

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)					
COST (In Thousands)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	138278	260279	212072	287074	238203	188868	237579	Continuing	Continuing
CA5 CONTAMINATION AVOIDANCE (SDD)	63966	83605	64689	99817	58425	53039	13990	Continuing	Continuing
CM5 HOMELAND DEFENSE (SDD)	8754	390	0	0	0	0	0	0	9144
CO5 COLLECTIVE PROTECTION (SDD)	2460	662	12581	21450	28306	20466	18826	Continuing	Continuing
DE5 DECONTAMINATION SYSTEMS (SDD)	4169	16496	11050	5397	15053	15353	7365	Continuing	Continuing
IP5 INDIVIDUAL PROTECTION (SDD)	27852	19724	19663	12441	3089	3071	999	Continuing	Continuing
IS5 INFORMATION SYSTEMS (SDD)	19884	73761	25838	17285	8812	5537	3274	Continuing	Continuing
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	9843	60612	71834	92533	95113	77377	181423	Continuing	Continuing
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	1350	5029	6417	38151	29405	14025	11702	Continuing	Continuing

Line No: 091

Page 1 of 182 Pages

Exhibit R-2 (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	
<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 agent threat environment across the continuum of global, contingency, special operations/low-intensity conflict, counter-narcotics, and other high risk missions. Operating forces have a critical need for defense against worldwide proliferation of Chemical and Biological (CB) warfare capabilities and for medical treatment of casualties in medical treatment facilities. Congress has directed centralized management of Department of Defense (DoD) CB Defense initiatives, both medical and non-medical. This program element supports the System Development and Demonstration (SDD) of CB defensive equipment, both medical and non-medical. These projects have been restructured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. The consolidation will provide for development and operational testing of equipment for Joint Service as well as Service-unique requirements.</p> <p>Contamination avoidance efforts under this system development program will provide U.S. forces with real-time hazard assessment capabilities. They include advanced multi-agent point and remote chemical detection systems for ground, aircraft, and shipboard applications; automated warning and reporting systems; integrated radiation detection and monitoring equipment; and enhanced battlefield reconnaissance capabilities. Force protection efforts will increase protection levels while decreasing physical and psychological burdens imposed by protective equipment. They include improved aircrew respiratory protection, lightweight integrated suit technology, and shipboard collective protection equipment.</p> <p>Weapons of Mass Destruction Civil Support Team (WMD CST) efforts provide for testing and development of a Unified Command Suite (UCS) and an Analytical Laboratory Platform (ALS) for these teams.</p>		
Line No: 091	Page 2 of 182 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	
<p>The medical chemical defense system development program funds improved medical equipment and drugs essential to counteracting lethal and performance-degrading effects of chemical threats and medical equipment essential to meeting medical requirements on the integrated battlefield with emphasis on decreased size/weight and high mobility, yet supporting large numbers of combat casualties. Additionally, foreign medical materiel may be procured for exploitation of advanced technology and development to meet medical defense goals. This program element supports the development of prophylactic and therapeutic drugs and rapid identification and diagnostic systems.</p> <p>DoD Biological Defense mission requires the detection of validated biological threat agents to provide early warning capabilities on mobile and fixed platforms. This program element will provide theater protection through the development of point and stand-off detection systems. The detection system concept will provide detection, identification, warning, and sample collection for verification that a biological agent attack has occurred. This program element also provides for the development of biological defense medical programs. DoD Biological Defense medical mission will address: (1) protective vaccines - vaccination capability against the most probable biological threat agents; (2) identification - clinical identification of biological threat agents through medical evaluation and laboratory analysis to augment early warning capabilities.</p> <p>The projects in this program element support efforts in the system development phases of the acquisition strategy and are therefore correctly placed in Budget Activity 5.</p>		
Line No: 091	Page 3 of 182 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)		PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)		

B. <u>Program Change Summary:</u>		<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Previous President's Budget (FY 2006 PB)		145794	280908	228319
Current Biennial Budget Estimate (FY 2007)		138278	260279	212072
Total Adjustments		-7516	-20629	-16247
a. Congressional General Reductions		-114	-3804	0
b. Congressional Increases		0	-16825	0
c. Reprogrammings		-6208	0	0
d. SBIR/STTR Transfer		-1194	0	0
e. Other Adjustments		0	-32	-16247

Change Summary Explanation:

Funding: N/A

Schedule: N/A

Technical: N/A

Line No: 091
Page 4 of 182 Pages
Exhibit R-2 (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CA5				
COST (In Thousands)				FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
CA5 CONTAMINATION AVOIDANCE (SDD)				63966	83605	64689	99817	58425	53039	13990	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project CA5 CONTAMINATION AVOIDANCE (SDD): This funding supports System Development and Demonstration and Low Rate Initial Production (SDD/LRIP) of an array of reconnaissance, detection and identification equipment, and warning systems.

Efforts funded in this project are: (1) Interim Biological Agent Detection System (IBADS), (2) Joint Biological Point Detection System (JBPDS), (3) Joint Biological Stand-off Detection System (JBSDS), (4) Joint Chemical Agent Detector (JCAD), (5) Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM), (6) Joint Service Light Nuclear, Biological and Chemical Reconnaissance System (JSLNBCRS), (7) Joint Service Lightweight Stand-off Chemical Agent Detector (JSLSCAD), (8) Joint Warning and Reporting Network (JWARN), and the (9) Point Chemical Agent Detector Evaluation (PCADE) Program.

This project includes IBADS continued technical support. IBADS gives the Navy an interim point detection capability aboard ships at sea, which will be part of the theater protection strategy. The JBPDS will replace the IBADS beginning in FY05.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>The Joint Biological Point Detection System (JBPDS) is the only joint service biological detector system for the services. The Army platforms include the JBPDS on the Biological Integrated Detection System (BIDS) and Stryker NBC Reconnaissance Vehicle. The Air Force and Marine Corps will include the JBPDS in the Lightweight NBC Reconnaissance vehicle platforms. Additionally, the Air Force will employ the JBPDS trailer and fixed site variant to support air bases and expeditionary and forward operating forces. The Navy has identified the Aegis class ships for installation of the JBPDS and the trailer variant at port. The JBPDS is a fully automated system that increases the number of agents that can be identified by the current BIDS and IBADS, and provides first-time point biological detection capability to the Air Force and Marine Corps. Spiral development with an evolutionary component/suite upgrade acquisition approach will be used to take advantage of emerging technologies and to provide the services with enhanced detection performance at lower life cycle costs. Director, Operational Test and Evaluation has mandated Whole System Live Agent Test prior to FRP.</p> <p>The JBPDS Block II program uses spiral development with an evolutionary component/suite upgrade acquisition approach, to take advantage of emerging technologies and to provide the Services with enhanced detection performance at lower life cycle costs. Per Director, Operational Test and Evaluation (DOT&E) Memorandum dated July 9, 2002, the JBPDS Block II program funding will support the development of a Whole System Live Agent Test (WSLAT) capability. DOT&E has directed the JBPDS program undergo WSLAT prior to a program Full Rate Production (FRP) decision. The JBPDS Block II funding will support WSLAT methodology, chamber design, system purchase and JBPDS record test execution.</p>		
Project CA5/Line No: 091	Page 6 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>The Joint Biological Standoff Detection System (JBSDS) is the first standoff early warning biological detection (BD) system. The system will be capable of providing near real time detection of biological attacks/incidents and standoff early warning detection/warning of biological warfare (BW) agents at fixed sites or when mounted on multiple platforms, including NBC reconnaissance platforms. It will be capable of providing standoff detection, ranging, tracking, discrimination (manmade vs. natural occurring aerosol) and generic detection (bio vs. non-bio) of large area BW aerosol clouds for advanced warning, reporting, and protection. The JBSDS will augment and integrate with existing BD systems to provide a BD network capable of near real time detection and warning theater wide to limit the effects of biological agent hazards against U.S. forces at the tactical and operational levels of war. The JBSDS can be employed in support of various areas (e.g., fixed sites, Air Ports of Debarkation/Sea Ports of Debarkation (APODs/SPODs), amphibious landing sites, etc.), or on platforms (ships, aircraft or ground vehicles). The JBSDS is employing an incremental acquisition strategy. Increment I will provide an initial capability to Army and Air Force units and will be deployed at fixed site locations or will operate in a stationary mode on mobile platforms. Increment II will be used by all services and will provide increased sensitivity, on-the-move operation, and an interface with existing and planned communication networks (i.e. JWARN). Increment II can be employed in support of various areas (e.g., fixed sites, APODs/SPODs, amphibious landing sites, etc., or on platforms (ships, aircraft or ground vehicles).</p> <p>The JCAD program employs an incremental acquisition strategy to develop a miniaturized, rugged, and portable point chemical agent detector that automatically and simultaneously detects, identifies, quantifies, and alerts in the presence of nerve, blister, and blood chemical warfare agents. Increment 1 will provide warfighter and simple platform mounted systems. Increment 2 will add low concentration detection and expand platform utility. JCAD will be used for aircraft, shipboard, wheeled vehicles, stand alone, and individual soldier applications. JCAD will replace the Automatic Chemical Agent Detector and Alarm (ACADA), Chemical Agent Monitor (CAM), Improved Chemical Agent Monitor (ICAM), and other legacy systems currently used by the individual Services.</p>		
Project CA5/Line No: 091	Page 7 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>The JCBRAWM program employs an incremental acquisition strategy to develop full capability to monitor dangerous materials in water. The JCBRAWM Increment I will provide first real-time biological detection capability in source water (lakes, sea water, rivers, and product waters from water treatment systems. Increment II will provide increased detection/monitoring capabilities for chemicals in water. Increment III will provide radiological detection capability in water. Increment IV will provide non-reagent biological detection in water (reagent based detection requires temperature controlled conditions).</p> <p>The JSLNBCRS is a lightweight NBC detection and identification system. It will consist of a Base Vehicle (BV) equipped with hand-held, portable and mounted, current, and advanced NBC detection and identification equipment. The JSLNBCRS will provide on-the-move reconnaissance and surveillance in support of combat, combat support, and combat service support forces. There will be two variants of the JSLNBCRS: the High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) variant and the Light Armored Vehicle (LAV) variant. The Chemical Biological Mass Spectrometer Block II (CBMS Block II) will provide chemical liquid, chemical vapor, toxic industrial chemical, and biological weapon detection and identification as a component of the JSLNBCRS and Stryker NBCRV systems.</p> <p>The JSLSCAD will provide the first real-time, on-the-move, chemical agent vapor detection for contamination avoidance or reconnaissance operations. The JSLSCAD detects, identifies, and reports nerve, blister, and blood agent vapors. JSLSCAD has detection capability of up to five kilometers. The JSLSCAD will replace the M21 Remote Stand-off Chemical Agent Alarm (RSCAAL). The JSLSCAD program will utilize an incremental acquisition approach. Increment I will provide an initial capability and be used for ground mobile reconnaissance applications. Increment II will pursue an evaluation of three commercially available systems with follow-on low-rate production. Increment III will assess the potential for integrating detection capabilities in aerial platforms.</p>		
Project CA5/Line No: 091	Page 8 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5

The JWARN will provide standard integration and analysis of NBC detection information with Command, Control, Communication, Computers, Intelligence Surveillance and Reconnaissance (C4ISR) on the battlefield automating the NBC warning and reporting processes currently performed manually throughout the Services. The JWARN will collectively consist of Commercial off-the-shelf (COTS) materiel and JWARN software for C4ISR. JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. JWARN ID was the initial acquisition and fielding of COTS and Government off-the-shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. JWARN will provide automatic NBC message capability at the Global Command and Control System (GCCS) level. JWARN will integrate NBC legacy and future detector systems, NBC warning and reporting software modules, and NBC battlespace management modules in the Joint Services C4I systems. In addition to JWARN development, a JWARN Initial Capability (JIC) will be developed and provided to warfighters in order to support refinement of Service CONOPS and provide feedback to the JWARN developer. Preplanned Product Improvement (P3I) will investigate new detectors/sensors and software changes to Service C4I systems. This program has been transitioned to IS5 beginning in FY05.

The PCADE program evaluated emerging technologies for potential insertion into future point chemical agent detection systems.

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
INTERIM BIO AGENT DETECTOR SYS (IBADS)	283	0	0
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2005 Accomplishments:**

- 283 IBADS - Completed the decommissioning of the remaining nine (9) shipboard IBADS.

Total 283

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	8800	7283	2180
RDT&E Articles (Quantity)	5	0	0

FY 2005 Accomplishments:

- 2810 JBPDS - Purchased JBPDS test hardware, Man-Portable, XM 96 systems (five @ \$503K ea.) and one System Support Package (\$295K) for Whole System Live Agent Test (WSLAT) support.
- 3000 JBPDS - Initiated improvements for the JBPDS LRUs to meet objective requirement for multiple agents and sensitivity.
- 2550 JBPDS - Initiated effort to adapt the Array Biological Sensor as an upgrade to the JBPDS.
- 440 JBPDS - Provided systems engineering support.

Total 8800

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 1030 JBPDS - Validate LRU improvements. • 1000 JBPDS (T&E Infrastructure/WSLAT) - Procure Whole System Live Agent Test (WSLAT) consumables. • 1010 JBPDS (T&E Infrastructure/WSLAT) - Complete M&S development of JBPDS engineering model in support of WSLAT effort. • 1732 JBPDS (T&E Infrastructure/WSLAT) - Complete methodology development and testing for WSLAT. • 700 JBPDS (T&E Infrastructure/WSLAT) - Complete preliminary chamber design contract. • 575 JBPDS (T&E Infrastructure/WSLAT) - Provide program management and technical support for WSLAT. • 245 JBPDS - Complete contractor support for optimization and engineering support. • 991 JBPDS - Congressional Interest Item - Biological and Chemical Agents Detector. <p>Total 7283</p> <p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 1017 JBPDS (T&E Capability/WSLAT) - Conduct WSLAT record test in support of JBPDS. • 1163 JBPDS - Provide system engineering support. <p>Total 2180</p>		
Project CA5/Line No: 091		Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM	17655	0	2000
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 3546 JBSDS - Continued development contract (including contractor support of Production Verification Test (PVT) and Initial Operational Test and Evaluation (IOT&E)).
- 450 JBSDS - Provided systems engineering support.
- 4147 JBSDS - Conducted and completed PVT.
- 5041 JBSDS - Initiated Multi-Service Operational Test and Evaluation (MOT&E).
- 900 JBSDS - Initiated Modeling and Simulation for JBSDS Increment II.
- 3571 JBSDS - Initiated demonstration of Increment II technologies.

Total 17655**FY 2007 Planned Program:**

- 2000 JBSDS (T&E Capability) - Develop real-time Man-In-Simulant Test (MIST) sampling system.

Total 2000

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM INCREMENT II	0	19560	19890
RDT&E Articles (Quantity)	0	0	18

FY 2006 Planned Program:

- 5181 JBSDS - Conduct Multi-Service Operational Test & Evaluation (MOT&E).
- 4980 JBSDS - Complete Developmental contract (including contractor support for MOT&E).
- 972 JBSDS - Continue agent/simulant correlation.
- 2335 JBSDS - Complete Inc I Developmental Testing.
- 1183 JBSDS Increment II - Continue Increment II Modeling & Simulation.
- 1696 JBSDS Increment II - Initiate Increment II Florescence/Algorithm Improvement Study.
- 909 JBSDS Increment II - Initiate design and development of engineering prototypes.
- 1276 JBSDS Increment II - Plan and initiate Increment II testing/field demo.
- 1028 JBSDS Increment II - Design/Build Spectral Characterization Instrument

Total 19560

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2007 Planned Program:**

- 1314 JBSDS Increment II - Field test to support prototype/algorithm development.
- 2500 JBSDS Increment II - Complete Increment I MOT&E Evaluation and prepare for FRP Decision.
- 3370 JBSDS Increment II - Complete Increment I/II Algorithm Study.
- 1737 JBSDS Increment II - Continue agent/simulant correlation.
- 1737 JBSDS Increment II - Initiate field simulant challenge test and cloud characterization.
- 1737 JBSDS Increment II - Initiate additional test grid development.
- 1737 JBSDS Increment II - (T&E Capability) - Prepare turnkey packages of required NEPA documentation for expanded range capabilities, to allow for rapid and standing environmental approvals.
- 4020 JBSDS Increment II - Implement and test Increment I algorithm upgrade.
- 1738 JBSDS Increment II - Initiate chemical biological standoff chamber test capability.

Total 19890

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT CHEMICAL AGENT DETECTOR (JCAD)	0	16842	3500
RD&E Articles (Quantity)	0	120	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2006 Planned Program:**

- 2345 JCAD - Provide contract support of commercial test systems.
- 8340 JCAD - Conduct government evaluation of commercial detector. Efforts include completing PQT and performing operational assessment.
- 1757 JCAD - Provide systems engineering support.
- 2200 JCAD - Purchase Increment 2 systems and support (120 systems at \$13.5K each).
- 2200 JCAD - (T&E Capability) - Design agent simulant dissemination systems, sampling systems, monitoring systems, and establish testing, safety and security protocols.

Total 16842**FY 2007 Planned Program:**

- 1500 JCAD - Initiate government evaluation of Increment 2 detector.
- 2000 JCAD - Conduct Increment 1 MOT&E.

Total 3500

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS CHEMICAL/BIOLOGICAL/RADIOLOGICAL AGENT WATER MONITOR	0	0	7600
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2007 Planned Program:**

- 6930 JCBRAWM - Initiate test and evaluation efforts to include developing test methodology and purchasing test instrumentation.
- 670 JCBRAWM - Initiate government systems engineering support.

Total 7600

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS LIGHT NBC RECON SYS (JSLNBCRS)	15190	9358	1770
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 6758 JSLNBCRS - Continued TICs and TIMs software upgrades for CBMS II transition to JSLNBCRS procurement. Continued improvements to biological detection/identification capability. Initiated Integrated Logistics Support (ILS) of Chemical Biological Mass Spectrometer (CBMS) II.
- 2600 JSLNBCRS - Continued Multi-service Operational Test & Evaluation (MOT&E) planning and preparation.
- 1756 JSLNBCRS - Completed LAV integration and conducted contractor Engineering Design Test (EDT) and Production Qualification Test (PQT).
- 2632 JSLNBCRS - Initiated, conducted and completed First Article Test (FAT)/Production Verification Test (PVT) of HMMWV LRIP.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>FY 2005 Accomplishments (Cont):</p> <ul style="list-style-type: none"> • 1444 JSLNBCRS - Provided government systems engineering support. <p>Total 15190</p> <p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 3000 JSLNBCRS - Initiate, conduct and complete MOT&E. • 2386 JSLNBCRS - Complete development and validation of biological detection capability for Chemical Biological Mass Spectrometer (CBMS) II. • 2120 JSLNBCRS - Initiate additional chemical/Toxic Industrial Chemical (TIC) library for CBMS II. • 1210 JSLNBCRS - Complete CBMS II software technical transfer and Integrated Logistics Support (ILS). • 642 JSLNBCRS - Provide government systems engineering support for CBMS II. <p>Total 9358</p> <p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 1770 JSLNBCRS - Initiate the development, integration and test of the Chemical Unmanned Ground Reconnaissance (CUGR) vehicle and P3I Advanced Concept Technology Development (ACTD) programs into JSLNBCRS. <p>Total 1770</p>		
<p>Project CA5/Line No: 091</p> <p>Page 17 of 182 Pages</p> <p>Exhibit R-2a (PE 0604384BP)</p>		

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS LIGHTWEIGHT STANDOFF CHEMICAL AGENT DET (JSLSCAD)	18046	26805	27749
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 2000 JSLSCAD - Continued Increment I evaluation to support NRC findings (modeling & simulation) and initiated Increment II evaluation efforts.
- 1500 JSLSCAD - Initiated and completed Algorithm Improvement Program Testing.
- 1500 JSLSCAD - Supported remote sensing test facility design and development of methodology for testing of commercial detectors.
- 1000 JSLSCAD - Procured data collection instrumentation.
- 800 JSLSCAD - Initiated systems engineering requirements analysis and Field of Regard Study.
- 700 JSLSCAD - Conducted field test methodology prove-out.
- 200 JSLSCAD - Integrated commercial systems into platforms.
- 9259 JSLSCAD - Initiated evaluation of candidate commercial remote detection systems (Increment II).
- 1087 JSLSCAD - Continued to provide government systems engineering support.

Total 18046

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE& DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 1900 JSLSCAD - Conduct IOT&E of systems supporting NBCRS platforms (Increment I). • 6200 JSLSCAD - Initiate product improvement program for system hardware and detection software. • 3840 JSLSCAD - (T&E Capability) Conduct limited objective experiment to measure performance improvement relative to developing requirements. • 4100 JSLSCAD - Continue Increment I model analysis and development of improved techniques to support testing and analysis to support NRC findings and refine modeling techniques. • 3536 JSLSCAD - Integrate improved algorithm into system hardware. • 1129 JSLSCAD - Continue to provide government systems engineering support. • 4500 JSLSCAD - (T&E Capability) Initiate data gathering efforts from various battle-space representative environments to include correlating and archiving spectral background signatures from these environments. • 700 JSLSCAD - (T&E Capability) Coordinate/facilitate subject matter expert support. • 900 JSLSCAD - (T&E Capability) Initiate purchase of data collection instrumentation. <p>Total 26805</p>		
<p>Project CA5/Line No: 091</p> <p>Page 19 of 182 Pages</p> <p>Exhibit R-2a (PE 0604384BP)</p>		

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2007 Planned Program:**

- 7181 JSLSCAD - Continue product improvement program for system hardware and detection software.
- 4500 JSLSCAD - Complete modeling and simulation verification efforts to support NRC findings.
- 1700 JSLSCAD - Conduct MOT&E and validate Joint Service Interoperability.
- 6100 JSLSCAD - Initiate formal testing of product improvement program.
- 4682 JSLSCAD - Initiate development evaluation of Increment III systems.
- 1586 JSLSCAD - Continue to provide government systems engineering support.
- 2000 JSLSCAD - (T&E Capability) Continue background signature data gathering efforts to include adding CB spectral signatures and correlating field and chamber test data.

Total 27749

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
POINT CHEMICAL AGENT DETECTOR EVALUATION	3992	0	0
RDTE&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 3492 PCADE - Initiated and completed government evaluation of candidate technologies.
- 500 PCADE - Initiated and completed systems engineering support.

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**FY 2005 Accomplishments (Cont):****Total** 3992

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
TECHNOLOGY TRANSFER FOR BIO SENSORS	0	2947	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 2947 TT Bio - Congressional Interest Item - Enhancements to provide for the modernization and upgrade of sensors and detection devices.

Total 2947

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	810	0
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CA5	
FY 2006 Planned Program: <ul style="list-style-type: none"> 810 SBIR Total 810									
C. <u>Other Program Funding Summary:</u>									
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
CA7 CONTAMINATION AVOIDANCE OPERATIONAL SYS DEV	2070	9949	7035	7016	7207	7206	6978	Cont	Cont
JC0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	134532	111757	105769	106619	104249	127947	125221	Cont	Cont
JC0101 CHEM/BIO AGENT WATER MONITOR	0	0	0	838	2078	2259	6591	Cont	Cont
JC0250 JOINT BIO STANDOFF DETECTOR SYSTEM (JBSDS)	1917	16482	0	0	0	0	10161	Cont	Cont
JC1500 NBC RECON VEHICLE (NBCRV)	10257	14781	10267	7671	0	0	0	0	42976
JF0100 JOINT CHEM AGENT DETECTOR (JCAD)	0	0	22681	26510	30407	32267	39546	Cont	Cont
M98801 AUTO CHEMICAL AGENT ALARM (ACADA), M22	55548	26910	7869	12995	12961	13035	0	0	129318
Project CA5/Line No: 091 Page 22 of 182 Pages Exhibit R-2a (PE 0604384BP)									

UNCLASSIFIED

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDTE DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**C. Other Program Funding Summary (Cont):**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
MC0100 JT SVC LIGHT NBC RECON SYS (JSLNBCRS)	44799	46647	52806	56432	57245	94563	110103	Cont	Cont
S10801 JS LTWT STANDOFF CW AGT DETECTOR (JSLSCAD)	2718	17513	19579	30107	29519	38038	32823	Cont	Cont

D. Acquisition Strategy:

IBADS

Technical support of 13 fielded systems. It is the goal of the Navy to decommission all 13 shipboard IBADS during FY04 and FY05 because of the expected fielding of JBPDS.

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
JBPDS	<p>The Joint Biological Point Detection System (JBPDS) utilizes an open systems approach to insert maturing and validated technologies as part of the overall acquisition strategy to expedite fielding of a credible force protection. Through the course of Low Rate Initial Production (LRIP), the system will be technically and operationally tested in phases to ensure that the system is suitable and effective. The program will utilize results from testing to upgrade the system's line replaceable units (LRUs). Upgraded LRUs that demonstrate improved system performance, availability, and lower ownership cost, will be supplied to field units throughout the LRIP phase, until new Full Rate Production (FRP) systems or LRUs are developed that meet the objective requirements. Per Director, Operational Test and Evaluation (DOT&E) Memorandum dated July 9, 2002, the program will support the development of a Whole System Live Agent Test (WSLAT) capability.</p>	
JBSDS	<p>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 I JBSDSs 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.</p>	
JBSDS II	<p>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. The Increment II JBSDS follow-on development contract will be competitively awarded with emphasis on increasing sensitivity, range, and reliability, while reducing acquisition life cycle costs, weight, power requirements, and size. The system is to be used by all Services, thus reducing acquisition life cycle costs.</p>	
Project CA5/Line No: 091		Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT CA5	
JBTDS	<p>The JBTDS will use an evolutionary development strategy to expedite fielding of a system to meet the threshold requirements and then be upgraded at intervals until the objective requirements can be met and implemented at the appropriate time. Pre-milestone activities to reach Milestone A have been initiated in FY05. Concurrently, tech base activities are being monitored to leverage and/or accelerate critical detection technologies.</p>	
JCAD	<p>Joint Chemical Agent Detector (JCAD) acquisition strategy focused Joint Service science and technology efforts into development of a small lightweight chemical agent detector. During production qualification test (PQT) in 2003, issues were identified in meeting two key performance parameters. Testing was terminated and the development contract allowed to expire. The acquisition strategy has been restructured to meet the JCAD requirements. A new Acquisition Program Baseline and Single Acquisition Management Plan was approved in Sep 05. The new strategy employs an incremental acquisition approach to provide a military significant capability in the shortest time, and subsequent improvements to that capability. Increment 1 will provide warfighter and simple platform mounted systems. Increment 2 will add low concentration detection and expand platform utility.</p>	
JCBRAWM	<p>Increment I: Conducted technology down-select in Feb 04 with formal Decision Analysis Process and Panel. Recommended for early transition of biodetection tickets for the interim capability. The concept of this detector will be handheld multiplex assay tickets with a reader.</p> <p>Increment II: This increment identifies a technology for detecting/monitoring Chemical Warfare Agents (CW agents) in water. Milestone A is planned for FY08.</p>	
<div>Project CA5/Line No: 091</div> <div>Page 25 of 182 Pages</div> <div>Exhibit R-2a (PE 0604384BP)</div>		

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>Increment III: This increment develops a detector/monitor for identifying radiological agents in water. Milestone A is planned for FY08.</p> <p>Increment IV: This increment develops a technology to replace Increment I with a non-reagent biological detector/monitor in water.</p> <p>JSLNBCRS This joint program follows a modified Non-Developmental Item (NDI) strategy integrating Government Furnished Equipment (GFE), NDI, and systems undergoing development in parallel programs into an integrated suite of detection, analysis, and dissemination of equipment/software. A Low Rate Initial Production contract for the build and integration of 14 M1113 HMMWV variants was awarded on 4 March 2004. Two production representative LAVs will be tested concurrently with LRIP HMMWVs. Initial Operational Capability (IOC) for HMMWV and LAV variants is Jun 07 (Objective) and Dec 07 (Threshold). Upon successful completion of LRIP and Multi-service Test and Evaluation (MOT&E), a Full Rate Production (FRP) competitive contract is anticipated.</p> <p>JSLSCAD The JSLSCAD program restructure reflects an incremental acquisition strategy to provide an initial capability by evaluating the current JSLSCAD configuration and alternative commercial systems against JSLSCAD Joint Operational Requirements Document (JORD) requirements.</p>		
<p>Project CA5/Line No: 091</p> <p>Page 26 of 182 Pages</p> <p>Exhibit R-2a (PE 0604384BP)</p>		

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>Increment I - Initial Capability: This Increment is the "current" JSLSCAD configuration developed under the Engineering and Manufacturing Development (EMD) contract awarded in 1997 after a full and open competition. While this system did not meet all the Key Performance Parameters (KPPs) or critical operational requirements of the JORD, the Acquisition and Combatant communities determined that the Increment I system provided additional capabilities to the warfighter (on-the-move detection) that the currently fielded M21 Remote Standoff Chemical Agent Alarm (RSCAAL) is not capable of performing. Increment I systems will be used for ground mobile reconnaissance applications on the Stryker Nuclear, Biological and Chemical Reconnaissance Variant (NBCRV) and the Joint Service Light NBC Reconnaissance System (JSLNBCRS). Upon Milestone Decision Authority (MDA) approval of the JSLSCAD Full Rate Production (FRP) decision, the government will award a Firm Fixed Price (FFP) production contract to the EMD contractor for production of additional systems to fulfill the remaining Stryker NBCRV and JSLNBCRS requirements. As of 17 November 2005, seventy-one (71) Increment 1 systems are required to support the reconnaissance programs. In June 2004, the JSLSCAD program office awarded a FFP contract to the EMD contractor to refurbish 31 of the Production Qualification Test/Initial Operational Test and Evaluation (PQT/IOT&E) systems from the EMD contract. These thirty-one (31) Low Rate Initial Production (LRIP/IOT&E) Increment 1 JSLSCADs are being provided to support the Stryker NBCRV IOT&E, the JSLNBCRS IOT&E and the Stryker NBCRV fielding. Forty (40) additional systems will complete the production. A production contract is contemplated to be awarded to the EMD contractor on a non-competitive basis to produce the remaining Increment 1 requirements. The appropriate Justification and Approval (J&A) will be executed to support this contract. A cost reimbursable contract will also be awarded to the EMD contractor for Contractor Logistics Support (CLS) of the fielded systems. No further contracting actions are expected for Increment I.</p>		
Project CA5/Line No: 091	Page 27 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>Increment II Commercial Item - Ground/Ship/Fixed-Site: Increment II has pursued an evaluation of three commercially available systems from three contractors who responded favorably to a market survey. The contracting officer determined Increment II to be a commercial item as defined by Federal Acquisition Regulation (FAR) 2.101. Based upon this determination, a market survey was conducted to obtain product information for specific items which would meet the government's requirements. Potential offerors were provided the opportunity to submit product information based on notices published on three separate websites. The product information which was received through the market survey was evaluated and contracts were awarded to three vendors. The Government will evaluate the commercial systems with the potential to meet the JSLSCAD KPPs for ground, mobile, fixed site, and shipboard applications. An Algorithm Improvement Program (AIP) will be considered for shipboard applications to address the shipboard operating environments. The Government anticipates one or more contractors will be awarded a LRIP contract as a result of a successful evaluation. The LRIP and follow-on FRP contracts for Increment II will be awarded based on the results of the Increment 2 Government Evaluation and additional market research. If the LRIP and follow-on FRP contracts are awarded on a non-competitive basis, the appropriate J&A approvals will be obtained to support these contracts; otherwise full and open competitive procedures will be used.</p> <p>Increment III Commercial Item - Aerial: After the Increment II Government evaluation, the Government will assess the potential for developing the contractor's item to meet the Increment III aerial requirements. If the Increment II system does not have the potential to meet the Increment III KPPs, the Government will conduct another market survey to determine if there is a commercial technology with the capability to meet the Increment III requirements.</p>		
Project CA5/Line No: 091	Page 28 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>PCADE PCADE is a limited technology demonstration program that investigated emerging technologies for potential insertion into future point chemical agent detection programs.</p>		
Project CA5/Line No: 091		
Page 29 of 182 Pages		
Exhibit R-2a (PE 0604384BP)		

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBPDS													
SW SB - Identification Component Upgrades	MIPR	Various	C	709	1400	2Q FY05	0	NONE	0	NONE	0	2109	0
SW SB - JBPDS Test Hardware (WSLAT)	C/CPFF	General Dynamics, Armaments & Technical Products, Charlotte, NC	C	0	2810	2Q FY05	0	NONE	0	NONE	0	2810	0
HW S - Sensor Design	PO	MIT-LL, Boston, MA	F	0	1600	2Q FY05	600	1Q FY06	0	NONE	0	2200	0
HW S - Identification upgrades	SS/CPFF	Constellation Technology, Largo, FL	F	0	2550	4Q FY05	0	NONE	0	NONE	0	2550	0
HW C - Biological and Chemical Agents Detector	PO	TBS	F	0	0	NONE	991	4Q FY06	0	NONE	0	991	0
JBSDS													
SW S - Develop and Integrate JBSDS, Initiate LRIP, Develop ILS and Documentation	C/CPFF	Science & Engineering Services, Inc, Columbia, MD	C	6755	3208	1Q FY05	0	NONE	0	NONE	0	9963	0
SW SB - Initiate Demonstration of Increment II technologies	MIPR	Various	C	0	1800	2Q FY05	0	NONE	0	NONE	0	1800	0
JBSDS II													
SW SB - Design and develop Inc II prototypes	MIPR	Sandia National Lab, Albuquerque, NM	C	0	0	NONE	525	1Q FY06	0	NONE	0	525	0
SW SB - Develop and integrate JBSDS Inc I	C/CPFF	SESI, Columbia, MD	C	0	0	NONE	4447	1Q FY06	0	NONE	0	4447	0
Project CA5													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SW SB - Algorithm Development	MIPR	NAVSEA, Johns Hopkins University, Baltimore, MD, MIT, Boston, MA	F	0	0	NONE	1313	1Q FY06	1830	1Q FY07	0	3143	0
SW SB - Algorithm Upgrade Testing	C/CPFF	SESI, Columbia, MD	C	0	0	NONE	0	NONE	1330	1Q FY07	0	1330	0
JCAD													
SW SB - Purchase Commercial Detectors	C/FFP	TBS	C	1200	0	NONE	2200	3Q FY06	0	NONE	0	3400	0
JSLNBCRS													
SW S - Toxic Industrial Chemicals/Toxic Industrial Materials and Biological Detection Software Improvement for CBMS	MIPR	Oak Ridge National Laboratory, Oak Ridge, TN	U	7800	6758	2Q FY05	6591	2Q FY06	0	NONE	0	21149	0
HW C - Development and Integration of CUGR & P3I ACTD programs	C/CPFF	TBS	C	0	0	NONE	0	NONE	1500	2Q FY07	0	1500	0
HW S - LAV Integration and EDT/PQT Support	MIPR	PM LAV, TACOM, Warren, MI	U	0	118	1Q FY05	0	NONE	0	NONE	0	118	0
JSLSCAD													
SW S - Develop Software	C/CPFF	General Dynamics-ATP, Charlotte, NC	C	14975	250	2Q FY05	0	NONE	0	NONE	0	15225	11095
SW S - Develop Software	C/CPFF	TBS	C	0	0	NONE	1000	2Q FY06	500	1Q FY07	0	1500	0
Project CA5													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		

I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SW S - Design and Build Test Hardware	C/CPFF	General Dynamics-ATP, Charlotte, NC	C	37500	250	2Q FY05	0	NONE	0	NONE	0	37750	0
SW S - Design and Build Test Hardware	C/CPFF	TBS	C	0	0	NONE	4000	2Q FY06	6681	1Q FY07	0	10681	0
SW S - Develop and Manage Test Methodology	PO	Various	U	1000	1500	1Q FY05	500	2Q FY06	1800	1Q FY07	0	4800	0
HW S - Purchase Data Collection Instrumentation	Reqn	NAVSEA/JHU APL, Baltimore, MD	C	0	1000	2Q FY05	900	2Q FY06	0	NONE	0	1900	0
SW S - Develop and Manage Algorithm Improvement Program	Reqn	Various	C	0	1500	3Q FY05	3536	2Q FY06	0	NONE	0	5036	0
SW S - Model Development and Analysis	C/CPIF	ITT Industries, Alexandria, VA	C	0	0	NONE	900	2Q FY06	900	1Q FY07	0	1800	0
TT Bio													
TT Bio - Contamination Avoidance - upgrade sensors and detection devices	SS/FP	TBS	C	0	0	NONE	2947	4Q FY06	0	NONE	0	2947	0
Subtotal I. Product Development:				69939	24744		30450		14541		0	139674	

Remarks: JBPDS - FY05 - Purchase five XM96 systems at \$503k/ea and one system support package at \$295k.

JCAD - FY06 - 120 systems at \$13.5K per system

Project CA5

Page 32 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IBADS													
TD/D SB - Continued technical support of fielded IBAD systems, and decommission of IBADS.	MIPR	NSWC, Dahlgren, VA	U	263	283	1Q FY05	0	NONE	0	NONE	0	546	0
JBPDS													
ES S - Support for optimization and engineering manufacturing	C/CPFF	GD, ATP, Charlotte, NC	U	0	0	NONE	245	2Q FY06	0	NONE	0	245	0
JBSDS													
TD/D SB - Modeling and Simulation	PO	FT Detrick, MD and BSM Inc., Kennett Square, PA	C	200	240	1Q FY05	0	NONE	0	NONE	0	440	0
TD/D S - Modeling and Test Support	MIPR	NAVSEA/Johns Hopkins University, Baltimore, MD	F	600	3025	1Q FY05	0	NONE	0	NONE	0	3625	0
ES S - Modeling & Simulation, CAIV	MIPR	Various	F	0	75	1Q FY05	0	NONE	0	NONE	0	75	0
ILS S - Training, ILS Support	MIPR	Various	U	0	591	2Q FY05	0	NONE	0	NONE	0	591	0
JBSDS II													
ES S - Modeling & Simulation, test support	PO	BSM, Inc, Kennett Square, PA	C	0	0	NONE	357	1Q FY06	309	1Q FY07	0	666	0
ES S - Modeling & Simulation, test support	PO	NAVSEA, Johns Hopkins-APL, Columbia, MD	C	0	0	NONE	1839	1Q FY06	2000	1Q FY07	0	3839	0
Project CA5													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCAD													
ILS S - Technical Data and Logistics Support	MIPR	Various	U	2558	0	NONE	2386	2Q FY06	0	NONE	0	4944	0
ES S - Contractor Support - Technical Evaluation	Reqn	TBS	C	0	0	NONE	2345	2Q FY06	0	NONE	0	2345	0
ES S - Evaluate commercial detectors	MIPR	Various	U	0	0	NONE	1415	2Q FY06	0	NONE	0	1415	0
JCBRAWM													
ILS S - Logistics Support	MIPR	RDECOM, APG, MD	U	0	0	NONE	0	NONE	150	1Q FY07	0	150	0
TD/D S - Technical Data Documentation	MIPR	RDECOM, APG, MD	U	0	0	NONE	0	NONE	100	1Q FY07	0	100	0
JSLNBCRS													
ILS C - CBMS Block II ILS Support	MIPR	JPM NBC CA, APG, MD	U	40	40	1Q FY05	40	1Q FY06	0	NONE	0	120	0
JSLSCAD													
TD/D S - Evaluation of Engineering Changes	MIPR	JPM NBC CA, APG, MD	U	1150	100	1Q FY05	100	1Q FY06	100	1Q FY07	0	1450	870
TD/D S - ILS Analysis and Documentation	MIPR	JPM NBC CA, APG, MD	U	2720	100	1Q FY05	100	1Q FY06	100	1Q FY07	0	3020	2315
TD/D S - Prepare Technical Manuals and Documents	MIPR	JPM NBC CA, APG, MD	U	1320	150	1Q FY05	500	1Q FY06	750	1Q FY07	0	2720	650
ES S - T&E Subject Matter Expert Support	PO	Various	U	0	0	NONE	200	2Q FY06	0	NONE	0	200	0
Project CA5													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5	

II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PCADE													
ES S - Engineering Support	MIPR	Various	U	0	350	2Q FY05	0	NONE	0	NONE	0	350	0
Subtotal II. Support Costs:				8851	4954		9527		3509		0	26841	
Remarks:													

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBPDS													
OTHT S - WSLAT Methodology Testing	MIPR	DPG, UT	U	0	0	NONE	1732	2Q FY06	0	NONE	0	1732	0
OTHT SB - LRU Validation Tests	PO	Various	U	0	0	NONE	430	2Q FY06	0	NONE	0	430	0
OTHT S - Modeling & Simulation Engineering Test	PO	Edgewood Chemical Biological Center, APG, MD	U	0	0	NONE	1010	1Q FY06	0	NONE	0	1010	0
OTHT S - Preliminary Chamber Design	C/CPFF	TBS	U	0	0	NONE	700	2Q FY06	0	NONE	0	700	0
OTHT SB - Procure WSLAT Test Consumables	MIPR	CBMS, Ft. Detrick, MD	U	0	0	NONE	1000	1Q FY06	0	NONE	0	1000	0
OTHT S - Conduct WSLAT Record Test	PO	Various	U	0	0	NONE	0	NONE	1017	1Q FY07	0	1017	0

Project CA5	Page 35 of 182 Pages	Exhibit R-3 (PE 0604384BP)
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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBSDS													
OTE S - Planning and Operational Testing I	MIPR	AFOTEC, Albuquerque, NM	U	818	320	2Q FY05	0	NONE	0	NONE	0	1138	0
DTE S - Production Verification Test	MIPR	Developmental Test Command, APG, MD	U	100	1764	1Q FY05	0	NONE	0	NONE	0	1864	0
OTE S - Operational Testing (MOT&E)	MIPR	Operational Test Command, FT Hood, TX	U	700	3170	2Q FY05	0	NONE	0	NONE	0	3870	0
OTE S - DT/OT Evaluation	MIPR	AEC, APG, MD	U	450	470	2Q FY05	0	NONE	0	NONE	0	920	0
OTHT SB - Initiate demonstration of Increment 2 technologies	MIPR	DTE, DPG, UT	U	0	630	2Q FY05	0	NONE	0	NONE	0	630	0
OTHT S - Test & Evaluation Infrastructure	PO	Various	U	0	0	NONE	0	NONE	2000	2Q FY07	0	2000	0
DTE S - PVT Test Site	MIPR	Eglin Air Force Base, Eglin, FL	U	0	138	2Q FY05	0	NONE	0	NONE	0	138	0
JBSDS II													
OTHT S - Initiate Inc II developmental and operational test planning and developmental testing	MIPR	DTC, APG MD	U	0	0	NONE	893	1Q FY06	1314	1Q FY07	0	2207	0
DTE S - Complete Inc I Developmental Evaluation	MIPR	Various	U	0	0	NONE	1156	1Q FY06	0	NONE	0	1156	0
OTE S - Inc I Operational Test and Evaluation	MIPR	OTC/AEC/AFOTEC, Location Various	U	0	0	NONE	4098	2Q FY06	1000	1Q FY07	0	5098	0
Project CA5													
Page 36 of 182 Pages													
Exhibit R-3 (PE 0604384BP)													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTHT SB - Agent Simulant Correlation	MIPR	TBS, JPM NBC	U	0	0	NONE	630	2Q FY06	1737	1Q FY07	0	2367	0
OTHT S - CB Standoff Chamber Test Capability	MIPR	TBS, JPM NBC	U	0	0	NONE	0	NONE	1737	1Q FY07	0	1737	0
OTHT S - Field Simulant Challenge Test and Cloud Characterization	MIPR	TBS, JPM NBC	U	0	0	NONE	0	NONE	1737	1Q FY07	0	1737	0
OTHT S - Additional Test Grid Development	MIPR	TBS, JPM NBC	U	0	0	NONE	0	NONE	1737	1Q FY07	0	1737	0
OTHT S - Turnkey packages	MIPR	Various	U	0	0	NONE	0	NONE	1738	3Q FY07	0	1738	0
OTE S - Spectral Characterization Instrument	MIPR	Michigan Aerospace, Michigan	F	0	0	NONE	893	1Q FY06	0	NONE	0	893	0
OTE S - Update Inc I T&E	MIPR	OTC, AEC, AFOTEC, Location Various	U	0	0	NONE	0	NONE	1500	1Q FY07	0	1500	0
JCAD													
OTHT S - Evaluate Commercial Detectors (Increment 1)	MIPR	Various	U	5700	0	NONE	5340	2Q FY06	2000	1Q FY07	0	13040	0
OTHT S - Evaluate Commercial Detectors (Increment 2)	MIPR	Various	U	0	0	NONE	0	NONE	1500	1Q FY07	0	1500	0
OTHT SB - (T&E) Agent simulant dissemination systems	MIPR	Various	U	0	0	NONE	2200	3Q FY06	0	NONE	0	2200	0
Project CA5													
Page 37 of 182 Pages													
Exhibit R-3 (PE 0604384BP)													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCBRAWM													
DTE S - Developmental/Operational Testing	MIPR	TBS	U	0	0	NONE	0	NONE	6930	2Q FY07	0	6930	0
JSLNBCRS													
OTHT SB - Conduct FAT/PVT of HMMWV	MIPR	Various	U	3200	2632	2Q FY05	0	NONE	0	NONE	0	5832	0
DTE S - LAV DT I	MIPR	Dugway Proving Ground, Dugway, UT	U	50	1638	2Q FY05	0	NONE	0	NONE	0	1688	0
OTHT SB - MOTE Test Planning & Prep OTC	PO	OTC, FT Hood, TX	U	4147	2600	1Q FY05	2085	2Q FY06	0	NONE	0	8832	0
OTHT C - Test CUGR & P3I ACTD programs in the JSLNBCRS	MIPR	TBS	U	0	0	NONE	0	NONE	270	1Q FY07	0	270	0
JSLSCAD													
OTE S - Remote Vapor Sensing to Support NRC Findings (M&S)	PO	Various	U	3206	2000	1Q FY05	2000	1Q FY06	4500	1Q FY07	0	11706	0
OTHT SB - Limited Objective Experiment-Remote Sensing Systems	PO	Various	U	0	7209	2Q FY05	3840	2Q FY06	7132	2Q FY07	0	18181	0
OTE S - Evaluate Background Data	PO	Various	U	0	0	NONE	4500	2Q FY06	2000	1Q FY07	0	6500	0
Project CA5													
Page 38 of 182 Pages													
Exhibit R-3 (PE 0604384BP)													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTHT S - Methodology Prove-out/Field of Regard Study	MIPR	Various	U	0	1200	2Q FY05	0	NONE	0	NONE	0	1200	0
OTE S - IOT&E on NBCRS Platforms (Increment I)	MIPR	Various	U	0	0	NONE	1900	2Q FY06	0	NONE	0	1900	0
PCADE													
OTHT S - Evaluate Candidate Technologies	MIPR	Various	U	0	3492	2Q FY05	0	NONE	0	NONE	0	3492	0
Subtotal III. Test and Evaluation:				18371	27263		34407		39849		0	119890	

Remarks:

Project CA5
Page 39 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBPDS													
PM/MS S - Project Management	MIPR	JPM BD, APG, MD	U	500	440	1Q FY05	0	NONE	1163	2Q FY07	0	2103	0
PM/MS SB - WSLAT Project Management	MIPR	JPM NBC CA, APG, MD	U	0	0	NONE	575	1Q FY06	0	NONE	0	575	0
JBSDS													
PM/MS S - Program Management/Management Support	MIPR	JPM BD, APG, MD	U	2799	1282	1Q FY05	0	NONE	0	NONE	0	4081	0
PM/MS S - Other Services (Army, Navy, and Air Force)	MIPR	Various	U	984	667	1Q FY05	0	NONE	0	NONE	0	1651	0
PM/MS S - Modeling and simulation analysis, market research and CAIV	MIPR	Various	U	1480	275	1Q FY05	0	NONE	0	NONE	0	1755	0
JBSDS II													
PM/MS S - JPM BD, APG, MD	MIPR	JPM BD, APG, MD	U	0	0	NONE	3041	1Q FY06	1300	1Q FY07	0	4341	0
PM/MS S - PM/MS other services (USN, USMC, USAF)	MIPR	Various	U	0	0	NONE	368	1Q FY06	249	1Q FY07	0	617	0
PM/MS S - Modeling and Simulation Analysis	MIPR	Various	U	0	0	NONE	0	NONE	372	1Q FY07	0	372	0
JCAD													
PM/MS SB - Joint Service Support	MIPR	Various	U	8293	0	NONE	956	1Q FY06	0	NONE	0	9249	0
JCBRAWM													
PM/MS S - Joint Service Support	MIPR	TBS	U	0	0	NONE	0	NONE	420	1Q FY07	0	420	0
Project CA5													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSLNBCRS													
PM/MS SB - Project/Program Management	MIPR	JPM NBC CA, APG, MD	U	2050	1404	1Q FY05	642	1Q FY06	0	NONE	0	4096	0
JSLSCAD													
PM/MS S - Management and Systems Engineering Support	MIPR	JPM NBC CA, APG, MD	U	6008	1087	1Q FY05	1129	1Q FY06	1586	1Q FY07	0	9810	2580
PM/MS S - Joint Service Support	MIPR	Various	U	0	1700	1Q FY05	1700	2Q FY06	1700	1Q FY07	0	5100	0
PCADE													
PM/MS S - Joint Service Support	MIPR	Various	U	0	150	2Q FY05	0	NONE	0	NONE	0	150	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	810	NONE	0	NONE	0	810	0
Subtotal IV. Management Services:				22114	7005		9221		6790		0	45130	
Remarks:													
TOTAL PROJECT COST:				119275	63966		83605		64689		0	331535	

Project CA5

Page 41 of 182 Pages

Exhibit R-3 (PE 0604384BP)

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY






RDTE DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
IBADS																																
Fielding Support	>>								4Q																							
JBPDS																																
Multi-service Operational Test and Evaluation (IOT&E) (Phase II through V)	1Q	2Q																														
Milestone (MS) C - LRIP			3Q		2Q																											
Block I First Unit Equipped (FUE)	1Q																															
Select JBPDS LRUs for Upgrade						2Q																										
Design and Validate selected Upgrades						2Q								4Q																		
Multi-service Operational Test and Evaluation (IOT&E) (Phase VI) FOT&E													2Q	3Q																		
Whole System Live Agent Test								4Q						2Q																		
MS C Full Rate Production Decision																3Q	4Q															
JBSDS																																
Increment I JBSDS Milestone C (Low Rate Initial Production (LRIP))			3Q																													
Increment I JBSDS LRIP Contract Award			3Q																													
Increment I JBSDS LRIP (2 Systems)			3Q		2Q																											

Project CA5

Page 42 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JBSDS (Cont)																																
Increment I JBSDS Engineering Design Test					1Q	2Q																										
Increment I JBSDS LRIP (4 Systems)					2Q	<div></div>	4Q																									
Increment I JBSDS Follow-on LRIP IPR					2Q																											
Increment I JBSDS Multi-Service Operational Test & Evaluation (MOT&E)									2Q	3Q																						
Increment I JBSDS Full Rate Production									4Q	<div></div>	4Q																					
Increment I JBSDS First Unit Equipped (FUE)												1Q																				
JBSDS II																																
Increment II Technology Modeling				4Q	<div></div>				3Q																							
Increment II Requirements Trade-Off Analysis					2Q	<div></div>			3Q																							
Increment II Technology Demo					3Q																											
Increment II Fluorescence Study/Algorithm Update									1Q	<div></div>	4Q																					
Increment II Prototype Development												1Q	<div></div>	3Q																		

Project CA5

Page 43 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JBSDS II (Cont)																																
Increment II Field Demo																			4Q													
Increment II CDD Update												3Q	<div></div>																			
Increment II JBSDS Milestone B																			4Q													
Increment II Upgrade Increment I																	1Q	<div></div>		4Q												
Increment II JBSDS System Development and Demonstration (SDD)																			1Q	<div></div>				2Q								
Increment II JBSDS Developmental Testing (DT)																							3Q	<div></div>				3Q				
Increment II JBSDS Milestone C																												3Q				
Increment II JBSDS Low Rate Initial Production (LRIP)																												3Q 4Q				
JCAD																																
Technical Evaluation and Analysis of Data								4Q	<div></div>				4Q																			
Milestone C - Low Rate Initial Production (LRIP) Decision														1Q																		
Multi-service Operational Test and Evaluation (MOT&E)														2Q																		

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JCAD (Cont)																																
Full Rate Production (FRP) Decision														4Q																		
JCBRAWM																																
6.5 Contractor Test & Evaluation Efforts													1Q	<div></div>	4Q																	
Operational/Development Test														1Q	<div></div>	1Q																
Milestone A Increment 2/3																4Q																
Milestone C Increment 1																		2Q														
Milestone B Increment 2/3																								4Q								
JSLNBCRS																																
Chemical Test CBMS Block II	>>	2Q																														
Development and Testing				4Q	<div></div>	4Q																										
Milestone C Low Rate Initial Production (LRIP)		2Q																														
Engineering Developmental Test (EDT) II LAV Variant				4Q																												
LAV Formal Qualification Test (FQT)						3Q	4Q																									
HMMWV (LRIP) First Article Test (FAT)							4Q																									

Project CA5

Page 45 of 182 Pages

Exhibit R-4a (PE 0604384BP)

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSLNBCRS (Cont)																																
HMMWV/LAV Production Verification Test							4Q	1Q																								
Multi-service Operational Test and Evaluation (MOT&E) for HMMWV and the LAV								3Q																								
Milestone C Full Rate Production (FRP) IPR								4Q																								
JSLSCAD																																
Support Stryker NBCRV Pre Qualification Test (PQT) Testing	>>			4Q																												
Increment II - Evaluation of Commercial Systems						2Q		1Q																								
Increment II - Joint Service Milestone C Low Rate Initial Production (LRIP)										3Q																						
Increment II - Initial Operational Test and Evaluation (IOT&E) of Commercial Systems														3Q	4Q																	
PCADE																																

Project CA5

Page 46 of 182 Pages

Exhibit R-4a (PE 0604384BP)

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CA5**D. Schedule Profile (cont):**

FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PCADE (Cont)																															
Evaluate Candidate Detection Technologies/Systems								2Q — 4Q																							

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CM5	
COST (In Thousands)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
CM5 HOMELAND DEFENSE (SDD)	8754	390	0	0	0	0	0	0	9144

A. Mission Description and Budget Item Justification:

Project CM5 HOMELAND DEFENSE (SDD): The Force Protection - CB Installation Protection Program (CBIPP) consists of a highly effective and integrated Chemical, Biological, Radiological, and Nuclear (CBRN) installation protection and response capability. This capability includes detection, identification, warning, information management, individual and collective protection, restoration, and medical surveillance, protection and response. The communications network will leverage existing capabilities and be integrated into the base operational command and control infrastructure. The program will develop and procure the CBRN systems, emergency responder equipment sets, New Equipment Training (NET), Contractor Logistics Support, spares, and associated initial consumable items required to field an integrated installation protection capability for up to 200 DoD installations.

The Weapons of Mass Destruction - Civil Support Teams program (WMD-CST) supports the acquisition and delivery of an integrated chemical, biological, and nuclear analytical detection and rapid response capability for the National Guard Bureau's (CSTs) and the United States Army Reserve (USAR) Chemical Reconnaissance and Decontamination Platoons. Capabilities include a state of the art Command, Control, Communications, Computer, and Intelligence (C4I) system that enables secure communications with Federal, State, and Local authorities from a WMD incident site. The program also provides CSTs and Reconnaissance/Decontamination platoons with individual protection, detection, survey and communications monitoring capability.

Project CM5/Line No: 091
Page 49 of 182 Pages
Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CM5

Major end items for this commercial off-the-shelf (COTS) based acquisition program include the Analytical Laboratory System (ALS), and the Unified Command Suite (UCS) for the WMD CSTs. The ALS provides a mobile laboratory platform that incorporates advanced analytical detection technology for the identification of Chemical Warfare (CW) agents, Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs), and Biological Warfare (BW) agents. The UCS provides secure communications interoperability with the ALS and reach back capability to federal, state, and local authorities from the incident site.

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
WMD - CIVIL SUPPORT TEAMS	8754	387	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 1975 WMD CST- Conducted Developmental Testing for ALS Increment I.
- 1051 WMD CST- Completed UCS Increment I Prototypes.
- 750 WMD CST- Conducted Logistics Analysis for ALS Increment I.
- 2140 WMD CST- Conducted Developmental Testing (DT) for UCS Increment I.
- 1400 WMD CST- Continued Operational Assessment (OA) for UCS Increment I.
- 1438 WMD CST- Provided government engineering and management support.

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CM5**FY 2005 Accomplishments (Cont):****Total** 8754**FY 2006 Planned Program:**

- 387 WMD CST- Complete Operational Assessment (OA) of the UCS Increment I and provide government engineering and planning support.

Total 387

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	3	0
RDTE&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 3 SBIR

Total 3

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

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CM5**C. Other Program Funding Summary:**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
CM6 HOMELAND DEFENSE (RD&E MGT SUPPORT)	1313	1536	1533	0	0	0	0	0	4382
JS0004 WMD - CIVIL SUPPORT TEAM EQUIPMENT	13290	53499	9214	0	0	0	0	0	76003
JS0500 CB INSTALLATION FORCE PROTECTION PROGRAM	91160	141793	76943	84849	90369	63634	61899	Cont	Cont

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5

D. Acquisition Strategy:

WMD CST This program utilizes multiple acquisition vehicles to deliver a CBRN capability to the WMD CSTs and the USAR Reconnaissance/Decontamination Platoons.

UCS Increment I:
The UCS Increment I program consists of the integration of additional Command, Control, Communication, Computer, and Intelligence (C4I) equipment and Non-Developmental Items (NDI) to allow the UCS system to meet all objective requirements as outlined in the validated Capability Production Document (CPD).

ALS Increment I:
The ALS Increment I program will upgrade the analytical capability of the ALS System Enhancement Program (SEP) system with the objective of improving chemical and biological detection sensitivity and selectivity in line with the requirements in the Operational Requirements Document (ORD).

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).

Project CM5/Line No: 091 Page 53 of 182 Pages Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)							PROJECT CM5	
I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
SW SB - UCS Increment I - Prototype Communications (C4I) equipment	MIPR	Naval Air Warfare Center Aircraft Division, St. Inigoes, MD	U	331	1051	2Q FY05	0	NONE	0	NONE	0	1382	0
SW SB - ALS Blk I - Analytical Detection Equipment Prototypes	MIPR	Edgewood Chemical Biological Center, Aberdeen, MD	U	0	1000	4Q FY05	0	NONE	0	NONE	0	1000	0
Subtotal I. Product Development:				331	2051		0		0		0	2382	
Remarks:													
II. Support Costs: Not applicable													
</													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CM5

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
DTE S - ALS Blk I - Developmental Test (PQT)	MIPR	Aberdeen Proving Ground, Aberdeen, MD	U	0	975	4Q FY05	0	NONE	0	NONE	0	975	0
DTE S - UCS Increment I - Developmental Testing	MIPR	Aberdeen Proving Ground, Aberdeen, MD	U	0	2140	2Q FY05	0	NONE	0	NONE	0	2140	0
OTE S - UCS Increment I - Operational Assessment	MIPR	Aberdeen Proving Ground, Aberdeen, MD	U	0	1400	4Q FY05	387	1Q FY06	0	NONE	0	1787	0
Subtotal III. Test and Evaluation:				0	4515		387		0		0	4902	

Remarks:

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CM5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
PM/MS S - Management Services	MIPR	PM WMD CSS, APG, MD	U	614	1438	3Q FY05	0	NONE	0	NONE	0	2052	0
PM/MS SB - Analytical Laboratory System Block I - Logistics Analysis	PO	Information Resource Management Ltd., Lexington Park, MD	C	0	750	3Q FY05	0	NONE	0	NONE	0	750	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	3	NONE	0	NONE	0	3	0
Subtotal IV. Management Services:				614	2188		3		0		0	2805	
Remarks:													
TOTAL PROJECT COST:				945	8754		390		0		0	10089	

Project CM5

Page 56 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CM5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
WMD CST																																
ALS INCREMENT I PROGRAM	>>															1Q																
Incr I - Award Contract											3Q																					
Incr I - System Verification Test											4Q																					
Incr I - Production											4Q					1Q																
UCS INCREMENT I PROGRAM	1Q															2Q																
Incr I - Prototyping-Platform Installation						2Q		4Q																								
Incr I - Developmental Testing (DT)									1Q																							
Incr I - Operational Assessment (OA)									2Q																							
Incr I - Award Production									3Q							2Q																

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CO5	
COST (In Thousands)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
CO5 COLLECTIVE PROTECTION (SDD)	2460	662	12581	21450	28306	20466	18826	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project CO5 COLLECTIVE PROTECTION (SDD): Funding supports System Demonstration and Low Rate Initial Production (SD/LRIP) of Joint Service Chemical, Biological, Radiological, and Nuclear (CBRN) Collective Protection (CP) systems that are smaller, lighter, less costly to produce and maintain, and more logistically supportable enabling mission accomplishment in CBRN environments. CP systems can be installed on any platform such as shelters, vehicles, ships, aircraft, buildings, and hospitals. CP systems create spaces safe from the effects of CBRN contamination.

Systems funded under this project are: (1) Joint Collective Protection Equipment (JCPE), (2) Joint Expeditionary Collective Protection (JECp).

JCPE - Provides needed improvements and cost saving standardization to fielded fixed site, building, shipboard, and vehicle collective protection systems. The program focuses on fixing specific problems and deficiencies with fielded collective protection system equipment designated high priority by each Service and validated by the Collective Protection Joint Project Office (ColPro JPO). Standardization of individual system components (specifically filter systems) across Joint Service mission areas will reduce logistics burden while maintaining the industrial base.

Project CO5/Line No: 091
Page 59 of 182 Pages
Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5

JECP - Results of a Baseline Capability Assessment conducted by the Joint Requirements Office identified expeditionary CP as the highest priority capability gap within the commodity area. JECP is a new start program that will address the need to reduce size, weight, power consumption, and logistics footprint of current CP systems, equipment and/or components. JECP will provide a portable and adaptable CP capability to protect and sustain the Joint Expeditionary Force and allow them to operate safely, at near-normal levels of effectiveness and efficiency, while under a CBRN threat or hazard area.

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT COLLECTIVE PROTECTION EQUIPMENT	2460	656	2582
RDT&E Articles (Quantity)	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
<p>FY 2005 Accomplishments:</p> <ul style="list-style-type: none"> 510 JCPE - Completed development and testing of a Collectively Protected Expeditionary Latrine (CPEL) for the Collectively Protected Expeditionary Medical System (CP EMEDS). Completed development and testing of a modified M28 liner for Large Capacity Shelters (LCS). Completed development and testing to increase efficiency of collective protection system supply fan motors to operate at peak performance over the entire range of filter loading. Completed design and testing of improvements to liner material, construction, and enclosures. Completed testing of improved airlock door systems to increase durability and decrease life cycle costs for all existing CB shelter systems utilizing the Bump Through Door Airlocks. Completed development and testing of a filter moisture indicator. Completed development and testing of a redesigned CP EMEDS collective protection liner systems for use in the Chemically Protected Deployable Medical Systems (CP DEPMEDS) version of the Small Shelter System (SSS). Completed comprehensive engineering study and analysis of the Collective Protection Equipment (CPE) systems used with the Patriot Missile system to evaluate and investigate potential upgrades/improvements using current technologies. Completed testing of the M48A1 alternate packaging design to lower life cycle costs. Continued program management and Integrated Product Team (IPT) support. 		
Project CO5/Line No: 091	Page 61 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
<p>FY 2005 Accomplishments (Cont):</p> <ul style="list-style-type: none"> 1950 JCPE - Continued development and testing of reliability improvements to the Fan Filter Assembly (FFA)-400 and M28 blowers. Continued live agent testing of improved 100/200 CFM gas filters. Completed integration and testing of a Tunnel Airlock Litter Patient (TALP) system with a Modular General Purpose Tent System (MGPTS). Continued testing of 100/200 Cubic Feet per Minute (CFM) gas filters with new media to provide protection against selected Toxic Industrial Chemicals (TICs). Continued identification and testing of a second source for individual distribution breathing air hose. Completed development and testing of an integrated SSS Contamination Control Area (CCA) / airlock. Continued development of shipboard CP automation. Continued development and testing of collective protection system blast operational mitigation techniques. Continued the development of documentation to fully support the CP EMEDS and Collective Protection System (CPS) liner systems. <p>Total 2460</p> <p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> 271 JCPE - Complete the development of documentation to fully support the CP EMEDS and Collective Protection System (CPS) liner systems. Complete identification and testing of a second source for individual distribution breathing air hose. Complete development and testing of reliability improvements to the Fan Filter Assembly (FFA)-400 and M28 blowers. Complete live agent testing of improved 100/200 CFM gas filters. Complete testing of 100/200 CFM gas filters with new media to provide protection against selected TICs. Complete development and testing of collective protection system, operational blast mitigation techniques. Complete development of shipboard CP automation. Continue program management and IPT support. 		
Project CO5/Line No: 091	Page 62 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5**FY 2006 Planned Program (Cont):**

- 385 JCPE - Complete environmental qualification of simplified filter housing. Complete technical data package for CPEL. Initiate a test and surveillance effort to better understand factors affecting service life and capacity of filters for land-based facilities. Complete applicability of High Efficiency Particulate Arresting (HEPA) filter studies to CBRN defense.

Total 656**FY 2007 Planned Program:**

- 2032 JCPE - Initiate changes to the technical data package on improvement to 28 Volt Direct Current motor on the M93 gas particulate filter unit. Continue program management, JPEO oversight, and IPT support.
- 550 JCPE - Continue the test and surveillance effort to better understand factors affecting service life and capacity of filters for land-based facilities. Initiate development and testing of BASE-X Shelter liner.

Total 2582

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT EXPEDITIONARY COLLECTIVE PROTECTION	0	0	9999
RDTE&E Articles (Quantity)	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
<p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 1473 JECF - Update the Single Acquisition Management Plan (SAMP). Provide Program Management Office (PMO) and subject matter expert support to the Joint Requirements Office (JRO) in update of the Concept of Operation (ConOps) and development of the Capability Production Document (CPD). Initiate an update to the Systems Engineering Management Plan (SEMP) and the Test & Evaluation Master Plan (TEMP) along with all requisite documentation to support a MS C decision. • 5385 JECF - Award contract for prototype development and testing including an Early Operational Assessment (EOA). Integrate contractor into the joint IPT structure. Expand the government generated Work Breakdown Structure (WBS) to include contractor details. Translate Performance Specification (P-Spec) into a documented design. Continue program risk analysis and management. Conduct technical reviews including a Systems Requirements Review (SRR), System Functional Review (SFR) and Preliminary and Critical Design Reviews. • 1151 JECF - Initiate development of a test resources and results database. Develop methodology and procedures in support of the overall test strategy. Secure equipment and facilities and conduct an EOA of prototypes in relevant environments. • 1990 JECF - Through the Product Support Integrated Product Team (IPT), initiate a supportability analysis to address logistics support elements including maintenance philosophy, manpower & personnel, supply support, Tech Data, support & test equipment, training and training support. Initiate development of a Post-Production Support Plan and a Joint Logistic Support Plan. <p>Total 9999</p>		
<div>Project CO5/Line No: 091</div> <div>Page 64 of 182 Pages</div> <div>Exhibit R-2a (PE 0604384BP)</div>		

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	6	0
RDTE&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 6 SBIR

Total 6

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CO5	
C. <u>Other Program Funding Summary:</u>									
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
JN0014 COLLECTIVE PROT SYS AMPHIB BACKFIT (CPS BACKFIT)	9338	10377	8833	3645	5217	0	0	0	37410
JN0017 JOINT COLLECTIVE PROTECTION EQUIPMENT (JCPE)	5962	0	0	0	0	0	0	0	5962
JP0911 CP FIELD HOSPITALS (CPFH)	0	4800	4089	3455	3430	3549	3626	Cont	Cont
JP1111 JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECF)	0	0	0	0	5069	6305	8240	Cont	Cont
R12301 CB PROTECTIVE SHELTER (CBPS)	25676	16237	30586	31051	32001	33118	33827	Cont	Cont
<div style="display: flex; justify-content: space-between;"> Project CO5/Line No: 091 Page 66 of 182 Pages Exhibit R-2a (PE 0604384BP) </div>									

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
<p>D. <u>Acquisition Strategy:</u></p> <p>JCPE The JCPE acquisition strategy is to consolidate planned improvements to fielded collective protection systems into one Joint product improvement program for addressing deficiencies, improvements, and cost saving initiatives. System improvements, after successful prototype development and testing, are delivered via a performance specification that can then be implemented by respective Services through an Engineering Change Proposal (ECP) process. All modified components will be fabricated and tested to ensure Service compatibility. Fielding will be accomplished through phased replacement or attrition through the supply system. Existing procurement contracts are leveraged to expedite fielding improvement upgrades.</p>		
<p>Project CO5/Line No: 091 Page 67 of 182 Pages Exhibit R-2a (PE 0604384BP)</p>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
<p>JECP</p> <p>Pursue an incremental development strategy based on the JRO/User developed capability documents. During the Pre-MS A Concept Refinement Phase, conduct a tailored Analysis of Alternatives (AoA) leveraging the market survey, test results and lessons learned from the FY05 ColPro Technology Readiness Evaluation (TRE). During the Technology Development Phase following MS A, technology demonstrations will be conducted to mitigate risk and identify affordable mature technologies that individually or together meet the warfighters needs. Following MS B, a Statement of Objectives (SOO) and Performance Specification will be used to award competitive cost plus incentive type contract(s) to build prototypes that will be subjected to robust engineering developmental testing and Operational Assessment during the System Development & Demonstration phase. Following MS C, exercise a contract option for Low Rate Initial Production (LRIP) to support formal Developmental Testing (DT) and Initial Operational Test & Evaluation (IOT&E). Following a successful Full Rate Production (FRP) decision, compete a fixed price production contract with multi-year options and product improvement incentives. For each incremental capability identified by the user, a similar approach for MS B and C will be used to seamlessly integrate improved and/or new technologies into follow-on increments to achieve a full JECP capability.</p>		
<p>Project CO5/Line No: 091</p> <p>Page 68 of 182 Pages</p> <p>Exhibit R-2a (PE 0604384BP)</p>		

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CO5	

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCPE													
HW C - TDP for CPEMEDS, CPS, & A2S	MIPR	ECBC, Edgewood, MD	U	0	150	1Q FY05	0	NONE	0	NONE	0	150	0
HW C - Environmental Qualification of Simplified Filter Housing	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	20	1Q FY06	0	NONE	0	20	0
HW S - TDP for CPEL	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	150	1Q FY06	0	NONE	0	150	0
HW C - Land-based Filter Surveillance Testing	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	25	1Q FY06	0	NONE	0	25	0
HW S - HEPA filter studies to CBR defense	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	25	1Q FY06	0	NONE	0	25	0
HW C - 28VDC M93 Gas Particulate Filter Unit	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	0	NONE	200	1Q FY07	0	200	0
HW C - Base X Liner Development	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	250	1Q FY07	0	250	0
JECP													
SW SB - Prototype Development	C/CPIF	TBS	U	0	0	NONE	0	NONE	5385	2Q FY07	0	5385	0
Subtotal I. Product Development:				0	150		220		5835		0	6205	
Remarks:													

Project CO5

Page 69 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CO5	

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JECP													
TD/D S - MS C Documentation	MIPR	Various	U	0	0	NONE	0	NONE	1990	2Q FY07	0	1990	0
Subtotal II. Support Costs:				0	0		0		1990		0	1990	
Remarks:													

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCPE													
DTE C - Blower Reliability and Environmental Testing	MIPR	ECBC, Edgewood, MD	U	0	72	1Q FY05	0	NONE	0	NONE	0	72	0
OTHT SB - 100/200 CFM Gas Filter - Live Agent Testing	MIPR	RDECOM, APG, MD	U	782	620	1Q FY05	0	NONE	0	NONE	0	1402	582
OTHT C - TALP Testing for MGPTS	MIPR	Various	U	275	40	1Q FY05	0	NONE	0	NONE	0	315	0
OTHT SB - Modified 100/200 CFM Filter for TICs - Testing	MIPR	ECBC, Edgewood, MD	U	0	450	1Q FY05	0	NONE	0	NONE	0	450	0
DTE C - Individual distribution Breathing Air Hose	MIPR	NSWCDD, Dahlgren, VA	U	200	30	1Q FY05	0	NONE	0	NONE	0	230	0

Project CO5
Page 70 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CO5	

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTHT C - SSS CCA/Airlock	MIPR	HSW/YACN Brooks City Base, San Antonio, TX	U	0	233	1Q FY05	0	NONE	0	NONE	0	233	250
OTHT C - Shipboard CP Automation	WR	NSWCDD, Dahlgren, VA	U	50	30	1Q FY05	50	1Q FY06	0	NONE	0	130	50
DTE S - CP Protection Blast Operational Analysis	MIPR	HSW/YACN Brooks City Base, San Antonio, TX	U	80	300	1Q FY05	0	NONE	0	NONE	0	380	0
DTE C - M48A1 Alternate Packaging Design	MIPR	ECBC, Edgewood, MD	U	0	10	2Q FY05	0	NONE	0	NONE	0	10	0
DTE C - Environmental Qualification of Simplified Filter Housing	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	40	1Q FY06	0	NONE	0	40	0
OTHT C - Land-based Filter Surveillance Testing	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	125	1Q FY06	475	1Q FY07	300	900	0
JECF													
DTE S - Test Results & Resource Data Base	MIPR	TBS	U	0	0	NONE	0	NONE	1151	1Q FY07	0	1151	0
Subtotal III. Test and Evaluation:				1387	1785		215		1626		300	5313	

Remarks:

Project CO5
Page 71 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)					PROJECT CO5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCPE													
PM/MS S - IPT Support	MIPR	Various	U	756	190	1Q FY05	75	1Q FY06	200	1Q FY07	0	1221	820
PM/MS S - Overall Program Management & IPT Oversight	MIPR	NSWCDD, Dahlgren, VA	U	1457	335	1Q FY05	146	1Q FY06	357	1Q FY07	0	2295	1403
PM/MS S - JPEO Oversight	MIPR	JPEOCBD, Falls Church, VA	U	0	0	NONE	0	NONE	1100	4Q FY07	0	1100	0
JECP													
PM/MS S - PMO & IPT	MIPR	Various	U	0	0	NONE	0	NONE	1473	1Q FY07	0	1473	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	6	NONE	0	NONE	0	6	0
Subtotal IV. Management Services:				2213	525		227		3130		0	6095	
Remarks:													
TOTAL PROJECT COST:				3600	2460		662		12581		300	19603	

Project CO5

Page 72 of 182 Pages

Exhibit R-3 (PE 0604384BP)

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JCPE																																
Develop Modified M28 Liner for MGPTS	>>																															
Market Survey and Test Latrine CPEMEDS	>>																															
Develop and Test FFA400-100 and M93 MCPE	>>																															
Develop Modified M28 Liner-Lg Cap Shelters	>>																															
Develop and Test Improved Ship CPS Motors	>>																															
Agent Testing 100/200 CFM Gas Filters	>>																															
Develop Improved Liner-Mat/Constr/Closures	>>																															
Develop Improved Airlock	>>																															
Develop and Test TALP for MGPTS	>>																															
Develop and Test Switchover/Pressure Regulator																																
Develop and Test Dust and Sand Mtr/Blwr Hose Kit																																

Project CO5

Page 73 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JCPE (Cont)																																
Develop and Test Timer-M28 CPE/CBPS Airlocks					1Q			3Q																								
Develop and Test Radiant Barrier Matl-TEMPER					1Q			3Q																								
Develop and Test 100/200 CFM Gas Filters-TICs					1Q							2Q																				
CB Shelter Extreme Environments Study	1Q			4Q																												
Individual Breathing Air Hose Improvements	1Q											4Q																				
Develop and Test Filter Moisture Indicator	1Q							3Q																								
Develop and Test SSS CCA/Airlock	1Q							4Q																								
Develop and Test Ship CP Automation	1Q											4Q																				
Develop and Test CP Blast Operations Analysis	1Q											2Q																				
Modify CPEMEDS Liner for CPDEPMEDS SSS	1Q							4Q																								
Patriot Missile CP Upgrade Recommendations	1Q							4Q																								

Project CO5

Page 74 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA5 - System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5

D. Schedule Profile (cont):

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JCPE (Cont)																																
TDP for CP EMEDS, CPS, & A2S							3Q					4Q																				
Environmental qualification of simplified filter housing											1Q					4Q																
TDP for CPEL											1Q					4Q																
Land-based Aged Filter Capacity											1Q																					
HEPA filter studies to CBR defense											1Q					4Q																
28VDC M93 Gas Particulate Filter Unit															1Q																	
Base X Liner															1Q																	
JECP																																
Technology Demonstration Testing												3Q			1Q																	
MS-B Decision															1Q																	
DRAFT System Development Demonstration Contract RFP															1Q																	
System Development Demonstration Contract Award															2Q																	
Prototype System Development															2Q					3Q												
OA																				3Q	4Q											

Project CO5

Page 75 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

CO5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JECP (Cont)																																
Design Readiness Review															1Q																	
DT/OT															1Q	<div></div>	4Q															
CPD																3Q																
MS-C Decision																4Q																
LRIP																4Q	<div></div>	4Q														

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT DE5				
COST (In Thousands)				FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
DE5 DECONTAMINATION SYSTEMS (SDD)				4169	16496	11050	5397	15053	15353	7365	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project DE5 DECONTAMINATION SYSTEMS (SDD): This project funds System Development and Demonstration (SDD) of decontamination equipment for the Joint Service Family of Decontamination System (JSFDS) and the Joint Service Sensitive Equipment Decontamination (JSSED).

The funding for JSFDS program covers the Joint Service Personnel/Skin Decontamination System (JSPDS) and the Joint Service Transportable Decontamination System - Small Scale (JSTDS-SS) programs. JSPDS will provide a United States Food and Drug Administration approved individually carried skin decontamination kit that will be used for immediate decontamination of skin, protective masks, hoods and gloves and small scale weapons (under 0.50 caliber). The JSTDS-SS will be transported by existing platforms in close proximity to combat operations and will be used for operational and thorough decontamination of non-sensitive military materiel, limited facility decontamination at logistics bases, airfields (and critical airfield assets), naval ships, ports, key command and control centers, and other fixed facilities that have been exposed to CBRN warfare agents/contamination and Toxic Industrial Materials (TIMs).

The JSSED system will fill an immediate need to decontaminate chemical and biological warfare agents from sensitive equipment during thorough decontamination operations. It will be a family of systems that will provide thorough decontamination capabilities for sensitive equipment (e.g. avionics, computers, electronics and environmental system equipment). JSSED Increment I will be a closed loop non-aqueous decontamination system that will remove and/or neutralize threat agents from sensitive equipment used on the integrated battlefield.

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**B. Accomplishments/Planned Program**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS FAMILY OF DECON SYSTEMS (JSFDS)	4169	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 2669 JSFDS/JSPDS - Completed DT II, including extended packaging testing, material compatibility testing, system level compatibility testing, live agent testing and field durability developmental testing.
- 500 JSFDS/JSPDS - Conducted Performance Based Logistics (PBL) Business Case Analysis (BCA) to determine optimum logistics support strategy. Updated logistics and training documentation based on test results.
- 1000 JSFDS - Congressional Interest Item. Prepared and conducted a study of passive materials for chemical and biological decontamination.

Total 4169

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT SERVICE PERSONNEL/SKIN DECONTAMINATION SYSTEM	0	2449	2051
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**FY 2006 Planned Program:**

- 1901 JSPDS - Conduct Initial Operational Test and Evaluation (IOT&E) to support full rate production decision and conduct packaging retest of modified pouch packaging.
- 548 JSPDS - Update program documentation to support MS C full rate production decision, update logistics support documentation including fielding plans, and begin implementation of the support strategy identified by the Performance Based Logistics (PBL) and the Business Case Analysis (BCA).

Total 2449**FY 2007 Planned Program:**

- 1222 JSPDS - Complete program documentation updates and obtain MS C full rate production decision. Transition to support strategy identified by the PBL BCA.
- 229 JSPDS - Perform shelf-life extension testing on decontaminants.
- 600 JSPDS - Perform follow-on live agent testing with additional threat agents.

Total 2051

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS SENSITIVE EQUIP DECON	0	1488	1250
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**FY 2006 Planned Program:**

- 1488 JSSED - Award SDD contract for pre-clean kits.

Total 1488**FY 2007 Planned Program:**

- 1250 JSSED - Award SDD contract for JSSED.

Total 1250

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT SERVICE TRANSPORTABLE DECONTAMINATION SYSTEM - SMALL SCALE	0	12399	7749
RDTE&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 2294 JSTDS-SS - Initiate initial Operational Test and Evaluation (IOT&E) to support full rate production decision.
- 3400 JSTDS-SS - Perform DT II which includes live chemical and biological agent testing, extensive material compatibility and efficacy testing, environmental testing and shelf-life testing.
- 1800 JSTDS-SS - Update program documentation, perform an independent logistics assessment, validate life cycle cost estimate and obtain full rate production decision.
- 1400 JSTDS-SS - Procure decontaminant (40,000 gallons) and interim contract or logistics support for testing.

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**FY 2006 Planned Program (Cont):**

- 3505 JSTDS-SS - Conduct PBL and BCA to determine optimum logistics support strategy for the JSTDS-SS hardware and decontaminant(s). Update logistics and training documentation based on test results. Prepare fielding plans. Develop and validate shelf life surveillance plan for JSTDS-SS decontaminant.

Total 12399**FY 2007 Planned Program:**

- 1209 JSTDS-SS - Perform extended live agent, toxic industrial material and material compatibility testing on the JSTDS-SS decontaminant to determine if objective capabilities can be met with existing decontaminant.
- 5000 JSTDS-SS - Complete Initial Operational Test and Evaluation (IOT&E) to support full rate production decision.
- 1540 JSTDS-SS - Update program, logistics and training documentation to reflect configuration changes, and test results. Prepare plans to modify fielded systems, as required.

Total 7749

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	160	0
RDTE&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT DE5	
FY 2006 Planned Program: <ul style="list-style-type: none"> • 160 SBIR Total 160									
C. <u>Other Program Funding Summary:</u>									
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
JD0055 JOINT SERVICE PERSONNEL/SKIN DECONTAMINATION SYSTEM (JSPDS)	0	0	9584	12775	0	0	0	0	22359
JD0056 JS TRANS DECON SYSTEM - SMALL SCALE (JSTDSS-SS)	0	2911	7209	11343	13432	18970	23889	Cont	Cont
JD0061 JOINT SERVICE SENSITIVE EQUIPMENT DECON (JSSSED)	0	0	0	0	6860	6991	6591	Cont	Cont
<div style="display: flex; justify-content: space-between;"> Project DE5/Line No: 091 Page 82 of 182 Pages Exhibit R-2a (PE 0604384BP) </div>									

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
<p>D. <u>Acquisition Strategy:</u></p> <p>JSFDS The JSFDS program will use an evolutionary acquisition strategy with spiral development. This allows the program to leverage existing commercial products to provide an initial capability. The initial capability will be enhanced through product modifications and technology insertion to further enhance the warfighter's fixed site, equipment and personnel decontamination capability.</p> <p>JSPDS The JSPDS program is implementing an evolutionary acquisition strategy using spiral and incremental development. The first increment will leverage commercial off-the-shelf (COTS) systems/Non-Developmental Items (NDI). This increment will increase the warfighter's capability and address near-term support issues with the M291 Skin Decontamination Kit (SDK) predecessor system. The follow-on efforts will focus on expanding the capabilities, such as increasing the agents the systems can decontaminate, and expanding mission sets. A full and open competition will be used to award a contract for Research and Development (R&D) efforts and initial procurement.</p> <p>JSSSED The JSSSED program will execute an evolutionary acquisition strategy with a two-increment approach. The first increment provides capabilities required by the ORD. The second increment will incorporate additional capabilities as more funding becomes available. Increment I is a four-step approach. The first step is the Optimization Phase that will focus on the decontaminant for the JSSSED system. The second step is the System Integration of the JSSSED Increment I. The third step is the production phase of the JSSSED Increment I variant. The fourth and final step is the spiral development of the JSSSED shipboard variant. It will include two sub-phases, shipboard System Integration and shipboard production. A limited objective experiment (LOE) will be conducted prior to system integration. The LOE will allow the combat developers to operate prototype hardware and to provide input to system integration design.</p>		
<p>Project DE5/Line No: 091 Page 83 of 182 Pages Exhibit R-2a (PE 0604384BP)</p>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
<p>JSTDS SS The JSTDS Small-Scale program is implementing an evolutionary acquisition strategy using incremental and spiral development. Increment I will focus largely upon fielding hardware systems that improve upon the capability of the M17 Lightweight Decontamination System.</p>		
<p>Project DE5/Line No: 091</p>		

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT DE5		

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSSSED													
HW S - Build JSSSED pre-clean kits	C/CPFF	TBS	C	0	0	NONE	800	2Q FY06	200	1Q FY07	0	1000	0
JSTDSS													
HW C - JSTDSS - Procure decontaminant	C/FFP	TBS	C	0	0	NONE	1400	2Q FY06	0	NONE	0	1400	0
Subtotal I. Product Development:				0	0		2200		200		0	2400	

Remarks:

Project DE5
Page 85 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT DE5		
II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
ILS S - JSFDS JSPDS Logistics studies	MIPR	Various	U	560	250	2Q FY05	0	NONE	0	NONE	0	810	0
ILS S - JSFDS JSPDS Logistics studies	C/CPFF	Various	C	577	250	2Q FY05	0	NONE	0	NONE	0	827	0
ES S - JSFDS - Passive materials for chemical and biological decontamination study	C/FFP	Inovatia, Fayette, MO	C	0	688	2Q FY06	0	NONE	0	NONE	0	688	0
ES S - JSFDS - Third party validation of Inovatia Laboratories	MIPR	AFRL, Tyndall AFB, FL	U	0	312	1Q FY06	0	NONE	0	NONE	0	312	0
JSPDS													
ILS S - JSPDS Logistics studies	MIPR	Various	U	0	0	NONE	100	1Q FY06	400	1Q FY07	0	500	0
ILS S - JSPDS Logistics studies	C/CPFF	Various	C	0	0	NONE	100	1Q FY06	460	1Q FY07	0	560	0
JSTDS SS													
ILS S - JSTDS-SS Logistics studies	MIPR	Various	U	0	0	NONE	750	1Q FY06	0	NONE	0	750	0
ILS S - JSTDS-SS Logistics studies	C/CPFF	Various	C	0	0	NONE	750	2Q FY06	0	NONE	0	750	0
TD/D S - JSTDS-SS - Update technical documentation	MIPR	Various	U	0	0	NONE	555	2Q FY06	932	1Q FY07	0	1487	0
ILS C - JSTDS-SS - Decontaminant Shelf Life Surveillance Plan	MIPR	Various	U	0	0	NONE	650	2Q FY06	0	NONE	0	650	0
Project DE5													

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT DE5		
II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ILS S - JSTDS-SS - Develop Fielding Plans	MIPR	Various	U	0	0	NONE	600	2Q FY06	0	NONE	0	600	0
Subtotal II. Support Costs:				1137	1500		3505		1792		0	7934	
Remarks:													
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
DTE S - JSFDS DT II JSPDS Testing	MIPR	Various	U	2019	1887	1Q FY05	0	NONE	0	NONE	0	3906	0
OTE S - JSFDS DT II JSPDS Testing	C/CPFF	Battelle, Columbus, OH	C	0	500	1Q FY05	0	NONE	0	NONE	0	500	0
OTHT S - JSFDS - JSPDS Test Planning	MIPR	Various		0	282	1Q FY05	0	NONE	0	NONE	0	282	0
JSPDS													
OTE S - JSPDS Initial Operational Test and Evaluation (IOT&E)	MIPR	Various	U	0	0	NONE	1901	2Q FY06	0	NONE	0	1901	0
DTE S - JSPDS Shelf life extension testing	MIPR	Various	U	0	0	NONE	0	NONE	254	1Q FY07	0	254	0
<div style="display: flex; justify-content: space-between;"> Project DE5 Page 87 of 182 Pages Exhibit R-3 (PE 0604384BP) </div>													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)					PROJECT DE5			

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
DTE S - JSPDS Follow-on agent test	C/CPFF	Battelle, Columbus, OH	C	0	0	NONE	0	NONE	537	1Q FY07	0	537	0
JSSD													
DTE S - JSSD developmental test planning/execution	MIPR	AFOTEC, Kirtland AFB, NM	U	0	0	NONE	200	1Q FY06	567	2Q FY07	0	767	0
JSTDS SS													
OTE S - JSTDS-SS Initial Operational Test and Evaluation	MIPR	Various	U	0	0	NONE	2294	2Q FY06	5000	1Q FY07	0	7294	0
DTE S - JSTDS-SS Developmental Testing (DT II)	MIPR	Various	U	0	0	NONE	2400	1Q FY06	0	NONE	0	2400	0
DTE S - JSTDS-SS Developmental Testing (DT II)	C/CPFF	Battelle, Columbus, OH	C	0	0	NONE	1000	1Q FY06	0	NONE	0	1000	0
DTE S - JSTDS-SS Decontaminant Shelf life extension testing	MIPR	Various	U	0	0	NONE	200	2Q FY06	200	1Q FY07	0	400	0
DTE S - JSTDS-SS Decontaminant testing of objective capabilities	MIPR	Various	U	0	0	NONE	0	NONE	509	1Q FY07	0	509	0
DTE S - JSTDS-SS Decontaminant testing of objective capabilities	C/CPFF	Battelle, Columbus, OH	C	0	0	NONE	0	NONE	500	1Q FY07	0	500	0
Subtotal III. Test and Evaluation:				2019	2669		7995		7567		0	20250	

Remarks:

Project DE5

Page 88 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT DE5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSPDS													
PM/MS S - JSPDS Programmatic Support	C/CPFF	Various	C	0	0	NONE	174	1Q FY06	200	1Q FY07	0	374	0
PM/MS S - JSPDS Programmatic Support	MIPR	Various	U	0	0	NONE	174	1Q FY06	200	1Q FY07	0	374	0
JSSD													
PM/MS S - JSSD Service Integrated Product Team Support	MIPR	Various	U	0	0	NONE	488	1Q FY06	483	1Q FY07	0	971	0
JSTDS SS													
PM/MS S - JSTDS-SS Programmatic Support	C/CPFF	Various	C	0	0	NONE	900	1Q FY06	108	1Q FY07	0	1008	0
PM/MS S - JSTDS-SS Programmatic Support	MIPR	Various	U	0	0	NONE	900	1Q FY06	500	1Q FY07	0	1400	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	160	NONE	0	NONE	0	160	0
Subtotal IV. Management Services:				0	0		2796		1491		0	4287	
Remarks:													

Project DE5

Page 89 of 182 Pages

Exhibit R-3 (PE 0604384BP)

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)							DATE February 2006						
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)			PROJECT DE5						
TOTAL PROJECT COST:				3156	4169		16496		11050		0	34871	
Project DE5													
Page 90 of 182 Pages													
Exhibit R-3 (PE 0604384BP)													

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSFDS																																
JSFDS Restructuring of Requirements/ORD Acquisition Strategy	>>	2Q																														
JSFDS Requirement feasibility and acquisition strategy development	1Q	<div></div>		4Q																												
JSFDS Compatibility Testing for JSPDS	2Q	3Q																														
JSFDS Multi-purpose Decontamination System Reliability Testing	2Q	<div></div>		4Q																												
JSFDS Milestone (MS) B for JSPDS			3Q																													
JSFDS Developmental Testing (DT) II for JSPDS	1Q	<div></div>						4Q																								
JSFDS RFP Release for JSTDS-SS			3Q																													
JSFDS Procure test articles for JSTDS-SS down-selection testing				4Q																												
JSFDS Paper down-selection for JSTDS-SS				4Q																												
JSFDS MS B for JSTDS-SS				4Q																												
JSFDS Down-selection testing (DT I) for JSTDS-SS					1Q	<div></div>		3Q																								
JSFDS MS C (LRIP) for JSTDS-SS							3Q																									

Project DE5

Page 91 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA5 - System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5

D. Schedule Profile (cont):

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSFDS (Cont)																																
JSFDS DT II for JSTDS-SS								4Q																								
JSFDS Funding Transition								4Q																								
JSPDS																																
JSPDS DT II Testing	1Q								4Q																							
JSPDS Pouch Packaging Retest									1Q																							
JSPDS IOT&E									2Q	3Q																						
JSPDS MS C (Full Rate Production)													1Q																			
JSPDS Shelf Life Extension Testing													1Q				4Q															
JSPDS Follow-on live agent testing													1Q				4Q															
JSSSED																																
Phase II SDD contract award for pre-clean kits									2Q																							
Phase II Pre-clean kit design and fabrication									2Q								4Q															
Phase II Pre-clean kit testing DT/OT													3Q	4Q																		
Phase II MS C for Pre-clean kits															1Q																	
Phase II - SDD contract award for JSSSED													2Q																			

Project DE5

Page 92 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSSD (Cont)																																
Phase II - Design and prototype fabrication and test													2Q				2Q															
Phase II - Prototype delivery (20 units at \$80K each)																2Q																
Phase II - SDD testing																2Q			4Q													
Phase II - Milestone C for LRIP																	4Q															
Phase II - Production and Operational Testing																			1Q				4Q									
Phase III - FRP decision																				4Q												
Phase IV - Shipboard																							4Q				2Q					
JSTDS SS																																
JSTDS-SS RFP Release				4Q																												
JSTDS-SS Paper Down-selection					1Q																											
JSTDS-SS MS B						2Q																										
JSTDS-SS Down-selection Testing (DT I)							3Q	4Q																								
JSTDS-SS Operational Assessment (OA)						2Q																										
JSTDS-SS MS C (LRIP)									3Q																							

Project DE5

Page 93 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

DE5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSTDS SS (Cont)																																
JSTDS-SS DT II									1Q				4Q																			
JSTDS-SS - Develop decontaminant shelf life surveillance program									1Q				4Q																			
JSTDS-SS IOT&E													1Q																			
JSTDS-SS Full Rate Production													2Q																			
JSTDS-SS Live Agent Testing													1Q				4Q															

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT IP5				
COST (In Thousands)				FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
IP5 INDIVIDUAL PROTECTION (SDD)				27852	19724	19663	12441	3089	3071	999	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project IP5 INDIVIDUAL PROTECTION (SDD): This project funds System Demonstration and Development (SDD) of individual protection equipment, such as the Joint Service Lightweight Integrated Suit Technology (JSLIST) ensemble, aimed at increasing individual protection levels while reducing physiological and logistical burdens. The goal is to provide equipment that allows the individual soldier, sailor, airman, or marine to operate in a contaminated Nuclear, Biological and Chemical (NBC) environment with little or no degradation of his/her performance.

Efforts funded in this program include:

- (1) Development of a Joint Protective Aircrew Ensemble (JPACE) to standardize aircrew ensembles across the services and reduce user fatigue.
- (2) JSAM is an incrementally developed Acquisition Category (ACAT) III program being conducted in two or more increments. The goal of JSAM is to develop, manufacture, field and sustain an aircrew respirator system that, in conjunction with a below-the-neck (BTN) clothing ensemble, will provide the capability for all aircrew to fly throughout their full operating envelope in an actual or perceived Chemical/Biological (CB) warfare environment.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>The JSAM will provide head-eye-respiratory, chemical and biological (CB) protection in fixed and rotary wing aircraft. It is intended to replace six aircrew respirators currently in the DoD inventory. JSAM will have multiple variants to optimize performance for different aircraft categories. Some variants of JSAM will provide donning and doffing capability while in flight. When integrated with anti-Gravity (G) protection equipment, JSAM will provide simultaneous CB and anti-G protection to aircrew in high performance aircraft. JSAM is compatible with below the neck CB ensembles, provides flame and thermal protection, and reduces heat stress imposed by existing CB protective masks. JSAM is compatible with the use of portable oxygen systems in Army rotary wing aircraft. JSAM is targeted to provide combined capability to enable the warfighter of the 21st century to fulfill full mission requirements.</p> <p>The first JSAM increment addresses the majority of the Department of Defense's (DoD's) rotary-wing aircraft [Type I/IA (Apache) systems]. Planned follow-on increments address fixed wing aircraft (Type II systems) and unique Helmet Mounted Display mask variants, such as the Top Owl (Type IB).</p> <p>(3) Development of a Joint Service General Purpose Mask (JSGPM) to replace and improve upon the multiple masks currently used by U.S. ground forces; development of a Joint Service Chemical Environment Survivability Mask (JSCESM) to provide a lightweight, disposable mask for special operations; and development of an Improved Protective Mask (IPM) for the unique needs of counterproliferation missions.</p> <p>(4) Validating the ability of Commercial off-the-shelf (COTS) products for a JSLIST Block II Glove Upgrade (JB2GU) to replace and improve upon the 7, 14 and 25 mil dipped butyl rubber gloves used by U.S. forces. The goal is to validate one COTS glove system with improved durability, tactility and dexterity when compared to the entire legacy butyl family.</p>		
Project IP5/Line No: 091	Page 96 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5

(5) Validating the ability of Commercial off-the-shelf products for a JSLIST Alternative Footwear Systems/Integrated Footwear System (AFS/IFS) to replace and improve upon the Chemical Protective Footwear Cover, Green/Black Vinyl Overboot, Multi-Purpose Overboot used by U.S. forces. The goal is to validate two COTS footwear systems with improved availability (through reduced volume and weight) and traction. The AFS will be a lightweight overboot for use by ground and shipboard forces while the IFS will be a sock or insert for use by Aviation, Combat Vehicle Crew and Special Mission personnel.

(6) JSLIST Spiral Development (JSLIST SD) garment to replace and improve upon the JSLIST in use by U.S. ground and shipboard forces. The goal is to eliminate, 1) the capability gaps for JSLIST identified by the Joint Requirement Office, 2) the commonly known vulnerabilities for JSLIST, and 3) to use JSLIST OIF lessons learned to improve upon CB suit capabilities. The effort will include using Joint Protective Air Crew Ensemble, U.S. Special Operations Command and a seams and closure effort for design improvements. The advanced materials identified through U.S. Special Operations Command, the JSLIST Alternative Source Qualification and nontraditional agent protection effort will be used. A single camouflage pattern for the suit is advocated in order to increase inventory efficiency and to reduce operational risk.

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT PROTECTIVE AIRCREW ENSEMBLE (JPACE)	3454	0	0
RDTE&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDTE DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**FY 2005 Accomplishments:**

- 400 JPACE - Finalized program, logistics, and technical documentation required to ensure that ensembles are fully supported.
- 2454 JPACE - Completed IOT&E. Conducted MS C decision for LRIP of ensembles. Prepared documentation for contract option to manufacture LRIP ensembles.
- 600 JPACE - Finalized garment specifications and patterns. Conducted System Verification Review (SVR). Completed MS C for Full Rate Production (FRP) design.

Total 3454

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS AIRCREW MASK (JSAM)	16876	14473	16313
RDTE Articles (Quantity)	342	0	508

FY 2005 Accomplishments:

- 6671 JSAM - Completed system engineering activities for JSAM rotary wing aircraft (Type I) and the AH-64 Apache (Type IA) variants. Initiated and completed material purchase, fabrication, and assembly of 1399 JSAM Type I filters (at an average unit cost of \$41), 201 Type 1 JSAM units (at an average unit cost of \$1858) and 141 JSAM Type IA systems (at an average unit cost of \$2141) to be utilized for Contractor/Government DT. Initiated contractor interest in fixed wing (Type II)/Helmet Mounted Display (HMD)/Top Owl Type IB variants via industry day and a draft Request for Proposal.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>FY 2005 Accomplishments (Cont):</p> <ul style="list-style-type: none"> • 5564 JSAM - Initiated Contractor/Government DT for the JSAM Type I and Type IA. Continued documentation and planning in preparation for finalization of JSAM DT and Operational Testing (OT). • 4641 JSAM - Continued contract and government program management, logistics and sustainment planning. Initiated JSAM fixed wing (Type II)/HMD/Top Owl Type IB variants Request for Information (RFI), market research/industry day activities, and Request for Proposal actions. Contractor continued to develop production plans and processes. <p>Total 16876</p> <p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 4058 JSAM - Continue system design, engineering and fabrication activities on all required variants; continue to develop production processes and ensure tooling and equipment are adequate to fabricate production units. • 5824 JSAM - . Conduct and complete Government DT and evaluation for the JSAM rotary wing aircraft variation (Type I), to include the Apache variant (Type IA). Initiate Government OT, utilizing Type I and Type IA JSAM DT assets. Continue Government DT and OT planning for fixed wing (Type II)/ HMD variants. • 4591 JSAM - Continue to provide contract and government program management, logistics and sustainment planning. <p>Total 14473</p> <p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 4094 JSAM - Continue system design, engineering and fabrication activities on all required variants; continue to develop production processes and ensure tooling and equipment are adequate to fabricate production units. 		
Project IP5/Line No: 091	Page 99 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**FY 2007 Planned Program (Cont):**

- 7359 JSAM - Complete Government OT, utilizing Type I and Type IA JSAM assets. Initiate Government DT for 348 fixed wing (Type II at \$4090 average per unit cost), and 160 HMD variants (at \$3649 average per unit cost).
- 4460 JSAM - Continue contract and government program management, logistics and sustainment planning.
- 400 JSAM - Complete Milestone C documentation.

Total 16313

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JS GENERAL PURPOSE MASK	2858	0	0
RDT&E Articles (Quantity)	1000	0	0

FY 2005 Accomplishments:

- 1509 JSGPM - Completed System Demonstration. System Demonstration includes system support packages for PQT and Multiservice Operational Testing and Evaluation.
- 500 JSGPM - Completed preparation of program/project documentation. Documentation includes the SAMP and performance specifications.
- 700 JSGPM - Completed Development (PQT) and Operational (Limited User Team) Testing. Completed test and evaluation reports. Purchased 1000 test articles (at \$150 each) for Multiservice Operational Test and Evaluation.

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**FY 2005 Accomplishments (Cont):**

- 149 JSJPM - Completed developmental Logistics Support Planning. This effort included completion of manuals and finalization of supportability plans.

Total 2858

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
PROTECTIVE CLOTHING (JSLIST)	4664	5058	3350
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 2912 JB2GU and AFS - Completed chemical agent validation testing and completed IOT&E.
- 300 JB2GU and AFS - Completed preparations for MS C Full Rate Production (FRP).
- 1452 IFS - Completed durability testing, completed IOT&E.

Total 4664

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 201 JSLIST - Initiate hierarchical requirement and affordability analysis. New materials with new designs present trade-offs in about every area of capability. This effort will weigh warfighter requirements in order to ensure that all material and design selections can be traced to the improvements in operational capability most in demand. • 1300 JSLIST - Design a new protective suit to support Special Forces operational requirements. U.S. Special Operations Command and JSLIST Additional Source Qualification (JASQ) efforts. • 800 JSLIST - Conduct producibility/reproducibility production base analysis. This effort includes all configuration management work and the work necessary to ensure that the design is producible (and reproducible with minimum variance) with new production methodologies. • 2100 JSLIST - Initiate testing of design variations at the system level in aerosol and vapor system test laboratories with U.S. military personnel (only simulants are used). • 657 JSLIST - Conduct initial design field testing. This field-testing will allow informed design selection decisions. <p>Total 5058</p> <p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 397 JSLIST - Complete design field testing. • 100 JSLIST - Purchase production representative items necessary for all Operational Testing (OT). • 875 JSLIST - Conduct mission OT with service personnel performing specific job specialties while wearing production representative suits. 		
Project IP5/Line No: 091	Page 102 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**FY 2007 Planned Program (Cont):**

- 1276 JSLIST (T&E Capability) - Develop a prototype instrumented mannequin for use in testing Individual Protective Equipment (IPE), including full ensembles, with live agents. Configure chamber for IPE simulant testing.
- 702 JSLIST (T&E Capability) - Generate, validate, and verify base model and perform confirmatory testing to include live agent testing. Develop plans for live-agent testing.

Total 3350

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	193	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 193 SBIR

Total 193

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT IP5	
C. <u>Other Program Funding Summary:</u>									
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
Ji0002 JT SVC AIRCREW MASK (JSAM)	0	1800	8002	21341	43561	33542	10257	Cont	Cont
Ji0003 JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)	13316	26879	32372	43999	27131	41036	40907	Cont	Cont
Ji0015 JOINT PROTECTIVE AIRCREW ENSEMBLE (JPACE)	12645	23808	0	11027	0	0	0	0	47480
JSM001 JOINT SERVICE MASK LEAKAGE TESTER (JSMLT)	8158	6258	4954	5062	4859	0	0	0	29291
MA0400 PROTECTIVE CLOTHING	98187	37135	31404	0	0	0	0	0	166726
<div style="display: flex; justify-content: space-between;"> Project IP5/Line No: 091 Page 104 of 182 Pages Exhibit R-2a (PE 0604384BP) </div>									

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>D. <u>Acquisition Strategy:</u></p> <p>JPACE The acquisition strategy employs a spiral development approach. Block I will address 90% of the JPACE requirements, including key performance parameters. Block II is intended to address any deficiencies found in Block I and specifically to address CB protection in a rotorwash or high velocity wind environment and to enhance the thermal burden reduction capabilities of the JPACE system. Block I includes a competitive material search for advanced material technologies addressing aviation material performance requirements from the JPACE Joint ORD. Firm Fixed Price delivery order type contracts were awarded to finalize design and verify system level requirements. These contract vehicles include quantities for System Development and Demonstration (SDD), LRIP, and FRP.</p> <p>JSAM The JSAM acquisition strategy included full and open competition for the Program Definition & Risk Reduction (PDRR) and Systems Development and Demonstration (SDD)/production efforts IAW FAR 15 (as supplemented). Two contracts were awarded for PDRR. A down-selection was made, and the contractor that was determined to be the best value offeror based on the established evaluation criteria. The SSD contact includes follow-on production options.</p> <p>Cost, schedule and performance remain key to program success. This acquisition strategy supports the Government's intent to continue pursuing competition within future increments through solicitation and evaluation of other potential sources, ensuring the user receives the best value product with reduced program risk.</p> <p>JSGPM The JSGPM acquisition strategy is a combined full-scale development (System Development and Demonstration) and production with Contractor Logistics Support (CLS). The contract for development/production is based on a Joint Service performance specification with special emphasis on the lowest total ownership cost (TOC).</p>		
Project IP5/Line No: 091	Page 105 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
PROT CLTH	The JSLIST acquisition strategy employs a spiral developmental approach, any deficiencies found in the JSLIST ensemble will be addressed to support the warfighters' mission and capabilities requirements using competitive material search.	
Project IP5/Line No: 091		
Page 106 of 182 Pages		
Exhibit R-2a (PE 0604384BP)		

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
HW C - Prototype Pattern Design	MIPR	NCTRF, Natick, MA	U	2011	150	1Q FY05	0	NONE	0	NONE	0	2161	2161
HW S - Prototype Procurement	C/FFP	Creative Apparel Associates, Belfast, ME	C	660	200	2Q FY05	0	NONE	0	NONE	0	860	570
JSAM													
HW S - Contractor Development Types I/IA	C/CPAF	AVOX, Lancaster, NY	C	13540	5634	2Q FY05	1874	2Q FY06	264	2Q FY07	91	21403	7209
SW SB - Contractor Development Type II/Top Owl	C/FPI	TBS	C	0	1037	2Q FY06	2183	2Q FY06	4030	2Q FY07	898	8148	0
JSGPM													
HW S - Develop JSGPM Hardware	C/CPIF	Avon, Inc. Cadillac, MI	C	19347	1009	1Q FY05	0	NONE	0	NONE	0	20356	0
PROT CLTH													
HW S - Protective Clothing	C/FFP	Various	C	0	0	NONE	0	NONE	147	1Q FY07	0	147	0
Subtotal I. Product Development:				35558	8030		4057		4441		989	53075	
Remarks:													

Project IP5

Page 107 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
OTHT S - Hazard Prediction Model - Independent Verification and Validation	WR	NAWCAD, Patuxent River, MD	U	1149	100	1Q FY05	0	NONE	0	NONE	0	1249	1249
ILS S - Systems Logistics	WR	NAWCAD, Patuxent River, MD	U	599	300	1Q FY05	0	NONE	0	NONE	0	899	1012
JSAM													
TD/D SB - JSAM Logistics, Training, and Data	C/CPAF	AVOX, Lancaster, NY	C	789	646	2Q FY05	214	2Q FY06	30	2Q FY07	10	1689	188
TD/D SB - TD/D SB - JSAM Logistics, Training, and Data	C/FPI	TBS	C	0	69	2Q FY06	146	2Q FY06	255	2Q FY07	0	470	0
JSGPM													
ES S - Engineering Support	MIPR	JPM - IP, Quantico, VA	U	1306	160	1Q FY05	0	NONE	0	NONE	0	1466	2852
TD/D S - Technical Data and Documentation of JSGPM System	MIPR	JPM - IP, Quantico, VA	U	581	70	1Q FY05	0	NONE	0	NONE	0	651	1000
ILS S - Logistics Support of JSGPM System	MIPR	JPM - IP, Quantico, VA	U	726	69	1Q FY05	0	NONE	0	NONE	0	795	1700
Subtotal II. Support Costs:				5150	1414		360		285		10	7219	
Remarks:													

Project IP5

Page 108 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
OTE S - Initial Operational Test and Evaluation	MIPR	AFOTEC DET 1, Albuquerque, NM	U	1048	900	1Q FY05	0	NONE	0	NONE	0	1948	2912
OTE S - Initial Operational Test and Evaluation	MIPR	USA ATEC, Aberdeen, MD	U	198	904	1Q FY05	0	NONE	0	NONE	0	1102	1182
OTE S - Initial Operational Test and Evaluation	WR	COMOPTEVFOR, Norfolk, VA	U	160	300	1Q FY05	0	NONE	0	NONE	0	460	1256
JSAM													
OTHT SB - Govt Developmental Test	MIPR	Various	U	1723	3310	2Q FY05	3257	2Q FY06	4857	2Q FY07	1520	14667	92
OTE S - Govt Operational Test	MIPR	Various	U	706	730	2Q FY05	1939	2Q FY06	2579	2Q FY07	3380	9334	404
OTHT SB - Contractor Test and Integration Type I/IA	PO	AVOX, Lancaster, NY	C	616	1456	2Q FY05	483	2Q FY06	68	2Q FY07	23	2646	185
OTHT SB - Contractor Test & Integration Type II/Top Owl	PO	TBS	C	0	69	2Q FY06	145	2Q FY06	255	2Q FY07	59	528	0
JSGPM													
OTHT SB - Plan and Conduct Developmental Testing of JSGPM System	MIPR	ATEC, Falls Church VA; DTC; HRED, APG, MD	U	3796	600	1Q FY05	0	NONE	0	NONE	0	4396	1250
OTE S - Plan and Conduct Operational Testing of JSGPM System	MIPR	Various	U	3312	500	1Q FY05	0	NONE	0	NONE	0	3812	8050
Project IP5													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PROT CLTH													
OTE S - Block II Glove Test	MIPR	Various	U	5040	2912	1Q FY05	0	NONE	0	NONE	0	7952	0
DTE S - JSLIST MPS Durability Trials	MIPR	Various	U	370	1452	1Q FY05	0	NONE	0	NONE	0	1822	0
OTE S - Protective Clothing OT&E	MIPR	Various	U	0	0	NONE	0	NONE	1250	2Q FY07	0	1250	0
OTE SB - Test Methodologies Modeling	MIPR	Various	U	0	0	NONE	0	NONE	1553	1Q FY07	0	1553	0
Subtotal III. Test and Evaluation:				16969	13133		5824		10562		4982	51470	

Remarks:

Project IP5

Page 110 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
PM/MS S - Overall Program Coordination	WR	NAWCAD, Patuxent River, MD	U	2330	300	1Q FY05	0	NONE	0	NONE	0	2630	2322
PM/MS SB - Air Force Program Coordination	MIPR	311 HSW Brooks AFB, TX	U	1095	100	1Q FY05	0	NONE	0	NONE	0	1195	1203
PM/MS SB - US Army Program Coordination	MIPR	PMSOLDIER, Ft. Belvoir, VA	U	343	100	1Q FY05	0	NONE	0	NONE	0	443	470
PM/MS SB - US Marine Corps Program Coordination	WR	MARCORSYSCOM, Quantico, VA	U	244	100	1Q FY05	0	NONE	0	NONE	0	344	344
JSAM													
PM/MS C - Program Management/Management Support	MIPR	Various	U	4261	2166	2Q FY05	3278	2Q FY06	3135	2Q FY07	3309	16149	2420
PM/MS S - Contractor Program Management	C/CPAF	AVOX, Lancaster, NY	C	2048	1551	2Q FY05	514	2Q FY06	72	2Q FY07	25	4210	1163
PM/MS S - Contractor Program Management	C/FPI	TBS	C	0	208	2Q FY06	440	2Q FY06	768	2Q FY07	179	1595	0
JSGPM													
PM/MS S - Program Management by Army (Lead Service)	MIPR	JPM - IP, Quantico, VA	U	2243	200	1Q FY05	0	NONE	0	NONE	0	2443	1400
PM/MS S - Program Management by Joint Services other than Army	MIPR	USN, USAF, USMC various locations	U	1600	250	1Q FY05	0	NONE	0	NONE	0	1850	1900
PROT CLTH													
PM/MS C - IPT	MIPR	Various	U	2652	300	1Q FY05	331	1Q FY06	0	NONE	0	3283	0
Project IP5													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PM/MS C - Design/Analysis/Modeling	MIPR	Various		0	0	NONE	4727	1Q FY06	0	NONE	0	4727	0
PM/MS S - Protective Clothing	MIPR	Various	U	0	0	NONE	0	NONE	400	1Q FY07	0	400	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	193	NONE	0	NONE	0	193	0
Subtotal IV. Management Services:				16816	5275		9483		4375		3513	39462	
Remarks:													
TOTAL PROJECT COST:				74493	27852		19724		19663		9494	151226	

Project IP5

Page 112 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JPACE																																
Pattern Finalization	>>																															
Developmental Test - Durability Testing	>>																															
Developmental Testing - Combined Developmental Testing (DT)/Operational Testing (OT) Assessment	>>																															
System Verification Review						1Q																										
Milestone C - Low Rate Initial Production (LRIP)						2Q																										
Independent Operational Testing								4Q		2Q																						
MS C Full Rate Production (FRP) Decision									2Q																							
JSAM																																
System Demonstration and Development (SDD)	>>																															
Development Test Readiness Review (DTRR) Types I/IA								4Q		2Q																						
Milestone C / Full Rate Production (FRP) Decision) - Type IA									2Q	3Q																						
IOC Type I															1Q		4Q															

Project IP5

Page 113 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSAM (Cont)																																
Fixed Wing (FW, Type II) DTRR														4Q	—	2Q																
FW, Type II Milestone C																2Q	—	4Q														
JSGPM																																
Conduct System Demonstration	>>							2Q																								
Documentation for Developmental Testing (DT) and Operational Testing (OT) Test	>>							4Q																								
Developmental Testing (DT) Production Qualification Testing (PQT)								3Q	—																							
Initial Evaluation Report								1Q	2Q																							
Prepare and Execute Log Spt Plan	>>							1Q																								
Preparation of Milestone C Documentation	>>							1Q																								
Limited User Test (LUT)								4Q	1Q																							
Final Performance Specification								4Q																								
Milestone C Low Rate Initial Production (LRIP) JSGPM								2Q																								
Production Contract Award								3Q	4Q																							
Material Release								2Q	—	4Q																						

Project IP5

Page 114 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile																DATE February 2006																	
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)										PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)										PROJECT IP5													
D. <u>Schedule Profile (cont):</u>		FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JSGPM (Cont)																																	
Full Rate Production (FRP) Review										2Q 3Q																							
Multiservices Operational Test and Evaluation (MOT&E) with Production Representative Articles										3Q																							
First Unit Equipped (FUE)/Initial Operational Capability (IOC)														1Q																			
PROT CLTH																																	
JSLIST Block II Glove Conduct Developmental Test (DT)/Operational Test (OT)		3Q				<div></div>				1Q																							
JSLIST Block II Glove Milestone C										4Q																							
JSLIST Block II Glove MS C										4Q																							
JSLIST MPS - Milestone C		1Q																															
JSLIST MPS - Production Contract Award		1Q																															
JSLIST - Initial Operational Test and Evaluation (IOT&E) Alternative Footwear Solutions (AFS)						3Q				<div></div> 1Q																							
JSLIST- Milestone C AFS										3Q																							
Project IP5										Page 115 of 182 Pages										Exhibit R-4a (PE 0604384BP)													

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IP5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
PROT CLTH (Cont)																																
Integrated Footwear System (IFS) DT/OT					1Q				1Q																							
JSLIST Spiral Development MS B									2Q																							
JSLIST Spiral Development DT									2Q				2Q																			
JSLIST Spiral Development MS C LRIP									3Q				3Q																			
JSLIST Spiral Development OT													3Q				3Q															
JSLIST Spiral Development MS C FRP																	4Q															

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT IS5	
COST (In Thousands)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
IS5 INFORMATION SYSTEMS (SDD)	19884	73761	25838	17285	8812	5537	3274	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project IS5 INFORMATION SYSTEMS (SDD): This funding supports System Development and Demonstration and Low Rate Initial Production (SDD/LRIP).

Efforts funded in this project are: (1) Joint Effects Model (JEM), (2) Joint Operational Effects Federation (JOEF) and (3) Joint Warning and Reporting Network (JWARN).

The JEM will be JPEO-CBD's only accredited model for predicting hazards associated with the release of contaminants into the environment. JEM will be developed in blocks and will be capable of modeling hazards in a variety of scenarios including: counterforce, passive defense, accident and/or incidents (Block I), high altitude releases, urban NBC environments (Block II), building interiors, and human performance degradation (Block III). Battlespace commanders and first responders must have an NBC hazard prediction capability in order to make decisions that will minimize risks of CBRN contamination and enable them to continue mission operations.

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>JOEF will be a near real-time course of action analysis tool developed in three increments using a detailed NBC hazard prediction model. Each increment supports Aerial Ports of Debarkation (APODs), Sea Ports of Debarkation (SPODs), mobile forces, medical and automated Tactics, Techniques and Procedures (TTPs) in various levels of fidelity. Increment I will support deliberate planning for operational and strategic users in a Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) common operating environment (COE); Command and Control Personal Computers (C2PC); and crisis planning for the operational users in a COE.</p> <p>The JWARN will provide standard integration and analysis of NBC detection information with Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) on the battlefield automating the NBC warning and reporting processes currently performed manually throughout the Services. The JWARN will collectively consist of Commercial off-the-shelf (COTS) materiel and JWARN software for C4ISR. JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. JWARN ID was the initial acquisition and fielding of COTS and Government off-the-shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. JWARN will provide automatic NBC message capability at the Global Command and Control System (GCCS) level. JWARN will integrate NBC legacy and future detector systems, NBC Warning and Reporting software modules, and NBC battlespace management modules in the Joint Services C4I systems. In addition to JWARN development, a JWARN Initial Capability (JIC) will be developed and provided to warfighters in order to support refinement of Service CONOPS and provide feedback to the JWARN developer. Pre-Planned Product Improvements (P3I) will investigate new detectors/sensors and software changes to Service C4I systems.</p>		
Project IS5/Line No: 091	Page 118 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDTE DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**B. Accomplishments/Planned Program**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT EFFECTS MODEL	7961	22196	1752
RDTE Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 1554 JEM Block I - Continued the conduct of Independent Validation and Verification (IV&V). Prepared for and achieved Interim Class Accreditation.
- 4591 JEM Block I - Continued software development and initiated Government developmental testing. Finalized operational test plans. Provided program financial management, scheduling, planning and reporting.
- 1816 JEM Block I - Performed software maintenance in support of Developmental Testing (DT) and OT. Established the JPEO Software Support Activity (SSA).

Total 7961

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 2252 JEM Block I - Perform software maintenance through Limited Deployment Phase (LDP) IAW DoDI 5000.2. • 2620 JEM Block I - Initiate long-term field trials, in conjunction with other programs, to obtain highly characterized CBRN dispersion patterns across the spectrum of operational scenarios critical to fill known data gaps. • 3953 JEM Block I - Accomplish full system interoperability with JWARN. Complete interoperability, network and system security certifications on 12 different Service C4I/host Systems and two computer operating systems (Windows NT and Unix). Conduct Operational Assessments with the service operational test agencies (OTA). Prepare for independent operational test and evaluation. • 3403 JEM Block I - Conduct MS C. Finalize Computer Based Training and courseware. Complete infrastructure and stand up of Software Support Activity and 24/7 capable Help Desk. Develop deployment plan for JEM software to include training. • 1832 JEM Block I - Implement and certify the CBRN Database. Provide program financial management, scheduling, planning and reporting. • 1476 JEM Block II - Revalidate Block II technology analysis from FY04 (See JEM portion of Project CA5), develop prototype options for down-select and prepare for Block II MS B. • 5713 JEM Block II - Initiate and complete Block II system development and demonstration, incorporating Urban Missile Defense, Missile Intercept, Backtracking to Source, Strategic Command (STRATCOM) Support and Human Effects. Migrate Block II technologies into Block I design Urban Missile Defense, Missile Intercept, Backtrack to Source, STRATCOM Requirements, effects to 180 days, and a 10% improvement in speed and accuracy. Initiate IV&V. • 947 JEM Block II - Initiate Pre-planned Product Improvement (P3I). 		
Project IS5/Line No: 091	Page 120 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**FY 2006 Planned Program (Cont):****Total** 22196**FY 2007 Planned Program:**

- 1752 JEM Block I - Provide for software upgrades after initial system fielding. Provide program financial management, scheduling, planning and reporting. Continue initial system training. Support system-of-system testing with JWARN. Support requests for operation on special configurations North American Aerospace Defense Command (NORAD), Northern Command (NORTHCOM), Pentagon Force Protection Agency (PFPA), etc. Conduct independent operational test and evaluation.

Total 1752

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT OPERATIONAL EFFECTS FEDERATION	0	13233	8188
RDT&E Articles (Quantity)	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 2349 JOEF Block 1 - Continue deliberate and crisis planning for Seaports of Debarkation (SPOD), Aerial Ports of Debarkation (APOD) and automated Tactics, Techniques and Procedures (TTP) software development, including development of Common Operating Environment (COE) and Command and Control Personal Computer (C2PC) interfaces. • 3277 JOEF Block 1- Initiate the development of mobile force capability to meet the Services' requirements. • 1237 JOEF Block 1 - Continue the integration with JEM, JWARN and database management systems. • 3801 JOEF Block 1 - Conduct software interoperability development and testing. • 1846 JOEF Block 1 - Develop test, validation and verification plans, start Development Testing (DT) and begin software validation and verification. • 287 JOEF Block 1 - Conduct Systems Engineering, Warfighter, T&E, and logistics IPTs. • 436 JOEF Block 1 - Identify, collect and model pertinent data into the JOEF schema. <p>Total 13233</p> <p>FY 2007 Planned Program:</p> <ul style="list-style-type: none"> • 4006 JOEF Block I - Complete software development for APODs, SPODs, automated TTPs and Mobile Force requirements, including COE and C2PC interfaces, for the Services for strategic level of war. • 2167 JOEF Block I - Continue developmental testing and start operational testing. • 642 JOEF Block I - Continue software validation and verification. 		
Project IS5/Line No: 091	Page 122 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**FY 2007 Planned Program (Cont):**

- 324 JOEF Block I - Continue to conduct Systems Engineering, Warfighter, T&E, and logistics IPTs.
- 560 JOEF Block I - Continue development of training material.
- 489 JOEF Block I - Continue identification, collection and modeling of pertinent data into the JOEF schema.

Total 8188

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT WARNING & REPORTING NETWORK (JWARN)	11923	37614	15898
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 3225 JWARN - Continued Block II development.
- 2083 JWARN - Congressional Interest Item - Continued Block II development.
- 3413 JWARN - Completed Block II DT/OA planning.
- 3202 JWARN - Provided program management support and oversight.

Total 11923

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>FY 2006 Planned Program:</p> <ul style="list-style-type: none"> • 7119 JWARN - Complete Block II development. • 3975 JWARN - Conduct Block II Developmental Test (DT). • 3508 JWARN - Conduct Block II Interoperability Tests (IOT). • 4002 JWARN - Conduct Joint Component Interface Device (JCID) tests. • 498 JWARN - Develop comprehensive DT test results and reports. • 2891 JWARN - Conduct Multi-Service Operational Test & Evaluation (MOT&E) event planning. • 2500 JWARN - Joint Component Interface Device (JCID) functionality - design & integration. • 5600 JWARN - Stand alone variant development. • 2102 JWARN - Network Centric Enterprise Services (NCES)/Net Ready (NR)/Key Performance Parameters (KPP) enhancements. • 2419 JWARN - Continue program management and oversight. • 2000 JWARN (T&E Capability) - Develop, design and integrate software and hardware for a functional Operational Test (OT) Stimulator demonstration system. • 1000 JWARN (T&E Capability) - Develop a high bandwidth data transfer backbone to transmit and integrate test data for rapid analysis across multiple users and test sites. <p>Total 37614</p>		
Project IS5/Line No: 091	Page 124 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**FY 2007 Planned Program:**

- 527 JWARN - Generate comprehensive Operational Assessment (OA) report.
- 3879 JWARN - Conduct Block II OA.
- 940 JWARN - Conduct Milestone C review.
- 1883 JWARN - Coordinate JCID Low Rate Initial Production (LRIP).
- 1791 JWARN - Coordinate JCID First Article Test (FAT).
- 2260 JWARN - Conduct MOT&E event planning.
- 2528 JWARN - Continue program management and oversight.
- 1045 JWARN (T&E Capability) - Test and validate software and hardware for the Operational Test (OT) Stimulator demonstration system.
- 1045 JWARN (T&E Capability) - Integrate branched connections to the data transfer backbone to transmit and integrate test data for rapid analysis across multiple users and test sites.

Total 15898

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	718	0
RDTE&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**FY 2006 Planned Program:**

- 718 SBIR

Total 718**C. Other Program Funding Summary:**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	8809	5112	6544	21455	21570	22752	29033	Cont	Cont
JC0208 JOINT EFFECTS MODEL (JEM)	994	1996	2058	1046	0	0	0	0	6094

Project IS5/Line No: 091

Page 126 of 182 Pages

Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>D. <u>Acquisition Strategy:</u></p> <p>JEM The JEM program will use a three-block evolutionary acquisition approach for the design, development, testing and fielding of JEM. For Block I, upon completion of an Independent Model Analysis, JEM interface, credibility and performance requirements will be refined in an iterative process through a series of design reviews, using cost-effective graphical storyboarding prior to actual implementation of the algorithms and data harvested from the legacy Chemical, Biological, Radiological and Nuclear (CBRN) models. A cost-plus award/incentive fee contract is being used for Block I model development.</p> <p>JOEF JOEF is a planning tool to support deliberate and crisis planning. JOEF will be a near real-time course of action analysis tool developed in three increments. It will use a detailed CBRN hazard prediction model. Each block supports Aerial Ports of Debarkation (APODs), Sea Ports of Debarkation (SPODs), mobile forces, medical and automated Tactics, Techniques and Procedures (TTPs) in various levels of fidelity.</p> <p>Increment I will support deliberate planning for operational and strategic users in a Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) common operating environment (COE)/Networked environment, Command and Control Personal Computers (C2PC), and crisis planning for the operational users in a COE/Networked environment.</p>		
Project IS5/Line No: 091	Page 127 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>Increment II will support deliberate and crisis planning for the tactical users in COE/Networked, and Non-Networked environments; deliberate planning for operational and strategic users in a Non-Networked environment; crisis planning for the operational users in a Non-Networked environment, and crisis planning for the strategic users in a COE Networked and Non-Networked environments. Increment II also supports planning for consequence management and development of consequence management for military capabilities.</p> <p>Increment III will extend consequence management capabilities to include civilian facilities.</p>		
Project IS5/Line No: 091	Page 128 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IS5
<p>JWARN</p> <p>The revised Acquisition Strategy (AS) is based on the contract awarded on July 15, 2003 to Northrop Grumman - Information Technology and updates key program milestones and events accordingly. The revised AS accelerates the development effort to provide a JWARN Initial Capability (JIC) providing a limited, end-to-end JWARN capability to the warfighter by 1QFY05. This acceleration will be accomplished by leveraging the technology of an extant end-to-end JIC. The JIC was completed early in the contract cycle, was demonstrated in 2QFY04, and will be made available to key users by 1QFY05. Usage of this initial integrated capability by the warfighter will generate operational feedback to the JWARN developer and provide a venue to validate and refine Measures of Performance (MOPs) and Measures of Effectiveness (MOEs). Further, it will provide an opportunity to refine Service Concepts of Operations (CONOPS) and Tactics, Techniques, and Procedures (TTPs) for the system. The revised strategy further accelerates the delivery of the full system by developing a single increment JWARN-Full Capability (JWARN-FC) system vice development in two separate Blocks. This acceleration is achieved through the concurrent integration of sensor connectivity initially planned for Block III. The revised strategy eliminates the Block II Milestone Decision process as well as Block II Development Testing/Operational Assessment (DT/OA). This shortens the delivery schedule for the full capability of JWARN by approximately 12 months.</p>		
Project IS5/Line No: 091	Page 129 of 182 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IS5		

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JEM													
SW SB - Block II Software	C/CPIF	TBS	C	0	0	NONE	7017	2Q FY06	0	NONE	1874	8891	0
SW SB - JEM Hazard Prediction Model	C/CPIF	Innovative Emergency Management (IEM), Baton Rouge, LA	C	0	144	2Q FY05	998	2Q FY06	0	NONE	650	1792	0
SW SB - JEM Hazard Prediction Model	C/CPIF	TBS	C	0	0	NONE	0	NONE	598	2Q FY07	0	598	0
SW SB - JEM Hazard Prediction Model	C/CPIF	Northrop Grumman, San Diego, CA	C	0	1953	1Q FY05	2252	2Q FY06	0	NONE	0	4205	0
JOEF													
SW S - Engineering Builds - Development, Design, Coding	C/CPIF	TBS	C	0	0	NONE	8172	2Q FY06	2960	2Q FY07	0	11132	0
SW S - Integration & Interoperability	C/CPIF	TBS	U	0	0	NONE	1076	2Q FY06	0	NONE	0	1076	0
JWARN													
SW S - JWARN System Development and Demonstration	C/FPI	Northrop Grumman - Winterpark, FL	C	0	5308	3Q FY05	24214	2Q FY06	0	NONE	0	29522	0
Subtotal I. Product Development:				0	7405		43729		3558		2524	57216	
Remarks:													

Project IS5

Page 130 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IS5		

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JEM													
ES S - IPT - System Engineering, Logistics and Program Support	MIPR	Various	U	0	2734	2Q FY05	4550	2Q FY06	202	2Q FY07	695	8181	0
ES S - JEM Data Model	MIPR	Various	U	0	0	NONE	2129	2Q FY06	0	NONE	0	2129	0
JOEF													
TD/D SB - Integration, System Engineering, Test and Logistics	MIPR	Various	U	0	0	NONE	1438	2Q FY06	1819	2Q FY07	0	3257	0
Subtotal II. Support Costs:				0	2734		8117		2021		695	13567	

Remarks:

Project IS5
Page 131 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IS5	

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JEM													
DTE S - Hazard Prediction Model Developmental Test	MIPR	Various	U	0	1372	2Q FY05	2822	2Q FY06	139	1Q FY07	650	4983	0
OTE S - Hazard Prediction Model Developmental Test	MIPR	Various	U	0	209	2Q FY05	938	2Q FY06	131	2Q FY07	555	1833	0
OTHT S - Hazard Prediction Model - IV&V	MIPR	Various	C	0	623	1Q FY05	598	2Q FY06	63	2Q FY07	39	1323	0
JOEF													
DTE S - Developmental Test Planning	MIPR	Various	U	0	0	NONE	1383	2Q FY06	1619	2Q FY07	0	3002	0
OTHT S - JOEF Independent Verification and Validation	MIPR	Various	U	0	0	NONE	225	2Q FY06	481	2Q FY07	0	706	0
JWARN													
OTHT SB - JWARN Block II Development Test	MIPR	Various	U	0	3413	3Q FY05	9974	1Q FY06	12253	1Q FY07	0	25640	0
Subtotal III. Test and Evaluation:				0	5617		15940		14686		1244	37487	

Remarks:

Project IS5
Page 132 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IS5	
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JEM													
PM/MS S - Program Office - Planning & Programming	MIPR	SPAWARSYSCOM, San Diego, CA	U	0	926	1Q FY05	892	1Q FY06	619	1Q FY07	100	2537	0
JOEF													
PM/MS S - Program Office - Planning and Programming	MIPR	Various	U	0	0	NONE	939	1Q FY06	1309	1Q FY07	0	2248	0
JWARN													
PM/MS S - JWARN Management Support	MIPR	Various	U	0	3202	3Q FY05	3426	1Q FY06	3645	1Q FY07	0	10273	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	718	NONE	0	NONE	0	718	0
Subtotal IV. Management Services:				0	4128		5975		5573		100	15776	
Remarks:													
TOTAL PROJECT COST:				0	19884		73761		25838		4563	124046	
<div style="display: flex; justify-content: space-between; padding: 10px;"> Project IS5 Page 133 of 182 Pages Exhibit R-3 (PE 0604384BP) </div>													

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY









RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JEM																																
BLK I - Software Development	>>												2Q																			
BLK I - Devel Test (DT) (Contr)					1Q				1Q																							
BLK I - DT (Government)						2Q				2Q																						
BLK I - Software Maintenance							3Q				4Q																					
BLK I - Establish, Train, Stand Up Software Support Activity							3Q				3Q																					
BLK I - Operational Testing (OT)										2Q	3Q																					
BLK I - M/S C (Lim Deploy) and Full Rate Production											3Q	4Q																				
BLK I - Production and Deployment											4Q				2Q																	
BLK I - Initial Operational Capability (IOC)											4Q	1Q																				
JOEF																																
Concept and Technology Development Phase	>>												1Q																			
Prototype Development		2Q				1Q																										

Project IS5

Page 134 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JOEF (Cont)																																
Focused Technology Assessment II (Mobile Forces)				3Q 4Q																												
Focused Technology Assessment III (Mobile Forces & Bus. Process Mgt. Models)								3Q				1Q																				
Increment I - Milestone B												1Q																				
Incr I - Award Systems Development and Demonstration (SDD) Contract												1Q 2Q																				
Incr I - Software Development												1Q	<div></div>				3Q															
Incr I - Tech Reviews												1Q	<div></div>				1Q															
Incr 1 - Developmental Testing (DT) Build 1														1Q																		
Incr I - Operational Assessment															3Q																	
Incr I - Developmental Testing (DT) Build 2															3Q																	
Incr I - Integrated Operational Test & Evaluation (IOTE)																	1Q															
Incr I - Milestone C (Limited Deployment)																		4Q														

Project IS5

Page 135 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY






RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JOEF (Cont)																																
Incr I - Initial Operational Capability (IOC)																4Q																
Incr 1 - Full Operational Capability																			4Q													
JWARN																																
JWARN BLK II - System Design and Development (SDD) Performance	>>								2Q																							
JWARN BLK II - JIC Deployment	>>								2Q																							
JWARN BLK II - JCID Design and Development	>>								2Q																							
JWARN BLK II - Development Test												3Q	4Q																			
JWARN BLK II - Operational Assessment												4Q		2Q																		
JWARN BLK II - Milestone C													2Q	3Q																		
JWARN BLK II - JCID Low Rate Initial Production (LRIP) Contract Award													3Q		1Q																	
JWARN BLK II - First Article Test													3Q	4Q																		
JWARN BLK II - Initial Operational Test and Evaluation (IOT&E)															1Q	2Q																

Project IS5

Page 136 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

IS5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JWARN (Cont)																																
JWARN BLK II - Multiservice Operational Test & Evaluation															1Q	2Q																
JWARN BLK II - Full Rate Production Milestone Decision																4Q																
JWARN BLK II - Full Rate Production																4Q	<div></div>														4Q	
JWARN BLK II - Full Operational Capability																								2Q								

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT MB5				
COST (In Thousands)				FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)				9843	60612	71834	92533	95113	77377	181423	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project MB5 MEDICAL BIOLOGICAL DEFENSE (SDD): This project funds the System Development and Demonstration (SDD) phase of vaccines, drugs, and diagnostic medical devices that are directed against validated biological warfare (BW) agents to include bacteria, viruses, and toxins of biological origin. Efforts for medical biological defense product development involve production scale-up studies, consistency manufacturing, and expanded human safety studies. The results of these efforts, and those conducted during the SDD phase, will be used to submit a Biologic License Application (BLA) to the Food and Drug Administration (FDA) for product licensure. Upon FDA licensure, the product will transition to full-scale licensed production. Products to be developed under this program include: Recombinant Botulinum, Plague, and Equine Encephalitis vaccines.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
<p>The Critical Reagents Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/select biological threat agent and genomic reference materials, and DNA biological detection requirements from Technology Development through production. The CRP ensures the availability of standardized high-quality reagents throughout the life-cycle of all biological warfare (BW) detection/identification systems. The CRP supports all aspects of manufacturing "scale-up" of developmental protocols for CRP developed products, including maintenance of repositories and validation laboratories. The CRP is a consolidation of all antibody/select biological threat agent and genomic reference materials based on identification requirements within the BW detection program. Supported systems include the Biological Integrated Detection System (BIDS), Joint Biological Agent and Identification System (JBAIDS) Increments I and II, and the Joint Biological Point Detection System (JBPDS) Increments I and II. This program also supports the development and manufacture of individual Handheld Immunochromatographic Assays (HHA), Electrochemiluminescence (ECL) immunoassays, polymerase chain reaction (PCR) genomic assays, and the DoD biological sampling kits. This program results in improved identification performance and ensures comparable results across disparate systems.</p> <p>The Joint Biological Agent Identification and Diagnostic System (JBAIDS) is a reusable, portable, modifiable biological agent identification and diagnostic system. JBAIDS will enhance force protection by providing commanders and medical personnel with the capability to determine appropriate treatment, effective preventive measures, and prophylaxis, in response to the presence of biological and toxin agents. JBAIDS will be configured to support reliable, fast, and specific identification of biological and toxin agents from a variety of clinical and environmental sources. Increments II and III technologies will be selected based on their reliability, technological maturity, and supportability.</p>		
Project MB5/Line No: 091	Page 140 of 182 Pages	Exhibit R-2a (PE 0604384BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**B. Accomplishments/Planned Program**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
CRITICAL REAGENTS PROGRAM	2939	8486	3204
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 762 CRP - Continued development of antibodies to International Task Force (ITF)-6B agents.
- 1483 CRP - Continued expansion of select biological threat agent reference materials and validation of assays.
- 694 CRP - Initiated development of ECL immunoassays and PCR genomic assays to ITF-6B (ITF-6A completed in FY04).

Total 2939**FY 2006 Planned Program:**

- 2179 CRP - Continue development of antibodies, PCR genomic assays and ECL immunoassays to ITF-6B.
- 3447 CRP - Continue expansion of select biological threat agent reference materials and validation of assays.
- 1597 CRP - Implement a formal Quality Assurance/Quality Control (QA/QC) medical and non-medical, validation, Developmental Testing (DT), and Operational Testing (OT) program to encompass the transition and fielding of biological detection assays.
- 873 CRP - Initiate development of ECL immunoassays and PCR genomic assays to ITF-6C agents.
- 390 CRP - Initiate expansion of unified culture collection (UCC).

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2006 Planned Program (Cont):****Total** 8486**FY 2007 Planned Program:**

- 1103 CRP - Continue expansion of select biological threat agent reference materials, validation of assays, and UCC.
- 1194 CRP - Continue antibody development of ITF-6B. Continue ECL immunoassays and PCR genomic assays development of ITF-6B and ITF-6C agents.
- 907 CRP - Initiate International Organization for Standardization (ISO) 17025 into antibody production.

Total 3204

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIOLOGICAL AGENT IDENT AND DIAG SYSTEM	4474	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 3070 JBAIDS Increment I - Completed Developmental Testing (DT), hardware Engineering Change Proposal (ECP) process and upgrading, and BW assay development. Initiated and completed OT. Achieved Milestone C/Low Rate Initial Production (LRIP).
- 560 JBAIDS Increment I - Conducted New Equipment Training (NET) of systems.

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

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2005 Accomplishments (Cont):**

- 844 JBAIDS Increment I - Conducted FDA clinical trials and submitted FDA 510(k) for detection of Anthrax.

Total 4474

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIOLOGICAL AGENT IDENT AND DIAG SYSTEM INCREMENT II	0	8119	10198
RD&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 137 JBAIDS Increment II - Complete down select process to determine commercial-off-the-shelf (COTS)/Non-Developmental Items (NDI) systems' potential applicability; and source selection activities, technical specification development, and support activities.
- 4996 JBAIDS Increment II - Purchase development prototype articles, perform contractor verification testing (CVT), develop technical manuals and test plans/procedures, provide contractor logistics support, and perform FDA 510(k) activities. Achieve Milestone B.
- 1551 JBAIDS Increment II - Initiate Government Developmental Testing (DT), Operational Assessment (OA), Operational Testing (OT), and system training development efforts.
- 843 JBAIDS Increment II - Initiate Government Furnished Material (GFM) manufacturing support of toxin test sample manufacturing.

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

DATE

February 2006

BUDGET ACTIVITY

RDTE DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2006 Planned Program (Cont):**

- 592 JBAIDS Increment II - Initiate and complete toxin Food and Drug Administration (FDA) interface planning efforts to determine pre-marketing approval (PMA)/510(k) applicability.

Total 8119**FY 2007 Planned Program:**

- 448 JBAIDS Increment II - Complete GFM manufacturing support of toxin test sample manufacturing.
- 7092 JBAIDS Increment II - Continue to perform CVT, develop technical manuals and test plans/procedures, provide contractor logistics support, and perform FDA 510(k) activities.
- 2145 JBAIDS Increment II - Continue Government DT, OA, OT, and system training development efforts.
- 513 JBAIDS Increment II - Initiate FDA toxin 510(k) submittals and clinical trials.

Total 10198

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
BOTULINUM VACCINE	0	26083	18583
RDTE Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2006 Planned Program:**

- 1736 JVAP - Recombinant Botulinum Vaccine - Continue stability studies on drug product.
- 3859 JVAP - Recombinant Botulinum Vaccine - Continue manufacturing process validation and validation of formulation, fill, and finish process for serotype A.
- 3657 JVAP - Recombinant Botulinum Vaccine - Continue manufacturing process validation and initiate validation of formulation, fill, and finish process for serotype B.
- 13331 JVAP - Recombinant Botulinum Vaccine - Initiate planning for Phase 2a clinical study.
- 3500 JVAP - Recombinant Botulinum Vaccine - Continue Phase 1b clinical study.

Total 26083**FY 2007 Planned Program:**

- 15216 JVAP - Recombinant Botulinum Vaccine - Initiate Phase 2 Clinical Trial.
- 3367 JVAP - Recombinant Botulinum Vaccine - Continue non-clinical studies and stability testing. Complete non-human primate immunogenicity study and continue animal model development efforts.

Total 18583

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
ENCEPHALITIS VACCINE	0	4877	0
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2006 Planned Program:**

- 4877 JVAP - Equine Encephalitis Vaccine - Initiate passive transfer studies with samples from the Phase 1 clinical trial.

Total 4877

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
PLAGUE VACCINE	0	10028	39849
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 9138 JVAP - Plague Vaccine - Initiate Phase 2 clinical trial of US candidate.
- 341 JVAP - Plague Vaccine - Continue non-clinical studies of US candidate.
- 549 JVAP - Plague Vaccine - Continue full-scale manufacturing process development of US candidate. This includes initiating analytical methods validation.

Total 10028**FY 2007 Planned Program:**

- 3051 JVAP - Plague Vaccine - Continue Phase 2 clinical trial of US candidate.
- 4964 JVAP - Plague Vaccine - Continue non-clinical studies of US candidate.

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**FY 2007 Planned Program (Cont):**

- 1049 JVAP - Plague Vaccine - Continue stability testing of US candidate.
- 10641 JVAP - Plague Vaccine - Complete full-scale manufacturing process development of US candidate and complete analytical methods validation.
- 20144 JVAP - Plague Vaccine - Complete manufacturing process validation.

Total 39849

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
BIOLOGICAL VACCINES	2430	2426	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 2430 Congressional Interest Item - Conducted ParalellaVax Rapid Vaccine Testing Technology study.

Total 2430**FY 2006 Planned Program:**

- 2426 TT Bio - Congressional Interest Item - ParalellaVax Rapid Vaccine Testing Technology.

Total 2426

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT MB5	

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	593	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 593 SBIR

Total 593

C. <u>Other Program Funding Summary:</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
JM0001 JOINT BIO AGENT IDENTIFICATION AND DIAGNOSTIC SYS (JBAIDS)	18372	20904	5732	14907	11328	8605	0	0	79848
JX0005 DOD BIOLOGICAL VACCINE PROCUREMENT	80417	38409	39074	14451	42421	41808	31807	Cont	Cont
JX0210 CRITICAL REAGENTS PROGRAM (CRP)	1841	2192	2307	2385	2414	2625	2738	Cont	Cont

Project MB5/Line No: 091
Page 148 of 182 Pages
Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
<p>D. <u>Acquisition Strategy:</u></p> <p>CRP The Critical Reagents Program (CRP) is executed using a stepwise strategy. After successful end item scale-up, items are transitioned to full-scale production in support of the detection platforms. Reagents have been developed to meet baseline project management requirements such as Biological Integrated Detection System (BIDS), Airbase/Port Biological Detection (Portal Shield), Joint Biological Agent Identification and Diagnostic System (JBAIDS), and JBPDS. Performance improvements in those reagents must be pursued. A large portion of the FY06-09 development activity will focus on antibody and immunoassay development against JBAIDS and JBPDS Block II requirements. This includes roughly tripling the inventory of agents that can be detected using antibody based methods. The antibody components of the critical reagents are Government Furnished Equipment (GFE) to the HHA and ECL immunoassay manufacturer. The CRP also seeks to improve the performance and producibility of the current reagent inventory through a program-wide testing and science and technology (S&T) transition strategy with the end goal of horizontally integrated reagent improvements. Expansion of select biological threat agent and genomic reference materials in support of ongoing detection reagent validation will be a major focus between FY06 and FY10. In FY06, the CRP will implement a formal DoD validation for DoD medical and non-medical assays.</p> <p>JBAIDS JBAIDS is an evolutionary development program. Increment I will be a rapid development and fielding effort to deliver a critical capability to identify bacteria and viral agents to the field in the shortest time. Increment I development effort focuses on militarizing and hardening of critical identification technologies based on a commercial off-the-shelf (COTS) item and on obtaining FDA clearance for the assays and hardware.</p>		
<p>Project MB5/Line No: 091 Page 149 of 182 Pages Exhibit R-2a (PE 0604384BP)</p>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
JBAIDS II	<p>JBAIDS is an evolutionary development program. Increment II will be a rapid development and fielding effort to deliver critical capability to identify toxins to the field in the shortest time. Increment II development effort focuses on militarizing and hardening of critical toxin identification technologies based on a commercial off-the-shelf (COTS)/Non-Developmental Item (NDI) candidate system. The four-phase down selection process includes a competitive fly-off of candidate toxin identification technologies in 4Q FY05, and source selection efforts in 2Q FY06.</p>	
VAC BOT	<p>A prime systems contractor will function as the "responsible head" and license holder and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The current budget supports development through FDA licensure of a recombinant bivalent (A and B) botulinum vaccine. The other serotypes will be added as evolutionary upgrades when funding is available.</p> <p>The management lead for the program shifts to JVAP at MS A. The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial (Phase 1).</p>	
<div>Project MB5/Line No: 091</div> <div>Page 150 of 182 Pages</div> <div>Exhibit R-2a (PE 0604384BP)</div>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
<p>During the System Development and Demonstration phase (SDD), the JVAP PSC will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose and schedule. The Phase 3 clinical trial is also conducted during this phase to demonstrate safety in an expanded volunteer population. To evaluate efficacy, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy the requirements of the "Animal Rule." The Milestone C, also the Low Rate Initial Production (LRIP) decision, will be conducted after the manufacturing process has been validated, consistency lots have been produced, and interim safety data is available from the Phase 3 clinical trial.</p> <p>JVAP has developed a risk mitigation plan to carry both United Kingdom (UK) and US candidates through an event driven down-select decision point. The UK plague vaccine candidate is being developed through a Project Arrangement (PA) among the US, UK and Canada.</p> <p>VAC ENC A prime systems contractor will function as the "responsible head" and license holder and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The current budget supports initial development through FDA licensure.</p> <p>The management lead for the program shifts to CBMS at MS A. The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial (Phase 1).</p>		
Project MB5/Line No: 091	Page 151 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
<p>VAC PLG</p> <p>During the System Development and Demonstration phase (SDD), the JVAP PSC will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose ranging and scheduling.</p> <p>A prime systems contractor will function as the "responsible head" and license holder and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The current budget supports initial development through FDA licensure.</p> <p>The management lead for the program shifts to CBMS at MS A. The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial (Phase 1).</p> <p>During the System Development and Demonstration phase (SDD), the JVAP PSC will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this period to provide additional safety data and determine dose and schedule of vaccinations and Phase 3 clinical trials are initiated.</p> <p>After a successful Milestone C, the program will enter the production and deployment phase. A low rate initial production decision (LRIP) will be held to authorize production of vaccine to support initial operational capability (IOC). The BLA will be submitted and FDA licensure (IOC) will be obtained during this phase. IOC is defined as FDA licensure plus 1/x Troop Equivalent Dose (TED) stockpile with x being the shelf life in years.</p>		
Project MB5/Line No: 091	Page 152 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
<p>JVAP has developed a risk mitigation plan to carry both United Kingdom (UK) and US candidates through an event driven down-select decision point. The UK plague vaccine candidate is being developed through a Project Arrangement (PA) under provisions of the Chemical, Biological, Radiological Memorandum of Understanding among the US, UK and Canada.</p> <p>VACCINES Upon FDA licensure, these vaccines and related biologics are procured as commercial-off-the-shelf (COTS) products.</p>		
<p>Project MB5/Line No: 091</p> <p>Page 153 of 182 Pages</p> <p>Exhibit R-2a (PE 0604384BP)</p>		

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
CRP - Scale-up of Select Biological Threat Agent Reference Materials	MIPR	USAMRIID, Fort Detrick, MD & Dugway Proving Ground, DPG, UT	U	803	675	1Q FY05	2429	2Q FY06	1035	2Q FY07	0	4942	0
CRP - Development of Select Biological Threat Agent Reference Materials and Assays	MIPR	Naval Medical Research Center, Silver Spring, MD	U	205	205	1Q FY05	1002	2Q FY06	205	2Q FY07	0	1617	0
JBAIDS													
SW SB - JBAIDS Inc I - Assay Development	C/FFP	Idaho Technology, Inc., Salt Lake City, UT	C	9252	330	1Q FY05	0	NONE	0	NONE	0	9582	0
JBAIDS II													
HW/SW C - JBAIDS Inc II - Development Prototype Article Production	C/CPFF	TBS	C	0	0	NONE	3282	3Q FY06	6878	1Q FY07	0	10160	0
VAC BOT													
HW S - Vaccine Development - Includes Consistency Lot, Pilot Lot, and Scale-Up Production	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	8610	1Q FY06	5893	1Q FY07	0	14503	0
VAC ENC													
HW S - Vaccine Development - Completion of Phase 1 clinical trial	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	2000	1Q FY06	0	NONE	0	2000	0
Project MB5													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		

I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
VAC PLG													
HW S - Includes validation and consistency lot production	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	3191	1Q FY06	16216	1Q FY07	0	19407	0
VACCINES													
HW S - ParallelaVax Rapid Vaccine Testing Technology	SS/CPFF	Maxygen, Inc., Redwood City, CA	C	0	972	4Q FY05	0	NONE	0	NONE	0	972	0
TT Bio - ParallelaVax Rapid Vaccine Testing	SS/CPFF	TBS	C	0	0	NONE	2426	4Q FY06	0	NONE	0	2426	0
Subtotal I. Product Development:				10260	2182		22940		30227		0	65609	
Remarks:													

Project MB5

Page 155 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
CRP - Conformance Testing and Select Biological Threat Agent Reference Material Development	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	217	500	2Q FY05	611	2Q FY06	720	2Q FY07	0	2048	0
CRP - Select Biological Threat Agent Reference Material Regulatory/Quality Assurance (QA) Support	MIPR	Dugway Proving Ground, Dugway, UT	U	0	238	2Q FY05	385	2Q FY06	350	2Q FY07	0	973	0
CRP - Select Biological Threat Agent Reference Material Development	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	404	2Q FY05	290	2Q FY06	0	NONE	0	694	0
JBAIDS													
TD/D SB - JBAIDS Inc I - Joint Services Training	MIPR	AMEDD, Fort Sam Houston, TX	U	310	649	1Q FY05	0	NONE	0	NONE	0	959	0
TD/D SB - JBAIDS Inc I - Government Labs Support	MIPR	AFIOH, AFIP, NSWC, and DPG	U	612	540	2Q FY05	0	NONE	0	NONE	0	1152	0
TD/D SB - JBAIDS Inc I - 510(k) Package, Test Plans, Technical Data/Manuals, Assay Patents	C/FFP	Idaho Technology, Inc., Salt Lake City, UT	C	1119	128	1Q FY05	0	NONE	0	NONE	0	1247	0
TD/D SB - JBAIDS Inc I - US Navy IOT&E	C/CPFF	Booz Allen Hamilton, McLean, VA	C	0	129	2Q FY05	0	NONE	0	NONE	0	129	0
Project MB5													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5	
II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBAIDS II													
TD/D C - JBAIDS Inc II - Government Labs/Regulatory Support	MIPR	Dugway Proving Ground, DPG, UT	U	0	0	NONE	683	2Q FY06	218	2Q FY07	0	901	0
TD/D C - JBAIDS Inc II - Government Labs/Regulatory Support	MIPR	TBS (Various)	U	0	0	NONE	306	3Q FY06	213	3Q FY07	0	519	0
TD/D C - JBAIDS Inc II - FDA, 510(k) Package, Test Plans, and Technical Data Manuals	C/CPFF	TBS	C	0	0	NONE	121	3Q FY06	287	3Q FY07	0	408	0
TD/D C - JBAIDS Inc II - Training Efforts	MIPR	AMEDD Center & School, Ft. Sam Houston, TX	U	0	0	NONE	200	2Q FY06	273	2Q FY07	0	473	0
TD/D C - JBAIDS Inc II - Down Select and Source Selection Activities	MIPR	TBS (Various)	U	0	0	NONE	99	2Q FY06	0	NONE	0	99	0
VAC BOT													
TD/D S - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	4100	1Q FY06	2788	1Q FY07	0	6888	0
Project MB5													
Page 157 of 182 Pages													
Exhibit R-3 (PE 0604384BP)													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5	

II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
VAC ENC													
TD/D S - Includes Regulatory Integration (Environmental and FDA Documentation)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	750	1Q FY06	0	NONE	0	750	0
VAC PLG													
TD/D S - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System.	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	1520	1Q FY06	6081	1Q FY07	0	7601	0
VACCINES													
TD/D SB - ParallelaVax Rapid Vaccine Testing Technology	C/CPFF	Maxygen, Inc., Redwood City, CA	C	0	365	4Q FY05	0	NONE	0	NONE	0	365	0
Subtotal II. Support Costs:				2258	2953		9065		10930		0	25206	
Remarks:													

Project MB5

Page 158 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
CRP - Conformance Testing of Select Biological Threat Agent Reference Materials and Assays	MIPR	Naval Medical Research Center, Silver Spring, MD	U	264	374	1Q FY05	1017	1Q FY06	446	1Q FY07	0	2101	0
CRP - Test & Evaluation of Select Biological Threat Agent Reference Materials, Assays & UCC	MIPR	USAMRIID, Frederick, MD	U	155	132	1Q FY05	761	3Q FY06	116	2Q FY07	0	1164	0
CRP - Test & Evaluation of Select Biological Threat Agent Reference Materials and Assays	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	296	214	1Q FY05	794	1Q FY06	0	NONE	0	1304	0
JBAIDS													
OTHT SB - JBAIDS Inc I - Conduct DT, OT, IOT&E	MIPR	AFIOH, Brooks City Base, TX	U	1183	373	1Q FY05	0	NONE	0	NONE	0	1556	0
DTE SB - JBAIDS Inc I - Conduct OA & OT	MIPR	AFOTEC, Kirtland AFB, NM	U	1111	1484	1Q FY05	0	NONE	0	NONE	0	2595	0
DTE SB - JBAIDS Inc I - Assay and Protocol Testing	MIPR	Dugway Proving Ground, UT	U	778	277	1Q FY05	0	NONE	0	NONE	0	1055	0
DTE C - JBAIDS Inc I - Conduct DT and OT	C/FFP	Idaho Technology, Inc., Salt Lake City, UT	C	0	167	1Q FY05	0	NONE	0	NONE	0	167	0
JBAIDS II													
DTE C - JBAIDS Inc II - Conduct DT, OA, OT, and Clinical Trials	MIPR	TBS (Various)	U	0	0	NONE	2500	2Q FY06	1191	3Q FY07	0	3691	0
Project MB5													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5	
III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
VAC BOT													
OTHT S - Testing, evaluation and clinical trials	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	10109	1Q FY06	7063	1Q FY07	0	17172	0
VAC ENC													
OTHT S - Testing, evaluation, and clinical trials	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	1448	1Q FY06	0	NONE	0	1448	0
VAC PLG													
OTHT S - Vaccine Development - Includes Testing, Evaluation, and Clinical Trials.	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	3743	1Q FY06	12162	1Q FY07	0	15905	0
VACCINES													
OTHT S - ParallelaVax Rapid Vaccine Testing Technology	SS/CPFF	Maxygen, Inc., Redwood City, CA	C	0	729	4Q FY05	0	NONE	0	NONE	0	729	0
Subtotal III. Test and Evaluation:				3787	3750		20372		20978		0	48887	
Remarks:													

Project MB5

Page 160 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)					PROJECT MB5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
PM/MS S - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	769	1Q FY06	172	1Q FY07	0	941	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	187	104	4Q FY05	257	4Q FY06	96	4Q FY07	0	644	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	63	93	4Q FY05	171	4Q FY06	64	4Q FY07	0	391	0
JBAIDS													
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	38	91	1Q FY05	0	NONE	0	NONE	0	129	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	C	2249	53	1Q FY05	0	NONE	0	NONE	0	2302	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	177	159	4Q FY05	0	NONE	0	NONE	0	336	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	178	94	4Q FY05	0	NONE	0	NONE	0	272	0
JBAIDS II													
PM/MS S - JBAIDS Inc II - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	248	1Q FY06	232	1Q FY07	0	480	0
PM/MS S - JBAIDS Inc II - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	164	4Q FY06	204	4Q FY07	0	368	0
PM/MS S - JBAIDS Inc II - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	0	0	NONE	516	4Q FY06	702	4Q FY07	0	1218	0
Project MB5													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
VAC BOT													
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	JPEO, Falls Church, VA	U	0	0	NONE	380	4Q FY06	372	4Q FY07	0	752	0
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	570	4Q FY06	558	4Q FY07	0	1128	0
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	972	1Q FY06	608	1Q FY07	0	1580	0
PM/MS S - Award Fee (Maximum 10.5%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	1342	1Q FY06	1301	1Q FY07	0	2643	0
VAC ENC													
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	JPEO, Falls Church, VA	U	0	0	NONE	90	4Q FY06	0	NONE	0	90	0
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	135	4Q FY06	0	NONE	0	135	0
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	154	1Q FY06	0	NONE	0	154	0
Project MB5													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PM/MS S - Award Fee (Maximum 10.5%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	300	1Q FY06	0	NONE	0	300	0
VAC PLG													
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	JPEO, Falls Church, VA	U	0	0	NONE	203	4Q FY06	1216	4Q FY07	0	1419	0
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	304	4Q FY06	912	4Q FY07	0	1216	0
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	358	1Q FY06	2350	1Q FY07	0	2708	0
PM/MS S - Award Fee (Maximum 10.5%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	709	3Q FY06	912	3Q FY07	0	1621	0
VACCINES													
PM/MS S - ParallelaVax Rapid Vaccine Testing Technology	SS/CPFF	Maxygen, Inc., Redwood City, CA	C	0	364	4Q FY05	0	NONE	0	NONE	0	364	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	593	NONE	0	NONE	0	593	0
Project MB5													

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal IV. Management Services:				2892	958		8235		9699		0	21784	
Remarks:													
TOTAL PROJECT COST:				19197	9843		60612		71834		0	161486	

Project MB5
Page 164 of 182 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY







RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
CRP																																		
CRP - Select Biological Threat Agent Reference Material Efforts to ITF-6A and ITF-6B	>>													2Q																				
CRP - Antibody Development of ITF-6B Agents	>>													2Q																				
CRP - Development of ECL Immunoassays and PCR Genomic Assays to ITF-6A, ITF-6B and ITF-6C Agents	1Q													1Q																				
CRP - Unified Culture Collection (UCC) Expansion									2Q													2Q												
CRP - Formal QA/QC, Validation, DT, & OT Implementation									3Q	4Q																								
CRP - Integrate ISO 17025 into Antibody Production													1Q													4Q								
CRP - ECL Immunoassay and PCR Genomic Assay Validation													2Q													3Q								
JBAIDS																																		

Project MB5

Page 165 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile																DATE February 2006																
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)								PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)												PROJECT MB5												
D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JBAIDS (Cont)																																
JBAIDS Increment I - Procure Systems for Engineering Design Test (EDT)/Developmental Test (DT)	>>	2Q																														
JBAIDS Increment I - EDT, DT, Qualification Testing, and Assay Development		2Q	<div></div>					4Q																								
JBAIDS Increment I - Conduct OA				4Q																												
JBAIDS Increment I - Milestone C/Low Rate Initial Production (LRIP) Decision					1Q																											
JBAIDS Increment I - Conduct FDA Clinical Trials and Submit 510(k) for Anthrax					1Q	<div></div>			1Q																							
JBAIDS Increment I - Initial Operational Test & Evaluation								4Q																								
JBAIDS Increment I - Full Rate Production (FRP) Decision									2Q																							
JBAIDS II																																
JBAIDS Increment II - Milestone B									3Q																							
Project MB5								Page 166 of 182 Pages								Exhibit R-4a (PE 0604384BP)																

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
JBAIDS II (Cont)																																
JBAIDS Increment II - Developmental Testing (DT), Operational Assessment (OA), and Operational Testing (OT)												4Q					1Q															
JBAIDS Increment II - FDA Toxin 510(k) Submittal and Clinical Trials															3Q				3Q													
JBAIDS Increment II - FDA Clearance (5 Toxins)															3Q													4Q				
JBAIDS Increment II - Milestone C (LRIP)																	1Q															
JBAIDS Increment II - Full Rate Production (FRP) Decision																		2Q														
VAC BOT																																
Non-Clinical Testing	>>																											3Q				
Manufacturing Process Development	>>												1Q																			
Phase 1 Clinical Trial (A/B)				3Q																								2Q				
Phase 2 Clinical Trial (A/B)														2Q														3Q				
Milestone B																	1Q															
Consistency Lot Production																			4Q								2Q					

Project MB5

Page 167 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MB5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
VAC BOT (Cont)																																
Phase 3 Clinical Trial (A/B)																									3Q			4Q				
VAC ENC																																
Passive Transfer Studies									2Q																			1Q				
VEE Milestone B													3Q																			
Phase 3 Clinical Trial																									1Q			4Q				
Consistency Lot Manufacture																									1Q			3Q				
VAC PLG																																
Non-Clinical Studies	>>																											4Q				
Manufacturing Process Development				4Q								3Q																				
PLG Milestone B									2Q																							
Phase 2 Clinical Trial									2Q												1Q											
Consistency Lot Production															2Q					1Q												
Phase 3 Clinical Trial																4Q											3Q					
Milestone C																				4Q												
Biological Licensure Application (BLA) Submission																										3Q						
FDA Licensure/IOC																												2Q				

Project MB5

Page 168 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT MC5				
COST (In Thousands)				FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
MC5	MEDICAL CHEMICAL DEFENSE (SDD)			1350	5029	6417	38151	29405	14025	11702	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project MC5 MEDICAL CHEMICAL DEFENSE (SDD): This project funds the development of medical materiel and other medical equipment items necessary to provide an effective capability for medical defense against chemical agent threats facing U.S. forces in the field. This project supports efforts in the System Development and Demonstration (SDD) phase of the acquisition strategy for prophylactic and therapeutic drugs, diagnostic equipment, and other life support equipment for protection against and management of chemical warfare agents. Project funds research and development of safety studies, manufacturing scale-up, process validation, drug interaction, performance test, and submission of the Food and Drug Administration (FDA) drug licensure application(s). This program currently funds: (1) Pharmaceutical Post Approval and Development Support (PPADS) - Soman Nerve Agent Pyridostigmine Pretreatment (SNAPP) used as a pretreatment against nerve agent poisoning, Skin Exposure Reduction Paste Against Chemical Warfare Agents (SERA), which is a topical skin protectant, and Antidote Treatment, Nerve Agent, Autoinjector (ATNAA), which is a multi-chambered autoinjector for delivery of atropine and an oxime; and (2) Advanced Anticonvulsant System (AAS), which will be used as a treatment for seizures from exposure to nerve agents.

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
ADVANCED ANTICONVULSANT SYSTEM	0	2574	6417
RDT&E Articles (Quantity)	0	0	0

Project MC5/Line No: 091

Page 169 of 182 Pages

Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5**FY 2006 Planned Program:**

- 2574 AAS - Continue process development and current Good Manufacturing Practices (cGMP) requirements.

Total 2574**FY 2007 Planned Program:**

- 3064 AAS - Continue process development and cGMP requirements.
- 2088 AAS - Initiate Phase 2 clinical safety study (expanded safety study). Achieve Milestone B.
- 456 AAS - Initiate GLP animal efficacy studies.
- 570 AAS - Initiate new formulation toxicology and stability studies.
- 239 AAS - Initiate Developmental Testing/Operational Testing (DT/OT) of packaging.

Total 6417

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
MEDICAL CHEMICAL DEFENSE	1350	0	0
RDT&E Articles (Quantity)	0	0	0

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5**FY 2005 Accomplishments:**

- 174 SERPACWA - Completed FDA manufacturing requirements, redesign of packaging for field durability, and shelf-life monitoring.
- 68 SERPACWA - Continued FDA required post-marketing studies (including compatibility study with M291).
- 522 ATNAA - Completed fifth-year shelf-life studies and FDA required post-marketing studies.
- 586 SNAPP - Continued FDA required post-approval studies.

Total 1350

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
PHARMACEUTICAL POST APPROVAL & DEVELOPMENT SUPPORT	0	2405	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 1633 SNAPP - Complete FDA required post-approval studies.
- 772 SERPACWA - Complete FDA required post-marketing studies (including compatibility study with M291).

Total 2405

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

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	50	0
RDTE&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 50 SBIR

Total 50**C. Other Program Funding Summary:** N/A

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
<p>D. <u>Acquisition Strategy:</u></p> <p>AAS Medical Identification and Treatment Systems (MITS) and/or a commercial partner will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical studies. After Milestone B, during the System Development and Demonstration Phase, MITS and/or a commercial partner (product dependent) will serve as the systems integrator to ensure that products are manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p>* Starting in FY06, all Medical Chemical Defense Program products transition to individual product line items under their respective Program Elements.</p>		
Project MC5/Line No: 091	Page 173 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
<p>BSCAV</p> <p>Bioscavenger is a developmental program with three distinct increments. Increment I is based on butyrylcholinesterase purified from human plasma, i.e., plasma-derived Bioscavenger or pBioscavenger. Medical Identification and Treatment Systems (MITS) exercises management oversight and a commercial partner serves as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. The Department of Health and Human Services (DHHS) may consider transition of this product for further development using BioShield funds after the Phase 1 clinical study is completed.</p> <p>Bioscavenger Increment II will initially look at two different technologies that bind and sequester nerve agents. The down-selection to one of the two technologies will be made during the source selection process or following the Phase 1 clinical trial. Medical Identification and Treatment Systems (MITS) will exercise management oversight and a commercial partner(s) will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. If contracts are awarded for both technologies, there will be a down-selection to one Bioscavenger Increment II candidate at the Milestone B. After Milestone B, during the System Development and Demonstration Phase, MITS will continue to exercise management oversight and the commercial partner will serve as the systems integrator to ensure that the selected product is manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained, and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p>		
Project MC5/Line No: 091	Page 174 of 182 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2006
BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
INATS	<p>Medical Identification and Treatment Systems (MITS) and/or a commercial partner will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical studies. After Milestone B, during the System Development and Demonstration Phase, MITS and/or a commercial partner (product dependent) will serve as the systems integrator to ensure that products are manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will have been obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p>* Starting in FY06, all Medical Chemical Defense Program products transition to individual product line items under their respective Program Elements.</p>	
PPADS	<p>Medical Identification and Treatment Systems (MITS) and/or a commercial partner will serve as the system integrator during the Production and Deployment Phase. FDA approval will be obtained and full rate and stockpile production will be pursued. Large-scale production and packaging issues will be addressed along with any FDA mandated post-marketing testing and surveillance.</p>	
<div>Project MC5/Line No: 091</div> <div>Page 175 of 182 Pages</div> <div>Exhibit R-2a (PE 0604384BP)</div>		

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AAS													
AAS - cGMP Manufacturing Requirements	C/CPIF	TBS	C	0	0	NONE	1954	4Q FY06	2567	2Q FY07	0	4521	0
MEDCHEM													
SERPACWA - Manufacturing and Shelf-Life Monitoring	C/FFP	Fisher BioServices, Rockville, MD	C	614	82	1Q FY05	0	NONE	0	NONE	0	696	0
Subtotal I. Product Development:				614	82		1954		2567		0	5217	

Remarks:

Project MC5

Page 176 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MC5	

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AAS													
AAS - Regulatory Integration and NDA Support Efforts	MIPR	Chemical Biological Information & Analysis Center, Edgewood, MD	U	0	0	NONE	0	NONE	837	2Q FY07	0	837	0
AAS - Regulatory Integration, NDA Support Efforts	MIPR	USAMMDA, Fort Detrick, MD	U	0	0	NONE	0	NONE	48	2Q FY07	0	48	0
MEDCHEM													
ATNAA & SERPACWA - FDA Regulatory Requirements	MIPR	USAMMDA, Fort Detrick, MD	U	220	14	1Q FY05	0	NONE	0	NONE	0	234	0
SNAPP - NDA Approval and Post-Approval Requirements	MIPR	USAMMDA & USAMRAA, Fort Detrick, MD	U	198	145	2Q FY05	0	NONE	0	NONE	0	343	0
PPADS													
SNAPP - FDA Post-Approval Requirements	MIPR	USAMMDA, Fort Detrick, MD	U	0	0	NONE	123	3Q FY06	0	NONE	0	123	0
SERPACWA - FDA Post-Marketing Requirements	MIPR	USAMMDA, Fort Detrick, MD	U	0	0	NONE	58	2Q FY06	0	NONE	0	58	0
Subtotal II. Support Costs:				418	159		181		885		0	1643	
Remarks:													

Project MC5

Page 177 of 182 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MC5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AAS													
AAS - GLP Animal Efficacy Studies	MIPR	USAMRICD, Edgewood, MD	U	0	0	NONE	0	NONE	324	2Q FY07	0	324	0
AAS - Phase 2 Clinical Safety Study	C/CPIF	TBS	C	0	0	NONE	0	NONE	1511	2Q FY07	0	1511	0
AAS - New Formulation Toxicology and Stability Studies	C/CPIF	TBS	C	0	0	NONE	0	NONE	327	1Q FY07	0	327	0
MEDCHEM													
SERPACWA - Durability Study	MIPR	Aberdeen Test Center (ATC), Edgewood, MD	U	102	38	3Q FY05	0	NONE	0	NONE	0	140	0
SERPACWA - FDA Required Post-Marketing Studies (Stability Testing)	C/FFP	Fisher BioServices, Rockville, MD	C	527	69	1Q FY05	0	NONE	0	NONE	0	596	0
ATNAA - Shelf-life Studies	MIPR	USAMMDA, Fort Detrick, MD	U	470	456	2Q FY05	0	NONE	0	NONE	0	926	0
SNAPP - FDA Required Post-Approval Studies	MIPR	USAMMDA, Fort Detrick, MD; USAMRICD, Edgewood, MD; WRAIR, SS, MD	U	1453	521	3Q FY05	0	NONE	0	NONE	0	1974	0
PPADS													
SNAPP - FDA Post-Marketing Requirements	MIPR	USMARICD, Edgewood, MD	U	0	0	NONE	1458	3Q FY06	0	NONE	0	1458	0
Project MC5													

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MC5		
III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SERPACWA - FDA Post-Marketing Requirements	MIPR	RDECOM, Edgewood, MD	U	0	0	NONE	400	2Q FY06	0	NONE	0	400	0
Subtotal III. Test and Evaluation:				2552	1084		1858		2162		0	7656	
Remarks:													
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AAS													
AAS - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	378	1Q FY06	482	1Q FY07	0	860	0
AAS - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	52	4Q FY06	128	4Q FY07	0	180	0
AAS - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	0	0	NONE	190	4Q FY06	193	4Q FY07	0	383	0
MEDCHEM													
Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	56	25	4Q FY05	0	NONE	0	NONE	0	81	0
PPADS													
PPADS - Program Management Support	MIPR	USAMMDA, Fort Detrick, MD	U	0	0	NONE	103	1Q FY06	0	NONE	0	103	0
PPADS - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	C	0	0	NONE	141	1Q FY06	0	NONE	0	141	0
<div style="display: flex; justify-content: space-between;"> Project MC5 Page 179 of 182 Pages Exhibit R-3 (PE 0604384BP) </div>													

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MC5		
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PPADS - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	49	4Q FY06	0	NONE	0	49	0
PPADS - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	0	0	NONE	73	4Q FY06	0	NONE	0	73	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	50	NONE	0	NONE	0	50	0
Subtotal IV. Management Services:				56	25		1036		803		0	1920	
Remarks:													
TOTAL PROJECT COST:				3640	1350		5029		6417		0	16436	

Project MC5

Page 180 of 182 Pages

Exhibit R-3 (PE 0604384BP)

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Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RDTE&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5**D. Schedule Profile:**

D. <u>Schedule Profile:</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
AAS																																
AAS - Non-GLP Pre-Clinical Safety Studies	>>											2Q																				
AAS - Investigational New Drug (IND) Application			3Q									2Q																				
AAS - Phase 1 Clinical Safety Study			3Q									4Q																				
AAS - cGMP Manufacturing Requirements							4Q																				1Q					
AAS - Milestone B													1Q																			
AAS - New Formulation Toxicology and Stability Studies													1Q							2Q												
AAS - Phase 2 Clinical Safety Study													2Q											1Q								
AAS - GLP Animal Efficacy Studies													2Q											4Q								
AAS - New Drug Application (NDA) Submission																									3Q							
AAS - MS C																												4Q				
MEDCHEM																																
ATNAA - Shelf-life Extension/Stability Studies	>>											4Q																				

Project MC5

Page 181 of 182 Pages

Exhibit R-4a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE

February 2006

BUDGET ACTIVITY

RD&E DEFENSE-WIDE/**BA5 - System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT

MC5**D. Schedule Profile (cont):**

D. <u>Schedule Profile (cont):</u>	FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
MEDCHEM (Cont)																																
SNAPP - FDA Required Post-Approval Studies	>>	<div></div>												4Q																		
SERPACWA - FDA Required Post-Marketing Studies	>>	<div></div>												4Q																		
SERPACWA - FDA Manufacturing Requirements, Redesign of Packaging for Field Durability & Shelf-life Monitoring.				4Q	<div></div>												4Q															
PPADS																																
SNAPP - FDA Required Post-Marketing Studies	>>	<div></div>												4Q																		
SERPACWA - FDA Required Post-Marketing Studies	>>	<div></div>												4Q																		

Project MC5

Page 182 of 182 Pages

Exhibit R-4a (PE 0604384BP)

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