

**UNCLASSIFIED**

<b>CLASSIFICATION:</b>		EXHIBIT R-2, RDT&E Budget Item Justification					DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-6 Management Support</b>		PROGRAM ELEMENT (PE) NAME AND NO. <b>0605873M Marine Corps Program Wide Support</b>							
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Total PE Cost	25.930	31.024	28.224	32.651	36.650	64.993	75.259	76.078	
C0030 Marine Corps Studies and Analyses	6.576	7.215	6.096	6.133	6.355	6.518	6.728	6.854	
C0033 Marine Corps Operational Testing & Evaluation Activity	2.826	2.675	3.578	3.656	3.769	3.851	3.958	4.034	
C2330 Family of Incident Response Systems (FIRS)	10.146	9.175	7.463	10.966	14.155	12.044	12.401	12.638	
C2930 Phase A Activities	6.382	8.100	11.087	11.896	12.371	42.580	52.172	52.552	
C9608 Field Rapid Assay Bio Sys	0.000	2.472	0.000	0.000	0.000	0.000	0.000	0.000	
C9609 Odor Signature Red Baselayar Garment Eval	0.000	0.396	0.000	0.000	0.000	0.000	0.000	0.000	
C9610 USMC Cost of Readiness (COR) Initiatives	0.000	0.991	0.000	0.000	0.000	0.000	0.000	0.000	
Quantity of RDT&E Articles									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>									
<p>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</p> <p>This program is funded under RDT&amp;E MANAGEMENT SUPPORT because it supports the operations and installation required for general research and development use.</p>									
<b>B. PROGRAM CHANGE SUMMARY</b>									
	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>					
<b>(U) FY 2005 President's Budget:</b>	29.297	19.701	25.600	30.289					
(U) Adjustments from the President's Budget:									
(U) Congressional/OSD Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases		11.700							
(U) Reprogrammings	-2.943		2.453	2.489					
(U) SBIR/STTR Transfer	-0.424								
(U) Program Adjustment		-0.377	0.171	-0.127					
<b>(U) FY 2006 President's Budget:</b>	25.930	31.024	28.224	32.651					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>				DATE: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-6 Management Support</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0605873M Marine Corps Program Wide Support</b>			PROJECT NUMBER AND NAME <b>C0030 Marine Corps Studies and Analyses</b>				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	<b>6.576</b>	<b>7.215</b>	<b>6.096</b>	<b>6.133</b>	<b>6.355</b>	<b>6.518</b>	<b>6.728</b>	<b>6.854</b>
RDT&E Articles Qty								

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**  
 This project funds the general studies and analysis 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.

In FY04, funds were provided to the Corrosion Control Program for test and evaluation of corrosion products and materials for military equipment, storage methods, corrosion training and other CPAC tasks, within joint service and OSD/ATL CPAC specifications, standards and policies.

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

COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>4.103</b>	<b>4.930</b>	<b>5.191</b>	<b>5.232</b>
RDT&E Articles Qty				

In FY04, continued the following FY-03 efforts: Marine Expeditionary Brigade (MEB) 2015, Joint Tactical Radio System (JTRS) Migration Strategy, Expeditionary Airfield (EAF), Establishing Time Criteria for Logistics Tasks, USMC Manpower Requirements Criteria, Light Armored Vehicle (LAV) Expeditionary Fire Support System (EFSS), Marine/Future Combat Systems (FCS) Technology Strategy, and the Remain Behind Equipment (RBE) Management studies.

Commenced the following FY-04 efforts: Lightweight Prime Mover; Flight Deck Manning for MPF(F) Aviation Capable Ships; Transformation of C4 Training, Manpower, and Structure to Support the 21st Century United States Marine Corps; Evaluation of USMC Operational Linguist Requirements & Resources; Operational Analysis of the Marine Air Ground Task Force (MAGTF) Distribution Center; Ammunition Logistics Chain; Developing an Optimal Strategy for Implementing Future Theater-Level Contractor Logistics Support (CLS); Review of Deployment Mobility Growth; Joint Warfare (JWARS) Support to MCCDC; Capability Requirements for Infantry Squad for Employment in Future Marine Corps Warfighting Concept of Expeditionary Maneuver Warfare and Across the Spectrum of Marine Air Ground Task Force (MAGTF) Operations; Ground Range and Training Area Management Analysis; and the Bulk Liquids Transportation Option studies.

Initiate the high priority study and analysis projects approved in the FY05-FY07 Marine Corps Studies Master Plan (MCSMP) and initiate new Analysis of Alternatives support as nominated and approved.

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>	DATE: <b>February 2005</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> RDT&E, N /BA-6 Management Support	<b>PROGRAM ELEMENT NUMBER AND NAME</b> 0605873M Marine Corps Program Wide Support	<b>PROJECT NUMBER AND NAME</b> C0030 Marine Corps Studies and Analyses
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COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>1.091</b>	<b>0.897</b>	<b>0.905</b>	<b>0.901</b>
RDT&E Articles Qty				

In FY05, Complete the USMC KC-130J Requirements effort. Initiate the following efforts: Expeditionary Information Operations; and Joint Strike Fighter Electronic Warfare Studies.

Initiate high priority study and analysis projects and studies nominated and approved in the FY2006 - FY2008 Marine Corps Studies System Master Plan (MCSSMP).

COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>1.382</b>	<b>1.388</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty				

Provide Corrosion Control Program Support.

(U) Total \$ 0.000	<b>6.576</b>	<b>7.215</b>	<b>6.096</b>	<b>6.133</b>
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(U) C. **OTHER PROGRAM FUNDING SUMMARY:** Not Applicable.

(U) **Related RDT&E:** PE 0605154N (Center for Naval Analyses (CNA), Project C0031 (Marine Corps Operations Analyses Group)

(U) D. **ACQUISITION STRATEGY:** Not Required.

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**EXHIBIT R-2a, RDT&E Project Justification**

DATE:

**February 2005**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N /BA-6 Management Support</b>	<b>0605873M Marine Corps Program Wide Support</b>			<b>C0033 Marine Corps Operational Testing &amp; Evaluation Activity</b>				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	<b>2.826</b>	<b>2.675</b>	<b>3.578</b>	<b>3.656</b>	<b>3.769</b>	<b>3.851</b>	<b>3.958</b>	<b>4.034</b>
RDT&E Articles Qty								

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

The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the Marine Corps Operational Test (OT) programs for Acquisition Categories (ACAT) I through ACAT IV (less OT of manned aircraft) and performs other functions that 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 a 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.

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

COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>0.726</b>	<b>0.656</b>	<b>0.385</b>	<b>0.300</b>
RDT&E Articles Qty				

MCOTEA: Provide for organizational support and utilities.

COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>1.621</b>	<b>1.819</b>	<b>3.010</b>	<b>3.144</b>
RDT&E Articles Qty				

MCOTEA: Provide for organizational salaries.

COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>0.479</b>	<b>0.200</b>	<b>0.183</b>	<b>0.212</b>
RDT&E Articles Qty				

MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.

(U) Total \$	2.826	2.675	3.578	3.656
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**(U) C. OTHER PROGRAM FUNDING SUMMARY:** Not Applicable.

**(U) Related RDT&E:** Not Applicable.

**(U) D. ACQUISITION STRATEGY:** Not Required.

**(U) SCHEDULE PROFILE:** Not Applicable.

R-1 SHOPPING LIST - Item No. 159

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EXHIBIT R-2a, RDT&E Project Justification						DATE:			
						February 2005			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E, N/BA-6 Management Support			0605873M Marine Corps Program Wide Support			C2330 Family of Incident Response Systems (FIRS)			
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		10.146	9.175	7.463	10.966	14.155	12.044	12.401	12.638
RDT&E Articles Qty									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>									
<p>The Family of Incident Response Systems (FIRS) consists of equipment, systems, and services designed to provide 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 Family of Incident Response Systems (FIRS) R&amp;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 commercial items.</p>									
<b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		1.963	1.032	4.608	4.750				
RDT&E Articles Qty									
<p><b>FIRS: Reconnaissance Mission Area.</b> Includes: 1) assessment of emerging technologies for Toxic Industrial Chemical detection and identification in conjunction with the Department of Homeland Security and the Technical Support Working Group 2) design and integration of an Advanced Mobile Lab for Chemical Warfare Agents, Non-traditional Agents, Biological Warfare Agents and Radiological Materials 3) assessment of Hand-Held Biological Detection Systems 4) transition of the Field Chemical Analytical Tool (GC/MS) Small Business Innovative Research (SBIR) Program (N03-001) 5) transition of the Multi-Toxic Industrial Chemical Colormetric Badge SBIR program (N02-117) 6) transition of the Special Operations Remote Agent Detector (SORAD) hand held chemical standoff detector developed by the Special Operations Command (SOCOM) 7) feasibility study for the use of tethered airborne sensors, camera and antennas for consequence management 8) transition of the Individual Chemical Alarm System SBIR program (CBD02-203) 9) transition of hand-held biosensor SBIR program (N02-118) 10) Product Improvement of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector. Incorporates previous CBIRF RDT&amp;E activities.</p>									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	0.200	0.425	0.500				
RDT&E Articles Qty									
<p><b>FIRS: Search and Rescue (SAR) Mission Area.</b> Includes 1) assessment of emerging technologies to locate viable casualties through debris of a collapsed building or through standing structures, such as walls and doors 2) evaluation of Commercial Off the Shelf (COTS) and emerging SAR tools. Incorporates previous CBIRF RDT&amp;E activities.</p>									
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.000	0.350	0.500	0.500				
RDT&E Articles Qty									
<p><b>FIRS: Decontamination Mission Area includes</b> 1) assessment of the effectiveness of packetized liquid decon solutions in civilian mass casualty events 2) development and evaluation improved mass casualty decon equipment and procedures. Incorporates previous CBIRF RDT&amp;E activities.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME			
<b>RDT&amp;E, N /BA-6 Management Support</b>	<b>0605873M Marine Corps Program Wide Support</b>	<b>C2330 Family of Incident Response Systems (FIRS)</b>			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.100</b>	<b>0.150</b>	<b>0.200</b>	
RDT&E Articles Qty					
<b>FIRS: C4I Mission Area</b> includes 1) technology assessments 2) field user evaluations 3) prototypes					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>1.767</b>	<b>0.700</b>	<b>1.015</b>	<b>1.186</b>	
RDT&E Articles Qty					
<b>FIRS: Force Protection Mission Area</b> Includes the 1) transition of the Improved Level A Protective Ensemble developed in concert with TSWG 2) development of an automatic filter breakthrough monitor for Powered Air Purifying Respirators 3) radiation hardness survey and assessment of COTS CM equipment 4) commercial filter testing 5) transition of Heat stress calculator Technical Support Working Group (TSWG) program. Incorporates previous CBIRF RDT&E activities.					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.200</b>	<b>0.590</b>	<b>0.600</b>	
RDT&E Articles Qty					
<b>FIRS: Medical Mission Area</b> Includes 1) development and testing of mass casualty ventilation systems for nerve agent casualties 2) evaluation of patient tracking systems 3) field user evaluations					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.250</b>	<b>0.100</b>	<b>0.230</b>	
RDT&E Articles Qty					
<b>FIRS: General Support Mission Area</b> includes 1) Development and demonstration of electronic warehouse for CBIRF unique COTS CBRNE response equipment using RFID tags 2) mobility and embarkation studies and assessments 3) field user evaluations					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.075</b>	<b>3.000</b>	
RDT&E Articles Qty					
<b>FIRS:Consequence Management Advanced Concept Technology Demonstration (ACTD).</b> This program line represents the MC buy-in to a proposed Joint Service ACTD in FY07. CM technologies will be demonstrated for CBIRF, National Guard WMD Civil Support Teams, Coast Guard Strike Teams, Navy Forward Deployed Preventive Medicine Units (FDPMU) and the Army Technical Escort Unit / Guardian Brigade.					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>2.074</b>	<b>1.685</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty					
<b>Multi-Sensor Analyzer Detector (MSAD) :</b> 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 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>1.925</b>	<b>2.577</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty					
<b>Warefare Logistics Testbed:</b> Integrate the latest planning technologies into individual, operationally focused, Web enabled planning solutions for assessment in operational environments.					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<b>2.417</b>	<b>2.081</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty					
<b>CB Warfare Agent Detector Chip :</b> Development of chem/bio warfare agent chip detector .					
<b>TOTAL</b>	<b>10.146</b>	<b>9.175</b>	<b>7.463</b>	<b>10.966</b>	

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

**February 2005**

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

PROJECT NUMBER AND NAME

**RDT&E, N /BA-6 Management Support**

**0605873M Marine Corps Program Wide Support**

**C2330 Family of Incident Response Systems (FIRS)**

**(U) C. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2008</u>	<u>FY2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC Line (BLI# 652100) FIRS Family of Incident Response Systems	4.406	2.793								
(U) PMC Line (BLI# 667000) Items Under \$5 Million			3.304	4.432	6.844	7.162	7.401	7.543	Cont	Cont

**(U) Related RDT&E:** Not Applicable.

**(U) D. ACQUISITION STRATEGY:** Not Required.

**(U) D. SCHEDULE PROFILE:** Not Applicable.

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>					DATE: <b>February 2005</b>				
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, N /BA-6 Management Support</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0605873M Marine Corps Program Wide Support</b>			<b>C2930 Marine Corps Phase A Activities</b>				
<b>COST (\$ in Millions)</b>		<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY10</b>	<b>FY11</b>
Project Cost		<b>6.382</b>	<b>8.100</b>	<b>11.087</b>	<b>11.896</b>	<b>12.371</b>	<b>42.580</b>	<b>52.172</b>	<b>52.552</b>
RDT&E Articles Qty									
<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p><b>Pre-Phase A Activities</b> 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&amp;A) program, MCSC Phase A Activities, Marine Corps Warfighting Lab (MCWL) warfighting experimentation or Science and Technology (S&amp;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><b>Phase A Activities</b> consist of a series of interrelated activities in Phase A (previously known as Phase 0) of the acquisition process designed to investigate potential materiel 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 (COMMARCORSSYSCOM) 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 Phase A activities include but are not limited to Market Surveys, Business Case 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.</p> <p><b>MAGTF Expeditionary Family of Fighting Vehicles (MEFFV):</b> The MAGTF Expeditionary Family of Fighting Vehicles (MEFFV) Project will field future capabilities currently met by the Marine Corps' fleet of M1A1 Common Main Battle Tanks (MBT) and the Light Armored Vehicle (LAV) Family of Vehicles (FOVs). The MEFFV will provide Ground Combat Elements (GCE) of the Marine Air Ground Task Force (MAGTF) with a principal means of operational and tactical maneuver/mobility. The vehicle family will be designed specifically to complement the Expeditionary Fighting Vehicle (EFV) and the MV-22 aircraft in providing the capability needs of combat operations ashore within the Navy and Marine Corps capstone operational concept of Expeditionary Maneuver Warfare (EMW). 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 produce a family of vehicles, replacing the current LAV and MBT as they reach End of Service (EoS) life in 2015 and 2020 respectively. The MEFFV family of vehicles will provide the capabilities necessary to provide warfighting Combatant Commanders the early forces needed to win on future battlefields.</p>									

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-6 Management Support</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0605873M Marine Corps Program Wide Support</b>	<b>C2930 Marine Corps Phase A Activities</b>																																															
<p>Acquisition of the MEFFV is critical to the Marine Corps and the project is a high priority GCE Advocate acquisition initiative. To satisfy the requirements of the 21st Century Marine Warfighters, the MEFFV Project will comply with the Joint Capability Integration and Development System in establishing a pre-systems acquisition framework specifically tailored to co-evolve leap ahead technologies with expeditionary operational concepts. This process will use successful operational concepts from services and joint experimentation to guide technologies funded by the Army's Future Combat Systems (FCS) Program, supplemented by the Office of Naval Research (ONR) and other agencies for MEFFV application. Oversight from the Deputy Commandant for Combat Development will guide this Pre-systems Acquisition framework to align institutional needs and resources with technological and operational opportunities. During the timeframe (2004-2010) MEFFV efforts are directed at capability refinement and integration, DOTMLPF analysis of multiple concepts, market research, analysis of alternatives, modeling and simulation, technology objectives, continued development of the Initial Capabilities Document (ICD) and the Capabilities Development Document (CDD). During this period, development of draft performance specifications will be generated in preparation of the life-cycle estimates leading to a Milestone B decision in 2010. This budget item will concurrently fund vehicle related activities leading to definition of a Future Combat Systems Marine Increment, complying with JROC and USD AT&amp;L guidance to participate in a Joint Program with the Army's Future Combat Systems Program.</p> <p><b>(U) ACCOMPLISHMENTS/PLANNED PROGRAM:</b></p> <table border="1"> <tr> <td>COST (\$ in Millions)</td> <td>FY 2004</td> <td>FY 2005</td> <td>FY06</td> <td>FY07</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>2.419</b></td> <td><b>2.472</b></td> <td><b>2.572</b></td> <td><b>2.616</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Initiate and complete high priority Milestone 0/Phase A activities for Market Surveys and associated Business Case Analysis for the following programs: MEFFV, Multi-Level Security (MLS) Systems , and Autonomic Logistics. Initiate and complete Requirements Study for the Ship-to-Objective Maneuver (STOM) Bridge. Initiate and complete Integration Study for Mobile Battery Chargers and Marine Corps Enterprise IT Services. Initiate and complete Trade-Off Studies for Electronic Maintenance Support System (EMSS), Light Weight Prime Mover (LWPM) and Mountain/ Cold Weather Clothing and Equipment. Conduct the high priority Analysis and Life Cycle Cost Estimate projects approved in the current FY Nomination for Phase A Activities and initiate new Business Case Analyses/Market surveys and associated Acquisition Strategies.</p> <table border="1"> <tr> <td>COST (\$ in Millions)</td> <td>FY 2004</td> <td>FY 2005</td> <td>FY06</td> <td>FY07</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>1.624</b></td> <td><b>0.000</b></td> <td><b>0.000</b></td> <td><b>0.000</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>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 Combat Optic (analysis of Alternatives/Operational Mode Summary/Mission Profile). War Reserve Materiel Requirement Development. Radio Migration Study.</p> <table border="1"> <tr> <td>COST (\$ in Millions)</td> <td>FY 2004</td> <td>FY 2005</td> <td>FY06</td> <td>FY07</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>1.124</b></td> <td><b>1.674</b></td> <td><b>2.151</b></td> <td><b>2.314</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Force Design Trades: Employ the Joint Capability Integration and Development System to derive roles, capability needs and attributes of MAGTF armor units performing in future service and joint operational concepts. Complete Functional Area Analysis (FAA), Functional Need Analysis (FNA), Functional Solution Analysis (FSA) and Concept Decision for Armored MAGTF Operations. Develop MEFFV mission profiles and operational mode summary. Develop an Evaluation Strategy providing metrics for the needed capabilities. Provide personnel and travel necessary to participate in FCS Increment I System Requirements Reviews and planning for FCS Spiral definition subsequent to FCS Increment I.</p>					COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	<b>2.419</b>	<b>2.472</b>	<b>2.572</b>	<b>2.616</b>	RDT&E Articles Qty					COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	<b>1.624</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	RDT&E Articles Qty					COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07	Accomplishment/Effort Subtotal Cost	<b>1.124</b>	<b>1.674</b>	<b>2.151</b>	<b>2.314</b>	RDT&E Articles Qty				
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EXHIBIT R-2a, RDT&E Project Justification		DATE:		
		February 2005		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			
<b>RDT&amp;E, N/BA-6 Management Support</b>	<b>0605873M Marine Corps Program Wide Support</b>	<b>C2930 Marine Corps Phase A Activities</b>		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>0.300</b>	<b>0.433</b>	<b>0.852</b>	<b>0.901</b>
RDT&E Articles Qty				
Technology Assessments: Initiate assessments not limited to but including lethality, propulsion/tactical mobility, and survivability, both active and passive. Conduct market research. Assess lethality system technology opportunities to evaluate their maturity and impact on effectiveness. Assess target acquisition systems and targeting methodologies. Assess design architecture with higher component commonalities and assess the Future Combat Systems (FCS) program. Monitor Functional Naval Capabilities (FNC) developments for component commonality opportunities. Explore survivability initiatives through service and joint wargames and experiments. Initiate risks studies.				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	<b>0.205</b>	<b>0.500</b>	<b>0.501</b>	<b>0.864</b>
RDT&E Articles Qty				
Systems Integration Plan: Initiate framework for the necessary capability (functional) integration activities to evaluate design trades and prepare for Systems Development and Demonstration tasks. Establish a database compatible with both the Expeditionary Force Development System for DOTMLPF Integration and the Army's FCS Systems Integration methodologies for MEFFV design integration. Develop modeling and simulation approach and determine feasibility of simulation-based acquisition. Populate MEFFV system integration databases, based on capability options for meeting Expeditionary Maneuver Warfare (EMW) capability needs. Employ service and joint experiments and wargames to evaluate design excursions. Examine risk mitigation methodologies. Build business technology evaluation plan and strategy for measuring progress.				
COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	<b>0.710</b>	<b>1.175</b>	<b>1.098</b>	<b>1.170</b>
RDT&E Articles Qty				
Office and Acquisition Analysis: Fund capabilities, acquisition and technology team documentation development and coordinate successive integration of activities. Administrative support, (Systems Engineering and Technical Assistance (SETA))/contractor support. Project office travel, training and office materials.				
COST (\$ in Millions)	FY 2004	FY 2005	FY06	FY07
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.846</b>	<b>3.913</b>	<b>4.031</b>
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/Mission Profile) War Reserve Materiel Requirement Development. MAGTF Expeditionary Family of Fighting Vehicles Concept Development. Radio Migration Study. Systematically improving the requirements and capabilities determination process by supporting the mechanisms and tools required for initial setup and continuing development of the Joint Capabilities Integration and Development System (JCIDS) process; also supporting tools and mechanisms that continue the refinement and enhancement of both the Expeditionary Maneuver Warfare Capabilities List (ECL) and Expeditionary Forces Development System (EFDS) ensuring the identification and prioritization of clearly defined capability gaps.				
<b>(U) Total \$</b>	<b>6.382</b>	<b>8.100</b>	<b>11.087</b>	<b>11.896</b>

**UNCLASSIFIED**

**EXHIBIT R-2a, RDT&E Project Justification**

DATE:

**February 2005**

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**

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

**(U) Related RDT&E:** Not Applicable.

**(U) D. ACQUISITION STRATEGY:** Not Required

**(U) D. SCHEDULE PROFILE:** Not Applicable.