

EXHIBIT R-2, RDT&E Project Justification

Date: **February 2008**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME							
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support							
COST (\$ in Millions)		FY07	FY08	FY09	FY10	FY11	FY12	FY13
Total PE Cost		33.454	27.039	24.687	25.417	24.814	33.323	37.518
C0030 Marine Corps Studies and Analyses		5.546	6.284	6.649	6.814	6.936	7.088	7.286
C0033 Marine Corps Operational Testing & Evaluation Activity		3.323	3.775	3.929	4.012	4.085	4.376	4.716
C2330 Family of Incident Response Systems (FIRS)		2.849	1.833	4.039	4.312	3.204	11.016	14.248
C2930 Phase A Activities		15.909	7.894	10.07	10.279	10.589	10.843	11.268
C9999 Congressional Adds		5.827	7.253	0.000	0.000	0.000	0.000	0.000

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

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

1. Received \$2M in FY07 GWOT.
2. Received \$0 in FY08 from the 2008 Consolidated Appropriation.
3. FY08 funding totals do not include \$0 previously requested for current FY08 GWOT requirements.

B. PROGRAM CHANGE SUMMARY

	FY2007	FY2008	FY2009
(U) FY 2008 President's Budget:	31.182	20.166	23.028
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Undistributed Rescissions/Reductions		-0.225	
(U) Congressional Increases		7.253	
(U) PR09 Program Adjustment by ASN (RDA)			1.662
(U) FY07 Emergency Supplemental	2.000		
(U) Reprogrammings	1.043		
(U) SBIR/STTR Transfer	-0.771	-0.202	
(U) Minor Affordability Adjustment			-0.003
(U) FY 2009 President's Budget:	33.454	26.992	24.687

CHANGE SUMMARY EXPLANATION:

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

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2008				
APPROPRIATION/BUDGET ACTIVITY: RDT&E, N/BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support		PROJECT NUMBER C0030 Marine Corps Studies and Analyses				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		5.546	6.284	6.649	6.814	6.936	7.088	7.286
RDT&E Articles Qty								
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>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 System Master Plan (MCSSMP) 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.</p> <p>The MCSS also supports 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 decision makers for basing decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. In addition, the MCSS 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.</p> <p>In FY07, funds were provided to NAVSEA to provide direct support, technical, analyses, and liaison services that will assure a sound bridge between the Marine Corps' role in defining EXW/Seabasing requirements and the SEA 05 role in executing Future Concepts and Ships Designs for amphibious ships/aircraft. Maritime Prepositioning Force (Future), (MPF (F)), High Speed Connectors, Sea based operations and related systems.</p>								
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:								
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009				
Accomplishment/Effort Subtotal Cost		5.546	6.284	6.649				
RDT&E Articles Qty								
<p>In FY 07, continue and complete the following FY06 efforts: Distributed Operations Accessions , Shallow Water, Very Shallow Water Planning and Reconnaissance Required for Ship to Objective Maneuver, (STOM); Marine Corps Expeditionary Fighting Vehicle, (EFV), Analysis of Alternatives, (AoA) Update; Marine Enhanced Rifle Squad, (MERS); Joint Light Tactical Vehicle Analytical Support, Post Independent Analysis (PIA,) Analysis of Alternatives (AoA) Marine Corps Aviation Lift Capability Optimization Model (MALCOM); Marine Air Ground Task Force (MAGTF) Command and Control (C2) Nodes; Marine Air Ground Task Force (MAGTF) Fires; Irregular Warfare Population Dynamics, Phase I; Strategies for Reducing Resources in Joint Terminal Attack Controller, (JTAC), Training; Marine Expeditionary Force, (MEF), Intelligence, Surveillance and Reconnaissance, (ISR), Gap Analysis; Seabasing Capabilities Wargame; and Joint Strike Fighter Variant Mix studies</p> <p>In FY-2007, initiate the following efforts: Echelons of Maintenance; Pythagoras Counterinsurgency Applications to Support Irregular Warfare; Joint Strikefighter; Verification, Validation, and Accreditation; Marine Air Ground Task Force, Data Development; Fires Support; Marine Advanced Unit Infantry; Marine Expeditionary Unit and Marine Special Operations Company Interoperability; Marine Air Ground Task Force Electronic Warfare Study; Career Path for Special Operations Marines; Support to the Operating Forces; Wounded Warrior Tracking; Marine Aviation Logistics Squadron; Verification of Agent Based Simulation, Marine Corps' role in Expeditionary Warfare Seabasing requirements and Future Concepts and Ships Design for amphibious ships/craft. Irregular Warfare, Population Dynamics Phase II ; Analysis of Combat Logistics Capabilities (ACE), Phase II, Ground Ammunition Requirements Development.</p> <p>Initiate the high priority studies and analyses projects approved in the FY2008 - FY2014 Marine Corps Studies System Master Plan (MCSSMP).</p>								
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009				
Accomplishment/Effort Subtotal Cost		0.061	0.000	0.000				
RDT&E Articles Qty								
In FY-07, sub-project D was reprogrammed and consolidated with sub-project J above to make program management and execution more efficient.								
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009				
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000				
RDT&E Articles Qty								
Provide Corrosion Control Program Support.								
(U) Total \$		5.607	6.284	6.649				

(U) PROJECT CHANGE SUMMARY	FY 2007	FY 2008	FY 2009
(U) FY 2008 President's Budget:	6.115	6.431	6.605
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Congressional Undistributed Rescissions/Reductions		-0.052	
(U) Reprogrammings	-0.416		0.044
(U) SBIR/STTR Transfer	-0.153	-0.095	
(U) Minor Affordability Adjustment			
(U) FY 2009 President's Budget:	5.546	6.284	6.649
(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 Analyses Group)			
(U) D. ACQUISITION STRATEGY: Not Required.			
(U) E. MAJOR PERFORMERS: Indefinite Delivery Indefinite Quantity contracts as follows:			
FY05 - FY09 Academia Analytical Support Services Contract. Sep 05.			
FY06 - FY10 Northrop Grumman Mission Systems (NGMS), Fairfax, VA for Military Modeling, Simulation, Analytical, and Support Services. May 06.			
FY06 - FY10 New Logistics Modeling, Simulation, Analytical, and Support Services Contract to be Awarded. Sep 06			
FY06 - FY10 New Professional Services Support Contract to be Awarded. Sep 06			
(U) SCHEDULE PROFILE: Not Applicable			

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008			
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 OT&E Activity			
COST (\$ in Millions)									
			FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
Project Cost			3.323	3.775	3.929	4.012	4.085	4.376	4.716
RDT&E Articles Qty									
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
<p>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 also ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently.</p>									
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:									
COST (\$ in Millions)				FY 2007	FY 2008	FY 2009			
Accomplishment/Effort Subtotal Cost				0.484	0.540	0.564			
RDT&E Articles Qty									
MCOTEA: Provide for Organizational Support and Utilities.									
COST (\$ in Millions)				FY 2007	FY 2008	FY 2009			
Accomplishment/Effort Subtotal Cost				2.654	3.081	3.296			
RDT&E Articles Qty									
MCOTEA: Provide for organizational salaries.									
COST (\$ in Millions)				FY 2007	FY 2008	FY 2009			
Accomplishment/Effort Subtotal Cost				0.185	0.000	0.000			
RDT&E Articles Qty									
MCOTEA: Provide organizational support, utilities, and salaries for the new Automation Information Systems (AIS) test branch.									
COST (\$ in Millions)				FY 2007	FY 2008	FY 2009			
Accomplishment/Effort Subtotal Cost				0.000	0.154	0.069			
RDT&E Articles Qty									
MCOTEA: Organizational Support, Administration, Logistics, and Executive Travel									
(U) Total \$									

EXHIBIT R-2a, RDT&E Project Justification		DATE:
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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 OT&E Activity
(U) PROJECT CHANGE SUMMARY:		
	FY 2007	FY 2008
(U) FY 2008 President's Budget:	3.659	3.814
(U) Adjustments from the President's Budget:		
(U) Congressional Program Reductions		
(U) Congressional Rescissions		
(U) Congressional Increases		
(U) Congressional Undistributed Rescissions/Reductions		-0.033
(U) Reprogrammings	-0.244	0.026
(U) SBIR/STTR Transfer	-0.092	-0.006
(U) Minor Affordability Adjustments		
(U) FY 2009 President's Budget:	3.323	3.775
CHANGE SUMMARY EXPLANATION:		
(U) Funding: See Above.		
(U) Schedule:		
(U) Technical:		
(U) C. OTHER PROGRAM FUNDING SUMMARY:	Not Applicable	
Line Item No. & Name	FY 2007	FY 2008
N/A	FY 2009	FY 2010
(U) Related RDT&E: Not Applicable.	FY 2011	FY 2012
(U) D. ACQUISITION STRATEGY: Not Required.	FY 2013	To Compl
(U) E. MAJOR PERFORMERS: Not Applicable.	Total Cost	

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME			PROJECT:			
RDT&E, N /BA-6 Management Support			0605873M Marine Corps Program Wide Support			C2330 Family of Incident Response Systems (FIRS)			
COST (\$ in Millions)			FY07	FY08	FY09	FY10	FY11	FY12	FY13
Project Cost			2.849	1.833	4.039	4.312	3.204	11.016	14.248
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
<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 of 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 of 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&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>									
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:									
COST (\$ in Millions)			FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost			1.899		0.933		2.127		
RDT&E Articles Qty									
<p>FIRS: Reconnaissance Mission Area. 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&E activities.</p>									
COST (\$ in Millions)			FY 2007		FY 2008		FY 2009		
Accomplishment/Effort Subtotal Cost			0.150		0.100		0.150		
RDT&E Articles Qty									
<p>FIRS: Search and Rescue (SAR) Mission Area. 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&E activities.</p>									

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT:		
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)		
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.150	0.100	0.350
RDT&E Articles Qty				
FIRS: Decontamination Mission Area includes 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&E activities.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.150	0.100	0.150
RDT&E Articles Qty				
FIRS: C4I Mission Area includes 1) technology assessments 2) field user evaluations 3) prototypes.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.200	0.300	0.762
RDT&E Articles Qty				
FIRS: Force Protection Mission Area Includes the 1) transition of the Improved Level A Protective Ensemble developed in concert with Technical Support Working Group (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 (TSWG) program. Incorporates previous CBIRF RDT&E activities.				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.100	0.100	0.100
RDT&E Articles Qty				
FIRS: Medical Mission Area 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 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.200	0.200	0.400
RDT&E Articles Qty				
FIRS: General Support Mission Area Includes 1) Prototyping and testing of modified COTS and GOTS vehicles for the deployment of incident response equipment (EOD, SAR).				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000
RDT&E Articles Qty				
Multi-Sensor Analyzer Detector (MSAD) III: 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 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000
RDT&E Articles Qty				
TOTAL		2.849	1.833	4.039

R-1 SHOPPING LIST

Item No. 152

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT:	
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)	
(U) PROJECT CHANGE SUMMARY:	FY07	FY08	FY09
(U) FY 2008 President's Budget:	3.541	1.845	4.012
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Congressional Undistributed Rescissions/Reductions		-0.012	
(U) Reprogrammings	-0.603		0.027
(U) SBIR/STTR Transfer	-0.089		
(U) Minor Affordability Adjustment			
(U) FY 2009 President's Budget:	2.849	1.833	4.039
CHANGE SUMMARY EXPLANATION:			
(U) Funding: Change in funding represents reprioritizing of efforts within the USMC.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			
(U) C. OTHER PROGRAM FUNDING SUMMARY:			
Line Item No. & Name	FY 2007	FY 2008	FY 2009
(U) PMC Line (BLI# 652200)	10.922	24.616	6.623
Field Combat Equipment			
(U) PMC Line (BLI# 667000)	1.328	14.070	0.000
Items Under \$5 Million			
(U) Related RDT&E: Not Applicable.			
(U) D. ACQUISITION STRATEGY: Not Required.			
(U) D. SCHEDULE PROFILE: Not Applicable.			

EXHIBIT R-2a, RDT&E Project Justification							February 2008							
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			C2930 Phase 0 Activities							
COST (\$ in Millions)								FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
								15.909	7.894	10.07	10.279	10.589	10.843	11.268
<p>RDT&E Articles Qty (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>Pre-Phase A Activities include assessments, surveys, and planning activities in support of the requirements generation system to mature, limit, clarify and define requirements before competition for resources in the POM process and transition to acquisition management. This effort will complement the currently funded Marine Corps Systems Command (MCSC) Phase A Activities line 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 Needs 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 Authorized Acquisition Objective process.</p> <p>Marine Corps Combat Development Command (MCCDC) averages approximately 62 UNS requests per year addressing new requirements, of which approximately 20% 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.</p> <p>These activities do not overlap/conflict with Mission Area Analysis and Analysis of Alternatives funded within the MCCDC Studies and Analysis (S&A) program, MCSC Phase A Activities, Marine Corps Warfighting Lab (MCWL) warfighting experimentation or Science and Technology (S&T) activities. Pre-phase A Activities 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. Pre Phase A facilitates a timely and more efficient process.</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 and Execution (PPBE) 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 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>														

R-1 SHOPPING LIST

MAGTF Expeditionary Family of Fighting Vehicles (MEFFV): JROC Decision Memorandum 038-04 directed the Army and Marine Corps to co-develop the Army's Future Combat Systems (FCS) and the MAGTF (MEFFV) as a joint program. MEFFV is the USMC Combat Vehicle Replacement program to replace the capabilities provided currently by Tanks and Light Armored Vehicles. Per MROC direction, the MEFFV program will: (1) Work to ensure harmonization between the FCS Network and USMC Network; (2) Assess FCS technologies & platforms for applicability to USMC capability requirements; and (3) evaluate the applicability of FCS Manned Ground Vehicles for USMC adoption/use. This program is specifically designed to implement the Marine FCS Engagement Strategy to adopt FCS components suitable for MAGTF use within operational concept of Expeditionary Maneuver Warfare (EMW). The project will support transition/integration of FCS Command and Control components to MAGTF C2 and other USMC C4I initiatives where appropriate, key survivability and mobility components in the near term to enhance manned vehicle where suitable, and support modernization of manned and unmanned vehicles as USMC platforms reach their End of Service (EoS).

To satisfy the emerging requirements, the Deputy Commandant for Combat Development is leading the MEFFV effort to conduct Joint Capability Integration and Development System analysis to establish a capabilities framework specifically tailored to assess technologies for transition to the MAGTF. During the timeframe (2004-2010) MEFFV efforts are directed at capability refinement and integration, analysis of multiple concepts, determining technology objectives, and continued development of Initial Capabilities Documents (ICDs) and Capabilities Development Documents supporting Spin Out technology transitions. This budget item supports combat development activities supporting the three MROC priorities in compliance with JROC and USD AT&L guidance to participate in a Joint Program with the Army's Future Combat Systems Program.

(U) ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)						FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost						6.955	2.642	4.366
RDT&E Articles Qty								

Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: AAV Modernization, Tactical Light Motor Transport Fleet, Lightweight 155 Howitzer laser fuze ignition capability, Global Command Support System (GCSS) logistics, and Marine Corps Enterprise Information Technology System.

COST (\$ in Millions)						FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost						3.627	4.067	4.243
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, Tier II UAV concept of employment & Initial Capabilities Document, Force Protection concepts and requirements assessments, establish alternatives for the Joint Light Tactical Vehicle, traceability findings for seabasing capabilities of the future, provide for integration of concepts for the Joint command and control arena, and examine engineering initial capabilities concepts.

Systematically improves 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; support tools, collaboration, 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.

COST (\$ in Millions)						FY 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost						5.327	1.185	1.461
RDT&E Articles Qty								

R-1 SHOPPING LIST

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 Solution Analysis (FSA) and Concept Decision for MAGTF needs potentially addressed by FCS systems, components or Spin Out products. Develop Expeditionary Armored Forces (EAF) mission profiles and operational mode summary. Develop an Operations and Organization documents for FCS Spin Out products potentially meeting MAGTF needs. Conduct an EAF Evaluation Strategy, providing metrics or the needed capabilities. Provide personnel and travel necessary to participate in FCS and Unit of Action IPTs and planning for FCS Spin Out products.

Technology Assessments: To support MCCDC JCIDS assessments of Army FCS capabilities. Technology assessments will be conducted to define technology maturity/readiness and issues for potential USMC adoption. Technology assessments, technology development strategy and consideration of technology issues shall be used to evaluate FCS technologies, including Spin Outs, and platforms (combat vehicles, UAVs, Unmanned Ground Vehicles, unattended sensors, and unattended munitions) of interest, based on developing MCCDC Initial Capabilities Documents (ICD) and Capability Development Documents (CDD). This shall include market research to determine alternate sources of technology. In support of MROC directed C4I integration (now called Systems Engineering, Interoperability Architectures and Technology (SIAT)) with FCS, assess architecture commonality, and assess/resolve technology barriers to C4I interoperability/integration (SIAT). Such technology assessment activities shall be coordinated with the Office of Naval Research, including monitoring Functional Naval Capabilities (FNC) developments for component commonality opportunities and participating in joint ONR/FCS technology initiatives. In support of FCS assessment, explore survivability initiatives through service and joint wargames and experiments and initiate risk studies.

Systems Integration Plan: Develop the architecture based Systems Engineering Plan to support development and integration in preparation 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 current and future MAGTF systems design integration. Develop modeling and simulation approach and determine feasibility of FCS components on MAGTF systems. Populate EFDC system integration databases, based on capability options for meeting Expeditionary Maneuver Warfare (EMW) capability needs. Evaluate design excursions. Examine risk mitigation methodologies. Build business technology evaluation plan and strategy for measuring progress.

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 2007	FY 2008	FY 2009
Accomplishment/Effort Subtotal Cost						0.000	0.000	0.000
RDT&E Articles Qty								
(U) Total \$						15.909	7.894	10.070

(U) PROJECT CHANGE SUMMARY:

	FY2007	FY2008	FY2009
(U) FY 2008 President's Budget:	11.890	8.076	8.508
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Congressional Undistributed Rescissions/Reductions		-0.081	
(U) PR09 Program Adjustment by ASN (RDA)			
(U) FY07 Emergency Supplemental	2.000		

R-1 SHOPPING LIST

(U) Reprogrammings	2.306		1.500
(U) SBIR/STTR Transfer	-0.287	-0.101	0.065
(U) Minor Affordability Adjustment			-0.003
(U) FY 2009 President's Budget:	15.909	7.894	10.070
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) D. SCHEDULE PROFILE: Not Applicable.			

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME						
RDT&E, N /BA-6 RDTE Management Support			0605873M MC Program Wide Support			C9999 FY07 Congressional Adds						
COST (\$ in Millions)						FY 2007	FY 2008	FY 2009	FY2010	FY2011	FY2012	FY2013
Project Cost						5.827	7.253	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty												
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <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 of 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 of 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&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> <p>The Marine Corps Corrosion Prevention and Control (CPAC) Program Office determined the Marine Corps maintenance reporting system does not provide sufficient information to determine the condition of assets as related to corrosion, the cost of corrosion or mission readiness related to corrosion. Over the past three years processes have been developed for assessing the degree of corrosion induced degradation of Ground Combat and Combat Support equipment. The development of this process has been funded 100% by Congressional Plus-Ups. This Marine Corps corrosion assessment process and associated data repository is under the cognizance of the CPAC Program Office. To date, this office has conducted corrosion assessments of all Marine Corps Ground Combat and Combat Support equipment except those in-theatre, pre-positioned storage and training commands. Additionally, we are in the process of completing MARFORRES. We now utilize this assessment data to determine the cost of corrosion for Marine assets.</p> <p>USMC Logistics Modernization - The Integrated Logistics Concept (ILC) Analysis provided the foundation for logistics transformation within the Marine Corps and established a compliance response to Defense Reform Initiative Directive (DRID) 54, directing that logistics transformation be accomplished throughout the service components. The ILC Analysis was completed during an 18 week engagement beginning in late October 1998 to early February 1999. This analysis concluded with a high level business Case Analysis (BCA). The BCA concluded conservatively that accomplishing the ILC actions (including re-engineered IT among others) would reduce Marine Corps inventories and reduce support requirements allowing the shifting of (2000) Marines from logistics to the battlefield by 2004 (given the current timelines). ILC action will also result in: lighter, more flexible and easier to move MAGTF; Higher Combat Support System (CSS) responsiveness: reduced stocks and CSS footprint inside the MAGTF; Less equipment for Warfighter to manage; rapidly scalable and deployable CSS units that have worldwide inventory visibility.</p> <p>Individual Chemical Alert System (ICAS). This is a continuing program that is developing a small lightweight individual wearable chemical sensor for chemical warfare agents and toxic industrial chemicals for use by the USMC CBIRF and the Department of Homeland Security.</p> <p>Chameleon Chemical Detection Armband. This program is developing, testing and transitioning to production an instrument that provides an immediate visual indication of the presence of a chemical hazard in the form of a lightweight armband for use by the USMC CBIRF and the Department of Homeland Security. The Chameleon enables war fighters and first responders to visually monitor the presence of up to ten hazardous chemicals simultaneously in real time.</p>												
COST (\$ in Millions)						FY07	FY08	FY09				
Accomplishment/Effort Subtotal Cost						0.971	0.000	0.000				
RDT&E Articles Qty												
<p>C9A63 Field Rapid Assay Biological System: Develop man-portable, battery operated, automated biological aerosol point detection, identification, and sampling system to be used by both consequence management and expeditionary forces.</p>												
COST (\$ in Millions)						FY07	FY08	FY09				
Accomplishment/Effort Subtotal Cost						0.971	0.000	0.000				
RDT&E Articles Qty												
<p>C9A64 Individual Chemical Alert System (ICAS): Develop, test and transition to production a individual wearable chemical sensor for chemical warfare agents and toxic industrial chemicals for used by the USMC CBIRF and the Department of Homeland Security</p>												

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME								
RDT&E, N/BA-6 RDTE Management Support	0605873M MC Program Wide Support	C9999 FY07 Congressional Adds								
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		2.914	0.000	0.000						
RDT&E Articles Qty										
C9A65 Tactical Air Sentinel (TAS): Develop, test and transition a tactical biological aerosol detection system for use by consequence management and expeditious forces.										
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		0.971	0.000	0.000						
RDT&E Articles Qty										
C9883 Corrosion Service Teams: In FY06 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 Corrosion Prevention and Control (CPAC) tasks within joint service and OSD-ATL-CPAC specifications, standards and policies.										
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		0.000	0.795	0.000						
RDT&E Articles Qty										
C9999 Individual Chemical Alter System (ICAS): Develop, test, and transition to production a small lightweight individual wearable chemical sensor for chemical warfare agent and toxic industrial chemicals to respond to low concentrations of specific classes of chemical compounds. Develop a combination CWA and TIC Monitor capability. Increase detector sensitivity for faster response to lower concentrations of chemicals.										
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		0.000	2.783	0.000						
RDT&E Articles Qty										
C9999 Automated Identification & Data Capture (AIDC) Solutions Center										
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		0.000	1.193	0.000						
RDT&E Articles Qty										
C9999 USMC Logistics Analysis & Optimization										
COST (\$ in Millions)		FY07	FY08	FY09						
Accomplishment/Effort Subtotal Cost		0.000	2.482	0.000						
RDT&E Articles Qty										
C9999 Chameleon Chemical Detection Armband: Develop and test additional disposable cartridge sensors for additional hazard detection to include Chemical Warfare detection. Test the shelf-life of the armband for longer use under extreme environmental conditions.										
(U) Total \$		5.827	7.253	0.000						
(U) PROJECT CHANGE SUMMARY:		FY 2007	FY 2008	FY 2009						
(U) FY 2008 President's Budget:		5.977	0.000	0.000						
(U) Adjustments from the President's Budget:										
(U) Congressional Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases			7.300							
(U) Congressional Undistributed Rescissions/Reductions			-0.047							
(U) Reprogrammings										
(U) SBIR/STTR Transfer		-0.150								
(U) Minor Affordability Adjustment										
(U) FY 2009 President's Budget:		5.827	7.253	0.000						
CHANGE SUMMARY EXPLANATION:										
(U) Funding: See above.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
(U) Related RDT&E:										
(U) D. ACQUISITION STRATEGY:										
(U) E. MAJOR PERFORMERS:										