

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2004

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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	26.441	29.297	19.701	25.600	30.289	34.091	32.555	Cont	Cont
C0030 Marine Corps Studies and Analyses	7.516	7.042	5.881	6.098	6.225	6.432	6.569	Cont	Cont
C0033 Marine Corps Operational Testing & Evaluation Activity	2.391	2.739	2.704	2.759	2.810	2.899	2.960	Cont	Cont
C2330 Family of Incident Response Systems (FIRS)	14.633	13.347	2.860	7.398	10.836	13.957	11.865	Cont	Cont
C2930 Phase 0 Activities	1.901	6.169	8.256	9.345	10.418	10.803	11.161	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>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2004 President's Budget:	27.476	16.635	19.766
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases		13.000	
(U) Reprogrammings	-0.037		
(U) SBIR/STTR Transfer	-0.593		
(U) Minor Affordability Adjustment	-0.405	-0.338	-0.065
(U) FY 2005 President's Budget:	26.441	29.297	19.701
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See Above.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			

# UNCLASSIFIED

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

DATE:

**February 2004**

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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost to Complete	Total Program
Project Cost	<b>7.516</b>	<b>7.042</b>	<b>5.881</b>	<b>6.098</b>	<b>6.225</b>	<b>6.432</b>	<b>6.569</b>	<b>Cont</b>	<b>Cont</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 FY03 and 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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>5.150</b>	<b>4.734</b>	<b>4.976</b>
RDT&E Articles Qty			

In FY-03, completed the following FY02 efforts: Expeditionary Fires Study, Imagery Analysis Support, Remain Behind Equipment (RBE) Management, Depot Future, and the Expeditionary Airfield (EAF) studies.

Commenced the following FY03 efforts: Marine Expeditionary Brigade 2015, Advanced Amphibious Assault Vehicle (AAAV) Carry Capacity Key Performance Parameters (KPP) and Analysis of Alternatives, Joint Tactical Radio System (JTRS) Migration Strategy, 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, Establishing Time Criteria for Logistics Tasks and the Light Amored Vehicle (LAV) Expeditionary Fire Support System (EFSS) studies.

In FY04, continue and complete the following 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), and the Remain Behind Equipment (RBE) Management studies.

Commence 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 Implementating Future Theater-Level Contractor Logistics Support (CLS); Marine/Future Combat Systems (FCS) Technology Strategy; USMC KC-130 Requirements, Review of Deployment Mobility Growth, and the Bulk Liquids Transportation Option studies.

Initiate the high priority study and analysis projects approved in the FY2005 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 2004**

APPROPRIATION/BUDGET ACTIVITY  
**RDTE&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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.413</b>	<b>0.908</b>	<b>0.905</b>
RDTE&E Articles Qty			

In FY03, continued and completed the following FY02 efforts: Concept of Link Employment (COLE), Marine Corps Meteorological and Oceanographic Support studies.

In FY04, continue and complete the following FY03 efforts: Anti-Terrorism/Force Protection Phase II, Integration of Diagnostics into Ground Equipment Life Cycle Management, and Enabling Logistics with Portable and Wireless Technology. Commence the FY04 Recruiter Selection and Training study.

Initiate high priority study and analysis projects and studies nominated and approved in the FY2005 Marine Corps Studies Master Plan (MCSMP).

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.953</b>	<b>1.400</b>	<b>0.000</b>
RDTE&E Articles Qty			

Provide Corrosion Control Program Support.

(U) Total \$ 0.000 7.516 7.042 5.881

**(U) PROJECT CHANGE SUMMARY**

	<b>FY2003</b>	<b>FY2004</b>	<b>FY2005</b>
<b>(U) FY 2004 President's Budget:</b>	<b>6.167</b>	<b>5.721</b>	<b>5.900</b>

(U) Adjustments from the President's Budget:

(U) Congressional Program Reductions

(U) Congressional Rescissions

(U) Congressional Increases

(U) Reprogrammings 1.504

(U) SBIR/STTR Transfer -0.155

(U) Minor Affordability Adjustment -0.079 -0.019

**(U) FY 2005 President's Budget: 7.516 7.042 5.881**

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

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

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>										
		DATE: <b>February 2004</b>								
APPROPRIATION/BUDGET ACTIVITY <b>RDTE, 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>								
<p>(U) <b>E. MAJOR PERFORMERS:</b> Indefinite Delivery Indefinite Quantity contracts as follows:</p> <table style="width: 100%; border: none;"><tr><td style="width: 15%;"><b>FY 03 - FY04</b></td><td>Decision Engineering Associates LLC, Dumfries, VA for analytical and support services. Mar 02.</td></tr><tr><td><b>FY 03 - FY04</b></td><td>Computing Technologies Inc. (CoTs) Fairfax, VA for analytical and support services. Jan 04</td></tr><tr><td><b>FY 03 - FY04</b></td><td>Marine Corps Research University at Pennsylvania State, State College, PA for analytical and support services. May 02.</td></tr><tr><td><b>FY 03 - FY04</b></td><td>Northrop Grumman Mission Systems (NGMS), Fairfax, VA for Analytical and support services. Nov 01.</td></tr></table> <p>(U) <b>SCHEDULE PROFILE:</b> Not Applicable</p>			<b>FY 03 - FY04</b>	Decision Engineering Associates LLC, Dumfries, VA for analytical and support services. Mar 02.	<b>FY 03 - FY04</b>	Computing Technologies Inc. (CoTs) Fairfax, VA for analytical and support services. Jan 04	<b>FY 03 - FY04</b>	Marine Corps Research University at Pennsylvania State, State College, PA for analytical and support services. May 02.	<b>FY 03 - FY04</b>	Northrop Grumman Mission Systems (NGMS), Fairfax, VA for Analytical and support services. Nov 01.
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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																																																				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program																																																
Project Cost	2.391	2.739	2.704	2.759	2.810	2.899	2.960	Cont	Cont																																																
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<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <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&amp;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><b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b></p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>0.549</td> <td>0.740</td> <td>0.656</td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">MCOTEA: Provide for organizational support and utilities.</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>1.631</td> <td>1.520</td> <td>1.848</td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">MCOTEA: Provide for organizational salaries.</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td>0.211</td> <td>0.479</td> <td>0.200</td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.</td> </tr> </tbody> </table> <p>(U) Total \$ 2.391 2.739 2.704</p>										COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.549	0.740	0.656	RDT&E Articles Qty				MCOTEA: Provide for organizational support and utilities.				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	1.631	1.520	1.848	RDT&E Articles Qty				MCOTEA: Provide for organizational salaries.				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.211	0.479	0.200	RDT&E Articles Qty				MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.			
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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
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	
	FY2003	FY2004	FY2005
<b>(U) Project Change Summary</b>			
<b>(U) FY 2004 President's Budget:</b>	2.389	2.770	2.713
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	0.034		
(U) SBIR/STTR Transfer	-0.003		
(U) Minor Affordability Adjustment	-0.029	-0.031	-0.009
<b>(U) FY 2005 President's Budget:</b>	2.391	2.739	2.704
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See Above.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b> Not Applicable.			
<b>(U) Related RDT&amp;E:</b> Not Applicable.			
<b>(U) D. ACQUISITION STRATEGY:</b> Not Required.			
<b>(U) E. MAJOR PERFORMERS:</b> This project provides funds for organizational support (travel, salaries) of MCOTEA.			
<b>(U) SCHEDULE PROFILE:</b> Not Applicable.			

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<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p>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&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>																																																																					
<p><b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b></p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>0.417</b></td> <td><b>0.300</b></td> <td><b>0.550</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>CBIRF:</b> Research and development of a device that senses victims through debris of a collapsed building or through standing structures, such as walls and doors.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>0.250</b></td> <td><b>0.200</b></td> <td><b>0.200</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>CBIRF:</b> 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.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>2.669</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> </tr> </tbody> </table> <p><b>Electro-Chemical Activated Solution (ECASOL):</b> Research and development of environmentally benign, patient-safe chem-bio decontaminant Electro-Chemical Activated Solution.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>0.245</b></td> <td><b>0.350</b></td> <td><b>0.200</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>CBIRF:</b> 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.</p> <table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td><b>0.875</b></td> <td><b>0.200</b></td> <td><b>0.450</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>CBIRF:</b> Research and development of improved respiratory protection.</p>										COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.417</b>	<b>0.300</b>	<b>0.550</b>	RDT&E Articles Qty				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.250</b>	<b>0.200</b>	<b>0.200</b>	RDT&E Articles Qty				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>2.669</b>	<b>0.000</b>	<b>0.000</b>	RDT&E Articles Qty				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.245</b>	<b>0.350</b>	<b>0.200</b>	RDT&E Articles Qty				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.875</b>	<b>0.200</b>	<b>0.450</b>	RDT&E Articles Qty			
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<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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.431</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>NANOTECH RESPONSES:</b> Research of nanoparticle technology, specifically begin evaluation and development of protocols for neutralization of chem-bio agents.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>2.029</b>	<b>2.100</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CB MSS/Analyzer Detector:</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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.076</b>	<b>0.120</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF:</b> Research and development of a patient tracking and following system and Mass Casualty Ventilation.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.250</b>	<b>0.353</b>
RDT&E Articles Qty			
<b>CBIRF:</b> Development of field rugged Gas Chromatograph/Mass Spectrometer (GC/MS).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.300</b>	<b>0.653</b>
RDT&E Articles Qty			
<b>CBIRF:</b> Development of an improved mass casualty decontamination system.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>3.339</b>	<b>2.500</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CB Warfare:</b> Development of chem/bio warfare agent chip detector .			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.200</b>	<b>0.010</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF:</b> 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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.610</b>	<b>0.150</b>	<b>0.100</b>
RDT&E Articles Qty			
<b>CBIRF:</b> Development of Stand-Off Chemical Agent Detector (SCAD).			



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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.010</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF: Development of a Radiation Protective Suit Prototype.</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.694</b>	<b>0.125</b>	<b>0.100</b>
RDT&E Articles Qty			
<b>CBIRF: Research and development of a chem/bio wearable detector capable of detection of chem/bio warfare agents and toxic industrial chemicals.</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.788</b>	<b>0.550</b>	<b>0.254</b>
RDT&E Articles Qty			
<b>CBIRF: Validation and verification of COTS technologies for improve operational capabilities of incident response forces to meet emerging terrorist threat. Field User Evaluations and Studies</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.200</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF: Heat Stress Calculator Development</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.600</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF: Improved PPE Testing and Qualification</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.397</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF: Testing Support</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.995</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CBIRF: C4I Architecture Development</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>Expeditionary Warfare Logistics</b> Funding to be moved to NAVSEA.			
<b>TOTAL</b>	14.633	13.347	2.860

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EXHIBIT R-2a, RDT&E Project Justification					DATE:					
					February 2004					
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)					
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</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	3.422	2.804	3.293	4.409	6.759	10.543	Cont	Cont
Family of Incident Response Systems										
<b>(U) Related RDT&amp;E:</b> Not Applicable.										
<b>(U) D. ACQUISITION STRATEGY:</b> Not Required.										
<b>(U) E. MAJOR PERFORMERS:</b>										
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.										
<b>(U) D. SCHEDULE PROFILE:</b> Not Applicable.										

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				C2930 Marine Corps Phase A Activities				
RDTE, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support								
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	1.901	6.169	8.256	9.345	10.418	10.803	11.161	Cont	Cont
RDTE 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).</p> <p>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 Laboratory (MCWL) (S&amp;T) activities. 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 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 (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>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
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>	
<p><b>MAGTF Family of Fighting Vehicles (MEFV):</b> 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</p> <p>is critical to the Marine Corps; the program is a high priority ground system acquisition initiative. To satisfy the requirements of the 21st Century Marine Warfighters, the MEFFV Project will establish a pre-systems acquisition framework specifically tailored to co-evolve leap ahead technologies with expeditionary operational concepts. A capability and systems integration architecture will use successful operational concepts from services and joint experimentation to guide technologies funded by Defense Advanced Research Projects Agency (DARPA), Office of Naval Research (ONR), Future Combat Systems (FCS) and other agencies for MEFFV application. Oversight from the Marine Corps' Ground Element Advocate will guide this Pre-Systems Acquisition framework to align institutional needs and resources with technological and operational opportunities. During the timeframe (2004-2012) MEFFV efforts are directed at concept and trade studies, analysis of multiple concepts, market research, Analysis of Alternatives, modeling and simulation, technology transition objectives, continued development of the Operational Requirements Document (ORD), development of draft performance specifications preparation of life-cycle estimates leading to a</p>			
<b>(U) ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.901	2.457	2.529
RDT&E Articles Qty			
<p>Initiate and complete high priority Milestone 0/Phase A activities for Market Surveys and associated Business Case Analysis for the following programs: Reproduction System (VIC), MEFFV, Mobile Electirc Power (MEP), Seaway Loggy and Deployable Vurtual Training Envir. Initiated and completed Life Cycle Cost estimates for the following programs: Elec. Maint. Support Tool (EMSST), Fire Support Programmatic Support, Automated Career Retention System and CAIV and completed Analysis of Cost Comparison Analysis for the Multi- Level Security; Completed Trade-off Analyses in lieu of Analysis of Alternatives for the Non-Lethal Payload for the Gladiator. Conduct the high priority Analysis and Life Cycle Cost Estimate projects approved in the current FY Nomination for Phase A Activities and initiate new Businesss Case Analyses/Market surveys and associated Acquisition Strategies.</p>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.250	0.000
RDT&E Articles Qty			
<p>Provides for the conduct of high priority Pre-Phase A Activities for Clear Facilities Ground Weapons Locating Radar, PROFILER Meterological 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>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.608	1.300
RDT&E Articles Qty			
<p>Force Design Trades: Survey and derive roles of MAGTF mounted units in future service and Joint operational concepts. Complete the Mounted MAGTF Concept Study and Functional Area Analysis for Mounted MAGTF Operations. Begin deriving alternative MEFFV mission profiles. Initiate Functional Need Analysis.</p>			

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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 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.260</b>	<b>0.260</b>	
RDT&E Articles Qty				
Lethality: Initiate Functional Solution Analysis for lethality, specifically: Populate baseline capability performance needs and constraints within capability architecture database. Assess lethality system technology opportunities to assess their maturity and impact on effectiveness. Assess target acquisition systems and targeting methodologies.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.200</b>	<b>0.210</b>	
RDT&E Articles Qty				
Propulsion/Tactical Mobility: Initiate Functional Solution Analysis for propulsion/mobility, specifically: work on propulsion/mobility roadmap (emphasis on expeditionary). Assess design architecture with higher component commonalities and assess Future Combat Systems (FCS). Monitor Electric Warship technical developments for component commonality opportunities (auxiliaries).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.175</b>	<b>0.200</b>	
RDT&E Articles Qty				
Survivability (Active): Initiate Functional Solution Analysis for active survivability, specifically: 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 and experiments. Continue active survivability risks study.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.100</b>	<b>0.120</b>	
RDT&E Articles Qty				
Survivability (Passive): Initiate Functional Solution Analysis for passive survivability, specifically: 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 initiatives.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.369</b>	<b>0.708</b>	
RDT&E Articles Qty				
System Integration: Initiate framework for System Engineering Management Plan, specifically: 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 architecture drivers and begin mission tradespace definition. Populate MEFFV Capability Baseline 1 (first of 3) within capability database, based on Expeditionary Maneuver Warfare (EMW) and draft MEFFV concepts, and technology predictions, vetted through Service and joint experiments and games. Examine risk mitigation methodologies.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.300</b>	<b>0.450</b>	
RDT&E Articles Qty				
Initiate Evaluation Plan, specifically: Build business technology evaluation plan and strategy for progress; Continue return on investment study; initiate Acquisition Strategy Development Plan; initiate logistical analysis.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.450</b>	<b>0.600</b>	
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, training and office materials.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>1.879</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.				
(U) Total \$	1.901	6.169	8.256	

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>		DATE: <b>February 2004</b>																																									
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDTE&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>																																									
<p><b>(U) PROJECT CHANGE SUMMARY:</b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="width:10%; text-align: right;"><u>FY2003</u></th> <th style="width:10%; text-align: right;"><u>FY2004</u></th> <th style="width:10%; text-align: right;"><u>FY2005</u></th> </tr> </thead> <tbody> <tr> <td><b>(U) FY 2004 President's Budget:</b></td> <td style="text-align: right;"><b>2.451</b></td> <td style="text-align: right;"><b>6.246</b></td> <td style="text-align: right;"><b>8.283</b></td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    (U) Congressional/OSD Program Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    (U) Congressional Rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    (U) Congressional Increases</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    (U) Reprogrammings</td> <td style="text-align: right;">-0.132</td> <td></td> <td></td> </tr> <tr> <td>    (U) SBIR/STTR Transfer</td> <td style="text-align: right;">-0.064</td> <td></td> <td></td> </tr> <tr> <td>    (U) Minor Affordability Adjustment</td> <td style="text-align: right;">-0.354</td> <td style="text-align: right;">-0.077</td> <td style="text-align: right;">-0.027</td> </tr> <tr> <td><b>(U) FY 2005 President's Budget:</b></td> <td style="text-align: right;"><b>1.901</b></td> <td style="text-align: right;"><b>6.169</b></td> <td style="text-align: right;"><b>8.256</b></td> </tr> </tbody> </table> <p style="margin-top: 10px;">CHANGE SUMMARY EXPLANATION:          (U) Funding: See Above.          (U) Schedule: Not Applicable.          (U) Technical: Not Applicable.</p> <p style="margin-top: 20px;"><b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b> Not Applicable</p> <p style="margin-top: 20px;"><b>(U) Related RDT&amp;E:</b> Not Applicable.</p> <p style="margin-top: 20px;"><b>(U) D. ACQUISITION STRATEGY:</b> Not Required</p> <p style="margin-top: 20px;"><b>(U) E. MAJOR PERFORMERS:</b>          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           FY03-05 Major Performers to be determined based on the Phase A activity.</p> <p style="margin-top: 20px;"><b>(U) D. SCHEDULE PROFILE:</b> Not Applicable.</p>					<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<b>(U) FY 2004 President's Budget:</b>	<b>2.451</b>	<b>6.246</b>	<b>8.283</b>	(U) Adjustments from the President's Budget:				(U) Congressional/OSD Program Reductions				(U) Congressional Rescissions				(U) Congressional Increases				(U) Reprogrammings	-0.132			(U) SBIR/STTR Transfer	-0.064			(U) Minor Affordability Adjustment	-0.354	-0.077	-0.027	<b>(U) FY 2005 President's Budget:</b>	<b>1.901</b>	<b>6.169</b>	<b>8.256</b>
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