

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2003

APPROPRIATION/BUDGET ACTIVITY

RDT&E, N /BA-6 Management Support

PROGRAM ELEMENT (PE) NAME AND NO.

0605873M Marine Corps Program Wide Support

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	20.023	27.476	16.635	19.766	25.669	30.355	34.122	32.537	Cont	Cont
C0030 Marine Corps Studies and Analyses	5.249	6.167	5.721	5.900	6.114	6.238	6.438	6.566	Cont	Cont
C0033 Marine Corps Operational Testing & Evaluation Activity	2.558	2.389	2.770	2.713	2.766	2.816	2.901	2.958	Cont	Cont
C2330 Family of Incident Response Systems (FIRS)	11.267	16.469	1.898	2.870	7.418	10.860	13.970	11.858	Cont	Cont
C2930 Phase 0 Activities	0.949	2.451	6.246	8.283	9.371	10.441	10.813	11.155	Cont	Cont
Quantity of RDT&E Articles										

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

This program element (PE) provides the analytical foundation for the Marine Corps Studies System (MCSS), including mandated Mission Area Analyses and Cost and Operational Effectiveness Analyses. The MCSS is the front end of the Marine Corps' acquisition system, supporting the Concepts Based Requirements Systems and Combat Development Process. In addition, the PE supports Marine Corps Operational Test and Evaluation (OT&E) Activities.

This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installation required for general research and development use.

B. PROGRAM CHANGE SUMMARY

	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2003 President's Budget:	20.133	12.208	12.917	13.867
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.055	-0.657	-1.161	-1.351
(U) Congressional Rescissions				
(U) Congressional Increases		15.925		
(U) Reprogrammings	0.239		4.879	7.250
(U) SBIR/STTR Transfer	-0.294			
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	20.023	27.476	16.635	19.766
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: February 2003					
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C0030 Marine Corps Studies and Analyses				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost to Complete	Total Program
Project Cost	5.249	6.167	5.721	5.900	6.114	6.238	6.438	6.566	Cont	Cont
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project funds the general studies and analyses portion of the Marine Corps Studies System (MCSS) and provides the analytical underpinnings and foundation for the MCSS. The project funds a variety of studies and analyses approved for execution in the annual Marine Corps Studies Master Plan (MCSMP) including mandated Mission Area Analyses (MAAs), Milestone A, and Pre-Milestone A (Conceptual) Analysis of Alternatives (AoAs), technology assessments, force structure analysis, weapons systems analysis, concept development and analysis, cost benefit analysis, training assessments, feasibility analysis, scenario development, and other analyses in support of the Program Objective Memorandum (POM) initiatives and the Marine Corps, as a whole. The MCSS also supports the front end of the Marine Corps' acquisition system, the Expeditionary Force Development System (EFDS), and the Combat Development Process (CDP). The MAA process provides quantitative and qualitative information to decision makers for basing decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. The MCSS also provides analytical support to decision makers for the resolution of current problems and issues identified by the operating forces. The MCSS also makes use of the Marine Corps Research University to conduct studies and analysis projects in the areas of basic and applied research and Advanced Technology Development.										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	1.331	0.000	0.000	0.000						
RDT&E Articles Qty										
In FY-02, completed the Mission Area Analyses (MAA) for Peacekeeping, Marine Expeditionary Brigade Sustained Operations Ashore, Humanitarian Assistance/Disaster Relief, Northeast Asia Forcible Entry, and Military Operations on Urban Terrain.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	3.011	5.171	4.818	4.995						
RDT&E Articles Qty										
In FY-02, commenced the Sustainment Consequences of Acquisition Decisions and Deployability Readiness, Expeditionary Fires, Remain Behind Equipment, and Depot Future studies.										
In FY-02, commenced and completed the Aviation Logistics Support Aboard Maritime Prepositioning Force Future, Sustainment Consequences of Acquisition Decisions, Joint Warfare System, Officer Candidate School Data Analysis, Officer Recruiting Structure II, Marine Corps Deployment Tempo, Utility of High Speed Vessel for United States Marine Corps Operations, Regimental Command and Control (C2) Architecture, Alternatives for Improving Critical Secondary Military Occupation Specialty (MOS), Ground Reconnaissance in Support of Expeditionary Maneuver Warfare, Tactical Air, Military Transformation in the United States Marine Corps, Imagery Analysis Support to Precision Targeting, Operational Support Airlift, Identification and Analysis of the Demographic Trends Impacting Reserves, Quality of Life, and facilitating Engagement in East Africa studies, and the Multi Role Radar System Alternatives of Analysis. Additionally, the Military Transformation in the USMC Study that identified efforts designed to ensure that the Marine Corps remains the force of choice for small scale contingency operations and critical contributions in large scale theater conflicts was completed. The MCSS also provided USMC participation in the DoN Tactical Air Support study and a Maritime Pre-Position Force (MPFF) transformation study.										
In FY-03, commence the Marine Expeditionary Brigade 2015 Command and Control (C2) and Combat Service Support (CSS) Capabilities, Advanced Amphibious Assault Vehicle (AAAV) Carry Capacity Key Performance Parameters (KPP) and Analysis of Alternatives, Joint Tactical Radio System (JTRS) Migration Strategy, United States Marine Corps Fuel Use Reduction, Light Tactical Wheeled Vehicle, Analysis of Alternatives for Advanced Antitank Weapon System - Heavy, United States Marine Corps Overarching Battery, Marine Air Ground Task Force (MAGTF) Expeditionary Family of Fighting Vehicles Capabilities Requirements, United States Marine Corps Manpower Requirements Criteria, Enabling Logistics Processes with Portable and Wireless Technology, Establishing Time Criteria for Logistics Tasks, Logistics Community Training for Officers and Staff Non-commissioned Officers, Logistics Performance Measurement, Injury Prevention and Rehabilitation, and Bumper to Bumper Maintenance Policy studies.										
Initiate the high priority study and analysis projects approved in the FY2004-2005 Marine Corps Studies Master Plan (MCSMP) and initiate new Analysis of Alternatives support as nominated and approved.										

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support		C0030 Marine Corps Studies and Analyses	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.907	0.996	0.903	0.905
RDT&E Articles Qty				

In FY-02, completed the Force Protection and Electro-Optical Equipment Inventory and Maintenance Study, Signals Intelligence (SIGINT) Electronic Warfare Assessment study, and Force Protection II study with the Marine Corps Research University.

In FY-03, continue and complete the Concept of Link Employment (COLE), Marine Corps Meteorological and Oceanographic Support studies. Commence and complete the Integration of Diagnostics into Ground Equipment Life Cycle Management, and Protective Technology Research, Development, and Implementation in Support of Defense Protective Needs studies.

Initiate high priority study and analysis projects and studies nominated and approved in the FY2003-2005 Marine Corps Studies Master Plan (MCSMP).

(U) Total \$ 0.000 5.249 6.167 5.721 5.900

(U) PROJECT CHANGE SUMMARY

	FY2002	FY2003	FY2004	FY2005
(U) FY 2003 President's Budget:	5.131	6.318	6.505	6.679
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.014	-0.151	-0.784	-0.779
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.217			
(U) SBIR/STTR Transfer	-0.085			
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	5.249	6.167	5.721	5.900
(U) 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 0605154N (Center for Naval Analyses (CNA), Project C0031 (Marine Corps Operations Analysis Group)

(U) D. ACQUISITION STRATEGY: Not Required.

(U) E. MAJOR PERFORMERS: Indefinite Delivery Indefinite Quantity contracts as follows:

FY 02 Northrop Grumman Information Technology (NGIT), San Diego, CA for Mission Area Analysis support services. Sep 01.

FY 02 - FY04 Decision Engineering Associates LLC, Dumfries, VA for analytical and support services. Mar 02.

FY 02 - FY04 Computing Technologies Inc. (CoTs) Fairfax, VA for analytical and support services. Dec 01

FY 02 - FY04 Marine Corps Research University at Pennsylvania State, State College, PA for analytical and support services. May 02.

FY 02 - FY04 Northrop Grumman Mission Systems (NGMS) (Formerly TRW Inc), Fairfax, VA for Analytical and support services. Nov 01.

(U) SCHEDULE PROFILE: Not Applicable

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003																																																		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME																																																		
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support				C0033 Marine Corps Operational Testing & Evaluation Activity																																																		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program																																													
Project Cost	2.558	2.389	2.770	2.713	2.766	2.816	2.901	2.958	Cont	Cont																																													
RDT&E Articles Qty																																																							
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the USMC Operational Test (OT) programs for the Acquisition Category (ACAT) I through ACAT IV less OT of manned aircraft and to perform such other functions as may be directed by the Commandant of the Marine Corps. The primary purpose of Operational Test and Evaluation (OT&E) is to provide information to the Milestone Decision Authority (MDA) regarding the Operational Effectiveness (OE) and Operational Suitability (OS) of the system addressed at decision point. MCOTEA must ensure that the Marines in the Operating Forces receive the very best possible equipment and support. MCOTEA must ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently.</p> <p>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right">0.753</td> <td align="right">0.578</td> <td align="right">0.771</td> <td align="right">0.771</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>MCOTEA: Provide for organizational support and utilities.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right">1.461</td> <td align="right">1.600</td> <td align="right">1.520</td> <td align="right">1.520</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>MCOTEA: Provide for organizational salaries.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right">0.344</td> <td align="right">0.211</td> <td align="right">0.479</td> <td align="right">0.422</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.</p>											COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.753	0.578	0.771	0.771	RDT&E Articles Qty					COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	1.461	1.600	1.520	1.520	RDT&E Articles Qty					COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.344	0.211	0.479	0.422	RDT&E Articles Qty				
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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C0033 Marine Corps Operational Testing & Evaluation Activity
	FY2002 FY2003 FY2004 FY2005	
(U) Project Change Summary		
(U) FY 2003 President's Budget:	2.485 2.447 2.863 2.806	
(U) Adjustments from the President's Budget:		
(U) Congressional/OSD Program Reductions	-0.007 -0.058 -0.093 -0.093	
(U) Congressional Rescissions		
(U) Congressional Increases		
(U) Reprogrammings	0.080	
(U) SBIR/STTR Transfer		
(U) Minor Affordability Adjustment		
(U) FY 2004 President's Budget:	2.558 2.389 2.770 2.713	
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:	Not Applicable.	
(U) D. ACQUISITION STRATEGY:	Not Required.	
(U) E. MAJOR PERFORMERS:	This project provides funds for organizational support (travel, salaries) of MCOTEA.	
(U) SCHEDULE PROFILE:	Not Applicable.	

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support				C2330 Family of Incident Response Systems (FIRS)					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	11.267	16.469	1.898	2.870	7.418	10.860	13.970	11.858	Cont	Cont
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:										
The Family of Incident Response Systems (FIRS) consists of equipment, systems, and services designed to provide federal, state, and local weapons of mass destruction (WMD) incident response forces the capabilities they need to effectively respond to a terrorist attack using Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) weapons of mass destruction. The Family Incident Response Systems meets the mission requirements for the detection, mass casualty decontamination, force protection, responder inter-agency interoperability, C4I, urban search and rescue, medical, and general support requirements needed by these forces to mitigate the effects of a CBRNE terrorist attack. The Family Incident Response Systems relies primarily on Commercial Off-The-Shelf/Non-Developmental Items (COTS/NDI) equipment and systems that meet the particular mission requirements of Consequence Management (CM). Nuclear, Biological, and Chemical (NBC) systems are adopted if they meet the CM mission requirements. The FIRS R&D effort allows the program to keep abreast of emerging technologies in the commercial sector and address operational capability gaps that cannot be met by commerical items.										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)	FY 2002		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost	0.411		0.441		0.100		1.168			
RDT&E Articles Qty										
CBIRF: Research and development of a device that senses victims through debris of a collapsed building or through standing structures, such as walls and doors.										
COST (\$ in Millions)	FY 2002		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost	0.080		0.250		0.562		0.200			
RDT&E Articles Qty										
CBIRF: Research and development of a hand-held broad spectrum detector capable of real-time detection and identification of chemical warfare agents (CWA), Toxic Industrial Chemicals/Materials (TIC/TIM) below the Immediately Dangerous to Life and Health (IDLH) level.										
COST (\$ in Millions)	FY 2002		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost	0.088		0.000		0.000		0.000			
RDT&E Articles Qty										
CBIRF: Live agent testing of the Portable Gas Chromatograph/Mass Spectrometer (GC/MS) upgrade to validate its level of TIC/TIM detection and identification.										
COST (\$ in Millions)	FY 2002		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost	0.735		0.000		0.000		0.000			
RDT&E Articles Qty										
CBIRF: Research and development of a lightweight cooling system capable of cooling personnel wearing various levels of chem-bio protective equipment.										
COST (\$ in Millions)	FY 2002		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost	0.265		0.000		0.000		0.000			
RDT&E Articles Qty										
CBIRF: Research and development of a device that will identify isotopes of radiological hazards to help characterize an incident and determine the duration of a hazard.										

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			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support		C2330 Family of Incident Response Systems (FIRS)	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.760	2.732	0.000	0.000
RDT&E Articles Qty				
ECASOL: Research and development of environmentally benign, patient-safe chem-bio decontaminant Electro-Chemical Activated Solution.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.300	0.253	1.226	0.420
RDT&E Articles Qty				
CBIRF: Research and development of a hand-held detector capable of real-time collection detection and identification of biological warfare agents (BWA) below the infective dosage level.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.240	0.000	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a structural triage technology capable of detecting hidden structural damage and identifying structural hazards.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.949	1.000	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of improved respiratory protection.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.200	1.463	0.000	0.076
RDT&E Articles Qty				
NANOTECH RESPONSES: Research of nanoparticle technology, specifically begin evaluation and development of protocols for neutralization of chem-bio agents.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.775	0.000	0.000	0.000
RDT&E Articles Qty				
NANOTECH RESPONSES: Research of nanoparticle technology, specifically begin evaluation and determine efficacy with regard to remediation of contaminated rooms and buildings.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.640	2.073	0.000	0.000
RDT&E Articles Qty				
CB MSS/Analyzer Detector: Research and development of a Multi-Sensor/Analyzer Detector (MSAD) and data-fusion architecture for chem-bio agents, toxic industrial chemicals/materials (TIC/TIM) and toxins.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	4.824	0.000	0.000	0.000
RDT&E Articles Qty				
CMIS: Research and development of the Consequence Management Interoperability System (CMIS), including fielding a "Fast Track" capability in response to the Sept. 11th, 2001 requirements.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.076	0.010	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a patient tracking and following system.				

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support		C2330 Family of Incident Response Systems (FIRS)	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.353
RDT&E Articles Qty				
CBIRF: Development of field rugged Gas Chromatograph/Mass Spectrometer (GC/MS).				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.653
RDT&E Articles Qty				
CBIRF: Development of an improved mass casualty decontamination system.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	3.415	0.000	0.000
RDT&E Articles Qty				
CB Warfare: Development of chem/bio warfare agent chip detector .				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.200	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development and user evaluation of a Personnel and Equipment Transport Vehicle (PETV) for transportation of incident response force and equipment in a vehicle configured for team integrity, movement command and control, and mission planning.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.610	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development of Stand-Off Chemical Agent Detector (SCAD).				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.010	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development of a Radiation Protective Suit Prototype.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.694	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a chem/bio wearable protector capable of detection of chem/bio warfare agents and toxic industrial chemicals.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.788	0.000	0.000
RDT&E Articles Qty				
CBIRF: Validation and verification of COTS technologies for improve operational capabilities of incident response forces to meet emerging terrorist threat.				

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RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.488	0.000	0.000
RDT&E Articles Qty				
MC Research University: Conduct studies and analysis of 1/ Integration of Diagnostics into Ground Equipment Life Cycle Management, 2/ Establishing Time Criteria for Logistics Tasks, and 3/ the Logistics Community Training for Officers and Staff-Noncommissioned Officers.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.976	0.000	0.000
RDT&E Articles Qty				
CPAC: Testing of sustainment corrison products on military equipment to include silane crystal technology.				
Total	11.267	16.469	1.898	2.870
(U) PROJECT CHANGE SUMMARY:	FY2002	FY2003	FY2004	FY2005
(U) FY 2003 President's Budget:	11.371	0.933	0.981	1.760
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.031	-0.389	-0.083	-0.190
(U) Congressional Rescissions				
(U) Congressional Increases		15.925		
(U) Reprogrammings	-0.073		1.000	1.300
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	11.267	16.469	1.898	2.870
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: February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)	

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	<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>FY2008</u>	<u>FY2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC Line (BLI# 652100) FIRS	0.000	0.000	3.447	4.243	4.732	5.847	8.187	11.949	Cont	Cont
Family of Incident Response Systems										

(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY: Not Required.

(U) E. MAJOR PERFORMERS:

FY 02 Battelle Memorial Institute, Columbus, OH. Research and development Consequence Management Interoperability System and CBIRF. M2 Technologies, Inc. West Hyannisport, MA - research nanoparticle technology. Penn State University, PA - research and develop a analyzer for chem-bio agents.

FY 03 Battelle Memorial Institute, Columbus, OH. Research and development urban search and rescue technology. Penn State University, PA; research and development of MSAD and CB chip detector.

FY 04 Battelle Memorial Institute, Columbus, OH - research and development urban search and rescue technology.

FY 05 Battelle Memorial Institute, Columbus, OH - research and development urban search and rescue technology.

(U) D. SCHEDULE PROFILE: Not Applicable.

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME									
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support				C2930 Marine Corps Phase A Activities					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	0.949	2.451	6.246	8.283	9.371	10.441	10.813	11.155	Cont	Cont
RDT&E Articles Qty										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>Pre-Phase A Activities fund assessment, survey, and planning activities in support of the requirements generation system to mature, limit, clarify and define requirements before competition for resources in the Program Object Memorandum (POM) process and transition to acquisition management. This effort will complement the currently funded Marine Corps Systems Command Phase A Activities line by providing funds to pursue a limited range of items on a priority basis, examining critical issues and alternatives. Examples of activities include but are not limited to (1) development of Operational Mode Summaries, Mission Profiles, Concepts of Employment and Acquisition Objectives, (2) mapping between legacy systems and replacements, (3) examining integration and family of systems architectural issues, (4) performing Doctrine, Organization, Training, Equipment, Support, Facilities (DOTESF) assessments and providing other key support for the Universal Need Statement (UNS) process, (5) base lining POM initiatives, (6) planning requirements support of evolutionary acquisition, (7) facilitating user/advocate interaction to better understand what is needed and how it will be used, and (8) supporting the Marine Requirements Oversight Council (MROC)-directed tailoring Council (MROC)-directed tailoring Authorized Acquisition Objective (AAO). Marine Corps Combat Development Command (MCCDC) averages approximately 62 UNS requests per year addressing new requirements, of which approximately 12% require expedited processing. Quick reaction assessment and planning is likely to support requirements emerging from current real world operations. Clear Facilities, a Command Element (CE) Army Research Laboratory (ARL) item (supported by the Marine Corps Ground Combat Element (GCE)) requiring a continuum of materiel solutions (family of systems) to enable lethal clearing of a broad range of man-made structures in multiple environments/tactical situations typifies a requirement needing pre-Phase A support. Supporting activities have centered around decomposition of the mission into 460 specific tasks accompanied by development of an operational concept, objectives and key performance parameters, and warfighter prioritization. The end product will be a requirements road map. The end state will be a process and product to guide both POM and acquisition activities. These activities do not overlap/conflict with Mission Area Analysis and Analysis of Alternatives funded within the MCCDC Studies and Analysis (S&A) program,</p> <p>MCSC Phase A Activities, Marine Corps Warfighting Lab (MCWL) warfighting experimentation or Science and Technology (S&T) activities.</p> <p>Pre-phase A Activities would allow high priority requirements to move ahead in advance of funding decisions for specific programs, provide a better capability to react to emerging requirements, and improve the quality of initiatives brought to the POM process. Through front-end assessment, relatively modest funding can be leveraged into significant cost and schedule savings, bringing needed capabilities to the operating forces sooner and cheaper. Each POM cycle provides examples of initiatives that are unfunded or delayed by an immature requirement or understanding of alternatives. In other cases the initiative is funded but the acquisition cycle stretches out until the requirement is better understood.</p> <p>Phase A Activities consist of a series of interrelated activities in Phase A (previously known as Phase 0) of the acquisition process designed to investigate potential material solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming, Planning, Budgeting System (PPBS) cycle, the Combat Development and Acquisition Management Systems, and prevent undue delays in pursuing priority requirements. The process supports Commanding General (CG), MCCDC and Commander, Marine Corps Systems Command (COMMARCORSYSCOM) by providing funding to priority programs, thus allowing for the examination of concepts and alternatives to support an orderly transition from requirements to initiatives and initiatives to funded programs. This will permit the POM process to focus on activities of evaluating, prioritizing and integrating rather than defining and resolving raw, immature requirements. Phase A activities literally "jump start" high priority programs of the acquisition process. Furthermore, since 70% of a program's life cycle cost is determined during Phase A, this initiative will put resources to work where the return on investment (payoff) is the greatest. Typical studies conducted with PF</p> <p>Analysis (BCA), Cost as an Independent Variable (CAIV) analysis, Life Cycle Cost Estimates, Cost Comparison Analysis, Acquisition Strategies, Trade-off Analysis in lieu of an Analysis of Alternatives. Also a recent initiative to have MARCORSYSCOM develop a BCA to help MCCDC frame the requirement in terms of a commercial-off-the-shelf (COTS) solution will increase utilization of the funds.</p>										

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support		C2930 Marine Corps Phase A Activities		
<p>The MAGTF Expeditionary Family of Fighting Vehicles (MEFFV) Project will field a successor to the Marine Corps' current M1A1 Common Main Battle Tank (MBT) and the Light Armored Vehicle (LAV) Family of Vehicles (FOV). The MEFFV will provide ground combat elements (GCE) of the Marine Air Ground Task Force (MAGTF) a principle means of operational and tactical maneuver/mobility. The vehicle family will be designed specifically to complement the Advanced Amphibious Assault Vehicle (AAAV) and MV-22 aircraft in providing the capability needs of combat operations ashore within the Navy and Marine Corps capstone operational concepts of Forward From the Sea and Expeditionary Maneuver Warfare. The MEFFV will provide the MAGTF with the capability to execute combat, combat support and select combat service support within the full spectrum of military missions from humanitarian operations to conventional conflict. The project intends to leverage key technologies in combat vehicle development to develop a family of systems, replacing the two current systems as they reach End of Service life in 2015 and 2020 respectively. The MEFFV family of systems will provide the capabilities necessary to provide warfighting Combatant Commanders the early entry forces needed for the program is a high priority ground system acquisition initiative. To satisfy the requirements of the 21st Century Marine Warfighters, the MEFFV Project will develop a family of systems that will meet the requirements of the program specifications preparation of life-cycle estimates leading to a Milestone B decision in 2012.</p>					
(U) ACCOMPLISHMENTS/PLANNED PROGRAM:					
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost		0.949	2.451	2.488	2.538
RDT&E Articles Qty					
Initiate and complete high priority Milestone 0/Phase 0 activities for Market Surveys and associated Business Case Analysis for the following programs: Audiovisual Investment Equipment, Portable Integrated System Monitor, M1A1 Munitions Countermeasures,					
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost		0.000	0.000	1.265	0.000
RDT&E Articles Qty					
Provides for the conduct of high priority Pre-Phase A Activities for Clear Facilities Ground Weapons Locating Radar, PROFILER Meteorological Measuring Set, Thermobaric Weapon, Reconnaissance Surveillance Target Acquisition, Squad Advanced Marksman, Rifle					

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2930 Marine Corps Phase A Activities		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.250	0.350
RDT&E Articles Qty				
Force Design Trades: Survey and derive roles of MAGTF mounted units in future service and Joint operational concepts. Initiate a Mounted MAGTF Concept Study and Mission Area Analysis for Mounted MAGTF Operations. Begin deriving alternative MEFFV missio				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.300	0.600
RDT&E Articles Qty				
Lethality: Populate baseline capability performance needs and constraints with capability architecture database. Assess lethality system opportunities to identify their salient characteristics. Determine the target set for MEFFV. Assess target acquisit				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.543	0.660
RDT&E Articles Qty				
Propulsion/Tactical Mobility: Work on propulsion/mobility roadmap (emphasis on expeditionary). Assess design architecture with higher component commonalities and assess Future Combat Systems (FCS). Monitor Electric Warship/Reconnaissance, Surveillance,				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.200	0.250
RDT&E Articles Qty				
Survivability (Active): Assess FCS active protection technologies for future exploitation. Correlate DOD technologies to MEFFV concepts, active survivability objective roadmap. Explore active survivability initiatives through Service and joint games an				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.350	0.600
RDT&E Articles Qty				
Survivability (Passive): Conduct assessment of new technology base/appliqué armor materials versus emergent threat munitions. The assessment will also investigate embedded sensor technology development/ballistic protection versus signature management in				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.400	0.750
RDT&E Articles Qty				
System Integration: Establish capability (functional) architecture database. Develop modeling and simulations approach, determine feasibility of Simulation Based Acquisition. Draft Modeling and Simulation (M&S) Roadmap. Identify family of vehicles ar				

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support		C2930 Marine Corps Phase A Activities	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.050	0.050
RDT&E Articles Qty				
C4ISR: Map C4ISR capability and needs to Naval and joint C4ISR plans. Correlate SPAWAR/DARPA technologies and issues to MEFFV concepts. Explore C4ISR initiatives within MEFFV concepts through Service and joint games experiment.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.400	0.600
RDT&E Articles Qty				
Office and Analysis Team: Fund analysis team to support technology exploitation and coordinate successive integration of technologies. Administrative support, (Systems Engineering and Technical Assistance (SETA))/contractor support. Project Office travel				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	1.885
RDT&E Articles Qty				
Provides for the conduct of high priority Pre-Phase A Activities for Reconnaissance Surveillance Target Acquisition, Joint Tactical Radio System, Assault Breacher Vehicle, Follow-On Shoulder Launcher Weapon System (Analysis of Alternative/Op Mode Summary/				
(U) Total \$	0.949	2.451	6.246	8.283
(U) PROJECT CHANGE SUMMARY:				
	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2003 President's Budget:	0.962	2.510	2.568	2.622
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.003	-0.059	-0.201	-0.289
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.015		3.879	5.950
(U) SBIR/STTR Transfer	-0.025			
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	0.949	2.451	6.246	8.283
CHANGE SUMMARY EXPLANATION:				
(U) Funding: Change in FY 04 and FY05 is due to realignment of programs within the Marine Corps.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	
RDTE, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2930 Marine Corps Phase A Activities

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

(U) Related RDT&E: Not Applicable.

(U) D. ACQUISITION STRATEGY: Not Required

(U) E. MAJOR PERFORMERS:

FY 04-05 Expeditionary Force Development Center, Quantico, VA - Develop Mission Area Analysis and Supporting Documents - Projected 11/03; 11/04

FY 04-05 Marine Corps Warfighting Lab (MCWL), Quantico, VA - Service and Joint Warfighting Gaming and Experimentation. - Projected 11/03; 11/04

FY 04-05 Others TBD - Candidate agencies include NSWC Dahlgren, VA, NSWC Carderock, MD, Army Research Lab, Tank Automotive Research, Development and Engineering Center.

(TARDEC), Warren, MI, University of Texas Institute for Advanced Technology (IAT), Austin, TX ect., - Projected 02/04; 02/05

FY 02 MKI Systems, Incorporated, Woodbridge, VA - Study Analysis, business Case Study, CAIV Analysis and Life Cycle Cost Estimates - Award dates: Various throughout the FY.

FY03-05 Major Performers to be determined based on the Phase A activity.

(U) D. SCHEDULE PROFILE: Not Applicable.