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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE May 2009
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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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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
Total Program Element (PE) Cost	65865	62721	205952		
CA4 CONTAMINATION AVOIDANCE (ACD&P)	3621	7792	39554		
CM4 HOMELAND DEFENSE (ACD&P)	0	800	0		
DE4 DECONTAMINATION SYSTEMS (ACD&P)	4151	8643	0		
MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P)	4742	5600	101265		
MC4 MEDICAL CHEMICAL DEFENSE (ACD&P)	19778	8155	9478		
MR4 MEDICAL RADIOLOGICAL DEFENSE	6579	8129	0		
TE4 TEST & EVALUATION (ACD&P)	13776	6335	28894		
TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P)	13218	17267	26761		

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<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, anticonvulsants, biological agent diagnostics, and vaccines to protect against various Biological Warfare (BW) agents. This project funds development of a Transformational Rapid Drug Discovery and Development Capability (TRDDDC). Transformational Medical Technology Initiatives (TMTI) efforts in this area will include the continual build out of both a genomic sequencing and a bio-chemical informatics capability for the DoD. 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 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	
Previous President's Budget (FY 2009 PB)	63951	51291	171533	
Current Biennial Budget (FY 2010 PB)	65865	62721	205952	
Total Adjustments	1914	11430	34419	
a. Congressional Program Reductions	0	-170	0	
b. Congressional Increases	0	11600	0	
c. Reprogrammings	2704	0	0	
d. SBIR/STTR Transfer	-790	0	0	
e. Other Adjustments	0	0	34419	

Change Summary Explanation:

Funding: FY09 - Congressional increases to enhance projects within the development base (+\$1,200K CA4; +\$800K CM3; +\$2,400K CP4; +\$1,600K DE4; +\$5,600K MB4). Congressional general reductions and other adjustments (-\$21K CA4; -\$15K DE4; -\$26K MC4; -\$27K MR4; -\$21K TE4; -\$60K TT4).

FY10 - Program realignments, inflation adjustment, and other adjustments. (+\$14,108K CA4; -\$20,246K MB4; +2,478K MC4; -\$2,478K MR4; +\$6,497K TE4; +\$7,660K TT4) NTA adjustments (+\$2,600K CA4; +\$7,000K MC4; +\$16,800K TE4).

Schedule: N/A

Technical: 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)	PROJECT CA4
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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
CA4 CONTAMINATION AVOIDANCE (ACD&P)	3621	7792	39554		

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 Standoff Detector System (JBSDS), (2) Joint Biological Tactical Detection System (JBTDS), (3) Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), (4) Major Defense Acquisition Program (MDAP) Support, and (5) Next Generation Chemical Standoff Detection (NGCSD).

The JBSDS Increment 2 will use a development cycle that builds on the capabilities demonstrated during the development of JBSDS Increment 1. The JBSDS Increment 2 system will focus on decreasing size, weight and power requirements, improving the false alarm rate and detection sensitivity. JBSDS Increment 2 will focus on the development of a system that can be used at fixed site installations. JBSDS Increment 3 will focus on the development of a system that will operate on mobile platforms as determined by the warfighter. The JBSDS Increment II will also integrate with the global information network to provide near real time detection and warning theater wide to limit the effect of biological agent hazards against the U.S. forces at the tactical and operational levels of war.

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<p>The Joint Biological Tactical Detection System (JBTDs) program will be a lightweight biological agent system that will detect, warn, provide presumptive identification and samples for follow-on confirmatory analysis. JBTDs will provide a local alarm and when networked provide cooperative capability with reduced probability of false alarms. The JBTDs will be one man portable and capable of being battery operated. The JBTDs will be employed organically at the wing, battalion, squadron and lower levels by non-CBRN personnel in tactical environments across multiple operational locations (e.g. forward operating bases, operationally engaged units, amphibious landing sites, air base operations, etc) to provide near real time detection of biological attacks and notification to personnel in the potential hazard area. JBTDs will ultimately support force protection and maximize combat effectiveness by providing situational awareness and surveillance and enhancing medical response decision making. When networked, JBTDs will augment existing biological detection systems to provide a theater-wide seamless array capable of biological detection and warning.</p> <p>The JSLSCAD effort initiated the component improvements and the Technology Readiness Assessment (TRA) for the System of Systems (SoS) approach to address the CB early warning mission within the Next Generation Chemical Standoff Detection (NGCSD) program. The NGCSD SoS approach will increase the range of standoff detection and decrease detection time.</p> <p>Major Defense Acquisition Program (MDAP) Support - The MDAP Support program will integrate System of Systems (SoS) solutions across the Armed Services for Major Defense Acquisition Programs (MDAP) having Chemical and Biological Radiological and Nuclear (CBRN) survivability requirements. The program will demonstrate modular, net-centric, plug-n-play capabilities for mounted and dismounted CBRN reconnaissance that will establish a common CBRN reconnaissance architecture across the services.</p> <p>The NGCSD is a new start effort which will provide early warning for both traditional and non-traditional chemical agent attacks at fixed sites, forward operating bases and on Service designated vehicles and ships. This effort will develop and integrate new standoff sensor technologies for future standoff systems. The detector will interoperate with the Services and Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) architectures.</p>		
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B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT BIO STANDOFF DETECTOR SYSTEM (JBSDS)	0	1187	17982
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
JBSDS INC 2 - FY09 - Initiate Testing & Support Equipment Development.	0	1187	0
JBSDS INC 2 - FY10 - Initiate and continue Agent Performance Assessment.	0	0	1253
JBSDS INC 2 - FY10 - Continue Modeling & Simulation.	0	0	1250
JBSDS INC 2 - FY10 - Provide strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight and technical support.	0	0	6979
JBSDS INC 2 - FY10 - Initiate and continue Engineering & Manufacturing Development & Demonstration.	0	0	8500
Total	0	1187	17982

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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT BIO TACTICAL DETECTION SYSTEM (JBTDS)	3621	4909	10743
RDT&E Articles (Quantity)	0	0	28

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
JBTDS - FY08/09/10 - Initiated and continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	872	2286	2869
JBTDS - FY08/09 - Continue Pre-Milestone B technology development, analysis and risk reduction demonstrations.	692	1905	0
JBTDS - FY08/09/10 - Continue to conduct data fusion network demonstration and algorithm development verification/validation.	253	154	200
JBTDS - FY08/09/10 - Initiated and continue technology development testing and analysis; to include competitive prototypes and reagentless trial.	1804	564	3474
JBTDS - FY10 - Initiate competitive prototyping contract of potential candidates (28 systems @ \$53K each (Average cost for 3 components)).	0	0	1500

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Accomplishments/Planned Program (Cont):		FY 2008	FY 2009	FY 2010
JBTDS - FY10 - Initiate assay development with Critical Reagents Program (CRP).		0	0	2500
JBTDS - FY10 - Conduct Manufacturing Readiness Assessment and Technology Readiness Assessment for finding maturity of potential candidates.		0	0	200
Total		3621	4909	10743
		<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JS LIGHTWEIGHT STANDOFF CHEM AGENT DET (JSLSCAD)		0	1607	0
RDT&E Articles (Quantity)		0	0	0
Accomplishments/Planned Program		FY 2008	FY 2009	FY 2010
JSLSCAD - FY09 - Provide Joint Service Support for Future Standoff Detection.		0	200	0
JSLSCAD - FY09 - Conduct strategic/tactical planning, systems engineering, and technology assessment for Future Standoff Detection.		0	945	0
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Accomplishments/Planned Program (Cont):	FY 2008	FY 2009	FY 2010
JSLSCAD - FY09 - Conduct Technology Readiness Assessment (TRA) for Future Standoff Detection.	0	462	0
Total	0	1607	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
MDAP SUPPORT	0	0	1541
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
MDAP SPT - FY10 - Initiate System of Systems (SoS) integration of current shelter/decontamination capabilities to meet Joint Strike Fighter (JSF) survivability requirements.	0	0	764
MDAP SPT - FY10 - Assist Collective Protection Advanced Component Technology Demonstration (ATD) of improved air purification for the Abrams Main Battle Tank using current Catalytic Oxidation (CatOx) air purification processes.	0	0	777
Total	0	0	1541

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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
NEXT GENERATION CHEMICAL STANDOFF DETECTION (NGCSD)	0	0	9288
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
NGCSD - FY10 - Initiate sensor prototype development.	0	0	6988
NGCSD - FY10 - Conduct technology demonstration/technology readiness assessment.	0	0	2000
NGCSD - FY10 - Provide engineering support.	0	0	300
Total	0	0	9288

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	89	0
RDT&E Articles (Quantity)	0	0	0

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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	89	0
Total	0	89	0

C. <u>Other Program Funding Summary:</u>					
	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
CA5 CONTAMINATION AVOIDANCE (SDD)	45754	51924	98120		
JC0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	77604	75545	45106		
JC0101 JS CHEM/BIO/RAD AGENT WATER MONITOR (JCBRAWM)	3416	6000	3194		
JC0250 JOINT BIO STANDOFF DETECTOR SYSTEM (JBSDS)	3200	4000	0		
JC1500 NBC RECON VEHICLE (NBCRV)	7764	0	0		
JF0100 JOINT CHEMICAL AGENT DETECTOR (JCAD)	44838	53306	27780		
MC0100 JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)	22960	32699	54171		

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D. Acquisition Strategy:

JBSDS INCREMENT 1

The JBSDS will use an evolutionary acquisition strategy with phased developments for the JBSDS program supporting time-phased JORD requirements. The JBSDS will provide an operationally useful and supportable capability in as short a time as possible. Increment 1 JBSDS will incorporate an accelerated development cycle relying on the modification of existing GOTS and COTS technologies. A down-select of existing systems via a competitive test fly-off resulted in a selection of a single system to enter Low Rate Initial Production (LRIP) to support the Government testing program.

INCREMENT 2

The JBSDS Increment 2 program will pursue an evolutionary approach to provide capability to the warfighter in the shortest possible timeframe. The JBSDS Increment 2 program was separated into two efforts based on feedback from combat developers regarding Concept of Operations (CONOPS), future requirements needs and current technology readiness. JBSDS Increment 2 addresses the need for a 24 hour operational fixed site system. Increment 3 will address the need for a mobile system.

The JBSDS Increment 2 program has investigated, monitored and developed promising technology areas for biological standoff since 2004. The technology development phase has involved several partners within JSTO, ECBC, academia, national laboratories and several members of private industry. Technologies have been demonstrated in varying environments with numerous biological and interferent sources. The development work to date has focused on hardware maturation, algorithm development and agent signature measurements. Technology Demonstration V (Tech Demo V) for the Increment 2 JBSDS is scheduled for 3QFY09. Technology areas will be demonstrated at Tech Demo V and assessed based on preliminary CDD KPPs, KSAs and other requirements. A Technology Readiness Assessment (TRA) will also be completed for each technology area in the categories of hardware and system. Results from Tech Demo V, supporting signature efforts and modeling and simulation will be used to ensure a higher confidence for a majority of technologies that will be discussed in proposals submitted for the JBSDS Increment 2 EMD contract.

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A competitively awarded contract is planned for the JBSDS Increment 2 EMD phase to develop and/or integrate prototypes for DT and complete an Operational Assessment (OA) prior to MS C. The justification for the type contract (Fixed Price or Cost Plus) will be completed prior to this decision in accordance with the latest Defense Acquisition and the Office of Management and Budget (OMB) guidelines. The appropriate system requirements reviews, test readiness reviews, software reviews and audits will be scheduled as needed within the EMD phase.

Upon approval at MS C, the JBSDS System Manager will initiate acquisition of production representative systems to conduct a Multi-Service Operational Test and Evaluation (MOT&E).

Each future increment defined via a separate CDD and CPD and will follow a similar path/process from MS B or C through FRP and will leverage preceding efforts to the greatest extent possible, maintaining commonality and synergy across all increments. It is intended to continue to use M&S tools in order to lower the program risks and reduce costs and ensure a higher confidence in selected technologies.

JBTDS The Joint Biological Tactical Detection (JBTDS) program will pursue an evolutionary incremental approach to provide capability to the warfighter. The JBTDS program will develop, integrate, test, procure and field systems that improve biological aerosol detection and sampling capabilities. The JBTDS program will also reduce size, weight, power consumption, and logistic footprint over current systems. Test Readiness Evaluations (TRE) will support the JBTDS EMD phase by identifying mature technologies. Modeling and simulation tools will be used in order to lower program risks, reduce costs and ensure a higher confidence in selected technologies.

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JSLSCAD	<p>The acquisition strategy for the JSLSCAD production phase focused upon a dual path to procure required systems and concurrently develop and test system improvements to increase the military utility. The Milestone Decision Authority (MDA) approved procurement of additional JSLSCAD LRIP systems in February 2008. The Government awarded a Fixed Price Incentive contract to GD-ATP in July 2008 for production of systems to fulfill the NBCRV Extended LRIP requirements and additional delivery orders will be exercised for full rate production of systems to fulfill the remaining NBCRV requirements. The JSLSCAD program office awarded multiple contracts to support system engineering, software development, test & evaluation, and system support efforts to increase standoff detection capabilities to rapidly respond to evolving system integration requirements with minimal contractual lead time. All these efforts are being integrated into the Next Generation Chemical Standoff Detection (NGCSD) program.</p>	
MDAP SPRT	<p>Major Defense Acquisition Program (MDAP) Support program will integrate System of Systems (SoS) solutions across the Armed Service's for Major Defense Acquisition Programs (MDAP) having Chemical and Biological Radiological and Nuclear (CBRN) survivability requirements. The MDAP program will achieve these SoS solutions by: (1) leading CBRN architecture development and System Engineering efforts that result in SoS concepts that address requirements; (2) establishing agreements with the MDAPs on roles and responsibilities with respect to funding deliverables and integration; (3) demonstrating modular, net-centric, "plug-n-play" capabilities for mounted and dismounted CBRN reconnaissance requirements; (4) developing master schedules which synchronize support for CBRN capability integration with MDAPs' schedules; and (5) providing integrated program management across the CBRN commodity areas to deliver capabilities on time that support MDAP goals.</p>	
NGCSD	<p>The NGCSD program, which was initiated under the JSLSCAD program, will award Indefinite Delivery/Indefinite Quantity contract(s) to support system engineering, software development, test and evaluation, and system support efforts to increase standoff detection capabilities. This contract type will allow the program office to rapidly respond to evolving system integration requirements and emerging test results with minimal contractual lead time. This will optimize the program goal of inserting the latest software and standoff detection technology into the host platforms in the shortest possible time.</p>	
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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
JBSDS													
HW SB - System Development & Demonstration Contract Award	C/CPFF	TBD	C	0	0	NONE	8000	2Q FY10					
JBTDS													
HW S - Competitive Prototype Contract	C/FFP	TBD	C	0	0	NONE	1500	2Q FY10					
MDAP SPRT													
HW S - Revolutionary Decontamination System	C/CPAF	TBD	C	0	0	NONE	764	2Q FY10					
HW S - Advanced CBRN Air Filtration System	C/CPAF	TBD	C	0	0	NONE	777	2Q FY10					
NGCSD													
HW SB - Initiate Sensor Prototype Development	C/CPFF	TBD	C	0	0	NONE	6988	3Q FY10					
Subtotal I. Product Development:					0		18029						

Remarks: JCBRAWM - Multiple buys from multiple vendors based on the results of the joint JBPDS/JCBRAWM Test Readiness Evaluation (TRE).

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
JBSDS													
ES S - INC 2 - Modeling & Simulation Test Support	C/FFP	Bricks, Sigal & Miller Inc., Kennett Square, PA	C	0	0	NONE	250	2Q FY10					
ES S - INC 2 - Modeling & Simulation Test Support	C/CPFF	NAVSEA, Johns Hopkins-Applied Physics Lab, Baltimore, MD	C	0	0	NONE	500	2Q FY10					
ES S - INC 2 - Modeling & Simulation Test Support	MIPR	Sandia National Lab, Albuquerque, NM	F	0	0	NONE	500	2Q FY10					
ES S - INC 2 - Modeling, Simulation & Data Analysis	MIPR	Various	U	0	0	NONE	1661	1Q FY10					
JBTDS													
ES S - C4I Integration	MIPR	JPM IS, San Diego, CA	U	145	154	2Q FY09	200	2Q FY10					
ES S - MS B Analysis and Document Development	MIPR	Various, TBD	U	214	1905	2Q FY09	0	NONE					
ES C - Assay Development	MIPR	CRP, Ft. Detrick, MD	U	0	0	NONE	2500	2Q FY10					
ES C - MRA	MIPR	TBD	U	0	0	NONE	150	3Q FY10					
ES C - TRA	MIPR	ECBC. APG, MD	U	0	0	NONE	50	3Q FY10					
Subtotal II. Support Costs:					2059		5811						

Remarks:

Project CA4/Line No: 077

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
JBSDS													
DTE S - INC 2 - ITT	C/CPFF	ITT, Inc, Albuquerque, NM	C	0	1187	2Q FY09	0	NONE					
OTHT SB - INC 2 - Networking Algorithm Development	MIPR	MA Institute of Technology - Lincoln Labs, Boston, MA	F	0	0	NONE	500	2Q FY10					
OTHT SB - INC 2 - Agent Performance Analysis Support	MIPR	DPG, Dugway, UT	U	0	0	NONE	600	2Q FY10					
OTHT SB - INC 2 - Test Support Equipment	MIPR	Various	U	0	0	NONE	1750	2Q FY10					
JBTDs													
OTHT SB - Developmental Test Planning and IPT support	MIPR	ATEC, AFOTEC, MCOTE, OPTEVFOR, Various	U	1572	564	2Q FY09	500	2Q FY10					
OTHT SB - Competitive Prototype Testing	MIPR	DPG, UT	U	0	0	NONE	2000	2Q FY10					
OTHT SB - Reagentless Trial	MIPR	TBD	U	0	0	NONE	974	2Q FY10					
JSLSCAD													
OTHT S - Technology Readiness Assessment	MIPR	Various	U	0	462	3Q FY09	0	NONE					

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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
JBSDS													
PM/MS S - JPM BD	MIPR	JPM BD, APG, MD	U	0	0	NONE	1800	2Q FY10					
PM/MS S - PM/MS Other Government Agencies	MIPR	Various	U	0	0	NONE	921	2Q FY10					
PM/MS S - JPEO Management Support	Allot	JPEO, Falls Church, VA	U	0	0	NONE	1500	2Q FY10					
JBTDs													
PM/MS S - JPM BD, APG, MD	MIPR	JPM BD, APG, MD	U	930	2286	1Q FY09	2869	1Q FY10					
JSLSCAD													
PM/MS S - Management and Systems Engineering Support	MIPR	JPM NBC CA, APG, MD	U	0	600	3Q FY09	0	NONE					
PM/MS C - Management and Systems Engineering Support	MIPR	JPM IS, San Diego, CA	U	0	145	3Q FY09	0	NONE					
PM/MS C - Management and Systems Engineering Support	MIPR	JPM BD, APG, MD	U	0	100	3Q FY09	0	NONE					
PM/MS C - Management and Systems Engineering Support	MIPR	JPM GN, Stafford, VA	U	0	100	3Q FY09	0	NONE					
PM/MS S - Joint Service Support	MIPR	Various	U	0	200	3Q FY09	0	NONE					
NGCSD													
PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC CA, APG, MD	U	0	0	NONE	300	1Q FY10					

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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 - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	89	NONE	0	NONE					
Subtotal IV. Management Services:					3520		7390						

Remarks:

TOTAL PROJECT COST:					7792		39554						
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Exhibit R-4a, Schedule Profile	DATE May 2009
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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:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
JBSDS												
Increment 2 - Requirements Trade-Off	1Q											
Increment 2 - Science & Technology	>>	—————							4Q			
Increment 2 - Pre-Milestone B	1Q	—————									2Q	
Increment 2 - Milestone B											2Q	
JBTDS												
Material Development Decision								4Q				
Capability Development Document											2Q	
Request for Proposal												3Q
PDR												3Q
MS B Decision												4Q
MDAP SPRT												
Catox Tech Demonstration for Abrams Main Battle Tank									1Q	————— >>		

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Exhibit R-4a, Schedule Profile	DATE May 2009
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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 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
MDAP SPRT (Cont)												
Advance Component Prototype Development of JSF Decontamination								4Q	————— >>			
NGCSD												
Material Development Decision (MDD)											3Q	
Prototype Development and Demo									1Q	—————		4Q
Technology Readiness Assessment									1Q	—————		4Q

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
CM4 HOMELAND DEFENSE (ACD&P)	0	800	0		

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 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
WMD - CIVIL SUPPORT TEAMS (WMD CST)	0	791	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Add - FY09 - Large Scale Single-Use Biological Reactor for Rapid Response to Bioterrorism.	0	791	0
Total	0	791	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	9	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	9	0
Total	0	9	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
CM5 HOMELAND DEFENSE (SDD)	0	2475	8674		
JS0004 WMD - CIVIL SUPPORT TEAMS (WMD CST)	9729	8300	11801		
JS0500 CB INSTALLATION/FORCE PROTECTION PROGRAM (FORCE PROT)	83200	80004	53789		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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 CM4
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D. Acquisition Strategy:

WMD CST This program utilizes multiple acquisition vehicles to deliver a CBRN capability to the WMD response units. CALS: The CALS program will upgrade the analytical capability with the objective of improving chemical and biological detection sensitivity and selectivity of the WMD CST Analytical Laboratory System Increment 1 and the 20th SUPCOM heavy and light tactical lab variants. Additionally the CALS will integrate the communications and reachback capability for mobile CBRN homeland defense capability as required by the JROC. 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).

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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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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
WMD CST													
HW C - Bche Formulation Program	PO	PharmAthene, Annapolis, MD	C	0	791	3Q FY09	0	NONE					
Subtotal I. Product Development:					791		0						

Remarks: MMSP - Additional Military Mail Screening Program funds executed under FY05, TT Bio, CA4.

II. Support Costs: Not applicable

III. Test and Evaluation: Not applicable

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	9	NONE	0	NONE					
Subtotal IV. Management Services:					9		0						

Remarks:

TOTAL PROJECT COST:					800		0						
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
DE4 DECONTAMINATION SYSTEMS (ACD&P)	4151	8643	0		

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 Human Remains Decontamination System (HRDS) and Joint Platform Interior Decontamination/Joint Material Decontamination System (JPID/JMDS) programs.

The HRDS, Increment 1, will utilize mature technologies to provide the capability for safe intra-theater handling and storage of Contaminated Human Remains (CHR) associated with a Chemical Warfare Agent (CWA) event. HRDS will be a Family-of-Systems (FoS) designed to leverage differing technology and requirements readiness across the three systems: (1) a Contaminated Human Remains Pouch (CHRP) to support the initial recovery of CHR from Point of Fatality to a Mortuary Affairs Decontamination Collection Point (MADCP), (2) a Contaminated Remains Transfer Case System (CHRTS) capability to store or transport CHR post MADCP operations, and (3) a Remains Decontamination System (RDS) to support the capability to store or transport CHR post MADCP operations.

The JPID/JMDS will fill the capability to decontaminate chemical and biological warfare agents from vehicle/aircraft/building interiors, sensitive equipment within, and the associated cargo. This is a new capability that currently does not exist in the DoD. The program goal is to use a single technology to provide sensitive equipment and platform interiors decontamination capability.

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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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B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
HUMAN REMAINS DECON SYSTEM (HRDS)	1223	2666	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
HRDS - FY08 - Conducted engineering, testing, contracting, and logistical planning to support the development of the acquisition strategy and requirements development for the CHRP. Conducted market research for CHRT.	1223	0	0
HRDS - FY09 - CHRT: Developed Pre-Milestone B documentation for statutory and regulatory requirements. Develop RFP, Test and Evaluation Plan (TEMP). Perform technology readiness assessment (TRA), logistics assessment and cost validation. Conduct Request for Information (RFI) and market survey.	0	2666	0
Total	1223	2666	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT MATERIAL DECON SYSTEM (JMDS)	1581	2373	0
RDT&E Articles (Quantity)	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	FY 2008	FY 2009	FY 2010
Congressional Interest Item - FY08 - Protective Self-Contaminating Surfaces.	1581	0	0
Congressional Interest Item - FY09 - Catalytic Oxidation Integrated (CATOX) Demonstration. Demonstration program to develop, test, and integrate a CATOX system into a U.S.Army vehicle.	0	2373	0
Total	1581	2373	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT PORTABLE DECON SYSTEM (JPDS)	556	1924	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
JPDS - FY08 - Conducted market survey, analysis of alternatives, and technical support. FY09 - Continue efforts initiated in FY08.	556	1924	0
Total			

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT PLATFORM INTERIOR DECON (JPID)	0	1582	0
RDT&E Articles (Quantity)	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	FY 2008	FY 2009	FY 2010
Congressional Interest Item - FY09 - Environmentally Friendly Aircraft Decontamination System. Develop a VHP/Hot Air Prototype Decon System to support the decontamination of Tactical and Cargo Aircraft.	0	1582	0
Total	0	1582	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
JOINT SERVICE PERSONNEL/SKIN DECON SYSTEM (JSPDS)	791	0	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Interest Item - FY08 - Next Generation/Improved Skin Decontamination System. Modified the NanoScale Reactive Nano Particle 212 formulation to enhance the efficacy and reactivity performance against chemical warfare agents.	791	0	0
Total	791	0	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	98	0
RDT&E Articles (Quantity)	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	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	98	0
Total	0	98	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
DE5 DECONTAMINATION SYSTEMS (SDD)	9408	13130	33704		
JD0055 JOINT SERVICE PERSONNEL/SKIN DECON SYSTEM (JSPDS)	18487	8280	0		
JD0056 JS TRANS DECON SYSTEM - SMALL SCALE (JSTDS-SS)	18275	17224	22008		

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Exhibit R-2a (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)	PROJECT DE4
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D. Acquisition Strategy:

HRDS The HRDS, Increment 1, will utilize mature technologies to provide the capability for safe intra-theater handling and storage of Contaminated Human Remains (CHR) associated with a Chemical Warfare Agent (CWA) event. HRDS will be a Family-of-Systems (FoS) designed to leverage differing technology and requirements readiness across the three systems: (1) a Contaminated Human Remains Pouch (CHRP) to support the initial recovery of CHR from Point of Fatality to a Mortuary Affairs Decontamination Collection Point (MADCP); (2) a Contaminated Remains Transfer Case System (CHRTS) capability to store or transport CHR post MADCP operations; and (3) a Remains Decontamination System (RDS) to support the capability to store or transport CHR post MADCP operations.

JPDS DE4 JPDS will utilize an evolutionary acquisition strategy using an incremental development methodology. Increment 1 will focus largely upon fielding Hardware systems, improving the capability of the M13 Decontamination Apparatus.

JPID The Joint Platform Interior Decontamination (JPID) and the Joint Service Sensitive Equipment Decontamination (JSSED) programs will be acquired as part of the overarching Joint Material Decontamination System (JMDS) evolutionary acquisition strategy that covers both the JPID and the JSSED programs. This strategy will use a single technology to meet the individual sensitive equipment and platform requirements through incremental development. The JPID and JSSED contracting strategies is under the JMDS contracting strategy that awarded one single base System Development and Demonstration contract (Cost Plus Incentive Fee) with Low Rate Initial Production and Full Rate Production options (Fixed Price Successive Target) in open competition for both JSSED and JPID. The JMDS program will integrate the competitive prototype effort into the JMDS Milestone C/LRIP Decision.

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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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JSPDS The Joint Service Personnel/Skin Decontamination System (JSPDS) is a Food and Drug Administration (FDA) cleared individually carried skin decontamination kit. The JSPDS provides the warfighter the ability to decontaminate the skin, after exposure to Chemical/Biological (CB) warfare agents, in support of immediate and thorough personnel decontamination operations. Reactive Skin Decontamination Lotion (RSDL) provides the warfighter with improved capability over the existing M291 Skin Decontamination Kit (SDK) to reduce lethal and performance degrading effects of Chemical Warfare agents. Additionally, it can be used to decontaminate individual equipment, weapons, and casualties on unbroken skin.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
HRDS													
ES S - Research Studies	MIPR	KCP, Kansas City, MO	U	23	50	3Q FY09	0	NONE					
TD/D S - Technical Support	MIPR	CASCOM, Fort Lee, VT	C	84	10	2Q FY09	0	NONE					
TD/D S - Technical Support	MIPR	Various	U	35	185	3Q FY09	0	NONE					
ES S - Acquisition Activities	MIPR	Various	U	0	485	2Q FY09	0	NONE					
Subtotal II. Support Costs:					730		0						

Remarks:

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
HRDS													
DTE S - Temp Development	MIPR	Various	U	0	275	2Q FY09	0	NONE					
JPID													
DTE S - Efficacy Test	MIPR	ECBC, MD	U	0	200	2Q FY09	0	NONE					
Subtotal III. Test and Evaluation:					475		0						

Remarks:

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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	

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
HRDS													
PM/MS SB - HRDS Program Management Support	C/FFP	Various	C	1081	1661	2Q FY09	0	NONE					
JPID													
PM/MS S - Program Management and Technical Support	C/FFP	Various	C	0	82	2Q FY09	0	NONE					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	98	NONE	0	NONE					
Subtotal IV. Management Services:					1841		0						

Remarks:

TOTAL PROJECT COST:					8643		0						
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Exhibit R-3 (PE 0603884BP)

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D. <u>Schedule Profile:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
HRDS												
CHRT Market Survey					1Q							
CHRT MS B								4Q				
CHRT Development Testing									1Q	—————		4Q
JMDS												
Catalytic Oxidation Integrated Demonstration						2Q	—————					2Q
JPID												
Cong Interest Item-Environmentally Friendly Aircraft Decon System						2Q	—————					2Q
JSPDS												
Cong Interest Item Improved Skin Decon System						2Q	—————	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)	PROJECT MB4
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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P)	4742	5600	101265		

A. Mission Description and Budget Item Justification:

Project MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P): This project (MB4) contains technology development (post Milestone A) efforts to include Filovirus Vaccine development and the Transformation Medical Technologies Initiative (TMTI). The Transformational Medical Technologies Initiative (TMTI) was launched in FY 2006 as a key Quadrennial Defense Review initiative to respond to the threat of emerging or intentionally bioengineered biological threats. TMTI's mission is to protect the Warfighter from genetically engineered biological threats by providing a rapid response capability from identification of pathogens to the delivery of medical countermeasures. This mission is accomplished by developing broad spectrum (multi-agent) therapeutics against biological warfare (BW) agents (e.g, one drug that treats multiple agents). The development of broad spectrum therapeutics involves developing a capability to treat exposure to hemorrhagic fever viruses (HFV's) (e.g. Ebola virus) and intracellular bacterial pathogens (ICB's) (e.g. Tularemia). Efforts are further classified as host-directed therapeutics (e.g, drugs that target common pathways within a human to prevent or treat a variety of diseases) or pathogen-directed therapeutics (e.g., drugs that attack a common pathway found in multiple threat agents). Attrition is high throughout the drug development process. Less than 10% of all preclinical compounds become a licensed drug. Causes for attrition include scientific failures, Food and Drug Administration (FDA) rejection at major milestone reviews, and loss through down-selection at DoD Milestone Decision points. Simply put, the development of medical countermeasures is an arduous process that requires extensive interaction with the FDA, from pre-clinical research to safety tests in human subjects (Phase I clinical studies), efficacy tests in humans/animals (Phase II clinical studies or pivotal animal efficacy studies), and expanded safety or efficacy studies (Phase III clinical studies), which culminate with a request to the FDA to license, market, and produce a drug. This interaction between the Department of Defense (DoD) and the FDA results in a coordinated, unified, and safe effort.

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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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B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
CONGRESSIONAL INTEREST ITEMS	3161	3164	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Interest Item - FY08 - Vacuum Sampling Pathogen Collection and Concentration. Developed the M-Vac, a field pathogen collection system. The M-Vac along with the Bacteria Reduction System (BRS) will greatly enhance the ability of soldiers, homeland defense officials, and law enforcement to find, extract and elute potentially deadly pathogens from surfaces.	3161	0	0
Congressional Interest Item - FY09 - Vacuum Sampling Pathogen Collection and Concentration. Continue development of the M-Vac System, a field pathogen collection system, along with the Bacteria Reduction System (BRS) to enhance the current capability to find, extract and elute potentially deadly pathogens from unique surfaces. A tube sampler will be developed, which will enable customers and inspectors to reach and sample inaccessible surfaces and areas. An effort will begin to miniaturize the sampling platform in order to meet DoD requirements.	0	3164	0
Total	3161	3164	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
CRITICAL REAGENTS PROGRAM (CRP)	0	1582	0
RDT&E Articles (Quantity)	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Add - FY09 - Biological Threat Antibody Research.	0	1582	0
Total	0	1582	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)	1581	0	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Interest Item - Dry Powder Inhaler Analyzer.	1581	0	0
Total	1581	0	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
TRANSFORMATIONAL MED TECH INITIATIVE (TMTI)	0	0	90111
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
<p>Multigent Broad Spectrum Medical Countermeasures - Upon Milestone A approval, this effort will advance experimental broad-spectrum drug candidates with an accepted Investigational New Drug (IND) from the Food and Drug Administration (FDA) through the Technology Development phase. This includes the initiation and completion of Phase I clinical studies, where a new drug is introduced into humans, and early evidence is gathered on drug safety. Approve performers who have had their IND applications accepted by the FDA, and initiate Phase I clinical trials and other studies necessary to support a Milestone B decision and progress toward a New Drug Application (NDA) with the FDA. Phase I trials are the first stage of drug testing in human subjects in a relatively small (between 20-100) group of healthy human volunteers. Trials are designed to assess the safety pharmacokinetics (characteristic interactions of a drug and the body in terms of its absorption, distribution, metabolism and excretion) and pharmacodynamics (the action or effects of drugs on living organisms) of a drug. Phase I trials often include dose-ranging or dose escalation studies so that the appropriate dose for therapeutic use can be found. The tested range of doses will usually be a fraction of the dose that causes harm in animal testing.</p> <p>FY10 - Following review and approval of new drug candidates, initiate work on Phase I clinical trials for up to three novel drugs that show promise against several Biological Warfare (BW) threat agents. Commence Phase I clinical trials for one additional candidate drug: a previously licensed (re-purposed) drug that requires a different dosing than its existing label allows. Conduct additional safety tests on the re-purposed drug.</p>	0	0	90111
Total	0	0	90111

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
TECH TRANSFER FOR BIO SENSORS	0	791	0
RDT&E Articles (Quantity)	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 MB4
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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
Congressional Add - FY09 - IM Formulation Development of Anthrax Therapeutic.	0	791	0
Total	0	791	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
FILOVIRUS (VAC FILO)	0	0	11154
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
JVAP - Filovirus Vaccine - FY10 - Conduct Milestone A and enter into Advanced Component Development and Prototypes.	0	0	100
JVAP - Filovirus Vaccine - FY10 - Initiate and continue small scale manufacturing process development.	0	0	6534
JVAP - Filovirus Vaccine - FY10 - Initiate and continue non-clinical studies.	0	0	4520
Total	0	0	11154

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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 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	63	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	63	0
Total	0	63	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
JM0001 JOINT BIO AGENT IDENT AND DIAG SYSTEM (JBAIDS)	4902	479	0		
JX0005 DOD BIOLOGICAL VACCINE PROCUREMENT	48298	38109	12740		
JX0210 CRITICAL REAGENTS PROGRAM (CRP)	2413	0	0		
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	69231	89424	64478		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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:

CRP The Critical Reagents Program's (CRP) strategy establishes a core research and development capability to develop biological threat agent, genomic reference materials (antigens, nucleic acids, and antibodies) and detection and diagnostic assays for biothreat agent detection that shall be horizontally inserted across multiple detection and diagnostic platforms. In addition, this strategy will implement a formal, validated advanced development process to transition new assays into production and integration with the appropriate detection/diagnostic platform.

TMTI TMTI's ultimate goal is the delivery of FDA-licensed, therapeutics to the warfighter. This goal can be reached through any one of the following three acquisition approaches: 1) through the discovery of new drugs; 2) through application of new drug indications (i.e., through a commercial -off-the-shelf (COTS) approach); or, 3) through the re-engineering of previously developed drugs (i.e., through a Modified COTS approach). This may involve FDA-approved drugs or previously developed drug compounds that do not have an FDA license. Each of these approaches will require different entry points into both the drug development process and the defense acquisition management timeline. Moreover, each of these approaches will likely experience a different set of FDA regulatory requirements. In order to execute the overall acquisition strategy, TMTI has partnered with other elements within the DoD Chemical and Biological Defense Program, DoD agencies, private industry, and other DoD laboratories for the development of TMTI products. The contract types used to execute the program will depend on the circumstances, including maturity of the science, the legalities surrounding Intellectual Property (IP) and patent rights, and even the size of the performer. TMTI desires to retain "limited use" rights for any medical product being developed. In the earliest stages of any initiative, TMTI plans to streamline the drug development process by structuring contracts to include Contract Line Item Numbers (CLIN's) for advanced development, and even in some cases - Low Rate Initial Production (LRIP). Cost Plus Award Fee contracts or Other Transactions Authority (OTA) may be used with traditional or nontraditional defense contractors for most research and development contracts, while Indefinite Delivery/Indefinite Quantity (IDIQ) contracts will most likely be utilized for production efforts. Finally, developing platform technologies, such as modeling and simulation to predict drug-to-drug interaction effects prior to actual clinical trials, and the use of genetic sequencing and a bioinformatics backbone, are examples of how TMTI managers intend to augment private industry best practices to streamline the program management, test and evaluation, and overall TMTI product development.

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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 MB4
VAC FILO	<p>Contract will be competed at Milestone A. Developer(s) and candidate(s) will be selected based on existing test data, technical approach and business case considerations. Because of inherent risk in development of vaccines for viral hemorrhagic fevers, funding requested will support development of two vaccine candidates through Milestone B, at which time, a down-select to a single candidate will be conducted. If technologically feasible, a combined Ebola/Marburg vaccine will be developed.</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 MB4
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
CONG													
Congressional Interest Item - Vacuum Sampling Pathogen Collection	Allot	Dugway Proving Ground, DPG, UT	U	0	24	2Q FY09	0	NONE					
TMTI													
TMTI Program Office, Chemical Biological Medical Systems (CBMS), JPEO	Allot	Ft. Belvoir, VA; Ft. Detrick, MD; Falls Church, VA	U	0	0	NONE	13556	1Q FY10					
VAC FILO													
PM/MS S - Program Management/Program Manager Support	Allot	CBMS, Frederick, MD	U	0	0	NONE	684	4Q FY10					
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	456	3Q FY10					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	63	NONE	0	NONE					
Subtotal IV. Management Services:					87		14696						

Remarks:

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Exhibit R-4a, Schedule Profile	DATE May 2009
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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. <u>Schedule Profile:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
NGDS												
Congressional Interest Item - Dry Powder Inhaler Atropine	1Q	—————						2Q				
TMTI												
Milestone A Decision (Hemorrhagic Fever Virus Therapeutics)								4Q				
AVI BioPharma Marburg and Ebola Phase I trials									1Q	————— >>		
AVI BioPharma Junin Phase I trials									1Q	————— >>		
Functional Genetics 080 Phase I trials									1Q	————— >>		
Milestone A Decision (Intracellular Bacteria Therapeutics)												4Q
VAC FILO												
VAC FILO - Milestone A										2Q		

Exhibit R-4a, Schedule Profile	DATE May 2009
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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. <u>Schedule Profile (cont):</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
VAC FILO (Cont)												
VAC FILO - Manufacturing Process Development - Small Scale										2Q	———	>>
VAC FILO - Non-clinical Studies										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) MC4	PROJECT MC4
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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
MC4 MEDICAL CHEMICAL DEFENSE (ACD&P)	19778	8155	9478		

A. Mission Description and Budget Item Justification:

Project MC4 MEDICAL CHEMICAL DEFENSE (ACD&P): This project funds Advanced Component Development and Prototypes (ACD&P) 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/buddy-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) Bioscavenger Increment 2 (BSCAV Inc. 2), which will be used as a prophylaxis against nerve agents; and (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.

B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
BIOSCAVENGER (BSCAV)	13980	4346	0
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE May 2009		
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
Accomplishments/Planned Program		FY 2008	FY 2009	FY 2010
BSCAV Increment 2 - FY08 - Completed small scale manufacturing, process development, assay qualification, and test/evaluate medical defense products against traditional and non-traditional agents.		2032	0	0
BSCAV Increment 2 - FY08 - Completed Pre-Clinical Safety Studies.		1201	0	0
BSCAV Increment 2 - FY08 - Completed Investigational New Drug (IND) application.		258	0	0
BSCAV Increment 2 - FY08/09 - Continued and complete Phase 1 clinical safety studies. FY09 - Achieve Milestone B.		7035	1448	0
BSCAV Increment 2 - FY08/09 - Initiated and continue large scale manufacturing, process development, and assay validation. Transition to SDD phase.		2196	2598	0
BSCAV Increment 2 - FY08/09 - Initiated and complete NTA studies at US Army Medical Research Institute of Chemical Defense (USAMRICD).		1258	300	0
Total		13980	4346	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 MC4
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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
DRY POWDER INHALER ATROPINE (DPIA)	0	0	2000
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
DPIA -	0	0	2000
FY10 - Initiate and complete formulation, analytical methods and device optimization.			
Total	0	0	2000

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
IMPROVED NERVE AGENT TREATMENT SYSTEM (INATS)	5798	3715	7478
RDT&E Articles (Quantity)	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 MC4
Accomplishments/Planned Program		FY 2008	FY 2009	FY 2010
INATS - FY08 - Completed GLP (Good Laboratory Practices) - Pre-Clinical Safety Studies.		1000	0	0
INATS - FY08/09 - Continued and complete IND application effort. Conduct Milestone B.		275	300	0
INATS - FY 08/09/10 - Continue and complete process development and current Good Manufacturing Practice (cGMP) requirements, and stability in autoinjector.		1612	2070	2478
INATS - FY 08/09 - Continued and complete Phase I clinical safety studies.		1300	1345	0
INATS - FY08 - Provided strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.		1611	0	0
INATS - FY10 - Initiate and complete efficacy, safety, and toxicology studies of other candidate oximes.		0	0	2500
INATS - FY10 - Initiate and complete large scale synthesis, scale-up manufacturing, and stabilization in an operationally stable formulation of other candidate oximes.		0	0	2500
Total		5798	3715	7478

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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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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	94	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	94	0
Total	0	94	0

C. <u>Other Program Funding Summary:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	14149	22068	14086		

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	PROJECT MC4	
DPIA	<p>Medical Identification and Treatment Systems (MITS) Joint Product Management Office will manage the development of Field Aerosolized Atropine Increment 2 (Dry Powder Inhaler Atropine (DPIA)) for the DoD. For this post-Milestone B effort, the competitively selected contractor will serve as the systems integrator throughout development and shall be responsible for conducting the activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA), including: human clinical safety studies; pharmacokinetic studies; and validated manufacturing. 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 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 be obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</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 MC4

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
BSCAV													
BSCAV - Product Management Support	MIPR	USAMMDA, Fort Detrick, MD	U	373	134	2Q FY09	0	NONE					
BSCAV - Product Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	2796	315	2Q FY09	0	NONE					
BSCAV - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	3359	33	3Q FY09	0	NONE					
BSCAV - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	180	3Q FY09	0	NONE					
INATS													
INATS - Product Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	1021	164	2Q FY09	168	2Q FY10					
INATS - Product Management Support	MIPR	USAMMDA, Fort Detrick, MD	U	250	145	2Q FY09	148	2Q FY10					
INATS - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	502	28	2Q FY09	0	NONE					
INATS - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	928	228	4Q FY09	0	NONE					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	94	NONE	0	NONE					

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date				
Subtotal IV. Management Services:					1321		316					

Remarks:

TOTAL PROJECT COST:					8155		9478					
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D. <u>Schedule Profile:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
BSCAV												
BSCAV Inc. 2 - Small Scale Manufacturing	>>	————— 4Q										
BSCAV Inc. 2 - Pre-Clinical Safety Studies	>>	——— 3Q										
BSCAV Inc. 2 - IND Application	>>	————— 4Q										
BSCAV Inc. 2 - Phase 1 Clinical Safety Studies	>>	————— 4Q										
BSCAV Inc. 2 - Large Scale Manufacturing, Process Development & Assay Validation	1Q	————— >>										
BSCAV Inc. 2 - Milestone B								4Q				
DPIA												
DPIA - Formulation, Analytical Methodology & Device Optimization									2Q	——— 4Q		
INATS												

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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 (cont):</u>	FY 2008				FY 2009				FY 2010				
	1	2	3	4	1	2	3	4	1	2	3	4	
INATS (Cont)													
INATS - Process Development and cGMP Manufacturing Requirements	>>	—————									2Q		
INATS - Phase 1 Clinical Safety Studies	>>	—————							3Q				
INATS - GLP Pre-Clinical Safety Studies		2Q	—————		4Q								
INATS - IND Application		2Q	—————			1Q							
INATS - Milestone B						2Q	3Q						
INATS - Efficacy, Safety & Toxicology Studies of Candidate Oximes									1Q	—————			4Q
INATS - Large Scale Synthesis, Scale-Up Manufacturing & Stabilization of Candidate Oximes									1Q	—————			4Q

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	FY 2008	FY 2009	FY 2010		
COST (In Thousands)	Actual	Estimate	Estimate		
MR4 MEDICAL RADIOLOGICAL DEFENSE	6579	8129	0		

A. Mission Description and Budget Item Justification:

Project MR4 MEDICAL RADIOLOGICAL DEFENSE: This project funds the advanced development of candidate therapeutic medical countermeasures to mitigate the consequences of exposure to ionizing radiation due to nuclear or radiological attacks. Exposure to ionizing radiation causes damage to blood-forming cells (hematopoietic system) and gastrointestinal system, leading to Acute Radiation Syndrome (ARS). Medical countermeasures must be approved by the Food and Drug Administration (FDA) for human use prior to fielding. Testing the efficacy of candidate drugs against normally 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 Radiological Countermeasures (MRADC) efforts include multiple countermeasures required to restore casualties to pre-exposure health and 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 evacuation.

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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
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Conducted an evaluation and determined requirements for incorporating a Biodosimetry Assessment Tool (BAT) system created by the Armed Forces Radiobiology Research Institute (AFRRI) onto the Medical Communication for Combat Casualty Care (MC4) suite of applications for the theater medical community. The BAT is a tool to deliver diagnostic information (clinical signs and symptoms, physical dosimetry, etc.) to federal health care providers responsible for the management of radiation casualties. It is designed primarily for early use after a radiation incident and permits collection, integration, and archiving of data obtained from patients accidentally exposed to ionizing radiation. This enables the generation of diagnostic indices for comparison with referenced radiation dose responses and this, in turn, facilitates the development of a multiparameter dose assessment. Additional clinical parameters useful for casualty management also are assessed. The resulting display of patient diagnostic information provides treating health care providers with concise and relevant information on which to base clinical decisions. This information is archived for further use in radiation protection management.

B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
MEDICAL RADIOLOGICAL COUNTERMEASURES (MRADC)	6579	8034	0
RDT&E Articles (Quantity)	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) MR4	PROJECT MR4
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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
MRADC - FY08/09 - Continue and complete process development and current Good Manufacturing Practices (cGMP) manufacturing requirements.	1526	2700	0
MRADC - FY08/09 - Continue and complete pre-clinical safety and toxicology studies for two candidates.	3317	634	0
MRADC - FY08/09 - Continue and complete Investigational New Drug (IND) application efforts for two candidates.	278	300	0
MRADC - FY08/09 - Initiate and complete non-clinical efficacy studies for two candidates. FY09 - Achieve Milestone B and transition a candidate to System Development and Demonstration (SDD) phase.	1458	4400	0
Total	6579	8034	0

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	95	0
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	95	0
Total	0	95	0

C. <u>Other Program Funding Summary:</u>					
	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
MR5 MEDICAL RADIOLOGICAL DEFENSE	0	2936	8311		

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE May 2009
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

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 the Production and Deployment Phase, sufficient quantities of product to meet Initial Operational 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 a full capability (FDA approval). The DoD is working very closely with the Department of Health and Human Services (DHHS), which also has an anti-radiation program. The establishment of an interagency working group provides oversight and guidance to both agency programs to ensure that their efforts are non-duplicative. DHHS will be responsible for developing a MRADC that will treat hematological syndrome of acute radiation syndrome (ARS) and the DoD will be responsible for the development of a MRADC for the treatment of the gastrointestinal syndrome of ARS.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
MRADC													
MRADC - Process Development & cGMP Manufacturing	C/CPIF	Osiris Therapeutics, Inc., Columbia, MD	C	2890	3262	2Q FY09	0	NONE					
Subtotal I. Product Development:					3262		0						

Remarks:

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
MRADC													
MRADC - Regulatory Integration and IND Support Efforts	C/CPIF	Osiris Therapeutics, Inc., Columbia, MD	C	1186	1102	2Q FY09	0	NONE					
Subtotal II. Support Costs:					1102		0						

Remarks:

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
MRADC													
MRADC - Product Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	480	500	2Q FY09	0	NONE					
MRADC - Chem Bio Medical Systems	Allot	CBMS, Fort Detrick, MD	U	768	245	2Q FY09	0	NONE					
MRADC - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	334	3Q FY09	0	NONE					
MRADC - Product Management Services	MIPR	USAMMDA, FT Detrick, MD	U	0	145	2Q FY09	0	NONE					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	95	NONE	0	NONE					
Subtotal IV. Management Services:					1319		0						

Remarks:

TOTAL PROJECT COST:					8129		0						
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Exhibit R-4a, Schedule Profile	DATE May 2009
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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 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
MRADC												
MRADC - Process development and cGMP		2Q	—————					4Q				
MRADC - Pre-Clinical Safety and Toxicology Studies for 2 candidates	>>	—————						4Q				
MRADC - IND Application for 2 candidates	>>	—————						4Q				
MRADC - Non-Clinical efficacy Studies for 2 candidates		2Q	—————					4Q				
MRADC - Milestone B							3Q	4Q				
MRADC - BioDosimetry				4Q								

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate		
COST (In Thousands)					
TE4 TEST & EVALUATION (ACD&P)	13776	6335	28894		

A. Mission Description and Budget Item Justification:

Project TE4 TEST & EVALUATION (ACD&P): This funding supports the Joint Project Manager Nuclear, Biological, Chemical Contamination Avoidance Product Director, Test Equipment, Strategy, and Support (PD TESS) efforts. PD TESS provides test infrastructure products for testing and evaluating chemical and biological defense systems throughout the life cycle acquisition process in support of the Milestone Decision Authority, Joint Project Managers, and the Test and Evaluation (T&E) community. PD TESS test infrastructure products are aligned in five groups to include: (1) Chemical Laboratory (Sense); (2) Biological Laboratory (Sense); (3) Field Simulant (Sense); (4) Individual Protection, Collective Protection and Decontamination (Shield and Sustain); and (5) Modeling and Simulation (Shape).

(1) Chemical Laboratory (Sense): Products for this area include a Non-Traditional Agent (NTA) Test Facility, Dynamic Test Chamber (DTC) for chemical point sensors and the upgrade of a chemical standoff test fixture. The NTA Facility provides a new capability at the Edgewood Chemical Biological Center (ECBC) to conduct highly toxic materials testing using new, emerging threat agents. The NTA facility supports testing of decontamination, collective protection, individual protection, and contamination avoidance products. The Dynamic Test Chamber provides a new capability for testing chemical point detection systems against chemical warfare agents in various environmental conditions. The final effort provides for the upgrade of a chemical standoff detection test fixture located at Dugway Proving Ground (DPG). Major CBDP acquisition programs supported are: the Joint Chemical Agent Detector (JCAD); the Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM); the Joint Service General Purpose Mask (JSGPM); the Joint Service Lightweight Integrated Suit Technology (JSLIST); Joint Expeditionary Collective Protection (JECP); Joint Collective Protection Equipment (JCPE); Joint Service Transportable Decontamination System (JSTDS); Joint Warning and Reporting Network (JWARN) hardware components; the Joint Protective Aircrew Ensemble (JPACE); the Joint Service Aircrew Mask (JSAM); the Joint Service Chemical Environment Survivability Mask (JSCESM); and the Joint Chemical Ensemble (JCE).

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE May 2009
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>(2) Sense Laboratory (Biological): Products for this area include a Whole System Live Agent Test (WSLAT) "Strung Out" Chamber; WSLAT "Full System" Chamber; and upgrade of a bio-level 3 facility located at Dugway Proving Ground (DPG). The WSLAT "Strung Out" Chamber supports Joint Biological Point Detection component testing in biological live agent environments. The WSLAT "Full System" Chamber supports testing of all biological detection systems in production configuration in biological live agent environments. The Baker Laboratory Upgrade will provide a bio-level 3 fabricated infrastructure to host the WSLAT "Full System" Chamber. The upgrade will include bio-level 3 support laboratories and analytical instrumentation. Major CBDP acquisition programs supported are: 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); and the Joint Biological Standoff Detection System (JBSDS) Block II.</p> <p>(3) Field Simulant (Sense): Products for this area include a fully instrumented Simulant Test Grid and characterization of the existing Joint Ambient Breeze Tunnel (JABT) and Active Standoff Chamber (ASC) facilities. The Test Grid effort provides a fully instrumented 20 km by 40 km field simulant test capability that integrates cloud tracking equipment, meteorological equipment, test data network, C4ISR network, and operations center. The JABT/ASC effort provides simulant cloud characterization and validates system performance. Major acquisition programs supported are: the Joint Chemical Agent Detector (JCAD); 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 Joint Biological Tactical Detection System (JBTDS); the Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV); the Joint Effects Model (JEM); the Joint Operational Effects Federation (JOEF); and the Joint Expeditionary Collective Protection (JECP) System.</p>		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE May 2009
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) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): Products for this area include: a Small Item Decontamination Chamber; Individual Protection Ensemble (IPE) Mannequin; Man-in-Simulant Test (MIST) instrumentation; Individual Protection Equipment (IPE) Grid; Chemical, Biological Agent Resistance Test (CBART) Equipment; and Collective Protection (ColPro) Instrumentation and Chamber. The Small Item Decontamination Chamber provides an enhanced ability to conduct decontamination and residual agent off-gassing testing. The IPE Mannequin provides an articulated robotic mannequin that simulates warfighters activities and includes under ensemble agent sensing capability for evaluating IPE against chemical warfare agents. The Man-in-Simulant Test instrumentation provides a near real time simulant sensor system to monitor penetration of simulant. The Individual Protection Equipment (IPE) Grid provides test procedures to establish commonality measurements for system level IPE performance tests. Chemical, Biological Agent Resistance Test (CBART) equipment provides a near real time testing capability under a range of environmental conditions for individual and collective protection materials. Collective Protection instrumentation upgrades provide improved test capabilities at Dugway Proving Ground, Eglin Air Force Base, Dahlgren Naval Surface Warfare Center, and the Edgewood Chemical Biological Center for the evaluation of entire ColPro systems, subsystems and individual components. Acquisition Programs supported are: Joint Platform Interior Decontamination/Joint Material Decontamination System (JPID/JMDS); Joint Service Transportable Decontamination System (JSTDS); Joint Expeditionary Collective Protection (JECP); Joint Collective Protection Equipment (JCPE); Joint Service Lightweight Integrated Suit Technology (JSLIST); Joint Protective Aircrew Ensemble (JPACE); Joint Service General Purpose Mask (JSGPM); Joint Service Aircrew Mask (JSAM); Joint Service Chemical Environment Survivability Mask (JSCESM); and the Joint Chemical Ensemble (JCE).</p> <p>(5) Modeling and Simulation (Shape): Product for this area is a Synthetic Test Environment (Backgrounds & Interferents) library of real world environmental and interferent physical characteristics for Chemical/Biological systems. The environmental signatures will be integrated into models to generate synthetic environments to assess material performance under various conditions. All CBDP Acquisition Programs except medical are supported by this effort.</p>		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
TEST EQUIPMENT, STRATEGY & SUPPORT (PD TESS)	13776	6261	28894
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
PD TESS - Non-Traditional Agent (NTA) Test System - FY08 - Completed NTA test system initial design. Completed mock-up design and fabricated a full-scale simulant test fixture and instrumentation. FY09 - Evaluate/optimize mock-up performance. Initiate test fixtures design and procedures development. FY10 - Complete NTA test system engineering and initiate fabrication and purchase of test fixtures.	4271	5030	23839
PD TESS - DPG Chemistry Laboratory Upgrade - FY08 - Completed upgrade of chemical stand-off detection test systems.	421	0	0
PD TESS - Dynamic Test Chamber (DTC) - FY08 - Verified near real-time, low level agent detection referee instrumentation performance.	520	0	0
PD TESS - Test Grid Instrument Network & Design - FY08 - Conducted Test Grid/Range Test Validation System verification testing.	420	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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):	FY 2008	FY 2009	FY 2010
PD TESS - Individual Protection Equipment (IPE) XYZ Grid - FY08 - Completed and validated IPE handbooks.	61	0	0
PD TESS - IPE Mannequin - FY08 - Initiated and completed IPE Mannequin System and Chamber design.	7968	0	0
PD TESS - FY08 - Provided systems engineering support to integrate and execute Advanced Component Development & Prototype development efforts. FY09/10 - Continue systems engineering support.	115	1231	5055
Total	13776	6261	28894

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	74	0
RDT&E Articles (Quantity)	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	74	0
Total	0	74	0

C. <u>Other Program Funding Summary:</u>					
	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
TE5 TEST & EVALUATION (SDD)	48238	42020	41466		
TE7 TEST & EVALUATION (OP SYS DEV)	6887	7119	4891		

D. Acquisition Strategy:

PD TESS The PD TESS program provides for the development and acquisition of new and enhanced test infrastructure to support the sense, shield, shape, and sustain mission areas for the Joint Service Chemical and Biological Defense Program (CBDP). The efforts are supported through competitive contract actions, academia, and other Government agencies. Infrastructure solutions will leverage commercially available systems to provide state-of-the-art capabilities that address current and future CBDP test and evaluation needs.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
PD TESS													
HW S - NTA Test System Mock-up Design	C/FFP	ARINC Engineering, Annapolis, MD	C	542	300	2Q FY09	1000	2Q FY10					
HW S - NTA Test System Mock Up Procedures/Fixtures	MIPR	ECBC, Aberdeen Proving Ground, MD	U	3729	4230	2Q FY09	6239	2Q FY10					
HW S - NTA Test System Design/Fabrication/Installation	C/FFP	TBD	C	3997	500	3Q FY09	16600	2Q FY10					
Subtotal I. Product Development:					5030		23839						

Remarks:

II. Support Costs: Not applicable

III. Test and Evaluation: Not applicable

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE May 2009
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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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
PD TESS													
PM/MS S - Program Management/Systems Engineering Support	MIPR	JPM NBC CA, APG, MD	U	3348	1231	2Q FY09	5055	1Q FY10					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	74	NONE	0	NONE					
Subtotal IV. Management Services:					1305		5055						

Remarks:

TOTAL PROJECT COST:					6335		28894						
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Exhibit R-3 (PE 0603884BP)

Exhibit R-4a, Schedule Profile	DATE May 2009
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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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D. <u>Schedule Profile:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
PD TESS												
XYZ IPE Grid Handbook/Validation	>>	————— 4Q										
DPG Chem Lab Upgrades	>>	————— 4Q										
Dynamic Test Chamber Design/Fabrication/Installation/Validation	>>	—————			————— 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)	PROJECT TT4
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	FY 2008	FY 2009	FY 2010		
COST (In Thousands)	Actual	Estimate	Estimate		
TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P)	13218	17267	26761		

A. Mission Description and Budget Item Justification:

Project TT4 TECHBASE TECHNOLOGY TRANSITION (ACD&P): This project (TT4) validates high-risk/high-payoff technologies, concepts-of-operations, and reconnaissance and surveillance platforms that could significantly improve warfighter capabilities in preparation for transition of mature technologies to advanced development programs requiring chemical and biological (CB) defense technologies. These programs offer an opportunity to identify and efficiently mature emerging technologies from laboratory experiments to acquisition programs through risk reduction, engineering and integration. These Advanced Technology Demonstrations (ATDs) and Advanced Concept Technology Demonstrations (ACTDs) seek to demonstrate the potential for enhanced military operational capability and/or cost effectiveness. Upon conclusion of the technical and operational demonstrations, the user or sponsor provides a determination of the military utility and operational impact of the technology and capability 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. This project funds three major thrust areas (two of which are new thrust areas that consolidate legacy systems and are annotated as such below): Advanced Remediation Technologies (ART), Early Warning Military Application in Reconnaissance Systems (EW-MARS), and Comprehensive Innovative Protection (CIP). The ART addresses Chemical, Biological, and Radiological (CBR) remediation and decontamination processes and demonstrates technologies and methods to restore assets such as mobile equipment, fixed sites, critical infrastructures, personal, and equipment to operational status as a result of having reduced or eliminated CBR contamination. The EW-MARS (new thrust area) achieves enhanced command and control decision making capabilities as a result of a combined and orchestrated family of chemical and biological defense systems deployed on various platforms in remote locations. The CIP (new thrust area) transitions mature technologies to improve individual and collective protection capabilities for U.S. and coalition warfighters. The following is a description of specific efforts funded under each thrust area:

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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
<p>ART:</p> <p>Interagency Biological Restoration Demonstration (IBRD) - A Department of Defense (DoD) / Department of Homeland Security (DHS) collaborative effort that will provide a coordinated, systems approach to the recovery and restoration of wide urban areas. This will include Department of Defense (DoD) infrastructures and high traffic areas (transit/transportation facilities) following the aerosol release of a biological agent.</p> <p>Special Platform Interior Decontamination and Equipment Restoration (SPIDER) - A concept exploration effort that focused on decontaminating the interior of an aircraft following the release of a chemical agent. This effort merged into the Decontamination Family of Systems, also known as HaMMER (see below for description).</p> <p>Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon) - A chemical and biological decontamination process for land vehicles, which will prototype an improved decontamination process and will evaluate the current Detailed Equipment Decontamination (DED), which is the most thorough of Joint Service decontamination procedures. This effort will merge into the Decontamination Family of Systems, also known as HaMMER (see below for description).</p> <p>Hazard Mitigation Material and Equipment Restoration (HaMMER) - A layered strategy to identify individual technologies that may be collectively applied to reduce or eliminate chemical and biological hazards. It includes a Decontamination Family of Systems that gives the warfighter multiple capabilities to reduce or eliminate chemical hazards. This effort leverages upon and consolidates Auto Decon and SPIDER efforts described above.</p> <p>EW-MARS:</p> <p>CBRN Unmanned Ground Reconnaissance Vehicle (CUGR) - (Concluded in FY08) - A CBRN contamination detection and identification ACTD.</p> <p>Expeditionary Biological Detection (EBD) - (Concluded in FY08) - A man-portable, point-detector for aerosolized biological weapons ATD. The results of this effort will be utilized by the JMDSE (see below for description).</p>		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE May 2009
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
<p>Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP) - A data fusion ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to improve the capability to detect and react to an initial chemical and biological attack, as well as prevent a second attack. Specifically, this effort focuses on force protection decision making for external, cross domain sensors for cueing/tipping, and managing resources of dynamically deployable high quality chemical and biological sensors.</p> <p>Rapid Area Surveillance Reconnaissance (RASR) - A sensitive-site exploration, standoff reconnaissance, ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to survey large areas (whole rooms, courtyards, fields) and assess and identify contamination with Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICS) and Non-Traditional Agents (NTAs).</p> <p>Post Intercept Weapons of Mass Destruction Identification (PIWID) - An ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3), which addresses both operational and technical issues associated with the capability to determine the presence of Weapons of Mass Destruction (WMD) in the threat payload of ballistic or cruise missile delivery systems after a successful active defense intercept.</p> <p>CIP:</p> <p>Demo-Low Burden Individual Protection Demonstration (IP Demo) - An ATD that leverages lightweight chemical and biological protective textiles developed in Budget Activity 3 (Project CB3, Protection and Hazard Mitigation), and will support the next generation Joint Chemical Ensemble. This effort will provide significantly decreased thermal burden correlated with acceptable levels of chemical and biological protection, as well as significantly increase the ability of the warfighter to accomplish a mission in a contaminated environment.</p> <p>Joint Medical Distance Support and Evaluation (JMDSE) - A Joint Concept Technology Demonstration (JCTD) that leverages the results of the EBD (see above for description) and seeks new detect-to-treat concept of operations (CONOPS) enabled by the deployment of new chemical and biological detection and identification capabilities to front line forces.</p>		
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE May 2009
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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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B. Accomplishments/Planned Program

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
TECH TRANSITION - JCTD AND DEMOS (TT DEMO)	13218	17065	26761
RDT&E Articles (Quantity)	4	0	2

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
ART (Interagency Biological Restoration Demonstration (IBRD)): FY08 - Continued the Interagency Biological Restoration Demonstration (IBRD), a DoD-DHS collaborative effort. Developed restoration plans and established risk assessment and clearance goals. Developed sampling, characterization, and long term monitoring plans. Developed and exercised wide-area decontamination methods. Developed and demonstrated restoration system tools and conducted table top exercises, field exercises, and workshops. FY09 - Continue development of restoration plans. Continue risk assessment and clearance goals development. Conduct decontamination technologies efficacy testing relevant to an outdoor urban environment. Conduct agent fate and transport studies and demonstrations. Continue development and demonstration of system tools. Conduct table top exercises, field exercises, and workshops.	261	5827	2761

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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)	FY 2008	FY 2009	FY 2010
FY10 - Complete IBRD development of restoration plans; complete established risk assessment and clearance goals. Develop sampling, characterization, and 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. Plan, coordinate, and execute the IBRD Final Demo/Table Top Exercise (TTX) in the Seattle urban area. Transition decontamination methods, restoration tools, agent fate and transport data to the advanced developer (Joint Program Manager for Guardian and Decontamination - see Budget Activities 4 and 5).	261	5827	2761
ART (Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)): FY09 - Conduct Test and Evaluation (T&E) of current detailed equipment decontamination processes and prototype automated decontamination solutions. FY10 - Complete Test and Evaluation (T&E) of current detailed equipment decontamination processes and prototype automated decontamination solutions. Recommend optimized process for automated decontamination. Transition detailed decontamination system to the advanced developer (Joint Program Manager for Decontamination - see Budget Activities 4 and 5).	0	3000	3000
ART (Hazard Mitigation Material and Equipment Restoration (HaMMER)): FY09 - Initiate identification of system and component technologies, establish test protocols, and establish performance metrics. FY10 - Conduct component decontamination processes in which collective applications can be employed to eliminate or reduce chemical and biological decontamination.	0	500	7900

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Accomplishments/Planned Program (Cont):	FY 2008	FY 2009	FY 2010
EW-MARS (Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD): FY08 - Completed concepts of operations (CONOPS) and Tactics, Techniques, and Procedures (TTP's) development, operational test planning, and execution. Completed CUGR residual support and extended user evaluation. Completed hardware and software modifications to meet transition plan requirements. Improved camera mount and range finder hardening to increase reliability and software maturation to reduce false positive rate. Transitioned system, data sets and kits to the advanced developer (Joint Program Manager for Nuclear Biological Chemical Contamination Avoidance, Guardian, and Consequence Management.)	9147	0	0
EW-MARS Thrust Area (Expeditionary Biological Detection (EBD)): FY08 - Completed CONOPS, TTPs development and operational test planning. Completed testing of biological detection technologies to evaluate capability to provide required functionality. Completed systems engineering, prototyping, technical testing and integration activities. Complete military utility assessment (MUA). Transitioned biological detection, trigger, and analysis capabilities to Joint Tactical Biological Detection System (JTBDS - see Budget Activity 5, Project CA5)).	3810	0	0
EW-MARS (Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP)): FY09 - Initiate operational concept generation. Validate the operational concepts through TTXs and operator in the loop command and control mockups. Develop risk management concepts and begin cross domain security architecture. Finalize ATD acquisition strategy. FY10 - Continue operational concept generation. Begin software development, operational and mockup development, and develop test plans and procedures. Execute initial lab based tech demo.	0	2000	3000

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Accomplishments/Planned Program (Cont):		FY 2008	FY 2009	FY 2010
<p>EW-MARS (Rapid Area Surveillance/Reconnaissance (RASR)):</p> <p>FY09 - Initiate operational concept planning and exercises. Conduct pathfinder demonstrations to baseline current state of the art and determine critical path.</p> <p>FY10 - Continue operational concept planning and exercises. Conduct pathfinder demonstrations to baseline current state of the art and determine critical path. Initiate competitive prototype industry awards and conduct technology readiness assessments. Initiate operational mockup, lesson plans and final development planning.</p>		0	3000	4000
<p>EW-MARS Thrust Area (Post Intercept Weapons of Mass Destruction Identification (PIWID)):</p> <p>FY09 - Initiate Joint Land Attack Cruise Missile Elevated Netted Sensor (JLENS) study. Leverage a missile intercept event for information gathering and baseline study. Conduct table top exercise to evaluate current TTPs.</p> <p>FY10 - Conduct post-intercept WMD simulant payload data collection while leveraging missile intercept event. Demonstrate sidecar re-processing of non-chemical and biological sensors to extract useful cue/tipping information.</p>		0	2000	2000
<p>CIP (Low Burden Individual Protection Demonstration (IP Demo)):</p> <p>FY10 - Perform and complete system level technical performance measure evaluations. Initiate and complete a system level user demonstration. Conduct and complete component level testing. Transition low burden individual protection overgarment to the advanced developer (Joint Program Manager for Individual Protection and the Program Manager for Soldier Equipment).</p>		0	0	3100
<p>Project TT4/Line No: 077</p> <p align="center">Page 99 of 113 Pages</p> <p align="right">Exhibit R-2a (PE 0603884BP)</p>				

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Accomplishments/Planned Program (Cont):	FY 2008	FY 2009	FY 2010
CIP (Joint Medical Distance Support and Evaluation (JMSDE)): FY09 - Initiate internal planning, program management, and documentation. Conduct overlay scenarios and initiate JMDSE to Joint Biological Tactical Decision System (JBTDSE) interface evaluation. FY10 - Complete JMDSE to Joint Biological Tactical Decision System (JBTDSE) interface evaluation. Conduct field demonstrations and military utility assessments. Develop CONOPS, training, test and security plans. Initiate software development.	0	738	1000
Total	13218	17065	26761

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
SBIR/STTR	0	202	0
RDT&E Articles (Quantity)	0	0	0

Accomplishments/Planned Program	FY 2008	FY 2009	FY 2010
SBIR - FY09 - Small Business Innovative Research.	0	202	0
Total	0	202	0

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C. <u>Other Program Funding Summary:</u>					
	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>		
TE3 TEST & EVALUATION (ATD)	23824	26579	13363		
TT3 TECHBASE TECHNOLOGY TRANSITION	9239	8214	7388		

D. Acquisition Strategy:

TT DEMO The Advanced Technology Demonstrations (ATD's) and Advanced Concept Technology Demonstrations (ACTDs) exploit mature and maturing technologies to solve important military problems. ATD's and ACTD's emphasize technology assessment and integration rather than technology development. The goal is to provide a prototype capability to the warfighter and to support in the evaluation of that capability. The warfighters evaluate the capabilities in real military exercises and at a scale sufficient to fully assess military utility. When possible, the ATDs will leverage results from existing chemical and biological science and technology (S&T) efforts and prior ATDs. Market research/baselining is performed prior to ATD initiation to determine if a suitable solution exists or whether a solicitation/sole source is required to develop a solution. The ATDs are typically managed by DoD, Federally Funded Research Development Centers (FFRDCs) or University Affiliated Research Centers (UARCs). This is done through the Military Interdepartmental Purchase Request (MIPR) or the Interagency Cost Reimbursable Order (IACRO) in accordance with the Economy Act. The ATD manager, who is typically responsible for total system development, can subcontract industry, academia, or other government agencies to perform individual component development.

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BUDGET ACTIVITY RD T&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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
TT DEMO													
HW S - (ART) HaMMER - Initiate Tech Order Development	MIPR	Army - ECBC, Edgewood, MD	U	0	957	2Q FY09	0	NONE					
HW S - (ART) IBRD System Design and Integration	PO	Pacific Northwest National Laboratory, Seattle, WA	F	0	375	2Q FY09	791	2Q FY10					
HW S - (ART) IRBD System Design and Integration	PO	Sandia National Laboratory, Albuquerque, NM	F	0	375	2Q FY09	0	NONE					
HW C - (EW) RASR Initiate System Design and Integration	MIPR	Army - ECBC, Edgewood, MD	U	0	1847	2Q FY09	0	NONE					
HW C - (ART) Auto Decon	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	300	1Q FY10					
HW C -(ART) HaMMER Product Development	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	2950	1Q FY10					
HW S - (ART) Hammer Product Development-SME	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	200	1Q FY10					
HW C - (EW) MARS JFP Product Development	PO	MITRE, Bedford, MA	F	0	0	NONE	200	2Q FY10					

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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 - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
HW C - (EW) MARS JFP Product Development	PO	Johns Hopkins Univ/Applied Physics Lab (JHU-APL), Laurel, MD	F	0	0	NONE	200	2Q FY10					
HW C - (EW) MARS JFP Product Development	PO	MIT/Lincoln Labs, Lexington, MA	F	0	0	NONE	200	2Q FY10					
HW C - (EW) RASR Product Development	PO	MIT/Lincoln Labs, Lexington, MA	F	0	0	NONE	1700	2Q FY10					
HW C - (EW) RASR Product Development	PO	Georgia Tech Institute of Technology, Atlanta, GA	F	0	0	NONE	500	2Q FY10					
HW C - (EW) PIWID Product Development	MIPR	JLENS, Huntsville, AL	U	0	0	NONE	500	1Q FY10					
HW C - (CIP) IP Demo Product Development	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	300	1Q FY10					
HW C - (CIP) JMDSE Product Development	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	150	1Q FY10					
Subtotal I. Product Development:					3554		7991						

Remarks:

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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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
TT DEMO													
ILS C - (ART) HaMMER CONOPS Development	MIPR	Army - RDECOM, ECBC, Edgewood, MD	U	0	1323	2Q FY09	0	NONE					
ILS C - (ART) IBRD TTP and CONOPS Development	MIPR	SPAWAR, San Diego, CA	U	286	742	1Q FY09	250	1Q FY10					
ILS C - (ART) IBRD TTP and CONOPS Development	PO	Sandia National Laboratory, Albuquerque, NM	F	298	300	2Q FY09	0	NONE					
ILS C - (ART) IBRD TTP and CONOPS Development	MIPR	National Geospatial Intelligence Agency, Bethesda, MD	U	286	300	2Q FY09	0	NONE					
ILS C - (ART) IBRD TTP and CONOPS Development	PO	Los Alamos National Laboratory, Los Alamos, NM	F	0	908	2Q FY09	0	NONE					
ILS C - (ART) Auto Decon CONOPS Development	MIPR	USA Chemical School, Ft. Leonard Wood, MO	U	0	1306	1Q FY09	0	NONE					
ILS C - (ART) Auto Decon Support	MIPR	Edgewood Chemical and Biological Center (ECBC), Edgewood, MD	U	0	0	NONE	800	1Q FY10					

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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	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
ILS S - (ART) HaMMER System Support	MIPR	Research, Development & Engineering Cmd (RDECOM), Edgewood, MD	U	0	0	NONE	1400	1Q FY10					
ILS S - (ART) Hammer OM Support	MIPR	US European Command (USEUCOM), Stuttgart, GE	U	0	0	NONE	150	1Q FY10					
ILS S - (ART) HaMMER Support	MIPR	Edgewood Chemical and Biological Center, Edgewood, MD	U	0	0	NONE	500	1Q FY10					
ILS C - (EW) MARS JFP Support	MIPR	Edgewood Chemical and Biological Center, Edgewood, MD	U	0	0	NONE	465	1Q FY10					
ILS C - (EW) RASR OM Support	MIPR	20th Support Command, Aberdeen Proving Ground, MD	U	0	0	NONE	215	1Q FY10					
ILS C - (EW) RASR OM Support	MIPR	MARFORPAC (PACOM), Camp Smith, HI	U	0	0	NONE	220	1Q FY10					
ILS C - (EW) PIWID Support-Data Analysis	MIPR	Air Force Research Laboratory, Wright Patterson AFB, OH	U	0	0	NONE	200	1Q FY10					

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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
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
TT DEMO													
OTE C - (ART) HaMMER Operational Test	MIPR	Air Force - AFOTEC, Kirtland AFB, NM	U	0	1626	1Q FY09	0	NONE					
OTE C - (ART) IBRD Operational Test	Allot	DTRA Test and Evaluation (DTRA CXT), Albuquerque, NM	U	319	1181	2Q FY09	809	1Q FY10					
OTE C - (ART) IBRD Operational Test	PO	Sandia National Laboratory, Albuquerque, NM	F	204	656	2Q FY09	0	NONE					
OTE C - (ART) IBRD Operational Test	MIPR	National Geospatial Agency, Reston, VA	U	250	788	2Q FY09	0	NONE					
OTE C - (ART) Auto Decon Operational Test	MIPR	Air Force - AFOTEC Kirtland AFB, NM	U	0	631	1Q FY09	0	NONE					
OTE S - (ART) Auto Decon System Testing	MIPR	Army- ECBC, Edgewood, MD	U	0	0	NONE	800	2Q FY10					
OTE S - (ART) HaMMER System Testing	MIPR	Army- ECBC, Edgewood, MD	U	0	0	NONE	750	1Q FY10					
OTE S - (ART) HaMMER T&E Oversight	MIPR	Army- ECBC, Edgewood, MD	U	0	0	NONE	400	1Q FY10					
OTE C - (EW) MARS JFP Support	MIPR	US Army Environmental Command (AEC), Aberdeen, MD	U	0	0	NONE	400	1Q FY10					

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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 - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
OTE C - (EW) MARS JFP Support	MIPR	Dugway Proving Ground (DPG), DPG, UT	U	0	0	NONE	500	1Q FY10					
OTE C - (EW) RASR Component Testing	MIPR	US Army Environmental Command (AEC), Aberdeen, MD	U	0	0	NONE	225	1Q FY10					
OTE C - (EW) RASR Component Testing	MIPR	Dugway Proving Ground (DPG), DPG, UT	U	0	0	NONE	225	1Q FY10					
OTE C - (EW) RASR Component Testing	MIPR	US Army Developmental Test Command, Aberdeen, MD	U	0	0	NONE	226	1Q FY10					
OTE C - (EW) PIWID Component Testing	MIPR	Dugway Proving Ground (DPG), DPG, UT	U	0	0	NONE	400	1Q FY10					
OTE C - (EW) PIWID Component Testing	MIPR	JLENS, Huntsville, AL	U	0	0	NONE	400	1Q FY10					
OTE C - (CIP) IP Demo T&E	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	1745	1Q FY10					
OTE C - (CIP) JMDSE Demo and Evaluation	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	400	1Q FY10					
Subtotal III. Test and Evaluation:					4882		7280						

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III. Test and Evaluation - Cont.
 Remarks:

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
TT DEMO													
PM/MS S - HaMMER Program Management	MIPR	Army - ECBC Edgewood, MD	U	0	1266	1Q FY09	0	NONE					
PM/MS S - IBRD Program Management	MIPR	Space and Naval Warfare Systems Command (SPAWAR), San Diego, CA	U	488	838	2Q FY09	1000	1Q FY10					
PM/MS S - CB Program Management	MIPR	Air Force - AFRL, Dayton, OH	U	0	747	1Q FY09	0	NONE					
PM/MS S - BRD Program Management	PO	Sandia National Laboratory, Albuquerque, NM	F	387	899	2Q FY09	0	NONE					
PM/MS S - Auto Decon Management Support	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	1000	1Q FY10					
PM/MS S - HaMMER System Management	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	750	1Q FY10					
PM/MS S - HaMMER System Program Management	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	950	1Q FY10					

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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date					
PM/MS S - MARS JFP Program Management	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	1000	1Q FY10					
PM/MS S - RASR Program Management	MIPR	Army - ECBC, Edgewood, MD	U	0	0	NONE	729	1Q FY10					
PM/MS S - PIWID System Program Management	MIPR	JLENS, Huntsville, AL	U	0	0	NONE	300	1Q FY10					
PM/MS C - IP Demo Program Management	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	636	1Q FY10					
PM/MS C - JMDSE Program Management	MIPR	US Army Natick Soldier RD&E Center, Natick, MA	U	0	0	NONE	250	1Q FY10					
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA		0	202	NONE	0	NONE					
Subtotal IV. Management Services:					3952		6615						

Remarks: TT DEMO - Management service costs cover all ten ATDs described in the R2a of this project (TT4).

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TOTAL PROJECT COST:		17267		26761						
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D. <u>Schedule Profile:</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
TT DEMO												
(EW) CUGR JCSD Demonstration	>>	————— 4Q										
(EW) Expeditionary Biological Demonstration	>>	————— 4Q										
(ART) Interagency Biological Restoration Demonstration (IBRD)	>>	—————			—————				————— 4Q			
(ART) Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)	1Q	—————			—————				————— 4Q			
(ART) Hazard Mitigation, Material and Equipment Restoration (HaMMER)					1Q	—————			————— >>			
(EW) Military Applications in Reconnaissance/Support (MARS JFP)					1Q	—————			————— >>			
(EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)					1Q	—————			————— >>			

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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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D. <u>Schedule Profile (cont):</u>	FY 2008				FY 2009				FY 2010			
	1	2	3	4	1	2	3	4	1	2	3	4
TT DEMO (Cont)												
(EW) Post Intercept WMD Identification (PIWID)					1Q	_____			_____ >>			
(CIP) IP Demo					1Q	_____			_____ >>			
(CIP) JMDSE					1Q	_____			_____ >>			

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