

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	127371	80407	57160	42467	170556	184559	185620	209767	Continuing	Continuing
CA4 CONTAMINATION AVOIDANCE (ACD&P)	14650	4996	3125	3165	23047	19905	16559	20881	Continuing	Continuing
CM4 HOMELAND DEFENSE (ACD&P)	10978	0	0	0	0	0	0	0	0	10978
CO4 COLLECTIVE PROTECTION (ACD&P)	6588	0	0	0	0	0	0	0	0	6588
CP4 COUNTERPROLIFERATION SUPPORT (ACD&P)	21960	0	0	0	0	0	0	0	0	21960
DE4 DECONTAMINATION SYSTEMS (ACD&P)	989	1000	3093	7662	0	0	0	0	0	12744
IS4 INFORMATION SYSTEMS (ACD&P)	3275	0	0	0	0	0	3591	4846	Continuing	Continuing
MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P)	26346	2600	0	0	122592	139754	133939	134012	Continuing	Continuing
MC4 MEDICAL CHEMICAL DEFENSE (ACD&P)	24809	37508	14529	4446	0	0	0	0	0	81292
MR4 MEDICAL RADIOLOGICAL DEFENSE	0	8967	7117	3321	0	0	0	0	0	19405
TE4 TEST & EVALUATION (ACD&P)	17776	1992	14049	6407	5646	5497	11944	30028	Continuing	Continuing
TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P)	0	23344	15247	17466	19271	19403	19587	20000	Continuing	Continuing

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	
<p>A. <u>Mission Description and Budget Item Justification:</u> Operational forces have an immediate need to survive, safely operate, and sustain operations in a Chemical and Biological (CB) agent threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions. This program element supports the Advanced Component Development and Prototypes (ACD&P) of CB defensive equipment, both medical and non-medical. DoD missions for civil support operations has recently expanded and has resulted in providing focus to develop technologies to support CB counterterrorism initiatives. Projects within BA4 have been structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. ACD&P is conducted for an array of chemical/biological/toxin detection and warning systems providing early warning, collector concentrators, generic detection, and improved reagents, and decontamination systems using solutions that will remove and/or detoxify contaminated material without damaging combat equipment, personnel or the environment. In the medical chemical/biological defense area, ACD&P is conducted for improved medical equipment, vaccines, and drugs essential to counteracting lethal and human performance degrading effects of chemical and biological agent threats. Specific items include improvements to nerve agent antidotes, topical skin protectants, anticonvulsants, biological agent diagnostics, and vaccines to protect against various Biological Warfare (BW) agents. ACD&P also supports the Product Director Test Equipment, Strategy and Support (PD TESS) providing for the development of updated test capabilities to evaluate Chemical, Biological, Radiological and Nuclear Defense systems. Also included is the Techbase Technology Transition effort which validates high-risk/high-payoff technologies that could significantly improve warfighter capabilities.</p> <p>This Program Element focuses on efforts associated with advanced technology development used to demonstrate general military utility to include ACD&P in the areas of Non-Traditional Agents (NTA) and chemical/biological defense equipment and is correctly placed in Budget Activity 4.</p>		
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B. <u>Program Change Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Previous President's Budget (FY 2007 PB)	122274	73111	139990	149679
FY08 President's Budget	127371	80407	57160	42467
Total Adjustments	5097	7296	-82830	-107212
a. Congressional General Reductions	0	-2304	0	0
b. Congressional Increases	3257	9600	0	0
c. Reprogrammings	3228	0	0	0
d. SBIR/STTR Transfer	-1190	0	0	0
e. Other Adjustments	-198	0	-82830	-107212

Change Summary Explanation:

Funding: FY08 - Realignment of funding to BA2 in support of the Transformational Medical Technology Initiative which focuses on broad-spectrum defenses against intracellular bacterial pathogens and hemorrhagic fevers (-\$69,096K MB4). Establish separate project to develop test capabilities to evaluate CBRN Defense systems (+\$14,409K TE4). Other fund adjustments and realignments (-\$4,906K CP4; -\$10,905K CP4; -\$1,424K DE4; -\$1,926K MB4; -\$688K MC4).

FY09 - Realignment of funding to BA3 in support of the Transformational Medical Technology Initiative which focuses on broad-spectrum defenses against intracellular bacterial pathogens and hemorrhagic fevers (-\$97,136K TB3). Establish separate project to develop test capabilities to evaluate CBRN Defense systems (+\$6,407K TE4). Other fund adjustments and realignments (-\$9,203K CA4; +\$2,383K CP4; +\$5,085K DE4; -\$2,299K MB4; -\$582K MC4).

Schedule: N/A

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	
Technical: N/A		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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COST (In Thousands)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Cost to	Total Cost
	Actual	Estimate	Complete							
CA4 CONTAMINATION AVOIDANCE (ACD&P)	14650	4996	3125	3165	23047	19905	16559	20881	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project CA4 CONTAMINATION AVOIDANCE (ACD&P): This Advanced Component Development and Prototypes (ACD&P) funding supports Component Advanced Development and System Integration (CAD/SI) of reconnaissance, detection, identification, and hazard prediction equipment, hardware, and software. Individual projects are: (1) Joint Biological Tactical Detection System (JBTDS), (2) Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM) and (3) Joint NBC Reconnaissance System (JNBCRS) Inc 1.

The JBTDS will be a lightweight biological agent detector that will detect, warn and isolate samples. Sample isolation will permit sample evacuation and confirmatory analysis. The detector will be networked to provide a cooperative detection capability to increase the probability of warning personnel and reduce the probability of false alarm. The JBTDS will be one man portable (i.e. < 35 lbs) and capable of being battery operated.

The JCBRAWM will provide an enhanced detection capability for waterborne CBR agents using an incremental development strategy. Increment 1 will provide the first biological and radiological detection capability in water. Increment 2 will improve on the Increment 1 biological detection capability and the fielded M272 Water Test Kit chemical agent detection capability. Increment 3 will replace the M272 Water Test Kit chemical agent detection capability with new technology. Increment 4 will provide a capability for in-line and continuous sampling for CBR contamination.

Joint NBC Reconnaissance System (JNBCRS) I - This joint program follows a modified Non-Developmental Item (NDI) strategy integrating Government Furnished Equipment (GFE), NDI, and systems undergoing development in parallel programs into an integrated suite of detection, analysis, and dissemination of equipment/software.

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT BIO TACTICAL DETECTION SYSTEM	0	987	3125	3165
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JBTDS - FY 07 - Establish Product Office and perform Pre Milestone (MS) A activities for new program start and initiate Integrated Process Teams (IPTs).	0	785	0	0
JBTDS - FY 07/08/09 - Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	0	202	326	330
JBTDS - FY 08/09 - Conduct MS B activities, continue IPT and initiate and conduct Technology Readiness Evaluation (TRE).	0	0	1243	785
JBTDS - FY 08 - Initiate Modeling & Simulation support, data fusion network demonstration, sensor density study and algorithm verification and validation.	0	0	1556	0
JBTDS - FY 09 - Initiate system design and development.	0	0	0	2050
Total	0	987	3125	3165

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JS CHEMICAL/BIOLOGICAL/RADIOLOGICAL AGENT WATER MONITO	3400	0	0	0
RDT&E Articles (Quantity)	5000	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JCBRAWM - FY 06 - Continued systems engineering support and initiated document preparation for MS A.	552	0	0	0
JCBRAWM - FY 06 - Continued procurement of test items (2,000 test tickets at \$0.1K each, \$200K total, Vendor: ANP Technology, Inc.; 3,000 test tickets at \$0.07 each, \$200K total, Vendor: SAS, Inc.).	400	0	0	0
JCBRAWM - FY 06 - Initiated and completed test and evaluation efforts to include preparation of test methodology, design of test set-up and development of equipment specifications. Initiated probability/receiver operating characteristics curves.	2448	0	0	0
Total	3400	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS) I	2137	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JNBCRS I - FY 06 - Conducted Limited Objective Experiment (LOE) to establish the foundation for standard interface control documents for Chemical Biological Radiological Nuclear Explosive (CBRNE) sensor manufacturers.	1657	0	0	0
JNBCRS I - FY 06 - Developed an analytically based rationale for choosing challenge levels for setting requirements for protective materials and other CBDP commodities.	240	0	0	0
JNBCRS I - FY 06 - Provided modeling and simulation technical support as part of the technical architectural development for Future Combat Systems.	240	0	0	0
Total	2137	0	0	0

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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
MDAP SUPPORT	0	3963	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
MDAP SPRT #1 - Congressional Interest Item - FY 07 - Naval Post Graduate School Coalition and Operating Area Surveillance Targeting Systems (COASTS).	0	991	0	0
MDAP SPRT #2 - Congressional Interest Item - FY 07 - Photovoltaic Power Supply for Autonomous Sensors.	0	991	0	0
MDAP SPRT #3 - Congressional Interest Item - FY 07 - Wide Spectrum Bio-ID.	0	1981	0	0
Total	0	3963	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TECHNOLOGY TRANSFER FOR BIO SENSORS	9113	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
TT Bio - Congressional Interest Item - FY 06 - Continuation of Robotics Testbed & Establishment of Cooperative Unmanned Ground and Aerial Vehicle Incubator.	991	0	0	0
TT Bio - Congressional Interest Item - FY 06 - Next Generation Dual Use Bio-Defense Technologies.	991	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) PROJECT CA4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
TT Bio - Congressional Interest Item - FY 06 - Advance Sensor Technology R&D Center.	1486	0	0	0
TT Bio - Congressional Interest Item - FY 06 - Wide-Spectrum Bio-ID Sensor.	4159	0	0	0
TT Bio - Congressional Interest Item - FY 06 - BioBlower.	1486	0	0	0
Total	9113	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	46	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	46	0	0
Total	0	46	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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C. <u>Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
CA5 CONTAMINATION AVOIDANCE (SDD)	68829	46352	31623	36677	42135	53117	64030	34943	Cont	Cont
CA7 CONTAMINATION AVOIDANCE OPERATIONAL SYS DEV	9671	7008	0	0	0	0	0	0	0	16679
JC0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	112766	105333	77784	76397	112000	111957	101539	100360	Cont	Cont
JC0101 JS CHEMICAL/BIOLOGICAL/RADIOLOGICAL AGENT WATER MONITOR	0	0	5047	6067	3221	0	0	0	0	14335
JC0250 JOINT BIO STANDOFF DETECTOR SYSTEM (JBSDS)	16483	0	0	0	0	0	0	20161	Cont	Cont
JC1500 NBC RECON VEHICLE (NBCRV)	58460	10225	7814	0	0	0	0	0	0	76499
JF0100 JOINT CHEM AGENT DETECTOR (JCAD)	0	22588	33855	38393	38114	35437	47001	63340	Cont	Cont
M98801 AUTO CHEMICAL AGENT ALARM (ACADA), M22	34511	14437	0	0	0	0	0	0	0	48948
MC0100 JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)	31151	52586	50385	75261	101413	119453	159700	164043	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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<u>C. Other Program Funding Summary (Cont):</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
MX0001 JOINT BIOLOGICAL TACTICAL DETECTION SYSTEM	0	0	0	0	0	8365	15365	25321	Cont	Cont
S10801 JS LTWT STANDOFF CW AGT DETECTOR (JLSCAD)	14615	19497	16440	0	0	0	0	10000	Cont	Cont

D. Acquisition Strategy:

JBTDS The JBTDS will use an evolutionary development strategy to spiral in upgrades/improvements until the objective requirements are met. The JBTDS program will execute Milestone A in FY07. Technology Development Phase will run thru FY09 to develop system concepts, prepare Milestone B documentation and reduce risk. Technology Development will include conduct of market research, technology demonstrations, modeling and simulation efforts, data fusion network demonstrations, and evaluation of the most promising government and commercial technology in a Technology Readiness Evaluation. System Development and Demonstration (SDD) phase will commence with Milestone B. SDD will finalize system designs and procure devices to test and demonstrate device capabilities against requirements. Pre-milestone activities to reach Milestone A were initiated in FY06.

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
JCBRAWM	<p>JCBRAWM will provide an enhanced detection capability for waterborne CBR agents using an incremental development strategy. Increment 1 will provide the first biological and radiological detection capability in water. Milestone C for Low Rate Initial Production (LRIP) is planned for 1QFY08. Increment 2 will improve on the Increment 1 biological detection capability and the fielded M272 Water Test Kit chemical agent detection capability. MS B of Increment 2 is planned for FY09. Increment 3 will replace the M272 Water Test Kit chemical agent detection capability with new technology. MS B for Increment 3 is planned for FY11. Increment 4 will provide a capability for in-line and continuous sampling for CBR contamination. MS B for Increment 4 is planned for FY14.</p>	
JNBCRS I	<p>This joint program follows a modified Non-Developmental Item (NDI) strategy integrating Government Furnished Equipment (GFE), NDI, and systems undergoing development in parallel programs into an integrated suite of detection, analysis, and dissemination of equipment/software. A Low Rate Initial Production contract for the build and integration of 14 M1113 HMMWV variants was awarded on 4 March 2004. Two production representative LAVs were tested concurrently with LRIP HMMWVs during the 3QFY06. Initial Operational Capability (IOC) for HMMWV and LAV variants is Jun 07 (Objective) and Dec 07 (Threshold). Upon successful completion of LRIP and Multi-service Test and Evaluation (MOT&E), a Full Rate Production (FRP) competitive contract is anticipated.</p>	
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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBTDS													
PM/MS S - JPM BD, APG, MD	MIPR	JPM BD, APG, MD	U	0	202	1Q FY07	326	1Q FY08	330	1Q FY09	0	858	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	46	NONE	0	NONE	0	NONE	0	46	0
Subtotal IV. Management Services:					248		326		330		0	904	

Remarks:

TOTAL PROJECT COST:		4996		3125		3165		0	11286
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Project CA4/Line No: 075

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Exhibit R-4a, Schedule Profile

DATE
February 2007

BUDGET ACTIVITY
RDT&E DEFENSE-WIDE/
BA4 - Advanced Component Development and Prototypes
(ACD&P)

PE NUMBER AND TITLE
0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) **PROJECT**
CA4

D. Schedule Profile:

	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JBTDS																																
MS A Decision							3Q																									
Market Survey					1Q		3Q																									
System Engineering Trade Study							3Q	4Q																								
CDD							3Q					3Q																				
MS B Doc Prep							4Q					4Q																				
MS B Decision												2Q																				
SDD												2Q				4Q																
Capability Production Document															1Q	4Q																
MS C Decision																				1Q												
Low Rate Initial Production (LRIP)																				1Q				3Q								
Developmental Test & Evaluation															1Q	4Q																
Operational Test & Evaluation																				1Q				4Q								
Full Rate Production (FRP) Decision																								2Q								
FRP																								2Q				4Q				
First Unit Equipped (FUE)																								3Q								
JCBRAWM																																

Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4
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D. <u>Schedule Profile (cont):</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JCBRAWM (Cont)																																
Purchase Test Items	>>	2Q																														
Contractor Test & Evaluation Efforts	>>	—	4Q																													
JNBCRS I																																
Initial Prototype Delivery			3Q	4Q																												
Advanced Prototype Delivery					1Q																											
Technical Report						2Q																										

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CM4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
CM4 HOMELAND DEFENSE (ACD&P)	10978	0	0	0	0	0	0	0	0	10978

A. Mission Description and Budget Item Justification:

Project CM4 HOMELAND DEFENSE (ACD&P): This project funds component level testing of Commercial off-the-shelf (COTS) chemical and biological detection equipment in support of Weapons of Mass Destruction Civil Support Team (WMD-CST) operations. Complimentary development efforts continue into CM5 for the Analytical Laboratory System (ALS) Increment 1 and Unified Command Suite (UCS) Increment 1 upgrades. In addition, this project funds the development of COTS Training Devices in support of the WMD-CST mission.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TECHNOLOGY TRANSFER FOR BIO SENSORS	8417	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
TT Bio - Congressional Interest Item - FY 06 - Countermeasures to Chemical and Biological Threats/Rapid Response.	8417	0	0	0
Total	8417	0	0	0

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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
WMD - CIVIL SUPPORT TEAMS	2561	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
WMD-CST - FY 06 - Provided Government Engineering and Planning Support.	311	0	0	0
WMD-CST - FY 06 - Conducted component testing of Commercial off-the-shelf (COTS) detection, protection and decontamination equipment.	2047	0	0	0
WMD-CST - FY 06 - Conducted testing of Analytical Laboratory System (ALS) components.	203	0	0	0
Total	2561	0	0	0

C. <u>Other Program Funding Summary:</u>		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
CM5 HOMELAND DEFENSE (SDD)		387	4000	0	0	0	0	0	0	0	4387
JS0004 WMD - CIVIL SUPPORT TEAM EQUIPMENT		56404	13146	0	0	0	0	0	0	0	69550
JS0500 CB INSTALLATION FORCE PROTECTION PROGRAM		144708	76619	86418	88748	62300	60070	0	0	0	518863

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CM4

D. Acquisition Strategy:

WMD CST

This program utilizes multiple acquisition vehicles to deliver a CBRN capability to the WMD CSTs.

ALS Increment 1:

The ALS Increment 1 program will upgrade the analytical capability of the ALS System Enhancement Program (SEP) system with the objective of improving chemical and biological detection sensitivity and selectivity in line with the requirements as outlined in the validated Capability Production Document (CPD).

Government off-the-shelf (GOTS) Detection, Protection, and Decontamination Equipment:

Procure Chemical and Biological Defense equipment as outlined in Defense Reform Directive #25 (see GOTS items listed below under Program Unit Cost).

COTS Evaluation:

Evaluate existing and new COTS equipment for incorporation into the NGB CST Table of Distribution and Allowances (TDA) and USAR Letter of Authorization (LOA).

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CM4
<p>I. Product Development: Not applicable</p> <p>II. Support Costs: Not applicable</p> <p>III. Test and Evaluation: Not applicable</p> <p>IV. Management Services: Not applicable</p>		
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
CO4 COLLECTIVE PROTECTION (ACD&P)	6588	0	0	0	0	0	0	0	0	6588

A. Mission Description and Budget Item Justification:

Project CO4 COLLECTIVE PROTECTION (ACD&P): Funding supports component development and integration of Chemical and Biological (CB) Collective Protection Systems that are smaller, lighter, less costly and more easily supported logistically at the crew, unit, ship, and aircraft level. Collective Protection Systems define a number of unique components that incorporate common basic principles and ensure that breathing air introduced into selected areas or zones is always clean and contaminated air cannot seep into those areas. Generally, Collective Protection technologies incorporate special filters for cleaning contaminated air and high pressure fans to deliver the clean air into the selected area. The fans also provide an over-pressure to prevent infiltration of contaminated outside air. Additionally, some protected areas like portable shelters, may require a special liner or material to be applied inside the shelter to prevent contaminants from infiltrating. In summary, Collective Protection provides a safe, shirt-sleeve environment for a single warfighter or a group of warfighters regardless of the contamination levels outside the protected area.

System funded under this project is: (1) Joint Expeditionary Collective Protection (JECP).

JECP - Results of a Baseline Capability Assessment conducted by the Joint Requirements Office (JRO) identified expeditionary Collective Protection (CP) as the highest priority capability gap within the commodity area. JECP provides the Joint Expeditionary Forces a Collective Protection (CP) capability which is lightweight, compact, modular, and affordable. A family of systems is planned that will allow the application of CP to portable hard-side and soft-side shelters, enclosed spaces of opportunity, and in remote austere locations as a stand alone resource. JECP will be capable of protecting personnel groups of varying size, unencumbered by Individual Protective Equipment (IPE), from the effects of CB agents, Toxic Industrial Materials (TIMs), heat, dust, and sand. The employment of JECP is a strategic deterrence against enemy use of CBRN agents or TIMs, and will reduce the need for personnel and equipment decontamination.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
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B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT EXPEDITIONARY COLLECTIVE PROTECTION	6588	0	0	0
RDT&E Articles (Quantity)	30	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JECF - FY 06 - Established the Systems Management Office (SMO) for day-to-day program execution including overall guidance and direction to the JECF IPT, budget preparation, generation of acquisition documentation supporting milestone decisions and JPEO/JPM reporting requirements. The SMO led all contracting related efforts, providing the core framework and language for all JECF contractual documentation including but not limited to RFP's, source selection plans, source selection criteria, contract language, contract modifications, and contract options.	735	0	0	0
JECF - FY 06 - Established the Systems Engineering Working-level IPT (SE WIPT) responsible for implementing a disciplined and robust systems engineering process throughout the acquisition life cycle in accordance with the JPEO-CBD Systems Engineering policy. The SE WIPT led all performance and technical related efforts associated with JECF. Major tasks included development, maintenance, and oversight of the System Engineering plan, Work Breakdown Structure (WBS), system architecture, system performance specification, Technology Development strategy, and technology demonstrations.	1075	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
JECF - FY 06 - Conducted an Analysis of Alternatives (AoA) leveraging the market survey, test results, and lessons learned from the FY05 ColPro Technology Readiness Evaluation (TRE). Planned a Limited Objective Experiment (LOE) with the Joint Combat Developer, Joint Experimentation and Analysis Branch, to examine service unique tactics, techniques, and procedures. Collaborated with the JRO Shield Integrator in preparing acquisition documentation and decision review package for Milestone (MS) A. Provided subject matter expert support to the Joint Requirements Office (JRO) in development of the Concept of Operation (ConOps) and the Capability Development Document (CDD). Developed a Life Cycle Cost Estimate (LCCE) for MS B.	633	0	0	0
JECF - FY 06 - Leveraged the findings of the ColPro TRE and the AoA for the basis of selected technology demonstrations. The purpose of the technology demonstrations was to mitigate risk and identify affordable mature technologies that individually or together meet the warfighters needs. Technologies demonstrated included; five whole CP systems with an average unit cost of \$67.2K, two quick erect liners at an average unit cost of \$82K, two quick erect airlocks at an average unit cost of \$76.5K, and one passive CP Shelter at a unit cost of \$28K. Planned Residual Life Indicator demonstration will develop 20 cartridges at an average cost of \$9K. The total cost of technologies demonstrated was \$861K. The Systems Engineering Working Integrated Product Team (SE WIPT) worked closely with the System Management Office (SMO) to plan, procure, test, and oversee all of the selected technology demonstrations.	2348	0	0	0
JECF - FY 06 - Established the Test & Evaluation Working-level IPT (TE WIPT) to lead all aspects of the JECF test program including the Test & Evaluation Master Plan (TEMP), Operational Assessments (OA), and Developmental Testing (DT). Coordinated with the Operational Test Agency (OTA) for Operational Testing (OT), the T&E Executive, the Product Director for Test Evaluation Systems and Support (PD-TESS), and the Test & Evaluation Capability Management IPT (TECM IPT) to ensure infrastructures and methodologies are available and certified to support system testing.	995	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
JECP - FY 06 - Provided strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	802	0	0	0
Total	6588	0	0	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
CO5 COLLECTIVE PROTECTION (SDD)	656	12534	13956	11477	2728	0	0	0	0	41351
JN0014 COLLECTIVE PROT SYS AMPHIB BACKFIT (CPS BACKFIT)	10377	8798	10564	5124	0	0	0	0	0	34863
JP0911 CP FIELD HOSPITALS (CPFH)	2900	4073	3519	3369	3475	3519	4318	4739	Cont	Cont
JP1111 JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)	0	0	0	0	6173	7997	5171	4790	Cont	Cont
R12301 CB PROTECTIVE SHELTER (CBPS)	18137	30462	24774	32001	32424	32828	37363	37330	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4

D. Acquisition Strategy:

JECP Strategy based on incremental development in consonance with the JRO/User developed capability documents. During the Pre-MS A Concept Refinement Phase, conduct a tailored Analysis of Alternatives (AoA) leveraging the market survey, test results and lessons learned from the FY05 ColPro Technology Readiness Evaluation (TRE). During the Technology Development Phase following MS A, technology demonstrations will be conducted to mitigate risk and identify affordable mature technologies that individually or together meet the warfighters needs. Following MS B, a Statement of Objectives (SOO) and Performance Specification will be used to award competitive cost plus incentive type contract(s) to build prototypes that will be subjected to robust engineering developmental testing and Operational Assessment during the System Development & Demonstration phase. Following MS C, award a contract for Low Rate Initial Production (LRIP) to support formal Developmental Testing (DT) and Initial Operational Test & Evaluation (IOT&E). Following a successful Full Rate Production (FRP) decision, award a fixed price production contract with multi-year options and product improvement incentives. For each incremental capability identified by the user, a similar approach for MS B and C will be used to seamlessly integrate improved and/or new technologies into follow-on increments to achieve a full JECP capability.

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
<p>I. Product Development: Not applicable</p> <p>II. Support Costs: Not applicable</p> <p>III. Test and Evaluation: Not applicable</p> <p>IV. Management Services: Not applicable</p>		
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Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CO4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
JECP																																	
AoA		1Q	2Q																														
MS-A Decision			3Q																														
Technology Demonstrations			3Q	2Q																													
Complete CDD				2Q																													
Decision Review				2Q																													
Limited Objective Experiment				1Q	2Q																												
MS-B Decision					3Q																												

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)				PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)					PROJECT CP4	
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COST (In Thousands)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Cost to	Total Cost
	Actual	Estimate	Complete							
CP4 COUNTERPROLIFERATION SUPPORT (ACD&P)	21960	0	0	0	0	0	0	0	0	21960

A. Mission Description and Budget Item Justification:

Project CP4 COUNTERPROLIFERATION SUPPORT (ACD&P): Technology Demonstrations validate high-risk/high-payoff technologies that could significantly improve warfighter capabilities. These programs offer an opportunity to identify and efficiently move emerging technologies from laboratory experiments to acquisition programs thru risk reduction, engineering and integration. They cover integrating and assessing technology in a realistic operational environment and often assess the technology as an integrated system. They seek to demonstrate the potential for enhanced military operational capability and/or cost effectiveness. Upon conclusion of the demonstration, the user/sponsor provides a determination of the military utility and operational impact of the technology demonstrated. Successfully demonstrated technologies with proven military utility can either be left in place for extended user evaluations, accepted into advanced stages of the formal acquisition process, proceed directly into limited or full-scale production or be returned to the technical base for further development.

The Contamination Avoidance at Sea Ports of Debarkation (CASPOD) ACTD provides technologies, tools, tactics and procedures for the recovery of throughput operations after a chemical or biological attack at a seaport during times of a major logistics operation. The CASPOD ACTD provided 13 technologies that were fielded into the CENTCOM AOR for the Extended User Evaluation and residual support phase. The ACTD completed at the end of FY06 and the residual support will terminate in March 2007.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CP4
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The Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance Vehicle (CUGR). ACTD will address several critical operational issues to enhance the speed, effectiveness, capabilities, and automation of surface and area CBRN contamination detection and identification. The technologies will be used to enhance the Joint NBC Reconnaissance System (JNBCRS) by using a non-surface contacting optical system that provides both surface contamination detection and identification in near real-time. Capabilities include traditional chemical agents and Toxic Industrial Chemicals (TICs). Additionally, the ACTD will provide a small unmanned ground platform (robotic) equipped with sensor packages capable of conducting CBRN detection. This unmanned platform will enable the reconnaissance crew to conduct CBRN reconnaissance in limited maneuver areas using a robotic platform carrying CBRN sensors that report findings to the operator using active telemetry.

The lack of a man portable point-detector for aerosolized Biological Weapons (BW) is not currently being met by existing DoD biological detection systems. This leaves expeditionary forces vulnerable to attack without indication until those exposed present symptoms. BW detection systems currently fielded are large, heavy, power-intensive, and expensive to procure and support. The Marine Corps has no fielded biological detection capability due to lack of system suitability and the dedicated force structure. The Expeditionary Biological Detection (EBD) ATD will be initiated with a Front End Analysis (FEA) to compare existing DoD biological agent detection/identification systems against USMC tactical biological detection needs. Candidate system must be able to automatically detect aerosolized BW clouds and collect samples for presumptive and confirmatory identification. The ability to discriminate, classify or identify the threat is desired. The system must be deployable and employable by Marine expeditionary forces and must be suitable for use within existing Marine Air-Ground Task Force (MAGTF) logistics and manpower constraints. Additionally, the role of portable biological point detectors in the greater context of existing Joint biological detection systems will be considered.

This Project transitions to Project TT4 in FY07.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
CPSP COUNTERPROLIFERATION SUPPORT	21960	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) PROJECT CP4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
Contamination Avoidance at Seaports of Debarkation (CASPOD) ACTD (DTO JD23) - FY 06 - Completed procurement and contractor logistics support services for residual support on selected technologies. Finalized CASPOD ACTD (DTO JD23).	3000	0	0	0
Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD - FY 06 - Continued program management and planning, documentation, Integrated Product Team (IPT) meetings, technical liaisons and transition planning. Continued Joint Contaminated Surface Detector (JCSD) systems engineering and technical testing. Continued CBRN Unmanned Ground Vehicle (CUGV) systems engineering, prototyping, technical testing and integration. Conducted JCSD and CUGV operational demonstrations. Completed JCSD prototyping, technical testing and integration. Continued modification of the Joint Nuclear Biological Chemical Reconnaissance System (JNBCRS) shelter design, fabricated and integrated on High Mobility Multipurpose Wheeled Vehicles (HMMWVs). Continued Concepts-of-Operations (CONOPs) and techniques, tactics, and procedures (TTPs) development, and operational test planning. Program transitions in FY 07 to project TT4.	16927	0	0	0
Expeditionary Biological Detection (EBD) - FY 06 - Initiated Concepts-of-Operations (CONOPs) and techniques, tactics, and procedures (TTPs) development and operational test planning.	2033	0	0	0
Total	21960	0	0	0

C. Other Program Funding Summary: N/A

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BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CP4
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D. Acquisition Strategy:

CPSP ACTD This project is a generic block description for future ACTD and ATDs. The CUGR ACTD will execute its demonstration phase in FY06 and FY07. CUGR will transition laser detection technology into various reconnaissance vehicles that are currently in an Acquisition Program under Joint Program Executive Office (JPEO) Program Manager for Reconnaissance. The CBRN Unmanned Ground Vehicle (CUGV) will transition to the Joint CBRN Dismountable Reconnaissance System (JCDRS). The Expeditionary Biological Detection technologies will be transitioned to the Joint Program Manager (JPM) Biological Detection and the Joint Biological Tactical Detection System (JBTDS).

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CP4
<p>I. Product Development: Not applicable</p> <p>II. Support Costs: Not applicable</p> <p>III. Test and Evaluation: Not applicable</p> <p>IV. Management Services: Not applicable</p>		
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4	PROJECT DE4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
DE4 DECONTAMINATION SYSTEMS (ACD&P)	989	1000	3093	7662	0	0	0	0	0	12744

A. Mission Description and Budget Item Justification:

Project DE4 DECONTAMINATION SYSTEMS (ACD&P): This ACD&P project supports the development of decontamination systems utilizing solutions that will remove and/or detoxify contaminated material without damaging combat equipment, personnel, or the environment. Decontamination systems provide a force restoration capability for units that become contaminated. Development efforts will provide systems which reduce operational impact and logistics burden, reduce sustainment costs, increase safety, and minimize environmental effects over currently fielded decontaminants.

This funding supports Joint Portable Decontamination System (JPDS), the Joint Platform Interior Decontamination (JPID) and Joint Service Transportable Decontamination System (JSTDS) programs.

JPDS will be used in immediate and operational decontamination operations and support thorough decontamination operations. JPDS will enhance decontamination capabilities by using the latest in technology to reduce or eliminate chemical, biological and toxic industrial material hazards in a safer and effective manner.

JPID will fill an immediate need to decontaminate chemical and biological warfare agents from vehicle/aircraft/buildings interiors, and associated cargo. JPID will develop two variants, the Joint Material Decontamination System - Tactical (JMDS-TAC) to decontaminate the interior of tactical ground vehicles and tactical aircraft and the Joint Material Decontamination System - Large Platform Interior (JMDS-LPI) to decontaminate the interior of large platforms (e.g., ships, large aircraft, buildings) and associated cargo. The JMDS-TAC and JMDS-LPI will include a JMDS wipe for removal of gross contamination.

JSTDS will be used in immediate and operational decontamination operations and support thorough decontamination operations.

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4
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B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT PORTABLE DECONTAMINATION SYSTEM	0	0	597	1967
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JPDS - FY 08 - Conduct Market Survey, analyze alternative contracting strategies. FY 09 - Prepare performance specifications, statement of work, solicitations, evaluate proposals and perform contract management.	0	0	100	900
JPDS - FY 08/09 - Perform programmatic, engineering, testing, logistics and risk management analysis. Coordinate with supporting Services to ensure that Service unique issues are addressed. Prepare documents to support Milestone B.	0	0	497	779
JPDS - FY 09 - Perform logistics and engineering analyses. Conduct technology readiness assessment, analyze alternative technical and logistic support approaches to support development of contracting strategy.	0	0	0	288
Total	0	0	597	1967

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT PLATFORM INTERIOR DECONTAMINATION	0	0	2496	2727
RDT&E Articles (Quantity)	0	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JPID - FY 08/09 - Initiate design of the Joint Material Decontamination System (JMDS) - Tactical (TAC) and JMDS-Large Platform Interior (LPI).	0	0	2496	2727
Total	0	0	2496	2727

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JS FAMILY OF DECON SYSTEMS (JSFDS)	989	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JSFDS (T&E Capability) - FY 06 - Overarching Decontamination Model throughout RDT&E - Developed a model to predict contamination-caused hazards for all phases of chemical and biological threats.	204	0	0	0
JSFDS (T&E Capability) - FY 06 - Developed and validated chemical decontamination test methods for full-system tests.	785	0	0	0
Total	989	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT SERVICE TRANSPORTABLE DECONTAMINATION SYSTEM - LA	0	0	0	2968
RDT&E Articles (Quantity)	0	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JSTDS-LS - FY 09 - Initiate Integrated Product Team (IPT) to develop JSTDS-LS.	0	0	0	1120
JSTDS-LS - FY 09 - Initiate design of JSTDS-LS.	0	0	0	766
JSTDS-LS - FY 09 - Prepare documentation for contract support and award.	0	0	0	1082
Total	0	0	0	2968

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
JOINT SERVICE TRANSPORTABLE DECONTAMINATION SYSTEM - SM	0	991	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JSTDS SS#1 - Congressional Interest Item - FY 07 - M291 Skin Decontamination Kit.	0	991	0	0
Total	0	991	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	9	0	0
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	9	0	0
Total	0	9	0	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
DE5 DECONTAMINATION SYSTEMS (SDD)	15357	11010	6019	10300	23791	19094	16945	12811	Cont	Cont
JD0055 JOINT SERVICE PERSONNEL/SKIN DECONTAMINATION SYSTEM (JSPDS)	0	11542	13011	0	0	0	0	0	0	24553
JD0056 JS TRANS DECON SYSTEM - SMALL SCALE (JSTDS-SS)	2911	7176	15628	22161	30474	34835	40346	17992	Cont	Cont
JD0058 JOINT PORTABLE DECONTAMINATION SYSTEM (JPDS)	0	0	0	0	0	4002	5014	4322	Cont	Cont
JD0060 JOINT PLATFORM INTERIOR DECONTAMINATION (JPID)	0	0	0	0	0	0	15102	31442	Cont	Cont
JD0061 JOINT SERVICE SENSITIVE EQUIPMENT DECON (JSSD)	0	0	0	5720	8837	8452	19915	23000	Cont	Cont
JD0062 HUMAN REMAINS DECON SYSTEM	0	0	0	0	1000	3458	3110	5000	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4
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D. Acquisition Strategy:

JPID The Joint Platform Interior Decontamination Program will be acquired as part of an overarching Joint Material Decontamination System (JMDS) evolutionary acquisition strategy, which covers both the JPID and Joint Service Sensitive Equipment Decontamination (JSSED) programs. This strategy uses a single technology I to meet the sensitive equipment and platform interior requirements. JMDS variants will be implemented in phases to leverage off lessons learned in the development process and to expand the capabilities to meet the different operational requirements. Each design is based off previous effort expanded to meet different operational requirements. A JMDS wipe for removal of gross contamination will be included as an accessory for each of the JMDS variants.

JSFDS The JSFDS program will use an evolutionary acquisition strategy with spiral development. This allows the program to leverage existing commercial products to provide an initial capability. The initial capability will be enhanced through product modifications and technology insertion to further enhance the warfighter's fixed site, equipment and personnel decontamination capability.

JSTDS SS The JSTDS Small-Scale program is implementing an evolutionary acquisition strategy using incremental and spiral development. Increment 1 will focus largely upon fielding hardware systems that improve upon the capability of the M17 Lightweight Decontamination System.

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) PROJECT DE4
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TOTAL PROJECT COST:		1000		3093		7662		0	11755	
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Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4	PROJECT DE4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JPDS																																
Market Survey									2Q																							
Solicitation release and review													1Q — 3Q																			
Milestone B																4Q																
JSTDS LS																																
JSTDS-LS RFP Release													1Q																			
JSTDS-LS Paper Down-selection													2Q																			
JSTDS-LS MS B													2Q																			
JSTDS-LS Down-selection Testing (DT I)																3Q 4Q																
JSTDS SS																																
Shelf Life Extension Test					1Q — 4Q																											

Project DE4/Line No: 075	Page 50 of 113 Pages	Exhibit R-4a (PE 0603884BP)
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
IS4 INFORMATION SYSTEMS (ACD&P)	3275	0	0	0	0	0	3591	4846	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project IS4 INFORMATION SYSTEMS (ACD&P): This Advanced Component Development and Prototypes (ACD&P) funding supports Component Advanced Development and System Integration (CAD/SI).

The Joint Program Executive Office - Chemical and Biological Defense (JPEO-CBD) Software Support Activity (SSA) is a JPEO-CBD user developmental support and service organization supporting all JPMs and JPEO-CBD Directorates, and providing enterprise-wide services and coordination to facilitate net-centric interoperability. The SSA will provide the CBRN Warfighter with Joint service solutions for Information Assurance, Verification, Validation and Accreditation (VV&A), and Data Management; interoperable and integrated net-centric, Service-oriented, composable solutions for CBD; and infusion of latest technologies into programs of record. CBRN user community and related communities of interest have need for CBRN "plug and play" capability to allow interoperability and re-configurability across the enterprise. The requirement for net-centric, composable solutions provides the near term foundation for the Warfighters ability to communicate his CBRN solutions and interoperate with other service operational systems. It also supports a longer term ability to interoperate with related agencies and to reduce the Warfighter's CBRN footprint as technologies improve.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SOFTWARE SUPPORT ACTIVITY	304	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4	PROJECT IS4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SSA - FY 06 - Assisted JPEO-CBD programs. Implemented the Enterprise Technical C4I architecture. Analyzed requirements and assisted programs with implementation of the CBRN Data Model. Supported CBRN Data Model updates. Provided information assurance compliance testing for JPEO-CBD programs. Provided enterprise modeling, simulation, verification, validation and accreditation support. Provided ISP development support for JPEO-CBD programs. Provided science and technology transition support and demonstration. Provided developmental support for JPEO-CBD programs and users.	304	0	0	0
Total	304	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TECHNOLOGY TRANSFER FOR BIO SENSORS	2971	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
TT Bio - Congressional Interest Item - FY 06 - E-Smart Threat Agent Network for Liberty Island.	2971	0	0	0
Total	2971	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4
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C. <u>Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	6112	6517	6744	6944	6628	7000	8200	5679	Cont	Cont
IS5 INFORMATION SYSTEMS (SDD)	74728	24951	47465	39453	27610	17652	14893	25293	Cont	Cont
IS6 INFORMATION SYSTEMS (RDT&E MGT SUPPORT)	1493	1527	0	0	0	0	0	0	0	3020
IS7 INFORMATION SYSTEMS (OP SYS DEV)	0	0	700	918	1349	1910	1761	1612	Cont	Cont
JC0208 JOINT EFFECTS MODEL (JEM)	1996	2050	3534	4394	0	0	0	0	0	11974
JC0209 JOINT OPERATIONAL EFFECTS FEDERATION (JOEF)	0	0	3611	3328	3523	0	0	0	0	10462

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT IS4

D. Acquisition Strategy:

SSA The JPEO-CBD Software Support Activity (SSA) is a JPEO-CBD user support organization spanning and supporting all Joint Project Managers (JPMs) and JPEO-CBD Directorates. The SSA provides enterprise-wide services and coordination across all JPEO-CBD Programs of Record (PORs) that contain data or software, or are capable of linking to the Global Information Grid (GIG). The SSA facilitates interoperability, integration, and supportability of existing and developing IT and National Security Systems (NSS) across the JPEO and all JPMs.

Phase 1a identifies JPEO-CBD JPMs and programs that deal with data or software, and have an IT component. This will be followed by coordination with the JPMs and programs to facilitate the concepts of interoperability, integration and supportability of enterprise-wide services. Next follows work with user communities to develop and demonstrate enterprise-wide common architectures, products and services. [BA5 - System Development and Demonstration] .

Phase 1b established management and control measures for tracking and reporting progress of the various elements described in Phases 1 and 2. This includes establishing, tracking, and performing configuration management of inventories and databases of IT systems and their states of interoperability and information assurance compliance. [BA6 - RDT&E Management Support].

Phase 2 will support the application of the enterprise-wide architectures, products and services into the programs, with verification of compliance with the defined products and services. [BA7 - Operational Systems Development].

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT IS4
<p>I. Product Development: Not applicable</p> <p>II. Support Costs: Not applicable</p> <p>III. Test and Evaluation: Not applicable</p> <p>IV. Management Services: Not applicable</p>		
Project IS4/Line No: 075	Page 55 of 113 Pages	Exhibit R-3 (PE 0603884BP)

Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4	PROJECT IS4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SSA																																
Establish SSA Charter, Management Plans, Processes, Procedures		>>	2Q																													

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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	COST (In Thousands)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Cost to	Total Cost
		Actual	Estimate	Complete							
MB4	MEDICAL BIOLOGICAL DEFENSE (ACD&P)	26346	2600	0	0	122592	139754	133939	134012	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P): This project funds the Advanced Component Development and Prototypes (ACD&P) phase of vaccines, drugs, and diagnostic medical devices that are directed against validated biological warfare (BW) agents to include bacteria, viruses, and toxins of biological origin. The results of these efforts, and those conducted during the System Development and Demonstration (SDD) phase, will be used to submit a Biologic License Application (BLA) to the Food and Drug Administration (FDA) for product licensure. Upon FDA licensure, the product will transition to full-scale licensed production. Products to be developed under this program include Venezuelan Equine Encephalitis, Recombinant Botulinum and Plague vaccines.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TECHNOLOGY TRANSFER FOR BIO SENSORS	2526	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
TT Bio - Congressional Interest Item - FY 06 - Roll-on-Roll-Off Infection Control Facility.	2526	0	0	0
Total	2526	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
BOTULINUM VACCINE	15828	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JVAP - FY 06 - Recombinant Botulinum Vaccine - Continued non-clinical studies.	3542	0	0	0
JVAP - FY 06 - Recombinant Botulinum Vaccine - Continued large scale process validation.	8089	0	0	0
JVAP - FY 06 - Recombinant Botulinum Vaccine - Initiated planning for Phase 1B clinical trial.	4197	0	0	0
Total	15828	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
ENCEPHALITIS VACCINE	6810	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JVAP - FY 06 - Equine Encephalitis Vaccine - Continued manufacturing process development.	2677	0	0	0
JVAP - FY 06 - Equine Encephalitis Vaccine - Continued Phase 1 clinical trial on the VEE 1 AB vaccine.	4133	0	0	0
Total	6810	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
PLAGUE VACCINE	1182	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
JVAP - FY 06 - Plague Vaccine - Continued Phase 1 clinical trial and non-clinical studies of US candidate.	682	0	0	0
JVAP - FY 06 - Plague Vaccine - Continued large scale process development.	400	0	0	0
JVAP - FY 06 - Plague Vaccine - Completed MS B and transitioned to SDD.	100	0	0	0
Total	1182	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
BIOLOGICAL VACCINES	0	2575	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
VACCINES #5 - Congressional Interest Item - FY 07 - Oral Anthrax/Plague Vaccine.	0	2575	0	0
Total	0	2575	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	25	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	25	0	0
Total	0	25	0	0

<u>C. Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
JM0001 JOINT BIO AGENT IDENTIFICATION AND DIAGNOSTIC SYS (JBAIDS)	12504	5710	4934	483	0	0	0	0	0	23631
JX0005 DOD BIOLOGICAL VACCINE PROCUREMENT	45809	38917	48627	47134	54847	54639	60495	61031	Cont	Cont
JX0210 CRITICAL REAGENTS PROGRAM (CRP)	2192	2297	2430	0	0	0	0	0	0	6919
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	49964	67358	69039	65396	57561	160884	143432	142500	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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D. Acquisition Strategy:

VAC BOT A prime systems contractor will function as the "responsible head" and license holder and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The current budget supports development thru FDA licensure of a recombinant bivalent (A and B) botulinum vaccine. Other serotypes will be developed thru an evolutionary approach, as funding becomes available.

 The management lead for the program shifted to JVAP at MS A. The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial (Phase 1).

 During the System Development and Demonstration phase (SDD), the JVAP prime systems Contract (PSC) will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose and schedule. The Phase 3 clinical trial is also conducted during this phase to demonstrate safety in an expanded volunteer population. To evaluate efficacy, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy the requirements of the "Animal Rule." The Milestone C, also the Low Rate Initial Production (LRIP) decision, will be conducted after the manufacturing process has been validated, consistency lots have been produced, and interim safety data is available from the Phase 3 clinical trial. At the Milestone C, approval is granted to produce the Initial Operational Capability (IOC) of vaccine material. A Biologics Licensure Application is submitted to the FDA with all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.

VAC ENC The management lead for the program shifted to CBMS at MS A. The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial.

VAC PLG The current budget supports development thru FDA licensure of a plague vaccine.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4

Chemical Biological Medical Systems (CBMS) is mitigating technical program risk in the Plague Vaccine Program by temporarily supporting development of both a US vaccine candidate and a United Kingdom (UK) vaccine candidate. The US candidate is managed by JVAP's prime systems contractor and the UK candidate is managed thru a Project Arrangement (PA) with Canada and the UK. Both vaccines will be developed thru an event-driven down-select decision which is after a Phase 2-like clinical trial (Phase 1b for the UK - funded thru a contract with the National Institute of Allergy and Infectious Diseases (NIAID) - and Phase 2a for the US). The information from this trial and other supporting non-clinical information will be used to determine if the vaccines can meet the Capabilities Development Document (CDD) threshold duration of protective immunity - one year after completion of primary series. Following down-select in 2008, the US will fund a single plague vaccine candidate thru FDA licensure. The dates listed in the "SCHEDULE" are primarily for the US candidate, as only the manufacturing scale up and validation efforts for the UK candidate have been funded thru the Project Arrangement.

The management lead for the program shifted to JVAP at MS A. The technology development stage included the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine was evaluated for safety and immunogenicity in a small human trial (Phase 1).

During the System Development and Demonstration phase (SDD), the vaccine developer will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems, and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose and schedule. The Phase 3 clinical trial is also conducted during this phase to demonstrate safety in an expanded volunteer population. To evaluate efficacy, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy the requirements of the FDA's "Animal Rule." The Milestone C, also the Low Rate Initial Production (LRIP) decision, will be conducted after the manufacturing process has been validated, consistency lots have been produced, and interim safety data is available from the Phase 3 clinical trial. At the Milestone C, approval is granted to produce the Initial Operational Capability (IOC) of vaccine material. A Biologics Licensure Application is submitted to the FDA with all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
VACCINES	Anthrax Vaccine Absorbed (AVA) and Vaccinia Immune Globulin (VIG) are procured as Commercial off-the-shelf (COTS) products directly from the manufacturer. Smallpox is currently procured thru an Interagency Agreement (IAA) with the Centers for Disease Control (CDC).	

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4	PROJECT MB4
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
VACCINES													
VACCINES #5 - Oral Anthrax/Plague Vaccines	SS/FP	TBD	C	0	2575	4Q FY07	0	NONE	0	NONE	0	2575	0
Subtotal I. Product Development:					2575		0		0		0	2575	

Remarks:

II. Support Costs: Not applicable

III. Test and Evaluation: Not applicable

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	25	NONE	0	NONE	0	NONE	0	25	0
Subtotal IV. Management Services:					25		0		0		0	25	

Remarks:

TOTAL PROJECT COST:		2600		0		0		0		0		2600	
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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	COST (In Thousands)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Cost to	Total Cost
		Actual	Estimate	Complete							
MC4	MEDICAL CHEMICAL DEFENSE (ACD&P)	24809	37508	14529	4446	0	0	0	0	0	81292

A. Mission Description and Budget Item Justification:

Project MC4 MEDICAL CHEMICAL DEFENSE (ACD&P): This project funds Technology Development of countermeasures for chemical agents including life support equipment, diagnostic equipment, prophylactic and therapeutic drugs, and individual/casualty decontamination compounds. A system of medical defense against chemical agents is required to provide protection, to sustain performance in a chemical environment, and to provide for self-aid and medical treatment of chemical casualties. Fielding of prophylactic and therapeutic drugs requires Food and Drug Administration (FDA) approval. Multiple long-term studies are required to obtain FDA approval resulting in longer program timelines and greater program cost than other non-pharmaceutical product programs. Efficacy testing of most candidate drugs against chemical warfare (CW) agents cannot be conducted in humans; therefore, animal surrogate models must be developed. The program currently funds the: (1) Advanced Anticonvulsant System (AAS), which will be used as a treatment for seizures from exposure to nerve agents; (2) Improved Nerve Agent Treatment System (INATS), which will be used as a treatment for nerve agent intoxication to include new indications for Pyridostigmine Bromide (PB) that will be integrated with current therapeutic regimens; (3) Plasma-derived Bioscavenger (pBSCAV) and Bioscavenger Increment 2 (BSCAV Inc. 2), which will be used as a prophylaxis against nerve agents; (4) Field Aerosolized Atropine Increment 2 (DPIA) (Congressionally-directed effort), which will be used as the replacement for the existing Medical Aerosolized Nerve Agent Antidote (MANAA); and (5) Chemical Surety Facility, which will be used to test and evaluate medical chemical defense products utilizing chemical agents under Good Laboratory Practices (GLP) conditions.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
ADVANCED ANTICONVULSANT SYSTEM	1505	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
AAS - FY 06 - Completed non-Good Laboratory Practices (GLP) pre-clinical safety studies.	592	0	0	0
AAS - FY 06 - Completed and submitted Investigational New Drug (IND) application.	236	0	0	0
AAS - FY 06 - Completed Phase 1 clinical safety studies.	597	0	0	0
AAS - FY 06 - Continued process development and current Good Manufacturing Practices (cGMP) requirements. Transitioned to System Development and Demonstration (SDD) phase.	80	0	0	0
Total	1505	0	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
BIOSCAVENGER	14128	27739	14529	4446
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
pBSCAV - FY 06 - Completed and submitted IND application.	800	0	0	0
pBSCAV - FY 06 - Initiated and completed pre-clinical safety studies.	500	0	0	0
pBSCAV - FY 06/07 - Continue and complete small scale manufacturing, process development, and assay qualification.	3715	4003	0	0
pBSCAV - FY 06/07 - Initiate and complete Phase 1 clinical safety studies.	2510	2810	0	0
Chemical Surety Facility - FY 06/07/08/09 - Continue test and evaluation of medical chemical defense products under GLP conditions in a chemical agent research and development facility.	267	271	284	295

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
BSCAV Increment 2 - FY 06/07/08 - Initiate and complete small scale manufacturing, process development, assay qualification, and test/evaluate medical defense products against traditional and non-traditional agents.	4226	8727	1748	0
BSCAV Increment 2 - FY 06 - Initiated pre-clinical safety studies and achieved Milestone A. FY 07 - Complete pre-clinical safety studies.	2110	3302	0	0
BSCAV Increment 2 - FY 07 - Initiate IND application. FY 08 - Complete and submit IND application.	0	853	258	0
BSCAV Increment 2 - FY07/08/09 - Initiate and complete Phase 1 clinical safety studies and achieve Milestone B.	0	7773	8519	1273
BSCAV Increment 2 - FY08 - Initiate large scale manufacturing, process development, and assay validation. FY09 - Continue large scale manufacturing, process development, and assay validation. Transition to SDD phase.	0	0	3720	2878
Total	14128	27739	14529	4446

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FIELD AEROSOLIZED ATROPINE INC 2	3257	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
Field Aerosolized Atropine Increment 2 (DPIA) - Congressional Interest Item - FY 06 - Formulation and device development efforts to replace the Medical Aerosolized Nerve Agent Antidote (MANAA).	3257	0	0	0
Total	3257	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
IMPROVED NERVE AGENT TREATMENT SYSTEM	5919	9404	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
INATS - FY 06/07 - Continue GLP pre-clinical safety studies.	1445	2776	0	0
INATS - FY 06/07 - Continue process development and cGMP manufacturing requirements.	1445	2483	0	0
INATS - FY 06/07 - Continue Phase 1 clinical safety studies.	2569	942	0	0
INATS - FY 06 - Continued IND application effort. FY 07 - Continue IND application effort. Transition to SDD phase.	460	275	0	0
INATS - FY 07 - Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	0	2928	0	0
Total	5919	9404	0	0

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	365	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	365	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4	PROJECT MC4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
Total	0	365	0	0

C. <u>Other Program Funding Summary:</u>										
	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	2406	6391	21348	26106	16306	18897	17740	12173	Cont	Cont

D. Acquisition Strategy:

AAS Medical Identification and Treatment Systems (MITS) Joint Product Management Office and/or a commercial partner will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. After Milestone B, during the System Development and Demonstration Phase, MITS and/or a commercial partner (product dependent) will serve as the system integrator to ensure that products are manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%; vertical-align: top;"> <p>BSCAV</p> </td> <td> <p>Bioscavenger is a developmental program with three distinct increments. Increment 1 is based on butyrylcholinesterase purified from human plasma, i.e., plasma-derived Bioscavenger or pBioscavenger. Medical Identification and Treatment Systems (MITS) Joint Product Management Office exercises management oversight and a commercial partner serves as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. The Department of Health and Human Services (DHHS) may consider transition of this product for further development using BioShield funds after the Phase 1 clinical study is completed.</p> <p>Bioscavenger Increment 2 will initially look at two different technologies that bind and sequester nerve agents. The down-selection to one of the technologies will occur following the Phase 1 human clinical safety study. MITS Joint Product Management Office exercises management oversight and commercial partners to serve as system integrators for their respective candidate products during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. Contracts have been awarded for both technologies, and there will be a down-selection to one Bioscavenger product at Milestone B. The plasma-derived Bioscavenger will be considered in the down selection. After Milestone B, during the System Development and Demonstration Phase, MITS will continue to exercise management oversight and the selected commercial partner will serve as the system integrator to ensure that: the selected product is manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines; appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted; and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained, and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p>Bioscavenger Increment 3 will be based on a product that degrades nerve agents while retaining its own activity.</p> </td> </tr> </table>			<p>BSCAV</p>	<p>Bioscavenger is a developmental program with three distinct increments. Increment 1 is based on butyrylcholinesterase purified from human plasma, i.e., plasma-derived Bioscavenger or pBioscavenger. Medical Identification and Treatment Systems (MITS) Joint Product Management Office exercises management oversight and a commercial partner serves as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. The Department of Health and Human Services (DHHS) may consider transition of this product for further development using BioShield funds after the Phase 1 clinical study is completed.</p> <p>Bioscavenger Increment 2 will initially look at two different technologies that bind and sequester nerve agents. The down-selection to one of the technologies will occur following the Phase 1 human clinical safety study. MITS Joint Product Management Office exercises management oversight and commercial partners to serve as system integrators for their respective candidate products during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. Contracts have been awarded for both technologies, and there will be a down-selection to one Bioscavenger product at Milestone B. The plasma-derived Bioscavenger will be considered in the down selection. After Milestone B, during the System Development and Demonstration Phase, MITS will continue to exercise management oversight and the selected commercial partner will serve as the system integrator to ensure that: the selected product is manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines; appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted; and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained, and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p>Bioscavenger Increment 3 will be based on a product that degrades nerve agents while retaining its own activity.</p>	
<p>BSCAV</p>	<p>Bioscavenger is a developmental program with three distinct increments. Increment 1 is based on butyrylcholinesterase purified from human plasma, i.e., plasma-derived Bioscavenger or pBioscavenger. Medical Identification and Treatment Systems (MITS) Joint Product Management Office exercises management oversight and a commercial partner serves as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. The Department of Health and Human Services (DHHS) may consider transition of this product for further development using BioShield funds after the Phase 1 clinical study is completed.</p> <p>Bioscavenger Increment 2 will initially look at two different technologies that bind and sequester nerve agents. The down-selection to one of the technologies will occur following the Phase 1 human clinical safety study. MITS Joint Product Management Office exercises management oversight and commercial partners to serve as system integrators for their respective candidate products during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. Contracts have been awarded for both technologies, and there will be a down-selection to one Bioscavenger product at Milestone B. The plasma-derived Bioscavenger will be considered in the down selection. After Milestone B, during the System Development and Demonstration Phase, MITS will continue to exercise management oversight and the selected commercial partner will serve as the system integrator to ensure that: the selected product is manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines; appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted; and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained, and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p>Bioscavenger Increment 3 will be based on a product that degrades nerve agents while retaining its own activity.</p>				
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Project MC4/Line No: 075</td> <td style="width: 33%; text-align: center;">Page 72 of 113 Pages</td> <td style="width: 33%; text-align: right;">Exhibit R-2a (PE 0603884BP)</td> </tr> </table>			Project MC4/Line No: 075	Page 72 of 113 Pages	Exhibit R-2a (PE 0603884BP)
Project MC4/Line No: 075	Page 72 of 113 Pages	Exhibit R-2a (PE 0603884BP)			

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
DPIA	<p>Medical Identification and Treatment Systems (MITS) Joint Product Management Office will manage the Congressionally-directed development of Field Aerosolized Atropine Increment 2 (Dry Powder Inhaler Atropine (DPIA)) for the DoD. The contractor will serve as the product integrator throughout development, and shall be responsible for conducting activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA), including human clinical safety and pharmacokinetic studies. The contractor shall sponsor the drug to the FDA and hold all approvals and/or licenses.</p>	
INATS	<p>Medical Identification and Treatment Systems (MITS) Joint Product Management Office and/or a commercial partner will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. After Milestone B, during the System Development and Demonstration Phase, MITS and/or a commercial partner (product dependent) will serve as the system integrator to ensure that products are manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p>	
Project MC4/Line No: 075	Page 73 of 113 Pages	Exhibit R-2a (PE 0603884BP)

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
BSCAV													
pBSCAV - Small Scale Manufacturing	C/CPFF	DynPort Vaccine Company (DVC), Frederick, MD	C	3598	2951	1Q FY07	0	NONE	0	NONE	0	6549	0
BSCAV Inc 2 - Small Scale and Large Scale Manufacturing	C/CPIF	PharmAthene, Inc., Annapolis, MD; SRI, Menlo Park, CA	C	2041	8263	1Q FY07	4359	2Q FY08	1467	2Q FY09	0	16130	0
INATS													
INATS - Pilot Lot & Small-Scale Manufacturing	C/CPIF	Southwest Research Institute, San Antonio, TX	C	454	1943	2Q FY07	0	NONE	0	NONE	0	2397	0
Subtotal I. Product Development:					13157		4359		1467		0	25076	

Remarks:

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MC4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
BSCAV													
PM/MS S - BSCAV - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	1253	1179	1Q FY07	1047	1Q FY08	540	1Q FY09	0	4019	0
PM/MS S - BSCAV - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	509	1248	4Q FY07	654	4Q FY08	200	4Q FY09	0	2611	0
PM/MS S - BSCAV - Program Management Support	MIPR	USAMMDA, Fort Detrick, MD	U	89	99	1Q FY07	101	1Q FY08	104	1Q FY09	0	393	0
INATS													
PM/MS S - INATS - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	310	319	1Q FY07	0	NONE	0	NONE	0	629	0
PM/MS S - INATS - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	120	2928	4Q FY07	0	NONE	0	NONE	0	3048	0
PM/MS S - INATS - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	220	470	4Q FY07	0	NONE	0	NONE	0	690	0
PM/MS S - INATS - Program Management Support	MIPR	USAMMDA, Fort Detrick, MD	U	0	139	1Q FY07	0	NONE	0	NONE	0	139	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	365	NONE	0	NONE	0	NONE	0	365	0
Subtotal IV. Management Services:													
					6747		1802		844		0	11894	

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)						DATE February 2007		
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)			PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT MC4	
IV. Management Services - Cont. Remarks:								
TOTAL PROJECT COST:			37508	14529	4446	0	73724	
Project MC4/Line No: 075		Page 78 of 113 Pages			Exhibit R-3 (PE 0603884BP)			

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Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4	PROJECT MC4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
AAS																																
AAS - Non-GLP Pre-Clinical Safety Studies	>>			4Q																												
AAS - Investigational New Drug (IND) Application	>>			3Q																												
AAS - Phase 1 Clinical Safety Study	>>			4Q																												
AAS - cGMP Manufacturing Requirements	>>																			1Q												
AAS - Milestone B								2Q																								
BSCAV																																
pBSCAV - Small Scale Manufacturing, Process Dev, Assay Validation Efforts	>>			1Q																												
pBSCAV - IND Application	>>			3Q																												
pBSCAV - Pre-Clinical Safety Studies	1Q			3Q																												
pBSCAV - Phase 1 Clinical Safety Study				4Q				4Q																								
CSF - Maintain Chemical Surety Facility	>>																							4Q								
BSCAV Inc. 2 - Milestone A				2Q																												
BSCAV Inc. 2 - Small Scale Manufacturing				4Q				4Q																								

Exhibit R-4a, Schedule Profile

DATE
February 2007

BUDGET ACTIVITY
RDT&E DEFENSE-WIDE/
BA4 - Advanced Component Development and Prototypes
(ACD&P)

PE NUMBER AND TITLE
0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

PROJECT
MC4

D. <u>Schedule Profile (cont):</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
BSCAV (Cont)																																	
BSCAV Inc. 2 - Pre-Clinical Safety Studies				4Q	-----			4Q																									
BSCAV Inc. 2 - IND Application					1Q	-----		1Q																									
BSCAV Inc. 2 - Phase 1 Clinical Safety Studies								4Q	-----				2Q																				
BSCAV Inc. 2 - Large Scale Manufacturing, Process Qualification & Validation									1Q	-----																						4Q	
BSCAV Inc. 2 - Milestone B																2Q																	
INATS																																	
INATS - GLP Pre-Clinical Safety Studies				>>	-----							2Q																					
INATS - Process Development and cGMP Manufacturing Requirements				>>	-----																											2Q	
INATS - Phase 1 Clinical Safety Studies				>>	-----											2Q																	
INATS - IND Application				>>	-----							4Q																					
INATS - Milestone B																2Q																	

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4	PROJECT MR4
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	COST (In Thousands)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Cost to	Total Cost
		Actual	Estimate	Complete							
MR4	MEDICAL RADIOLOGICAL DEFENSE	0	8967	7117	3321	0	0	0	0	0	19405

A. Mission Description and Budget Item Justification:

Project MR4 MEDICAL RADIOLOGICAL DEFENSE: This project funds the advanced development of candidate therapeutic and/or prophylactic medical countermeasures to mitigate the consequences of exposure to ionizing radiation due to nuclear or radiological attacks. Exposure to ionizing radiation causes damage to the blood-forming cells (hematopoietic system) and gastrointestinal system, leading to Acute Radiation Syndrome (ARS). Development and fielding of prophylactic and therapeutic drugs require Food and Drug Administration (FDA) approval. Testing the efficacy of candidate drugs against lethal radiation exposure cannot be conducted in humans; therefore, surrogate animal models must be used to obtain FDA approval. This project allows the joint force to operate safely, over the long term, and at near normal levels of effectiveness while in a contaminated environment.

Medical Radiation Countermeasures (MRADC) efforts include multiple countermeasures required to restore casualties to pre-exposure health to protect U. S. Forces against injury caused by exposure to radiation. MRADC shall reverse or limit radiation injury, resulting in increased survival, decreased incapacity and sustained operational effectiveness. In addition, MRADC shall be effective against a broad range of radiation sources and types, and shall be useable in the battle space, including during evacuation.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
MEDICAL RADIOLOGICAL COUNTERMEASURES	0	8881	7117	3321
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4	PROJECT MR4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
MRADC - FY 07 - Initiate process development and current Good Manufacturing Practices (cGMP) manufacturing requirements, Investigational New Drug (IND) application efforts, and achieve Milestone A. FY08 - Complete process development and cGMP manufacturing requirements, and submit IND application.	0	5029	2960	0
MRADC - FY 07/08 - Initiate and complete pre-clinical safety and toxicology studies.	0	1870	2817	0
MRADC - FY 08 - Initiate Phase 1 clinical safety studies. FY 09 - Complete Phase 1 clinical safety studies. Achieve Milestone B and transition to System Development and Demonstration (SDD) phase.	0	0	1340	3321
MRADC - Congressional Interest Item - FY 07 - Medical Radiation Countermeasures #1, development of candidate therapeutic and/or prophylactic medical countermeasures.	0	991	0	0
MRADC - Congressional Interest Item - FY 07 - Medical Radiation Countermeasures #2, development of adult-derived hematopoietic progenitor cells to treat Acute Radiation Syndrome.	0	991	0	0
Total	0	8881	7117	3321

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	86	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	86	0	0
Total	0	86	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MR4
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C. <u>Other Program Funding Summary:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>
MR5 MEDICAL RADIOLOGICAL DEFENSE	0	0	0	7867	8515	9460	5083	2404	Cont	Cont

D. Acquisition Strategy:

MRADC Medical Identification and Treatment Systems (MITS) Joint Product Management Office will manage the development of Medical Radiation Countermeasures (MRADC) for the DoD. A contractor will serve as the product integrator throughout development, and shall be responsible for conducting activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA). The contractor shall sponsor the drug to the FDA and hold all approvals and/or licenses. The Technology Development Phase includes pre-clinical studies and Phase 1 human clinical safety studies. During the System Development and Demonstration (SDD) Phase, large scale manufacturing, Phase 2 human clinical safety studies and definitive animal efficacy studies will be conducted. FDA approval of the countermeasure is an exit criterion for the SDD phase. During Production and Deployment Phase, sufficient quantities of product to meet Initial Operating Capability will be purchased. Subsequent purchases will be made by the Defense Logistics Agency. Any post-marketing surveillance requested by the FDA will be conducted. MRADC will be developed using a system-of-systems approach to address the multiple organ systems affected by radiation exposure. Individual countermeasure solutions will be developed using a single step to full capability (FDA approval). The DoD MRADC program shall be non-duplicative of and synergistic with similar efforts by the Department of Health and Human Services (DHHS).

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MR4
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MRADC													
MRADC - Regulatory Integration Support Efforts	C/CPIF	TBD	C	0	445	3Q FY07	811	2Q FY08	498	2Q FY09	0	1754	0
Subtotal II. Support Costs:					445		811		498		0	1754	

Remarks:

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MRADC													
MRADC - Pre-clinical, Toxicology & Phase 1 Clinical Safety Studies	C/CPIF	TBD	C	0	1098	3Q FY07	2581	2Q FY08	2345	2Q FY09	0	6024	0
Subtotal III. Test and Evaluation:					1098		2581		2345		0	6024	

Remarks:

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MR4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MRADC													
PM/MS S - MRADC - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	159	1Q FY07	238	1Q FY08	179	1Q FY09	0	576	0
PM/MS S - MRADC - Chem Bio Medical Systems	Allot	CBMS, Fort Detrick, MD	U	0	202	4Q FY07	356	4Q FY08	166	4Q FY09	0	724	0
PM/MS S - MRADC - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	284	4Q FY08	133	4Q FY09	0	417	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	86	NONE	0	NONE	0	NONE	0	86	0
Subtotal IV. Management Services:					447		878		478		0	1803	

Remarks:

TOTAL PROJECT COST:					8967		7117		3321		0	19405	
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Exhibit R-4a, Schedule Profile	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4	PROJECT MR4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
MRADC																																	
MRADC - Milestone A							2Q																										
MRADC - Process Development and cGMP Small Scale Manufacturing							3Q	—————				3Q																					
MRADC - Pre-Clinical Safety and Toxicology Studies							3Q	—————				3Q																					
MRADC - IND Application							3Q	—————				3Q																					
MRADC - Phase 1 Clinical Safety Studies												3Q	—————																				
MRADC - Milestone B																4Q																	

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) TE4	PROJECT TE4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
TE4 TEST & EVALUATION (ACD&P)	17776	1992	14049	6407	5646	5497	11944	30028	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project TE4 TEST & EVALUATION (ACD&P): This funding supports the Product Director Test Equipment, Strategy, and Support (PD TESS) effort. PD TESS provides support for the Milestone Decision Authority, Joint Project Managers, and the Test and Evaluation (T&E) community with the development of test capabilities to adequately test and evaluate Chemical, Biological, Radiological, and Nuclear Defense systems throughout the life cycle acquisition process.

Efforts funded under PD TESS support the following five major areas: (1) Sense Laboratory (Chemical), (2) Sense Laboratory (Biological), (3) Sense Field, (4) Shield and Sustain, and (5) Shape.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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(1) Sense Laboratory (Chemical): The Sense (Chem) development effort provides a new capability to the Edgewood Chemical Biological Center (ECBC) to conduct tests involving new and emerging highly toxic threat materials. The test capability will support tests of various commodity areas (such as decontamination, collective protection and individual protection, and contamination avoidance (detection) technologies and systems for the Department of Defense and other government agencies. The Acquisition Programs supported by this effort will be the Joint Chemical Agent Detector (JCAD); the Automatic Chemical Agent Detector Alarm (ACADA); the Joint NBC Reconnaissance System (JNBCRS) Sensors; the Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM); the Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) Stryker Sensors; the Joint Service General Purpose Mask (JSGPM); the Joint Service Lightweight Integrated Suit Technology (JSLIST); the Joint Expeditionary Collective Protection (JECP); the Joint Collective Protection Equipment (JCPE); the Joint Service Tactical Decontamination System (JSTDS); the Joint Service Sensitive Equipment Decontamination (JSSSED); the Joint Warning and Reporting Network (JWARN) hardware components; the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD); the Joint Protective Air Crew Ensemble (JPACE); the JSLIST Combat Vehicle Crewman Coverall (JC3); Multipurpose Lightweight Overboot (MULO); the Advanced Footwear Solution (AFS); the Initial Footwear Solution (IFS); the JSLIST Block I Glove Upgrade (JB1GU); the JSLIST Block II Glove Upgrade (JB2GU); the Chemical & Biological Protective Shelter (CBPS); the Collective Protection System (CPS); the Joint Service Aircrew Mask (JSAM); the Joint Service Chemical Environment Survivability Mask (JSCESM); the Joint Chemical Ensemble (JCE); and the All Purpose - Personal Protective Equipment (AP-PPE).

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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(2) Sense Laboratory (Biological): The Sense (Bio) development effort supports current and future biological point detection system programs; develops a single unit of measure for characterizing biological aerosols in testing; designs and fabricates a live agent Biological Standoff facility; and develops a biological spectral instrument which measure spectral signatures and cross sections of biological warfare agents and stimulant materials. The Acquisition Programs supported by this effort will be the Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM); the Joint Biological Point Detection System (JBPDS) / JBPDS Block II; the Joint Biological Tactical Detection System (JBTDS); the Joint Biological Standoff Detection System (JBSDS); the Joint NBC Reconnaissance System (JNBCRS); and the Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) Stryker.

(3) Sense Field: The Sense Field capability provides the Test Grid and Data Network, a fully instrumental CB stimulant field test capability to include cloud tracking, Test Data Network, C4ISR network, and safari capability; a Spectroradiometer effort which procures two Adaptive Infrared Imaging Spectroradiometers - Wide Area Detector (AIRIS-WAD) to complement a Joint Science and Technology Office effort; and the Joint Ambient Breeze Tunnel and Active Standoff Chamber (JABT/ASC) upgrade which provides test instrumentation and fully characterizes and validates JABT/ASC chamber performance. The Acquisition Programs supported by this effort will be the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD); the Joint Chemical Agent Detector (JCAD); the Automatic Chemical Agent Detector Alarm (ACADA) Variants; the Joint NBC Reconnaissance System (JNBCRS); the Joint Warning and Reporting Network (JWARN); the Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM); the Joint Biological Standoff Detection System (JBSDS); the Joint Biological Point Detection System (JBPDS); the Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) Stryker; the Joint Effort Model (JEM); the Joint Operational Effects Federation (JOEF); and the Joint Expeditionary Collective Protection (JECP).

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
<p>(4) Shield and Sustain: The Shield and Sustain capability provides the Upgraded Decontamination Facility (UDF), an enhanced ability to conduct decontamination efficacy testing thru the use of a test apparatus that includes separate containment chambers to support small-scale contamination, decontamination, and off-gassing/residual agent collection test procedures; the Protection Ensemble Test Mannequin (PETMAN) program which designs and procures articulated robotic mannequins that simulate soldier activity to allow for full system evaluation of individual protection ensembles against chemical warfare agents and non-traditional agents; the Man-in-Simulant Test (MIST) Upgrade program which includes two improved test capability development efforts. The first is the development of a real-time simulant sampling system and associated test methodology. The second is the development of test equipment and methodology that allows for simultaneous particulate quantification of various particle sizes to support aerosol (stimulant) level tests; the Liquid Chromatograph and Gas Chromatograph (LC/GC) effort, procures analytical testing equipment for low-level detection of CW agents in support of decontamination programs. This test capability will provide improved characterization of residual contamination to support evaluation of decontamination efficacy of decontamination systems; the Individual Protection Ensemble (IPE) Grid program develops methodology for assigning locations to the body and each successive layer of IPE to provide a commonality of measurements for IPE performance assessment. A common sample location identification system is needed to equate data collected by various test protocols, to provide a means to ensure data is collected from the same location for each testing cycle at each testing location, and to joint data from several testing scenarios; the Collective Protection Airflow Mapping (CPAFM) program develops capabilities to measure, map, and model the airflow, barometric pressure and agent flux of the Collective Protection (ColPro) systems, both internally and externally, as a function of time. The program provides enhanced test and evaluation tools to allow fielding of significantly more effective ColPro systems for the warfighter. The enhancement will be achieved by using airflow mapping capabilities to identify ColPro design problems that reduce protection factors and allow contamination to enter the protected area; and the ColPro Facility Upgrade effort provides improved test fixtures and instrumentation to evaluate ColPro systems and components to include air purification systems and novel closures. Standardized test procedures will be developed to allow for comparison of test data across facilities. The Acquisition Programs supported by this effort will be the Joint Sensitive Equipment Decontamination (JSSED); the Joint Platform Interior Decontamination (JPID); the Joint Expeditionary Collective Protection (JECF); the Joint Collective Protection Equipment (JCPE); the Chemical & Biological Protective Shelter (CBPS); the Collective Protection System (CPS); the Joint Service Lightweight Integrated Suit Technology (JSLIST); the Joint Protective Air Crew Ensemble (JPACE); the JSLIST Combat Vehicle Crewman Coverall (JC3); the Multipurpose Lightweight Overboot (MULO); the Advanced Footwear Solution (AFS); the Initial Footwear Solution (IFS); the JSLIST Block I Glove Upgrade (JB1GU); the JSLIST Block II Glove Upgrade (JB2GU); the Joint Service General Purpose Mask (JSGPM); the Joint Service Aircrew Mask (JSAM); the Joint Service Chemical Environment Survivability Mask (JSCESM); the Joint Chemical Ensemble (JCE); and the All Purpose - Personal Protective Equipment (AP-PPE).</p>		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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(5) Shape: The Shape capability provides the Synthetic Test Environment effort which produces a library of real world environmental and interferent physical characteristics for CB systems by collecting background and interferent signatures at operationally relevant locations throughout the world. The signatures will be integrated into models to generate synthetic environments to assess material performance under various conditions; and the Stimulants and Stimulators effort to design and build detection system stimulants and stimulators to facilitate hardware-in-the-loop testing in a field environment. The stimulants and stimulators will be networked on the Dugway Proving Ground test grid and will allow an operator to cause any combination of detection systems to enter an alarm state by exercising the technology in the detection system. The stimulants and stimulators will allow the detection systems to be exercised without the release of simulants into the test area. The Acquisition Programs supported by this effort will be the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD); the Joint Chemical Agent Detector (JCAD); the Automatic Chemical Agent Detector Alarm (ACADA) Variants; the Joint NBC Reconnaissance System (JNBCRS); the Joint Warning and Reporting Network (JWARN); the Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM); the Joint Biological Standoff Detection System (JBSDS); the Joint Biological Point Detection System (JBPDS); the Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) Stryker; the Joint Effects Model (JEM); the Improved Point Detection System (IPDS); the Improved Chemical Agent Monitor (ICAM); and the Multiservice Radiac Program (AN/PDR-75, AN/UDR-2, AN/PDR-77, AN/UDR-13).

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TEST EQUIPMENT, STRATEGY & SUPPORT	17776	1973	14049	6407
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
PD TESS - FY 06 - Liquid Chromatograph (LC)/Gas Chromatograph (GC) - Purchased and installed LC and GC systems necessary to upgrade analytical testing equipment for low-level detection of CW agents in support of decontamination programs.	605	0	0	0
PD TESS - FY 06 - Individual Protection Ensemble (IPE) Mannequin - Conducted system feasibility study of articulated, robotic protection ensemble test mannequin that simulate soldier activity to allow for full system evaluation of individual protection ensembles against chemical warfare agents.	520	0	0	0
PD TESS - FY 06 - XYZ IPE Grid - Developed/verified sampling schema for locations to the body and each successive layer of IPE to provide commonality of measurements for IPE performance testing. FY 07 - Validate sampling schema test methodology.	485	230	0	0
PD TESS - FY 06 - Upgrade Decontamination Facility - Designed methodology to support upgrade of decontamination test fixtures/methods to test future decontaminants and decontamination systems. Conducted methodology development trials (one agent/three materials).	400	0	0	0
PD TESS - FY 06 - ColPro Airflow Mapping - Designed Collective Protection (ColPro) Airflow Mapping System.	480	0	0	0
PD TESS - FY 06 - Spectroradiometer - Purchased test equipment to characterize simulant cloud releases in a field environment for standoff detection systems.	2000	0	0	0
PD TESS - FY 06 - Stimulants and Stimulator System - Initiated stimulant devices design and stimulator system design to facilitate hardware-in-the-loop testing in a field environment.	1205	0	0	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
PD TESS - FY 06 - NTA Test System - Procured analytical instrumentation and test equipment supporting science and technology. Prepared initial design concepts and initiated design of Non-Traditional Agent (NTA) Test System. FY 07 - Complete NTA system design. Develop NTA test system functional model. FY 08 - Fabricate and install the NTA test system. Install NTA test system functional model. Develop NTA test system performance validation test plan and operating procedures.	7295	1619	10589	0
PD TESS - FY 06 - DPG Chemistry Laboratory Upgrade - Developed design and upgraded test chambers/fixtures for chemistry laboratory. FY 08 - Initiate relocation of JSLSCAD test systems. FY 09 - Complete relocation of JSLSCAD test system. Conduct performance testing to validate test system adequacy.	1970	0	960	1454
PD TESS - FY 09 - Biological Standoff Facility - Initiate design for biological standoff test facility.	0	0	0	2523
PD TESS - FY 06 - Provided systems engineering support to integrate and execute Advanced Component Development & Prototype development efforts with Joint Science and Technology Office Advanced Technology Development efforts. FY 07/08/09 - Continue engineering support.	2816	124	2500	2430
Total	17776	1973	14049	6407

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	19	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	19	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
Total	0	19	0	0

C. <u>Other Program Funding Summary:</u>											
	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Compl</u>	<u>Total Cost</u>	
TE5 TEST & EVALUATION (SDD)	18892	22163	45604	42481	37603	15485	15008	4844	Cont	Cont	
TE7 TEST & EVALUATION (OP SYS DEV)	0	0	7016	7201	6922	8094	8235	8235	Cont	Cont	

D. Acquisition Strategy:

PD TESS The PD TESS program provides for the development and acquisition of new and enhanced test capabilities to support the sense, shield, shape, and sustain mission areas for the Joint Service Chemical and Biological Defense Program (CBDP). Beginning in FY06 and continuing thru the FYDP, a combination of Advanced Component Development and Prototypes (ACD&P) and System Development and Demonstration (SDD) efforts will be executed. The efforts are being supported thru new, competitive contract actions, by studies conducted by the National Academies of Science, and thru efforts conducted by technology experts of other Government agencies and academia. Technology solutions will leverage commercially available technologies and systems to provide state-of-the-art capabilities that address the current and future test and evaluation needs of the CBDP. Delivery of the capabilities is prioritized and synchronized with the needs of the acquisition programs of record to ensure capability availability when needed.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PD TESS													
HW S - NTA Test System Design/Model/Fabricate/Install	C/FFP	ARINC Engineering, Annapolis, MD	C	4355	1619	2Q FY07	10589	2Q FY08	0	NONE	0	16563	0
HW S - Bio Standoff Facility Design	C/FFP	TBD	C	0	0	NONE	0	NONE	2523	2Q FY09	0	2523	0
Subtotal I. Product Development:					1619		10589		2523		0	19086	

Remarks:

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PD TESS													
ES SB - DPG Chem Lab Upgrade	MIPR	DPG, DPG, UT	U	0	0	NONE	960	2Q FY08	1454	2Q FY09	0	2414	0
Subtotal II. Support Costs:					0		960		1454		0	2414	

Remarks:

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TE4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PD TESS													
PM/MS S - Program Management/Systems Engineering Support	MIPR	JPM NBC CA, APG, MD	U	2816	124	1Q FY07	2500	2Q FY08	2430	2Q FY09	0	7870	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	19	NONE	0	NONE	0	NONE	0	19	0
Subtotal IV. Management Services:					143		2500		2430		0	7889	

Remarks:

TOTAL PROJECT COST:					1992		14049		6407		0	30104	
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Exhibit R-3 (PE 0603884BP)

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) TE4
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D. <u>Schedule Profile:</u>	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PD TESS																																
LC/GC		2Q		4Q																												
IPE Mannequin Feasibility & Design				4Q				4Q																								
Develop/Verify XYZ IPE Grid Location Schema/Methodology			3Q					4Q																								
Upgrade Decon Facility			3Q					4Q																								
ColPro Airflow Mapping			3Q	4Q																												
Spectroradiometer Purchase				4Q																												
Stimulant/Stimulator Development				4Q				3Q																								
NTA Test System Design/Fabrication/Installation		1Q														2Q																
DPG Chem Lab Upgrades				4Q												4Q																

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) TT4	PROJECT TT4
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COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P)	0	23344	15247	17466	19271	19403	19587	20000	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P): Technology Demonstrations validate high-risk/high-payoff technologies that could significantly improve warfighter capabilities. These programs offer an opportunity to identify and efficiently move emerging technologies from laboratory experiments to acquisition programs thru risk reduction, engineering and integration. They cover integrating and assessing technology in a realistic operational environment and often assess the technology as an integrated system. They seek to demonstrate the potential for enhanced military operational capability and/or cost effectiveness. Upon conclusion of the demonstration, the user/sponsor provides a determination of the military utility and operational impact of the technology demonstrated. Successfully demonstrated technologies with proven military utility can either be left in place for extended user evaluations, accepted into advanced stages of the formal acquisition process, proceed directly into limited or full-scale production or be returned to the technical base for further development. Prior to FY07, funding was provided in Project CP4. These efforts are currently funded under this Project:

CUGR - The Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance Vehicle (CUGR) Advanced Concept Technology Demonstration (ACTD) will address several critical operational issues to enhance the speed, effectiveness, capabilities, and automation of surface and area CBRN contamination detection and identification. The technologies will be used to enhance the Joint NBC Reconnaissance System (JNBCRS) by using a non-surface contacting optical system that provides both surface contamination detection and identification in near real-time. Capabilities include traditional chemical agents and Toxic Industrial Chemicals (TICs). Additionally, the ACTD demonstrated a small unmanned ground platform (robot) equipped with sensor packages capable of conducting CR detection. This unmanned platform will enable the reconnaissance crew to conduct CR reconnaissance in limited maneuver areas using a robotic platform carrying CR sensors that report findings to the operator using active telemetry.

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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EBD- The lack of a man - portable point-detector for aerosolized Biological Weapons (BW) is not currently being met by existing DoD biological detection systems. This leaves expeditionary forces vulnerable to attack without indication until those exposed present symptoms. BW detection systems currently fielded are large, heavy, power-intensive, and expensive to procure and support. The Marine Corps has no fielded biological detection capability due to lack of system suitability and the dedicated force structure. The Expeditionary Biological Detection (EBD) Advanced Technology Demonstration (ATD) will be initiated with a Front End Analysis (FEA) to compare existing DoD biological agent detection/identification systems against USMC tactical biological detection needs. Candidate system must be able to automatically detect aerosolized BW clouds and collect samples for presumptive and confirmatory identification. The ability to discriminate, classify or identify the threat is desired. The system must be deployable and employable by Marine expeditionary forces and must be suitable for use within existing Marine Air-Ground Task Force (MAGTF) logistics and manpower constraints. Additionally, the role of portable biological point detectors in the greater context of existing Joint biological detection systems will be considered.

ART - CB - Advanced Remediation Technologies - Chemical and Biological (ART-CB) ATD seeks to evaluate and demonstrate means to significantly improve existing military decontamination operations. The ATD will consider the entire spectrum of military decontamination processes and systems. Three thrusts are planned: Small Vehicle Thrust (Land and small aircraft systems); Personnel Thrust (Personnel systems); Large Equipment Thrust (Large surface vehicle and aircraft systems). The ATD will explore and establish new methods of assessing and reducing known chemical, biological, and/or radiological contamination levels. It will consider contamination density estimation methods and detailed reduction processes for detected or assessed contamination presence. The goal is to provide a processing technique or techniques for maximized use of automation and reduced personnel in protection workloads.

B. Accomplishments/Planned Program

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
CPSP COUNTERPROLIFERATION SUPPORT	0	23114	15247	17466
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
<p>Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD - FY 07 - Continue program management and planning, documentation, IPT meetings, technical liaisons and transition planning. Complete CBRN Unmanned Ground Vehicle systems engineering, prototyping, technical testing and integration. Continue Concepts-of-Operations (CONOPs) and techniques, tactics, and procedures (TTPs) development, operational test planning and execution. Finalize Joint Contaminated Surface Detector systems engineering and technical testing. Complete modification of Joint Nuclear Biological Chemical Reconnaissance System (JNBCRS) shelter design, fabricate and integrate on High Mobility Multipurpose Wheeled Vehicles. Initiate CUGR residual support and extended user evaluation.</p> <p>FY 08 - Complete CONOPs and TTPs development, operational test planning and execution. Complete CUGR residual support and extended user evaluation.</p>	0	9432	1281	0
<p>Expeditionary Biological Detection (EBD) - FY 07 - Continue CONOPs and TTPs development and operational test planning. Initiate testing of biological detection technologies to evaluate capability to provide required capability systems engineering, prototyping, technical testing and integration and program management and planning, documentation, Integrated Process Team (IPT) meetings, technical liaisons and transition planning.</p> <p>FY 08 - Complete CONOPs and TTPs development and operational test planning. Complete testing of biological detection technologies to evaluate capability to provide required capability, systems engineering, prototyping, technical testing and integration and program management and planning, documentation, IPT meetings, technical liaisons and transition planning.</p>	0	9200	3438	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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Accomplishments/Planned Program (Cont):	FY2006	FY2007	FY2008	FY2009
<p>Advanced Remediation Technologies (ART)</p> <p>FY 07 - Initiate technical testing to confirm biological agent kill demonstration testing of vaporous decontamination on designated aircraft to confirm biological agent kill, development of technical order for the qualification of the decontamination of designated aircraft using the vaporous decontamination process. Initiate coordination and development of the Interagency Biological Remediation Demonstration (I-BRD). This DOD-DHS cooperative program is focused on providing a coordinated, systems approach to the recovery and restoration of wide urban areas, to include DOD infrastructures and high traffic areas following the aerosol release of a biological agent.</p> <p>FY 08 - Continue technical testing to confirm biological agent kill. Continue ATD demonstration testing of vaporous decontamination on designated aircraft to confirm biological agent kill and development of technical order for the qualification of the decontamination of designated aircraft using the vaporous decontamination process. Continue the I-BRD program in order to: develop restoration plans; establish risk assessment and clearance goals; develop sampling/characterization/ long term monitoring plans; develop and exercise wide area decontamination methods; develop and demonstrate restoration system tools; and conduct table top exercises, field exercises, and workshops.</p>	0	4482	10528	17466

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)		PROJECT TT4
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Bullet Text (cont)	FY2006	FY2007	FY2008	FY2009
FY 09 - Complete technical testing to confirm biological agent kill. Complete ATD demonstration testing of vaporous decontamination on designated aircraft to confirm biological agent kill and development of technical order for the qualification of the decontamination of designated aircraft using the vaporous decontamination process. Initiate program management and planning, documentation, Integrated Product Team (IPT) meetings, technical liaisons and transition planning. Initiate the Small Vehicle Phase: Land and small aircraft systems: explore and establish new methods of assessing and reducing known CBRN contamination levels on and/or inside land and small air systems. Continue the I-BRD program in order to: develop restoration plans; establish risk assessment and clearance goals; develop sampling/characterization/ long term monitoring plans; develop and exercise wide area decontamination methods; develop and demonstrate restoration system tools; and conduct table top exercises, field exercises, and workshops.	0	4482	10528	17466
Total	0	23114	15247	17466

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SBIR/STTR	0	230	0	0
RDT&E Articles (Quantity)	0	0	0	0

Accomplishments/Planned Program	FY2006	FY2007	FY2008	FY2009
SBIR - FY 07 - Small Business Innovative Research.	0	230	0	0
Total	0	230	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2007
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C. Other Program Funding Summary: N/A

D. Acquisition Strategy:

CPSP ACTD

This project is a generic block description for future ACTD and ATDs. The CUGR ACTD will execute its demonstration phase in FY06 and FY07. CUGR will transition laser detection technology into various reconnaissance vehicles that are currently in an Acquisition Program under Joint Program Executive Office (JPEO) Program Manager for Reconnaissance. The CBRN Unmanned Ground Vehicle (CUGV) will transition to the Joint CBRN Dismountable Reconnaissance System (JCDRS). The Expeditionary Biological Detection technologies will be transitioned to the Joint Program Manager (JPM) Biological Detection and the Joint Biological Tactical Detection System (JBTDS).

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CPSP ACTD													
HW C - CUGV UGV- System Design and Integration	MIPR	Army - RDECOM, ECBC, Edgewood, MD	U	0	2162	1Q FY07	0	NONE	0	NONE	0	2162	0
HW S- EBD - Initiate System Design and Integration	MIPR	Marine Corps - MCSC, Quantico, VA	U	0	3600	2Q FY07	1019	1Q FY08	0	NONE	0	4619	0
HW S- SPIDER - Initiate Tech Order Development	MIPR	Army - RDECOM, ECBC Edgewood, MD	U	0	0	3Q FY07	1854	1Q FY08	957	1Q FY09	661	3472	0
HW S - IBRD System Design and Integration	PO	Lawrence Livermore National Laboratory, Livermore, CA	F	0	195	2Q FY07	89	2Q FY08	375	2Q FY09	187	846	0
HW S - IRBD System Design and Integration	PO	Sandia National Laboratory, Albq., NM	F	0	195	2Q FY07	89	2Q FY08	375	2Q FY09	188	847	0
HW C - ART CB (Land and small aircraft systems Thrust) Initiate System Design and Integration	MIPR	Air Force - AFRL, Dayton, OH	U	0	0	NONE	0	NONE	2109	1Q FY09	2119	4228	0
Subtotal I. Product Development:					6152		3051		3816		3155	16174	

Remarks: CPSP ACTD - FY 2006 Costs are in ITEM CP4

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CPSP ACTD													
ILS C - CUGR CONOPS Development	MIPR	PACOM - USA Army Pacific, Fort Shafter, HA	U	0	750	2Q FY07	0	NONE	0	NONE	0	750	0
ILS C - CUGR CONOPS and doctrine development	Allot	USA Chemical School Ft Leonard Wood, MO	U	0	182	2Q FY07	0	NONE	0	NONE	0	182	0
ILS C - CUGR - JCSD Residual Support	MIPR	Army - RDECOM, ECBC, Edgewood, MD	U	0	686	1Q FY07	650	1Q FY08	0	NONE	0	1336	0
ILS C - CUGR CUGV Residual Support	MIPR	Army - RDECOM, ECBC Edgewood, MD	U	0	0	NONE	365	1Q FY08	0	NONE	0	365	0
ILS C - EBD CONOPS Development	MIPR	Marine Corps - MCCDC, Quantico, VA	U	0	1000	2Q FY07	444	2Q FY08	0	NONE	0	1444	0
ILS C - EBD TTP and CONOPS	MIPR	Marine Corps - II MEF, Camp Lejeune, SC	U	0	1000	2Q FY07	353	2Q FY08	0	NONE	0	1353	0
ILS C- SPIDER CONOPS Development	MIPR	Army - RDECOM, ECBC Edgewood, MD	U	0	0	NONE	1809	2Q FY08	1323	1Q FY09	0	3132	0
ILS C - IBRD TTP and CONOPS Development	MIPR	SPAWAR, San Diego, CA	U	0	386	2Q FY07	176	2Q FY08	742	2Q FY09	371	1675	0
ILS C - IBRD TTP and CONOPS Development	MIPR	National Geospatial Intelligence Agency, VA	U	0	386	2Q FY07	176	2Q FY08	743	2Q FY09	371	1676	0
ILS C - IRBD TTP and CONOPS Development	PO	Lawrence Livermore National Laboratory, Livermore, CA	F	0	398	2Q FY07	181	2Q FY08	765	2Q FY09	384	1728	0

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)					PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)						PROJECT TT4		
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II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ILS C - ART CB (Land and small aircraft systems Thrust) CONOPS Development	MIPR	USA Chemical School, Ft. Leonard Wood, MO	U	0	0	NONE	0	NONE	1306	1Q FY09	617	1923	0
Subtotal II. Support Costs:					4788		4154		4879		1743	15564	

Remarks: CPSP ACTD - FY 2006 Costs are in ITEM CP4

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CPSP ACTD													
OTE C - OTE C - CUGR Operational Test for JCSD	MIPR	Army Test and Evaluation Command - Alexandria, VA	U	0	5123	2Q FY07	0	NONE	0	NONE	0	5123	0
OTE C - EBD Operational Test	MIPR	Marine Corps - MCOTEA, Quantico, VA	U	0	2600	2Q FY07	793	2Q FY08	0	NONE	0	3393	0
OTE C - SPIDER Operational Test	MIPR	Air Force - AFOTEC, Kirtland AFB, NM	U	0	0	3Q FY07	3256	2Q FY08	1626	1Q FY09	365	5247	0
OTE C- IBRD Operational Test	PO	Lawrence Livermore National Laboratory, Livermore, CA	F	0	614	2Q FY07	280	2Q FY08	1181	2Q FY09	590	2665	0
OTE C - IBRD Operational Test	PO	Sandia National Laboratory, Albq., NM	F	0	341	2Q FY07	156	2Q FY08	656	2Q FY09	328	1481	0
OTE C- IBRD Operational Test	MIPR	National Geospatial Agency, Reston, VA	U	0	410	2Q FY07	186	2Q FY08	788	2Q FY09	394	1778	0
OTE C - ART CB (Land and small aircraft systems Thrust) Operational Test	MIPR	Air Force - AFOTEC Kirtland AFB, NM	U	0	0	NONE	0	NONE	631	1Q FY09	2075	2706	0
Subtotal III. Test and Evaluation:					9088		4671		4882		3752	22393	

Remarks: CPSP ACTD - FY 2006 Costs are in ITEM CP4

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2007
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT TT4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2007 Cost	FY2007 Award Date	FY2008 Cost	FY2008 Award Date	FY2009 Cost	FY2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CPSP ACTD													
PM/MS S - CUGR Program Management	MIPR	Army - RDECOM, ECBC, Edgewood, MD		0	1111	2Q FY07	266	2Q FY08	0	NONE	0	1377	0
PM/MS S - EBD Program Management	MIPR	Marine Corps - MCSC, Quantico, VA	U	0	1000	2Q FY07	830	2Q FY08	0	NONE	0	1830	0
PM/MS S - SPIDER Program Management	MIPR	Army - RDECOM, ECBC Edgewood, MD	U	0	0	3Q FY07	1831	2Q FY08	1266	1Q FY09	540	3637	0
PM/MS S - ART CB (Land and small aircraft systems Thrust) Program Management	MIPR	Air Force - AFRL, Dayton, OH	U	0	0	NONE	0	NONE	747	1Q FY09	590	1337	0
PM/MS S - IBRD Program Management	PO	Lawrence Livermore National Laboratory, Livermore, CA		0	488	2Q FY07	222	2Q FY08	938	2Q FY09	469	2117	0
PM/MS S - IBRD Program Management	PO	Sandia National Laboratory, Albq., NM		0	487	2Q FY07	222	2Q FY08	938	2Q FY09	469	2116	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	230	NONE	0	NONE	0	NONE	0	230	0
Subtotal IV. Management Services:					3316		3371		3889		2068	12644	

Remarks:

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BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) PROJECT TT4
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TOTAL PROJECT COST:		23344		15247		17466		10718	66775	
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Exhibit R-4a, Schedule Profile

DATE
February 2007

BUDGET ACTIVITY
RDT&E DEFENSE-WIDE/
BA4 - Advanced Component Development and Prototypes
(ACD&P)

PE NUMBER AND TITLE
0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) **PROJECT**
TT4

D. Schedule Profile:

	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
CPSP ACTD																																	
CASPOD/CUGR JCSD Demonstration				4Q																													
CUGR JCSD Residual Support					1Q	—————			4Q																								
CUGR CUGV Demonstration				4Q																													
CUGR CUGV Residual Support					1Q	—————			4Q																								
Expeditionary Biological Detection ATD	1Q	—————						1Q																									
Expeditionary Biological Detection Demonstration							3Q	—————			4Q																						
SPIDER							3Q	—————			1Q																						
IBRD							2Q	—————			2Q																						
ART												1Q	—————			4Q																	