Fire Support Systems

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U) RDT&E,N				0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
(U) PMC BLI# 473300 Fire Support Systems							0.000	0.000	Continuing	Continuing

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-2a, RDTE,N Project Justification

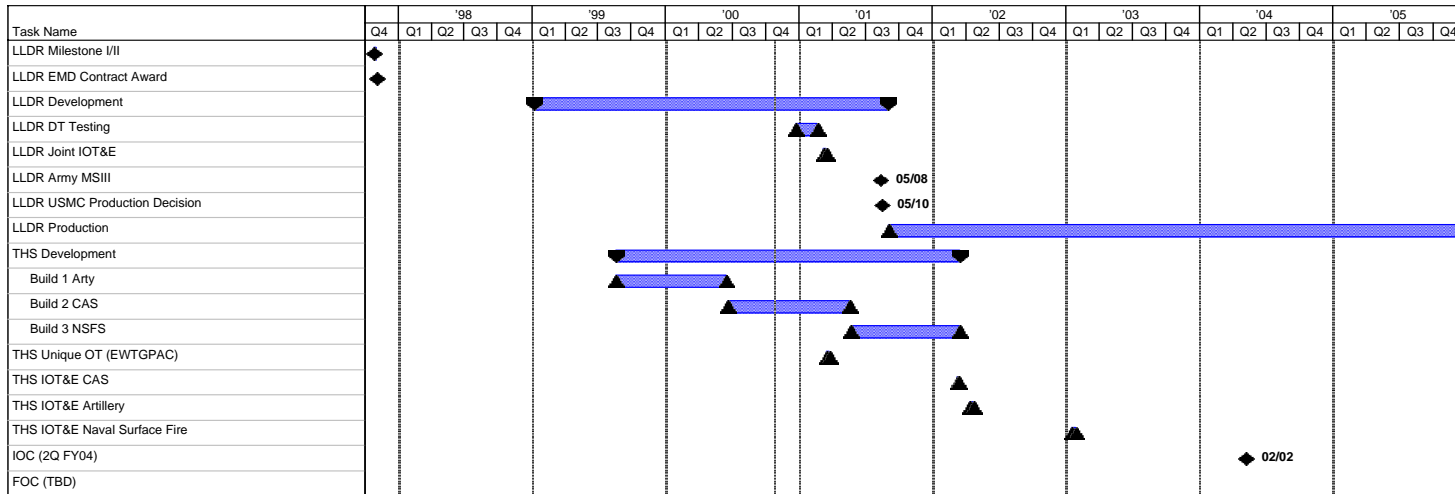
(Exhibit R-2a, page 17 of 41)

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RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys		C1901 Marine Corps Ground Weaponry PIP	

Target Location Designation Hand-off System (TLDHS)



LLDR - Lightweight Laser Designator Rangefinder **THS** - Target hand-off System **CAS** - Close Air Support

Program Funding Summary

(APPN, BLI #, NOMEN)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U) RDT&E,N	2.593	0.728	0.349						0.000	Cont.
(U) PMC BLI# 473300 Fire Support Systems		12.231	16.152	0.000	0.000				0.000	Cont.

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EXHIBIT R-2a, RDT&E Project Justification			DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		C1901 Marine Corps Ground Weaponry PIP	
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat/Supporting Arms Sys			

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		■ Feb 00 - Mar 00											
IOT&E (USMC)		◆ Aug 00											
Indep Log Assessment		◆ Sep 00											
MCOTEA IER		■ Sep 00 - Nov 00											
ULSS		■ Sep 00 - Jan 01											
USMC ADM (MS I/III)		◆ Dec 00											
Awd OMNI Cntr Options		◆ Dec 00	◆ Oct 01	◆ Oct 02	◆ Oct 03	◆ Oct 04							
TWS Production			■ Dec 00 - Sep 06										
Fielding Decision			◆ Nov 01										
IOC			◆ Dec 01										
FOC - Medium						◆ Oct 03							
FOC - Heavy								◆ Oct 06					

Program Funding Summary

(APPN, BLI #, NOMEN)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U) RDT&E,N	0.154	0.113	0.118	0.000	0.000	0.000			0.000	Cont.
(U) PMC, BLI# 493000 Nt Vision Eq		14.218	18.739	0.000	0.000	0.000			0.000	Cont.

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-2a, RDTE,N Project Justification

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Exhibit R-3 Cost Analysis								DATE:				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Sys				C1901 Marine Corps Ground Weaponry PIP					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Primary Hardware Dev											0.000	
Ancillary Hardware Dev											0.000	
Systems Engineering											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
AN/TPQ-46	RCP	TBD						0.201	1Q02	0.000	0.201	0.200
Fam Impr Mortars	MIPR	PM Mortars, Picatinny NJ		0.155	TBD					Continuing	Continuing	
Fam Small Craft Mods	WR/RCP	NSWC, Crane IN	0.250	0.535	1Q00	0.396	1Q01	0.402	2Q02	Continuing	Continuing	
Fire Spt Mods	WR	Marine Det, Ft Sill, OK	0.080	0.050	1Q00	0.050	1Q01	0.050	1Q02	Continuing	Continuing	
Fire Spt Mods	MIPR	USArmy CECOM, Ft Monmouth NJ	0.050	0.155	1Q00	0.198	2Q01	0.064	1Q02	Continuing	Continuing	
Fire Spt Mods	WR	NSWC, Crane IN			1Q00	0.030	1Q01			Continuing	Continuing	
IRV	MIPR	UDLP, York, PA		0.058	2Q00		2Q02			0.000	0.058	0.055
Inf Weapon Mods	WR/RCP	MCCDC, Quantico, VA	0.075	0.452	3Q00	0.198	1Q01	0.092	1Q02	Continuing	Continuing	
Inf Weapon Mods	MIPR	TACOM, Warren MI	0.008							0.000	0.008	0.008
ISURSS	RCP	TBD					2Q01	0.374	TBD	Continuing	Continuing	
M1A1 Firepower	RCP	TBD		5.372	07/00	2.807		7.137	2Q02	Continuing	Continuing	
M1A1 Firepower	MIPR	Nt Vision Lab, Ft Belvoir, VA		0.200	1Q00	0.200	2Q01	0.200	2Q02	Continuing	Continuing	
M1A1 Mods	RCP	Ctr Nav Anl, Alexandria, VA		0.300	2Q00		1Q01			Continuing	Continuing	
M1A1 Mods	WR/RCP	TACOM, Warren MI	0.193		2Q00		1Q01		2Q02	Continuing	Continuing	
M1A1 Mods	WR/RCP	TBD		0.023	2Q00	0.153	1Q01	0.188	1Q02	Continuing	Continuing	
Nt. Vision Mod	WR/RCP	NSWC, Crane IN		0.045	2Q00	0.050	2Q01	0.041	1Q02	Continuing	Continuing	
Nt. Vision Mod	MIPR	Nt Vision Lab, Ft Belvoir, VA		0.050	2Q00	0.100	2Q01	0.100	2Q02	Continuing	Continuing	
TWS	MIPR	Nt Vision Lab, Ft Belvoir, VA	0.225	0.017	2Q00	0.018	2Q01	0.018	2Q02	Continuing	Continuing	
TWS	RCP	MCSC, Quantico, VA	0.138		2Q00		1Q01			Continuing	Continuing	
TLDHS	RCP	Synetics, Inc King George, VA		1.709	2Q00	0.223	1Q01	0.126	1Q02	0.000	2.058	2.039
TLDHS	MIPR	Nt Vision Lab, Ft Belvoir, VA	2.031							0.000	2.031	
Subtotal Product Dev			3.050	9.121		4.373		8.993		Continuing	Continuing	
Remarks:												

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Exhibit R-3 Cost Analysis								DATE:				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Sys				C1901 Marine Corps Ground Weaponry PIP					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SUPPORT												
AN/GVS-5	WR	MCSC, Quantico, VA						0.204	1Q02	1.089	1.293	1.333
AN/GVS-5	RCP	BAEST, Stafford, VA						0.109	10/05	0.111	0.220	0.220
AN/TPQ-46	RCP	BAEST, Stafford, VA						0.150	1Q02	0.000	0.150	0.150
AN/TPQ-46	WR	MCSC, Quantico, VA						0.015	1Q02	0.000	0.015	0.015
Fam Artillery Munitions	WR/RCP	BAEST, Stafford, VA		0.059	Various	0.049	10/01	0.046	1Q02	Continuing	Continuing	
Fam Small Craft Mods	RCP	ALS, Inc, Dumfries, VA	0.040	0.090	Various					0.000	0.130	0.130
Fam Small Craft Mods	RCP	BAEST, Stafford, VA				0.050	Various	0.050	1Q02	Continuing	Continuing	
Fam Small Craft Mods	WR	MCSC, Quantico, VA	0.050	0.046	1Q00	0.050		0.050	10/05	Continuing	Continuing	
Fire Supt Mods	WR/RCP	BAEST, Stafford, VA		0.373	Various	0.673		0.644	1Q02	Continuing	Continuing	
Fire Supt Mods	RCP	ALS, Inc, Dumfries, VA	0.205	0.247	Various					0.000	0.452	0.452
Fire Supt Mods	WR	NSWC, Dahlgren, VA	0.015	0.135	Various					Continuing	Continuing	
Fire Supt Mods	MIPR	TACOM, Rock Island, IL				0.030	1Q00			Continuing	Continuing	
IRV	RCP	ALS, Inc, Dumfries, VA		0.050	Various					0.000	0.050	0.050
IRV	WR	MCSC, Quantico, VA		0.093	1Q00					Continuing	Continuing	
Inf Wpns Mods	WR	MCSC, Quantico, VA	0.097	0.120	Various	0.130	1Q01	0.130	1Q02	Continuing	Continuing	
Inf Wpns Mods	RCP	ALS, Inc, Dumfries, VA	0.079	0.262	Various					0.000	0.341	0.455
Inf Wpns Mods	RCP	BAEST, Stafford, VA		0.096	Various	0.343	1Q01	0.350	1Q02	Continuing	Continuing	
Inf Wpns Mods	WR/RCP	NSWC, Dahlgren, VA	0.290	0.290	Various	0.200	1Q01	0.136	1Q02	Continuing	Continuing	
Inf Wpns Mods	WR	MCLB, Albana, GA	0.025	0.025	Various	0.025	1Q01	0.025	1Q02	Continuing	Continuing	
Inf Wpns Mods	WR/RCP	NSWC, Crane, IN		0.181	Various	0.031	1Q01	0.012	1Q02	Continuing	Continuing	
Inf Wpns Mods	WR/RCP	CSS, Panama City, FL		0.461	Various					Continuing	Continuing	
ISURSS	WR/RCP	BAEST, Stafford, VA			Various			0.127	1Q02	Continuing	Continuing	
M1A1 Firepower	RCP	ALS, Inc, Dumfries, VA		0.064	Various					0.000	0.064	0.075
M1A1 Firepower	RCP	BAEST, Stafford, VA			Various	0.064	2Q01	0.361	2Q02	Continuing	Continuing	
M1A1 Firepower	MIPR	GDLS, Warren, MI		0.472	1Q00	0.500	1Q01			Continuing	Continuing	
M1A1 Mods	RCP	ALS, Inc, Dumfries, VA	0.040	0.040	Various					0.000	0.080	0.080
M1A1 Mods	RCP	BAEST, Stafford, VA				0.040	Various	0.040	1Q02	Continuing	Continuing	
M1A1 Mods	WR	MCSC, Quantico, VA	0.062	0.048	Various	0.050		0.050	1Q02	Continuing	Continuing	
MBC	WR	MCSC, Quantico, VA	0.075							0.000	0.075	0.075

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Exhibit R-3 Cost Analysis								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT				PROJECT NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev				0206623M Marine Corps Ground Combat/Supporting Arms Sys				C1901 Marine Corps Ground Weaponry PIP				
Nt Vision Mod	WR	MCSC, Quantico, VA		0.075	1Q00	0.121		0.125	Various	Continuing	Continuing	
Nt Vision Mod	RCP	ALS, Inc, Dumfries, VA		0.055	Various					0.000	0.055	0.055
Nt Vision Mod	RCP	BAEST, Stafford, VA				0.147	Various	0.150	1Q02	Continuing	Continuing	
TWS	WR	MCSC, Quantico, VA	0.060	0.042		0.030	Various	0.030	Various	Continuing	Continuing	
TWS	RCP	ALS, Inc, Dumfries, VA	0.090	0.095	Various					0.000	0.185	0.185
TWS	RCP	BAEST, Stafford, VA				0.030	Various	0.050	Various	Continuing	Continuing	
TLDHS	RCP	ALS, Inc, Dumfries, VA	0.092	0.073	Various					0.000	0.165	0.183
TLDHS	RCP	BAEST, Stafford, VA				0.117	Various	0.045	Various	0.000	0.162	0.180
TLDHS	WR	MCSC, Quantico, VA	0.080	0.080	Various	0.083		0.013	Various	0.000	0.256	0.256
TLDHS	WR	NSWC, Dahlgren, VA	0.599	0.371	Various					0.000	0.970	0.970
Subtotal Support			1.899	3.943		2.763		2.912				
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T&E												
Developmental Test & Eval											0.000	
Operational Test & Eval											0.000	
AN/GVS-5 Replcmnt	MIPR	AMCOM, Huntsville, AL						1.147		0.000	1.147	1.147
Family Arty Mun	WR/RCP	NSWC, Crane, IN		0.089	1Q00	0.217	1Q01	0.222	1Q02	Continuing	Continuing	
Family Small Craft Mods	WR	NSWC, Crane, IN	0.063	0.083	Various	0.085	1Q01	0.092	1Q02	Continuing	Continuing	
Fire Spt Mods	WR	MCOTEA, Quantico, VA	0.014	0.011	1Q00					Continuing	Continuing	
IRV	WR	CSS, Panama City, FL		0.260						0.000	0.260	0.260
Inf Wpn Mods	WR	MCOTEA, Quantico, VA	0.050	0.010	Various	0.010	Various	0.010	Various	Continuing	Continuing	
Inf Wpn Mods	WR	MCCDC, Quantico, VA	0.040	0.065	Various	0.065	Various	0.065	Various	Continuing	Continuing	
M1A1 Mods	MIPR	ARDEC, Rock Island, IL	0.020	0.010	Various	0.020	1Q01	0.020	1Q01	Continuing	Continuing	
M1A1 Mods	WR	MCOTEA, Quantico, VA	0.100							Continuing	Continuing	
Nt Vision Mods	WR	MCOTEA, Quantico, VA		0.050	Various	0.025	2Q01	0.025	2Q01	Continuing	Continuing	
TWS	WR	MCOTEA, Quantico, VA	0.050			0.035	Various	0.020	Various	Continuing	Continuing	
TLDHS	WR	NSWC, Dahlgren, VA	0.074	0.225	1Q00	0.175	1Q01	0.085	1Q01	0.000	0.559	0.559
TLDHS	WR	MCOTEA, Quantico, VA	0.125	0.127	1Q00	0.117	2Q01	0.075	2Q01	0.000	0.444	0.444
Subtotal T&E			0.536	0.930		0.749		1.761		Continuing	Continuing	
Remarks:												

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT					PROJECT NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat/Supporting Arms Sys					C1901 Marine Corps Ground Weaponry PIP				
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MANAGEMENT												
Fam Improved Mortars	WR	MCSC, Quantico, VA		0.008	1Q00					Continuing	Continuing	
Fire Supt Mods	WR	MCSC, Quantico, VA	0.225	0.167	1Q00	0.090	1Q02	0.080	1Q02	Continuing	Continuing	
Inf Wpns Mods	RCP	ALS, Inc, Dumfries, VA	0.026	0.088	Various					0.000	0.114	0.455
M1A1 Firepower	RCP	ALS, Inc, Dumfries, VA		0.011	Various					0.000	0.011	0.011
M1A1 Firepower	RCP	BAEST, Stafford, VA			Various	0.011	2Q01	0.064	2Q02	Continuing	Continuing	
TLDHS	RCP	ALS, Inc, Dumfries, VA	0.010	0.008	Various					0.000	0.018	0.183
TLDHS	RCP	BAEST, Stafford, VA				0.013	Various	0.005	Various	0.000	0.018	0.180
Subtotal Management			0.261	0.282		0.114		0.149		0.000	0.806	
Remarks:												
Total Cost				14.276		7.999		13.815		Continuing	Continuing	

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:			
							June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME									
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems					C2086 Marine Enhanced Program (MEP)				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	1.472	1.640	2.555	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

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

(U) This program was formerly titled Soldier/Marine Enhancement. 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/commercial of 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.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments:

- (U) \$ 0.458 Explored NDI equipment that will improve the combat effectiveness and enhance safety and survivability of the Individual Marine.
- (U) \$ 0.565 Explored clothing and individual equipment NDI categories.
- (U) \$ 0.449 Explored ground weapons, communications and command and control equipment NDI categories.

(U) Total \$ 1.472

FY 2001 Planned Program

- (U) \$ 0.560 Continue to explore NDI equipment that will improve the combat effectiveness and enhance safety and survivability of the Individual Marine.
- (U) \$ 0.543 Continue to explore clothing and individual equipment NDI categories.
- (U) \$ 0.525 Continue to explore ground weapons, communications and command and control equipment NDI categories.
- (U) \$ 0.012 SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

(U) Total \$ 1.640

FY 2002 Planned Program

- (U) \$ 0.903 Continue to explore NDI equipment that will improve the combat effectiveness and enhance safety and survivability of the Individual Marine.
- (U) \$ 0.834 Continue to explore clothing and individual equipment NDI categories.
- (U) \$ 0.818 Continue to explore ground weapons, communications and command and control equipment NDI categories.

(U) Total \$ 2.555

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE:			
						June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME								
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems					C2086 Marine Enhanced Program (MEP)			
	FY2000	FY2001	FY2002						
(U) FY 2001 President's Budget:	1.475	1.656	2.604						
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer	-0.011								
(U) Execution Adjustment									
(U) Minor Affordability Adjustment	-0.006	-0.016	-0.049						
(U) Program Adjustment	0.014								
(U) FY 2002 President's Budget:	1.472	1.640	2.555						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) PMC (BLI #221100) MEP	4.343	8.336	2.243	0.000	0.000	0.000	0.000	0.000 Continuing	Continuing
(U) O&M Initial Issue Active	44.693	32.173	27.662	0.000	0.000	0.000	0.000	0.000 Continuing	Continuing
(U) O&M Initial Issue Reserve	15.523	12.758	7.749	0.000	0.000	0.000		Continuing	Continuing
(U) Related RDT&E: PE 0604713A (Combat Feeding, Clothing and Equipment)									
(U) C. ACQUISITION STRATEGY: * An explanation of acquisition, management, and contracting strategies shall be provided for each project.									
Acquisition Strategies are program specific. They vary from modified NDI to short term developmental programs.									
(U) D. SCHEDULE PROFILE: N/A									

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CLASSIFICATION:

Exhibit R-3 Cost Analysis								DATE:				
								June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat Arms Systems				C2086 Marine Enhanced Program (MEP)					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Dev											0.000	
Ancillary Hardware Dev											0.000	
Systems Engineering											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
	WR	Lexington-Bluegrass, Lexington KY	2.357	0.042	1Q00	0.048	1Q01	0.052	1Q02	Continuing	Continuing	
	WR	NOC PacDiv, Fallbrook, CA	0.173	0.030	1Q00	0.035	1Q01	0.040	1Q02	Continuing	Continuing	
	WR/RCP	MCTSSA, CamPen, CA	0.604	0.004	1Q00	0.005	1Q01	0.018	1Q02	Continuing	Continuing	
	WR/RCP	NCTRF, Aberdeen, MD	0.299	0.021	1Q00	0.021	1Q01	0.035	1Q02	Continuing	Continuing	
	MIPR	NATICK, Natick, MA	1.298	0.040	2Q00	0.070	2Q01	0.151	1Q02	Continuing	Continuing	
	MIPR	ARL/APG Aberdeen, MD	0.247	0.007	1Q00	0.008	1Q01	0.022	2Q02	Continuing	Continuing	
	MIPR	NSMA, Washington DC	0.175	0.014	1Q00	0.016	1Q01	0.020	1Q02	Continuing	Continuing	
	MIPR	TACOM, Warren MI	0.067	0.010	1Q00	0.011	2Q01	0.012	2Q02	Continuing	Continuing	
	MIPR	2nd MARDIV, CamLej, NC	0.389	0.018	2Q00	0.020	2Q01	0.038	2Q02	Continuing	Continuing	
	WR	2nd MARDIV, CamLej, NC	0.066	0.002	1Q00	0.004	1Q01	0.008	1Q02	Continuing	Continuing	
	WR	NCCOSC, San Diego, CA	0.217	0.016	1Q00	0.014	1Q01	0.022	2Q02	Continuing	Continuing	
	WR	NCSS, Panama City, FL	1.880	0.008	1Q00	0.012	2Q01	0.035	1Q02	Continuing	Continuing	
	WR	NSWC, Crane, IN	2.000	0.032	1Q00	0.040	1Q01	0.097	1Q02	Continuing	Continuing	
	WR	NAWC Air Div, Pax River, MD	0.256	0.038	1Q00	0.041	1Q01	0.072	1Q02	Continuing	Continuing	
	WR	II MEF, CamLej, NC	0.080	0.005	1Q00	0.005	1Q01	0.010	1Q02	Continuing	Continuing	
Subtotal Product Dev			10.108	0.287		0.350		0.632		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat Arms Systems				C2086 Marine Enhanced Program (MEP)					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Development Support Equip											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
	WR	MCCDC, Quantico, VA	2.039	0.037	1Q00	0.037		0.095		Continuing	Continuing	
	Various	MISC	4.434	0.146	Various	0.029		0.070		Continuing	Continuing	
Subtotal Support			6.473	0.183		0.066		0.165				
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Eval											0.000	
Operational Test & Eval											0.000	
Tooling											0.000	
	WR/RCP	MCTSSA, CamPen, CA	1.818	0.024	1Q00	0.024	1Q01	0.054	1Q02	Continuing	Continuing	
	WR/RCP	NCTRF, Aberdeen, MD	0.851	0.005	1Q00	0.005	1Q01	0.018	1Q02	Continuing	Continuing	
	MIPR	NATICK, Natick, MA	2.470	0.125	2Q00	0.185	2Q01	0.290	2Q02	Continuing	Continuing	
	MIPR	ARL/APG Aberdeen, MD	0.801	0.012	1Q00	0.014	2Q01	0.035	2Q02	Continuing	Continuing	
	MIPR	PPSC, Phladelphia, PA	0.046	0.004	3Q00	0.005	3Q01	0.024	3Q02	Continuing	Continuing	
	WR/RCP	MCAGCC 29 Palms, CA	0.351	0.008	1Q00	0.010	2Q01	0.020	2Q02	Continuing	Continuing	
	MIPR	NSMA, Washington DC	0.539	0.021	1Q00	0.021	1Q01	0.035	1Q02	Continuing	Continuing	
	MIPR	TACOM, Warren MI	0.199	0.021	1Q00	0.021	1Q01	0.031	1Q02	Continuing	Continuing	
	MIPR	NHRC, Crane, IN	1.473	0.150	2Q00	0.200	2Q01	0.292	2Q02	Continuing	Continuing	
	WR	2nd MARDIV, CamLej, NC	0.224	0.012	1Q00	0.012	1Q01	0.025	1Q02	Continuing	Continuing	
	WR	NCCOSC, San Diego, CA	0.674	0.036	1Q00	0.036	2Q01	0.046	2Q02	Continuing	Continuing	
	WR	NCSS, Panama City, FL	6.192	0.015	1Q00	0.015	1Q01	0.027	1Q02	Continuing	Continuing	
	WR	NSWC, Crane, IN	6.560	0.260	1Q00	0.284	1Q01	0.270	1Q02	Continuing	Continuing	
	WR	NAWC Air Div, Pax River, MD	0.788	0.162	1Q00	0.176	1Q01	0.275	1Q02	Continuing	Continuing	
	WR	NSWC, Indian Head, MD	0.556	0.010	4Q00	0.010	3Q01	0.020	3Q02	Continuing	Continuing	
	Various	MISC	8.851	0.137	Various	0.206		0.296		Continuing	Continuing	
Subtotal T&E			32.393	1.002		1.224		1.758		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 27 of 41)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206623M Marine Corps Ground Combat Arms Systems				C2086 Marine Enhanced Program (MEP)					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Contractor Eng Suppt											0.000	
Govt Engineering Suppt											0.000	
Program Mngmnt Suppt											0.000	
Travel											0.000	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost				1.472		1.640		2.555		Continuing	Continuing	

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 28 of 41)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems					C2237 Amphibious Vehicle Test Branch (AVTB)				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	0.598	0.717	0.732	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

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

(U) The Amphibious Vehicle Test Branch (AVTB) is a one-of-a-kind Department of Defense test facility for amphibious vehicles and supports the requirements of all Services. The AVTB 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 AVTB is ideal for the amphibious vehicle, as well as ship related testing. The AVTB 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 AVTB is committed to testing product improvement programs, engineering change proposal design changes, and field change requests.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments:

- (U) \$ 0.490 Provided program support, supplies, and services at AVTB test site to support scheduled and unscheduled Assault Amphibious Vehicle 7A1 (AAV7A1) "rebuild to standard" testing, Advanced Assault Amphibious Vehicle (AAAV) Development Testing as well as other Marine Corps mobility and mine warfare programs. .
Programmed 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. Provided services and support to the Department of Defense Common Test and Training Range Architecture workshops. These funds provided organic supply support including management operations, advertising, general accounting, and a maintenance float of equipment. Provided intermediate maintenance (third echelon) of organic non-developmental communication electronic and ordnance equipment.
- (U) \$ 0.108 Provided funding for necessary services provided by Marine Corps Base, Camp Pendleton (MCB CAMPEN), California and off-station units for electricity, heating, and other power charges; long distance telephone support; and calibration of laboratory test equipment and maintenance.

(U) Total \$ 0.598

FY 2001 Planned Program

- (U) \$ 0.550 Maintenance, refurbishment, upgrade, and replacement of test equipment and instrumentation needed to provide program support, supplies, and services at AVTB 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. These funds 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.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE:	
				June 2001	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev		0206623M Marine Corps Ground Combat Arms Systems		C2237 Amphibious Vehicle Test Branch (AVTB)	
• (U) \$	0.164	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) \$	0.003	SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.			
(U) Total \$	0.717				
FY 2002 Planned Program					
• (U) \$	0.571	Maintenance, refurbishment, upgrade, and replacement of test equipment and instrumentation needed to provide program support, supplies, and services at AVTB 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. These funds 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.			
• (U) \$	0.161	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 1 Force Service Support Group (FSSG).			
(U) Total \$	0.732				
		FY2000	FY2001	FY2002	
(U) FY 2001 President's Budget:		0.639	0.724	0.729	
(U) Adjustments from the President's Budget:					
(U) SBIR/STTR Transfer		-0.004			
(U) Execution Adjustment					
(U) Minor Affordability Adjustment		-0.003	-0.007	0.001	
(U) Program Adjustment		-0.034		0.002	
(U) FY 2002 President's Budget:		0.598	0.717	0.732	
CHANGE SUMMARY EXPLANATION:					
(U) Funding: See Above.					
(U) Schedule: Not Applicable.					
(U) Technical: Not Applicable.					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001																							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME																							
RDT&E, N /BA-7 Operational Sys Dev	0206623M Marine Corps Ground Combat Arms Systems					C2237 Amphibious Vehicle Test Branch (AVTB)																							
<p>(U) B. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <table border="1"> <thead> <tr> <th><u>Line Item No. & Name</u></th> <th>FY 2000</th> <th>FY 2001</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY 2006</th> <th>FY 2007 To Compl</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td colspan="10">(U) Related RDT&E: PE 0603611M (Marine Corps Assault Vehicles)</td> </tr> </tbody> </table> <p>(U) C. ACQUISITION STRATEGY: * An explanation of acquisition, management, and contracting strategies shall be provided for each project. Work will be lead in-house. Necessary contractor support will be provided by MCB Barstow by using existing contracts. General Services Administration will be used for vehicle leasing contract.</p> <p>(U) D. SCHEDULE PROFILE:</p> <p>Testing conducted at AVTB includes all aspects of Marine Corps Assault Amphibious Vehicles. Testing planned for FY 02 and beyond includes MK 155 Minefield Breaching System, NBC overpressure system, RAM/RS (Reliability, Availability and Maintainability/Rebuild to Standard) Proof of Principle Developmental Testing, Operational Testing Support and Production Assurance testing. Engineering Change Proposals (ECP) as required; Combined Recoil Booster (CRB) for adoption of Multiple Integrated Laser Engagement System (MILES) for AAV use; upgrade instrumentation for over the horizon capability in developing weapons systems to support operational maneuver from the sea, support for the Light Armored Vehicle Service Life Extension Program; C4I integrated support for AAV Communications and 7 RAM/RS. AVTB will also support the testing of the Advanced Amphibian Assault Vehicle (AAAV) as directed, by DRPM AAA, during the Program Definition & Risk Reduction phase of the AAAV Program Development.</p>										<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost	(U) Related RDT&E: PE 0603611M (Marine Corps Assault Vehicles)									
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost																				
(U) Related RDT&E: PE 0603611M (Marine Corps Assault Vehicles)																													

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: <div>June 2001</div>				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 0206623M Marine Corps Ground Combat/Supporting Arms Systems					PROJECT NUMBER AND NAME C2503 Initial Issue				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	2.007	1.403	1.307	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:										
The Initial Issue program provides Research, Development, Test and Evaluation of low visibility, low cost items with emphasis on non-developmental/commercially available items. Items approved for procurement transition into the O&M Initial Issue program. Focus is on clothing and equipment items (i.e. improved Jungle and Desert Boots, Light Weight Helmet, combat boots, sleeping bags) which will benefit the individual Marine by reducing the load with less bulky, lightweight, comfortable equipment, increasing survivability and improving combat effectiveness. Initial Issue continues to explore the spectrum of technologies commercially available that can provide enhancement in individual protection, tactical mobility and application of state-of-the-art technologies through studies and testing.										
PROGRAM ACCOMPLISHMENTS AND PLANS										
FY 2000 Accomplishments:										
<div><div>• (U) \$</div><div>0.981 Explored and evaluated across a broad spectrum of commercially available technologies that could be incorporated into existing or new designs of individual clothing and equipment in an effort to reduce weight, increase survivability, increase lethality, improve safety, increase mobility, and improve combat performance of the individual Marine. (Marine load system product improvement, redesigned, conducted testing and evaluation; improved jungle and desert boots; conducted boot outsole traction study to optimize performance of boot soles for traction, durability, and resole-ability; body armor and light weight helmet ballistic testing which included cadaver testing and analysis of ballistic effects of shock forces of the torso, neck and spine; reviewed uniform sizing integration (less sizes covering same population with potential cost savings associated with stock and storage). Provided recommendations to uniform board on Marine uniform product improvements in an effort to reduce cost, utilize commercial manufacturing techniques, improve durability, and retain sharp appearance.</div></div>										
<div><div>• (U) \$</div><div>0.070 Performed trade studies and system alternative analysis, evaluations, verification and validation of the Marine Casualty Flow Model to address casualties on the battlefield.</div></div>										
<div><div>• (U) \$</div><div>0.442 Conducted validation of the model and testing of the Forward Resusitative Surgery System prototypes.</div></div>										
<div><div>• (U) \$</div><div>0.314 Developed and purchased 2 complete Digital Radiography Systems for field testing and evaluation.</div></div>										
<div><div>• (U) \$</div><div>0.200 Conducted Blunt Trauma Studies at the Armed Forces Pathology Laboratory.</div></div>										
(U) Total \$ 2.007										
FY 2001 Planned Program										
<div><div>• (U) \$</div><div>1.024 Continue to validate and incorporate commercial technologies into individual combat clothing and equipment. Conduct comparative analysis through boot study (fatigue, shear force, injury rates, energy consumption) of new infantry combat boots and existing foot wear. Conduct study/analysis of the Army's Land Warrior program for commercial technology insertion to complement the Marine Corps Integral Combat System (our version of Land Warrior). Evaluate commercial power source/recharging systems through individual movement (Piezoelectrics). Evaluate and incorporate cost-effective commercial fabric technologies into the Battle Dress uniform.</div></div>										
<div><div>• (U) \$</div><div>0.284 Complete development and test of the Forward Resusitative Surgery System.</div></div>										
<div><div>• (U) \$</div><div>0.095 Continue operational assessment of Forward Resusitative Surgery System and provide test data to Medical Community for acceptance.</div></div>										
(U) Total \$ 1.403										
B.1 SHOPPING LIST, Item No. 101										
Exhibit R-2a. RDTE.N Project Justification										

R-1 SHOPPING LIST Item No. 191

Exhibit R-2a, RDTE,N Project Justification

(Exhibit R-2a, page 32 of 41)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Development	0206623M Marine Corps Ground Combat/Supporting Arms Systems	C2503 Initial Issue
FY 2002 Planned Program		
<ul style="list-style-type: none"> (U) \$ 1.064 Continue the exploration of new commercial technologies that can be inserted into current body armor, load bearing, 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 enable the baselining of current equipment and configuration/compatibility management of new equipment initiatives. Funding will go toward research and development of the Military Eye Protection System which will be designed to protect Marines' eyes from laser and ballistic threats. (U) \$ 0.243 Develop software interface for Marine Casualty Flow Model for estimating supply program. 		
(U) Total \$ 1.307		
	FY2000	FY2001
(U) FY 2001 President's Budget:	1.613	1.416
(U) Adjustments from the President's Budget:		
(U) SBIR/STTR Transfer	-0.004	
(U) Execution Adjustment	0.397	
(U) Minor Affordability Adjustment	-0.005	-0.013
(U) Program Adjustment	0.006	0.025
(U) FY 2002 President's Budget:	2.007	1.403
CHANGE SUMMARY EXPLANATION:		
(U) Funding: See Above.		
(U) Schedule: Digital Radiography Program Schedule accelerated to take advantage of cost savings and technology available now.		
(U) Technical: Not Applicable.		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001																																	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME																																	
RDT&E, N /BA-7 Operational Sys Development		0206623M Marine Corps Ground Combat/Supporting Arms Systems				C2503 Initial Issue																																	
<p>(U) B. OTHER PROGRAM FUNDING SUMMARY:</p> <table border="1"> <thead> <tr> <th>Line Item No. & Name</th> <th>FY 2000</th> <th>FY 2001</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY 2006</th> <th>FY 2007 To Compl</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>(U) PMC Line (BLI#652200) Field Med Equip **</td> <td></td> <td></td> <td>3.412</td> <td>0.000</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="9"></td> <td>Cont.</td> </tr> </tbody> </table> <p>**Forward Resuscitative Surgery System & Digital Radiography are the procurement programs contained within PMC Field Medical Equipment and associated with Initial Issue.</p> <p>(U) Related RDT&E: Not Applicable.</p>										Line Item No. & Name	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost	(U) PMC Line (BLI#652200) Field Med Equip **			3.412	0.000															Cont.
Line Item No. & Name	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost																														
(U) PMC Line (BLI#652200) Field Med Equip **			3.412	0.000																																			
									Cont.																														
<p>(U) C. ACQUISITION STRATEGY: * Initial Issue items are all ACAT IV programs and utilize various acquisition strategies. Initial Issue programs leverage heavily off of 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 and Engineering Center via Indefinite Delivery/Indefinite Quantity (ID/IQ) contracts. ID/IQ contracts are used to decrease the government risk, allow maximum contract flexibility and capitalize on the savings realized by utilizing Economic Order Quantities.</p> <p>SHELTERS: The 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.</p>																																							
<p>(U) D. SCHEDULE PROFILE: Not Applicable.</p>																																							

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CLASSIFICATION:

Exhibit R-3 Cost Analysis										DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT					PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Development			0206623M Marine Corps Ground Combat/Supporting Arms Systems					C2503 Initial Issue					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Primary Hardware Dev											0.000		
Ancillary Hardware Dev											0.000		
Systems Engineering											0.000		
Licenses											0.000		
Tooling											0.000		
GFE											0.000		
Award Fees											0.000		
	MIPR	USASSCOM		0.980	2Q/00	0.908	1Q/01	0.932	1Q/02	Continuing	Continuing		
	FFP	MCSC CTQ		0.314		0.000		0.000		Continuing	Continuing		
Subtotal Product Dev			0.000	1.294		0.908		0.932		Continuing	Continuing		
Remarks:													
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Development Support Equip											0.000		
Software Development											0.000		
Training Development											0.000		
Integrated Logistics Support											0.000		
Configuration Management											0.000		
Technical Data											0.000		
Subtotal Support			0.000										
Remarks:													
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Developmental Test & Eval											0.000		
Operational Test & Eval											0.000		
Tooling											0.000		
	MIPR	USASSCOM		0.251	3Q/00	0.368	3Q/01	0.253	3Q/02	Continuing	Continuing		
	FFP	MCSC CTQ		0.342	3Q/00	0.000		0.000		Continuing	Continuing		
Subtotal T&E			0.000	0.593		0.368		0.253		Continuing	Continuing		
Remarks:													

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CLASSIFICATION:

Exhibit R-3 Cost Analysis								DATE:				
								June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Development			0206623M Marine Corps Ground Combat/Supporting Arms Systems				C2503 Initial Issue					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Contractor Eng Suppt											0.000	
Govt Engineering Suppt											0.000	
Program Mngmnt Suppt											0.000	
	WR	MCSC Travel		0.020	1Q/00	0.020	1Q/01	0.021	1Q/02	Continuing	Continuing	
	FFP/O	SVERDRUP		0.100	4Q/00	0.107	4Q/01	0.101	4Q/02	Continuing	Continuing	
Travel											0.000	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			0.000	0.120		0.127		0.122		0.000	0.369	

Remarks:

Total Cost			0.000	2.007		1.403		1.307		Continuing	Continuing	
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <div>June 2001</div>			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Development	PROGRAM ELEMENT NUMBER AND NAME 26623M Marine Corps Ground Combat/Supt Arms					PROJECT NUMBER AND NAME C2928 HIMARS				
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	0.000	17.141	10.891	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
RDT&E Articles Qty		2								

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

The High Mobility Artillery Rocket System (HIMARS) is an artillery system capable of firing rockets and/or guided missiles. It will provide long-range indirect fire support (45km or greater) to the Fleet Marine Force. It is composed of a Launcher Loader Module (LLM) and a fire control system mounted on a vehicle platform. The system will be C-130 aircraft transportable and rockets and missiles will be compatible with the current and future Multiple Launch Rocket System (MLRS) Family of Munitions. It will provide indirect fire support for the duration of tactical operations, accurately engaging targets at long range with high volumes of lethal fire under all weather conditions, both day and night. During a 24 hour period, the system will conduct multiple moves and multiple fire missions.

The 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.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments: Not Applicable.

FY 2001 Planned Program:

- (U) \$ 9.962 Purchase two HIMARS maturation launchers.
- (U) \$ 2.678 Program Management.
- (U) \$ 1.730 Engineering and Manufacturing Development.
- (U) \$ 0.276 Rockets, reduced range practice.
- (U) \$ 0.500 MLRS Joint Program Management.
- (U) \$ 1.595 Launcher and Family of Medium Tactical Vehicles (FMTV) initial spares.
- (U) \$ 0.400 SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 usc 638.

(U) Total \$ 17.141

FY 2002 Planned Program:

- (U) \$ 5.694 Engineering and Manufacturing Development. Includes contractor support, USMC R&D effort.
- (U) \$ 2.439 Program Management.
- (U) \$ 0.426 Support Test and Evaluation Program with Army. Includes contractor support, USMC R&D effort.
- (U) \$ 1.240 Systems test using equipment purchased with anticipated FY01 Congressional Enhancement.
- (U) \$ 0.033 MLRS PMO Program Management.
- (U) \$ 0.399 Launcher and Family of Medium Tactical Vehicles (FMTV) contractor support.
- (U) \$ 0.260 Launcher and FMTV Annual Repairs/Spares.
- (U) \$ 0.400 Training.

(U) Total \$ 10.891

CLASSIFICATION:

R-1 SHOPPING LIST - Item No. 191 Exhibit R-2a, RDTE,N Project Justification
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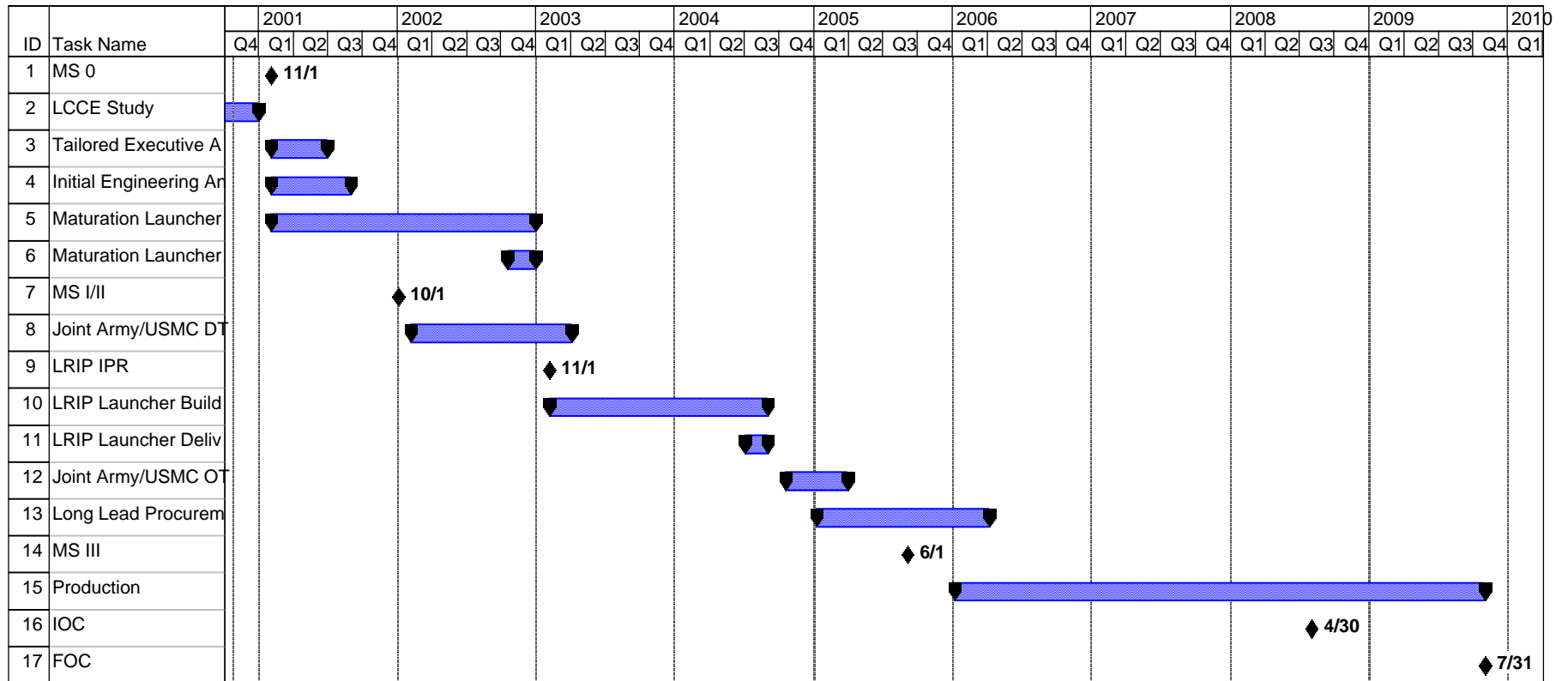
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE:	June 2001
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME		
RDT&E, N /BA-7 Operational Sys Development		26623M Marine Corps Ground Combat/Supt Arms			C2928 HIMARS		

(U) D. SCHEDULE PROFILE:



Program Funding Summary		FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U)	0603635M, RDT&E,M	0.000	17.141	10.891	0.000	0.000	0.000	0.000	0.000	0.000	Cont.
(U)	PMC, 205001,EIFGSWS (HIMARS)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Cont.

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis								DATE:				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development			26623M MC Ground Combat/Supt Arms				C2928 HIMARS					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Dev											0.000	
Ancillary Hardware Dev											0.000	
Systems Engineering											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
	SS/CPAF	Lockheed Martin, Dallas, TX	0.000	0.000		12.188	12/20/00	1.858	01/02/02	Continuing	Continuing	
	SS/CPAF	O'Gara-Hess, Cincinnati, OH	0.000	0.000		0.300	12/20/00	0.214	01/02/02	Continuing	Continuing	
	SS/CPAF	Steward & Stevenson, Sealy, TX	0.000	0.000		0.005	12/20/00	0.652	07/02/02	Continuing	Continuing	
	FFP	USMC R&D, Quantico, VA	0.000	0.000		0.000		2.617	03/15/02	Continuing	Continuing	
	MIPR	US Army R&D (MSL),Huntsville,AL	0.000	0.000		0.300	01/02/01	0.900	11/01/01	Continuing	Continuing	
	SS/CPAF	Oshkosh Truck Corp, Oshkosh,WI	0.000	0.000		1.075	0727/01	0.000		0.000	1.075	
	WR	NSWC-Carderock,MD	0.000	0.000		0.075	02/28/01	0.000		0.000	0.075	
	WR	NSWC-Dahlgren, VA	0.000	0.000		0.080	11/24/00	0.000		0.000	0.080	
	FFP	John J. McMullen Assocs,Pittsb.,PA	0.000	0.000		0.040	04/15/01	0.000		0.000	0.040	
Subtotal Product Dev			0.000	0.000		14.063		6.241		0.000	20.304	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Development Support Equip	WR	MARCORSYSCOM,Quantico, VA	0.000	0.000		0.699	02/28/01	2.091	10/15/02	Continuing	Continuing	
Development Support Equip	WR	MCCDC, Quantico, VA	0.000	0.000		0.945	04/30/01	0.000		0.000	0.945	
Program Support	MIPR	US Army-MSL,Huntsville, AL	0.000	0.000		0.450	01/02/01	0.133	11/01/02	Continuing	Continuing	
Training Development Support	MIPR	Fort Sill-Training,Ft. Sill, OK	0.000	0.000		0.225	06/30/01	0.360	12/01/01	0.000	0.585	
Integrated Logistics Support	FFP	BAE Systems, Stafford, VA	0.000	0.000		0.368	01/31/01	0.000		0.000	0.368	
Subtotal Support			0.000	0.000		2.687		2.584		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 191

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Exhibit R-3, Project Cost Analysis
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CLASSIFICATION:

Exhibit R-3 Cost Analysis							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Development			26623M MC Ground Combat/Supt Arms				C2928 HIMARS					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Eval											0.000	
Operational Test & Eval											0.000	
Tooling											0.000	
	WR	Cold Region Test Center, Ft Greely,AK		0.000		0.000		0.032	11/15/01	0.000	0.032	
	FFP	KTR SPT TMI		0.000		0.000		0.105	12/01/01	Continuing	Continuing	
	WR	Redstone Tech Test Ctr,Huntsville,AL		0.000		0.000		0.115	10/31/01	0.000	0.115	
	FFP	RAM GEN SPT		0.000		0.000		0.032	12/01/01	Continuing	Continuing	
	WR	Aberdeen Proving Grd,Aberdeen,MD		0.000		0.000		0.078	11/15/01	0.000	0.078	
	CPAF	Systems Test - TBD		0.000		0.000		1.240	03/03/02	0.000	1.240	
	WR	User Evaluation - TBD		0.000		0.000		0.000		Continuing	Continuing	
	CPAF	KTR SPT - OT		0.000		0.000		0.053	07/15/02	Continuing	Continuing	
	TRAVEL	Travel - OT		0.000		0.000		0.011	10/15/01	Continuing	Continuing	
	WR	OT Test Conduct		0.000		0.000		0.000		Continuing	Continuing	
	CPAF	OT Ammo-Lockheed Martin,Dallas,TX		0.000		0.000		0.000		Continuing	Continuing	
Subtotal T&E			0.000	0.000		0.000		1.666		Continuing	1.465	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Mngmnt	WR	MCSC, QUANTICO				0.116	2/28/01	0.348	10/15/02		0.464	
Program Mngmnt	WR	MCCDC, QUANTICO				0.105	4/30/01	0.000			0.105	
Program Mngmnt	MIPR	US ARMY, AL				0.050	1/02/02	0.116	11/01/01		0.166	
Program Mngmnt	MIPR	FT. STILL, TRNG				0.010	6/30/01	0.004	12/01/01		0.014	
Program Mngmnt	FFP	BAE SYSTEMS				0.092	1/31/01				0.092	
											0.000	
Subtotal Management			0.000	0.000		0.373		0.468		0.000	Continuing	
Remarks:												
Total Cost				0.000		17,141		10,891		Continuing	Continuing	