CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)

	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	125420	122274	73111	139990	149679	176770	205721	Continuing	Continuing
CA4	CONTAMINATION AVOIDANCE (ACD&P)	50885	31140	1000	8031	12368	5624	0	0	109048
CM4	HOMELAND DEFENSE (ACD&P)	365	11086	0	0	0	0	0	0	11451
CO4	COLLECTIVE PROTECTION (ACD&P)	0	7472	0	0	0	0	0	0	7472
CP4	COUNTERPROLIFERATION SUPPORT (ACD&P)	15853	24239	25452	26152	15083	14344	26674	Continuing	Continuing
DE4	DECONTAMINATION SYSTEMS (ACD&P)	16950	998	2000	4517	2577	2278	4002	Continuing	Continuing
IS4	INFORMATION SYSTEMS (ACD&P)	5750	3000	0	0	0	0	0	0	8750
MB4	MEDICAL BIOLOGICAL DEFENSE (ACD&P)	24215	22574	0	71022	99435	138474	166246	Continuing	Continuing
MC4	MEDICAL CHEMICAL DEFENSE (ACD&P)	11402	21765	37663	15217	5028	5010	4880	Continuing	Continuing
MR4	MEDICAL RADIOLOGICAL DEFENSE	0	0	6996	15051	15188	11040	3919	Continuing	Continuing

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)

A. Mission Description and Budget Item Justification: Operational forces have an immediate need to survive, safely operate, and sustain operations in a chemical and biological (CB) agent threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions. This program element supports the Advanced Component Development and Prototype (ACD&P) of CB defensive equipment, both medical and non-medical. DoD missions for Homeland Security and for civil support operations have recently expanded and have resulted in providing focus to develop technologies to support CB counterterrorism initiatives. These projects have been structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. This program is enhanced using Counterproliferation Support Program funding. ACD&P is conducted for an array of chemical/biological/toxin detection and warning systems to include ARTEMIS, decontamination capabilities to include the sorbent technology, the Joint Service Family of Decontamination Systems (JSFDS) and the Joint Service Sensitive Equipment Decontamination (JSSED) programs. ACD&P is also conducted for the transition of biological detection components (major thrusts include: (1) early warning; (2) collector concentrators; (3) generic detection; and (4) improved reagents) for the future Joint Biological Point Detection System (JBPDS) Block II, and Joint Biological Standoff Detection System, (JBSDS). In the medical chemical/biological defense area, ACD&P is conducted for improved medical equipment, vaccines, and drugs essential to counteracting lethal and human performance degrading effects of chemical and biological agent threats. Specific items include improvements to nerve agent antidotes, topical skin protectants, anticonvulsants, biological agent diagnostics, and vaccines to protect against various Biological Warfare (BW) agents. This Program Element focuses on efforts associated with advanced technology development used to demonstrate general military utility to include ACD&P in the areas of Non-Traditional Agents and chemical/biological defense equipment and is correctly placed in Budget Activity 4.

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

(ACD&P)

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

B. Program Change Summary:	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Previous President's Budget (FY 2006 PB)	125718	100796	74392
Current Biennial Budget Estimate (FY 2007)	125420	122274	73111
Total Adjustments	-298	21478	-1281
a. Congressional General Reductions	-98	-1772	0
b. Congressional Increases	0	23250	0
c. Reprogrammings	832	0	0
d. SBIR/STTR Transfer	-1032	0	0
e. Other Adjustments	0	0	-1281

Change Summary Explanation:

Funding: FY06 - Congressional increases to enhance development projects (+\$9,200K CA4; +\$8,500K CM4; +\$3,000K IS4;

+\$2,550K MB4). Congressional general reductions and other adjustments (-\$390K CA4; -\$46K CM4; -\$133K CO4;

-\$439K CP4; -\$17K DE4; -\$355K MB4; -\$392K MC4).

Schedule: N/A

Technical: N/A

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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			R AND TITLI BP CHEM		OLOGIC.	AL DEFI	ENSE (AC		PROJECT A4
BA4 - Advanced Component Development and Prototypes (ACD&P)									
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
CA4 CONTAMINATION AVOIDANCE (ACD&P)	50885	31140	1000	8031	12368	5624	0	0	109048

A. Mission Description and Budget Item Justification:

Project CA4 CONTAMINATION AVOIDANCE (ACD&P): This Advanced Component Development and Prototypes (ACD&P) funding supports Component Advanced Development and System Integration (CAD/SI) of reconnaissance, detection, identification, and hazard prediction equipment, hardware, and software. Individual projects are: (1) Plasma Bioscavenger (pBSCAV), (2) Joint Biological Point Detection System (JBPDS), (3) Joint Biological Point Detection System Block II (JBPDS BLK II), (4) Joint Biological Tactical Detection System (JBTDS), (5) Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM), (6) the Non-Traditional Agent (NTA) Detection Improvement Program, (7) the Portable Area Warning and Surveillance System (PAWSS) and (8) Epidemic Outbreak Surveillance (EOS).

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

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.

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.

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RDT&E DEFENSE-WIDE/

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PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

The JCBRAWM Increment 1 will provide first real-time biological detection capability in source water. Increment 2 will provide increased detection/monitoring capabilities for chemicals in water. Increment 3 will provide radiological detection capability in water. Increment 4 will provide non-reagent biological detection in water replacing Increment 1.

The JBTDS will be employed at the wing, battalion, squadron and lower levels to provide detection and warning of biological attacks delivered by various weapon systems and provide early warning to personnel in potential hazard area. In addition, JBTDS will provide local alarm to personnel in the potential hazard area. JBTDS will augment existing biological detection systems to provide a seamless array capable of near real time detection and warning theater-wide to limit the effects of biological agent attacks which have the potential for catastrophic effects to US forces.

NTA detection efforts will evaluate Non-Developmental Item (NDI) and developmental technologies to enhance legacy and developmental detection systems capability to detect non-traditional agents.

PAWSS is a technology demonstration to determine the utility of cascading detection methodology using radar and force protection surveillance to tip and cue dedicated chemical biological detection assets for detection and warning. PAWSS will integrate long and mid-range radar systems, force protection intrusion detectors, and an integrated CB data fusion system to augment the capabilities of traditional CB detection systems. Efforts include modeling and simulation, system development/integration, and limited technology demonstration.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

EOS (Epidemic Outbreak Surveillance) Project Silent Guardian is to provide a surveillance tool to select USAF, USN, and U.S. Army Medical Treatment Facilities (MTFs) within the Military District Washington (MDW) National Capital Region from December 2004 through March 2005. This detection capability from EOS uses the Respiratory Pathogen Microarray (RPM) to enable robust, rapid pathogen identification for a subset of pathogens that result in febrile respiratory illness, including bio-threat agents in a compressed time.

pBSCAV - (Plasma Bioscavenger). A chemical prophylaxis effective against a broad spectrum of nerve agents. It will inactivate the nerve agents by irreversibly binding to the nerve agent before it can inhibit normal nerve functions.

B. Accomplishments/Planned Program

	FY 2005	FY 2006	FY 2007
STANDOFF CHEMICAL AGENT DETECTION SYSTEM	1192	0	0
RDT&E Articles (Quantity)	0	0	0

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

FY 2005 Accomplishments:

- ARTEMIS Completed system performance modeling activities to evaluate LIDAR performance against the full range of
 threat agents and to ambient water density and ozone. Tailored the performance analyses to support the on going Standoff
 Chemical Detection Analysis being led by MIT Lincoln Laboratory. The performance analysis products assisted JPEO-CBD
 in crafting a technical and acquisition way ahead for standoff chemical detection of vapors, aerosols and rains.
- ARTEMIS Performed acquisition program close out and archived acquisition documentation as well as technical program products such as Component Advanced Development Reports, Liquid Agent Spectra Measurements, LIDAR Performance Model, Spectral Algorithm Stimulator Report and Simulant Selection Analysis. Developed reports of major program decisions and lessons learned. Coordinated with DTRA to establish Technology Readiness Level of Frequency Agile LIDAR components. Performed program and financial management, scheduling, planning and reporting.

Total 1192

	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	5403	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

• 3000 JBPDS - Initiated spiral improvements to JBPDS Line Replaceable Units (LRUs).

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

FY 2005 Accomplishments (Cont):

- 1500 JBPDS Initiated system level validation platform.
- 903 JBPDS Provided systems engineering support.

Total 5403

	FY 2005	<u>FY 2006</u>	FY 2007
JOINT BIO POINT DETECTOR SYSTEM BLK 2	4600	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 1620 JBPDS BLK II Continued methodology work in support of Whole System Live Agent Test (WSLAT) to include standardizing the Standing Operating Procedures, preparation, and conformance testing of the challenge materials to be used in the WSLAT effort.
- 642 JBPDS BLK II Continued Modeling and Simulation effort in support of WSLAT which included initiating the build of the Joint Biological Point Detection System (JBPDS) engineering model through component analysis.
- 779 JBPDS BLK II Procured test consumables to include carrier box assemblies and Electrochemiluminescence (ECL) assays to support methodology development.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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FY 2005 Accomplishments (Cont):

- 300 JBPDS BLK II Initiated preliminary chamber design effort. Completed Statement of Work and System Requirements Document in support of chamber design contract.
- 1010 JBPDS BLK II Provided government engineering, program management and technical support of WSLAT program.
- 249 JBPDS BLK II Initiated contractor support for optimization of JBPDS strung-out configuration, maintenance and repair support, and engineering manufacturing support.

Total 4600

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
JOINT BIO TACTICAL DETECTION SYSTEM	0	0	1000
RDT&E Articles (Quantity)	0	0	0

FY 2007 Planned Program:

- 800 JBTDS Establish Product Office and perform Pre-milestone B activities for new program management start such as acquisition documentation and initiation of PM-IPTs.
- 200 JBTDS Develop network algorithm to incorporate use of heterogeneous biological detector for initial JBTDS solution.

Total 1000

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PROJECT

RDIGE DEFENSE-WIDE

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
JS CHEMICAL/BIOLOGICAL/RADIOLOGICAL AGENT WATER MONITOR	3967	3952	0
RDT&E Articles (Quantity)	20036	2020	0

FY 2005 Accomplishments:

- 2360 JCBRAWM Congressional Interest Item Purchased test items (20,000 test tickets at \$0.1K each, \$2.0M total; and 36 ticket readers at \$10K each, \$360K total. Vendor: ANP Technology, Inc.).
- 1535 JCBRAWM Congressional Interest Item Initiated contractor detection system development of dot and line-based multiplexed assays.
- 72 JCBRAWM Congressional Interest Item Initiated systems engineering support.

Total 3967

FY 2006 Planned Program:

- 3000 JCBRAWM Initiate test and evaluation efforts to include preparation of test methodology, design of test set-up and development of equipment specifications. Initiate probability/receiver operating characteristics curves.
- 552 JCBRAWM Continue systems engineering support and initiate document preparation for Milestone B.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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FY 2006 Planned Program (Cont):

• 400 JCBRAWM - Continue procurement of test items (2,000 test tickets at \$0.1K each, \$200K total; and 20 readers at \$10K each, \$200K total. Vendor: ANP Technology, Inc.)

Total 3952

	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
NON TRADITIONAL AGENT DETECTION IMPROVEMENT PROGRAM	2845	17776	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 200 NTA Updated trade-off studies to select and test technologies for detection of NTAs which can be used to augment or improve legacy and developmental detection systems.
- 2345 NTA Continued integration of existing selected NTA technologies into legacy and developmental detection systems.

 Continued developmental testing using simulants and live agents.
- 300 NTA Provided operational assessment/system engineering efforts for NTA enhanced detection systems.

Total 2845

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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FY 2006 Planned Program:

- 2776 NTA (T&E Capability) Initiate and complete preparation of test methodology, to include design of test set-up and equipment specifications, to test all CBDP systems with non-traditional and emerging threat agents.
- 8000 NTA (T&E Capability) Initiate and complete purchase and assembly of test chamber fixture equipment and modification of existing chambers for multi-agent use.
- 4000 NTA (T&E Capability) Initiate and complete validation of test and sampling methods.
- 2000 NTA (T&E Capability) Complete integration of existing NTA technologies into legacy and developmental detection systems.
- 1000 NTA (T&E Capability) Initiate and complete development of standard operating procedures to include safety, surety, testing methods and data analysis.

Total 17776

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
PORTABLE AREA WARNING AND SURVEILLANCE SYSTEM	2045	0	0
RDT&E Articles (Quantity)	0	0	0

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BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

FY 2005 Accomplishments:

- 225 PAWSS Completed planning and execution of battlefield simulations.
- 760 PAWSS Completed system engineering, integration and testing.
- 1060 PAWSS Completed limited technology demonstration planning and execution.

Total 2045

	FY 2005	<u>FY 2006</u>	FY 2007
TECHNOLOGY TRANSFER FOR BIO SENSORS	30833	9113	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 517 TT Bio Initiated technology transition, including developmental testing, of capabilities for early warning and detection, detection and identification of biological and chemical agents, including novel threat agents, and decision support tools.
- 5500 pBSCAV Initiated small-scale manufacturing, process development, and assay qualification.
- 300 pBSCAV Initiated Investigational New Drug (IND) application.
- 7265 EOS (Epidemic Outbreak Surveillance) Project Silent Guardian Congressional Interest Item Initiated protocol development and assay optimization.

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FY 2005 Accomplishments (Cont):

- 3000 EOS Project Silent Guardian Congressional Interest Item Initiated confirmatory analysis, culturing and/or molecular testing in accordance with the gold-standard laboratory operating procedures.
- 70 EOS Project Silent Guardian Congressional Interest Item Provided program management and logistics management support.
- 37 EOS Project Silent Guardian Congressional Interest Item Initiated confirmatory testing.
- 2000 Provided support for critical nuclear missions and requirements.
- 9918 Chemical and Biological Defense Program Initiative Fund Provided for the development of modeling and simulation/battlespace management efforts across the broad-range of military operations.
- 1664 Architecture Information System Developed software with upgraded functionality, improved C2P2 injectors, improved training material and more robust user support. Will be deployed to Korea, and other services units in the United States and abroad.
- Military Mail Screening Program (MMSP) Assisted JPEO in review of DoD mail processing flow report summaries and evaluation of potential locations and mail flow considerations for first phase mail screening sites.

Total 30833

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FY 2006 Planned Program:

- 4159 TT Bio Congressional Interest Item Wide-Spectrum Bio-ID Sensor.
- 991 TT Bio Congressional Interest Item Next Generation Dual Use Bio-Defense Technologies.
- 1486 TT Bio Congressional Interest Item BioBlower.
- 991 TT Bio Congressional Interest Item Continuation of Robotics Testbed & Establishment of Cooperative Unmanned Ground and Aerial Vehicle Incubator.
- 1486 TT Bio Congressional Interest Item Advance Sensor Technology R&D Center.

Total 9113

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
SBIR/STTR	0	299	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 299 SBIR

Total 299

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C. Other Program Funding Summary:								_	
	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	FY 2011	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
CA5 CONTAMINATION AVOIDANCE (SDD)	63966	83605	64689	99817	58425	53039	13990	Cont	Cont
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
MC0100 JT SVC LIGHT NBC RECON SYS (JSLNBCRS)	44799	46647	52806	56432	57245	94563	110103	Cont	Cont

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(ACD&P)

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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</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
S10801 JS LTWT STANDOFF CW AGT DETECTOR (JSLSCAD)	2718	17513	19579	30107	29519	38038	32823	Cont	Cont

D. Acquisition Strategy:

ARTEMIS The Artemis acquisition program has been closed.

JBPDS 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.

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UNCLASSIFIED DATE **CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) **JBTDS** 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. **JCBRAWM** 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. Increment II: This increment identifies a technology for detecting/monitoring Chemical Warfare Agents (CW agents) in water. Milestone A is planned for FY08.

Increment III: This increment develops a detector/monitor for identifying radiological agents in water. Milestone A is

planned for FY08.

Increment IV: This increment develops a technology to replace Increment I with a non-reagent biological

detector/monitor in water.

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NTA

PAWSS

As a result of tradeoff studies, develop and test the following NTA detection technologies: ACADA Model-D and M256A1 Low Volatility Hazard (LVH) kit. Enhance ACADA Model-D detector performance using collector devices. Perform technical and NTA laboratory testing in-house on two independent designs, down-select for final implementation, perform NTA tests in-house and support tests at United Kingdom NTA test facilities. Develop test devices and methods for M256A1 LVH NTA/CWA detection, perform in-house technical tests and independent user tests to support a product improvement to the kit.

Develop an NTA test chamber using in-house and contractually developed/purchased assemblies. Validate chamber performance for NTA testing.

The PAWSS demonstration was conducted using the Government Integrated Product Team as the Lead Systems Integrator for a complex set of activities performed by Other Government Agencies and contractors. Each task was awarded based on technical expertise in the subject matter or technology required. The contracts were awarded sole source to developers of the selected Government off-the-shelf technologies. The contractors and OGA's were incorporated into the Integrated Product Team as full partners.

Future acquisitions will be conducted using open competition to develop modifications to the systems required to support the PAWSS concept of operations.

Project CA4/Line No: 070 Page 20 of 151 Pages Exhibit R-2a (PE 0603884BP)

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

TT Bio

TT Bio - Initiate technology transition of capabilities for early warning detection, detection and identification of biological and chemical agents, including novel threat agents, and decision support tools. Report critical information through the Global Command and Control Systems (GCCS) and into the common operating picture (COP).

EOS (Epidemic Outbreak Surveillance) - Project Silent Guardian a short-term project to provide surveillance tool to select USAF, USN, and U. S. Army Medical Treatment Facilities (MTFs) within the Military District Washington (MDW) National Capital Region.

pBSCAV (Plasma Bioscavenger) - is based on butyrylcholinesterase purified from human plasma. 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.

Project CA4/Line No: 070 Page 21 of 151 Pages Exhibit R-2a (PE 0603884BP)

CBDF	PRO	JECT COST A	N	ALYSI	S (R-3	Exhil	bit)		D.	ATE Fel	oruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/				PE NUMBE 16038841		ΓLE MICAL/	BIOLO	GICAL 1	DEFENS	SE (ACI		ОЈЕСТ \4
BA4 - Advanced Compon	nent Dev	elopment and Prot	otvn	es									
(ACD&P)			o ey p	,es									
I. Product Development	Contract Method &	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	Туре		cc	Cost		Date		Date		Date			Contract
SW SB - System Level Validation Platform	C/CPFF	Battelle, Columbus, OH	F	0	1500	4Q FY05	0	NONE	0	NONE	(1500	(
HW SB - Upgrade Collector	SS/CPFF	Texas A&M, College Station, TX	N	0	2100	2Q FY05	0	NONE	0	NONE	(2100	
HW SB - LRU Upgrade	MIPR	Various	U	0	900	3Q FY05	0	NONE	0	NONE	C	900)
JBTDS													
SW SB - Network Algorithm development	C/CPFF	TBS	С	0	0	NONE	0	NONE	200	1Q FY07	(200	(
JCBRAWM													
HW C - Purchase Test Items	SS/FFP	ANP Technology, Inc., Newark, DE	С	0	2360	3Q FY05	400	2Q FY06	0	NONE	(2760	
HW C - Development of Nano-Intelligent Detection System	SS/CPFF	ANP Technology, Inc., Newark, DE	С	0	1535	3Q FY05	0	NONE	0	NONE	(1535	(
NTA	MIDD	37 '		250	1645	20 57/05	0	NONE	0	NONE		1005	
HW C - Detector Enhancement	MIPR	Various	U	250		2Q FY05	0	TTOTTE	0		0	10,0	
HW S - Technology Down-select Studies - Support	MIPR	Various	U	319	200	2Q FY05	0	NONE	0	NONE	(519	
PAWSS													
SW S - Modeling and Simulation	MIPR	Various	U	682		2Q FY05	0	1,01,2	0		(
SW S - Radar Enhancements	MIPR	Various	U	1153		2Q FY05	0	NONE	0		C	- 100	
SW S - Software Integration	Reqn	Various	C	300	279	2Q FY05	0	NONE	0	NONE	(579	(

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Project CA4

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US I. Product Development - Cont. Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Cost Method & Location NF PYs Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Type TT Bio TT Bio - Chemical Biological RDECOM, Aberdeen U 400 10 FY06 NONE NONE 400 **MIPR** Assessment Tool Proving Ground, MD TT Bio - Technical Evaluation and C/CPFF F 117 40 FY05 NONE NONE 0 The Johns Hopkins 117 Research Support University, Laurel, MD pBSCAV - Small-Scale C/CPFF DynPort Vaccine C 2310 30 FY05 NONE NONE 2310 Manufacturing, Process Corporation (DVC), Development, Assay Validation Frederick, MD MMSP - Study interaction with MIPR NSWC, Dahlgren, VA U 98 1Q FY06 NONE NONE 98 other postal/parcel systems Architecture Info System -Bruhn Newtech Corp. C 618 4Q FY05 NONE 0 NONE 0 SS/FFP 618 Software development Aberdeen, MD Architecture Info System -SS/FFP SAIC, San Diego, CA C 0 346 4Q FY05 NONE 0 NONE 0 346 Software dev Architecture Info System -SS/FFP ADI, San Diego, CA C 235 40 FY05 NONE NONE 235 Software dev C 243 4Q FY05 Architecture Info System -SS/FFP Sonalysts, San Diego, 0 NONE NONE 0 243 Software dev CA Architecture Info System -SS/FFP Systems Center, San C 72 4Q FY05 NONE NONE 72 Software dev Diego, CA Air Force Research U 149 40 FY05 0 NONE 0 NONE 0 Architecture Info System -**MIPR** 0 149 Software dev Laboratory, Rome, NY

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Project CA4

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

I. Product Development - Cont.	Contract	Performing Activity &	US	Total	FY2005	FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Target
	Method &	Location	NF	PYs	Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of
	Type		CC	Cost		Date		Date		Date			Contract
TT Bio - Wide spectrum Bio-ID	SS/FFP	TBS	С	0	0	NONE	4159	4Q FY06	0	NONE	0	4159	0
Sensor													
TT Bio - Next Gen Bio-Defense	SS/FFP	TBS	С	0	0	NONE	991	4Q FY06	0	NONE	0	991	0
Tech													
TT Bio - BioBlower	SS/FFP	TBS	С	0	0	NONE	1486	4Q FY06	0	NONE	0	1486	0
TT Bio - Robotics Testbed	SS/FFP	TBS	С	0	0	NONE	991	4Q FY06	0	NONE	0	991	0
TT Bio - Advanced Sensor Tech	SS/FFP	TBS	С	0	0	NONE	1486	4Q FY06	0	NONE	0	1486	0
Subtotal I. Product Development:				2704	15557		9513		200		0	27974	

Remarks: JCBRAWM - JCBRAWM - FY05 - 20,000 test tickets at \$0.1K each, \$2.0M total; and 36 ticket readers at \$10K each, \$360K total. Vendor: ANP Technology, Inc.

JCBRAWM - FY06 - 2,000 test tickets at \$0.1K each, \$200K total; and 20 ticket readers at \$10K each, \$200K total. Vendor: ANP Technology, Inc.

TT Bio - pBSCAV funding continues in FY06 and FY07, but is located under MC4, Medical Chemical Defense.

Additional MMSP funds executed in FY05 under CM5 - MMSP.

Project CA4

(ACD&P)

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CBDP	PRO	JECT COST A	ALYSI	S (R-3	8 Exhil	bit)		Б	ATE Fe l	bruary 20	006		
	RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes							BIOLO	GICAL	DEFEN	SE (ACD		:ОЈЕСТ \4
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
ARTEMIS ES S - Perf Modeling Analysis	C/CPFF	Battelle, Arlington, VA	C	816	220	2Q FY05	0	NONE	(NONE	0	1036	1305
ES S - Perf Modeling	MIPR	NSWC, Dahlgren, VA	U	0		2Q FY05	0		(0		
ES S - Modeling Support	MIPR	Various	U	0		2Q FY05	0		(0		
JBPDSBLK2	WIII K	various		0	302	2Q1103	0	NONE	,	NONE	0	302	0
ES S - Support for Optimization and Engineering Manufacturing	MIPR	JPM BD, APG, MD & Edgewood Chemical Biological Center, APG, MD	U	0	249	2Q FY05	0	NONE	(NONE	0	249	0
NTA													
TD/D C - Develop Standard Operating Procedures	MIPR	Various	U	0	0	NONE	1000	3Q FY06	(NONE	0	1000	0
ES C - Systems Integration Support TT Bio	MIPR	Various	U	0	0	NONE	2000	3Q FY06	(NONE	0	2000	0
pBSCAV - Regulatory Integration, Quality Assurance, & IND Support Efforts	C/CPFF	DynPort Vaccine Company (DVC), Frederick, MD	С	0	555	3Q FY05	0	NONE	(NONE	0	555	0
EOS (Epidemic Outbreak Surveillance) - Confirmatory testing	MIPR	Brooks City Base, TX	U	0	37	2Q FY05	0	NONE	(NONE	0	37	0
Project CA4				Page	25 of 151	Pages				Exhibit	R-3 (PE)	0603884]	BP)

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) II. Support Costs - Cont. Contract Performing Activity & US Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Type Cost Date Date Date Contract MMSP - Support MIPR SAF/FMBMB, U 100 10 FY06 NONE NONE 0 100 Washington, DC 215 1Q FY06 MMSP - Methods for handling **MIPR** AF/Electronic System NONE NONE 215 high mail volumes Center, Hanscom, AFB, MA (Contractor TBS)

1853

3000

0

816

Remarks: TT Bio - pBSCAV funding continues in FY06 and FY07, but is located under MC4, Medical Chemical Defense.

Subtotal II. Support Costs:

Project CA4 Page 26 of 151 Pages Exhibit R-3 (PE 0603884BP)

5669

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Type JBPDSBLK2 OTHT S - Methodology Testing **MIPR** DPG, UT U 0 1620 2Q FY05 NONE NONE 1620 OTHT S - Modeling and MIPR **Edgewood Chemical** U 642 2Q FY05 NONE NONE 642 Simulation and Build of Biological Center, APG, Engineering Model MD 779 2Q FY05 OTHT S - Procure Test MIPR CBMS, FT Detrick, MD U 0 NONE 0 NONE 0 779 Consumables and JPM BD, APG, MD 300 4Q FY05 OTHT S - Preliminary Chamber **MIPR** JPM NBC CA, APG, U 0 NONE 0 NONE 0 300 Design MD **JCBRAWM** OTHT SB -U 3000 2Q FY06 MIPR Various NONE NONE 3000 Developmental/Operational Testing NTA DTE C - NTA Enhancement U 700 10 FY05 MIPR Various 710 NONE 0 NONE 0 1410 Testing DTE C - Test Methodology and **MIPR** Various IJ 0 NONE 2776 2Q FY06 0 NONE 2776 Design OTHT C - Purchase/Assembly of C PO Various 0 NONE 8000 2Q FY06 NONE 0 8000 Test Equipment DTE C - Equipment/Chamber PO U 0 NONE 4000 3Q FY06 0 NONE 0 4000 Various Validation

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Project CA4

CBDF	PRO.	JECT COST A	ALYS]	IS (R-3	Exhil	bit)		D	ATE Fe l	bruary 2	006		
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/				PE NUMBE 06038841			/BIOLO	GICAL	DEFEN	SE (ACI		ROJECT \4
BA4 - Advanced Compon	nent Dev	elopment and Prote	otyp	es									
(ACD&P)													
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
PAWSS	7.7												
OTE S - Limited Technology Demonstration	MIPR	Various	U	298	885	3Q FY05	0	NONE	0	NONE	(1183	
TT Bio													
pBSCAV - Conduct Process Development, Assay Validation Efforts	C/CPFF	DynPort Vaccine Company (DVC), Frederick, MD	С	C	2435	3Q FY05	0	NONE	0	NONE	(2435	
EOS (Epidemic Outbreak Surveillance) - Protocol development	MIPR	Naval Research Laboratory, Washington, DC	U	C	7476	2Q FY05	0	NONE	0	NONE	(7476	
EOS (Epidemic Outbreak Surveillance) - Confirmatory analysis	MIPR	Naval Health Research Center, San Diego, CA	U	C	1945	2Q FY05	0	NONE	0	NONE	(1945	
EOS (Epidemic Outbreak Surveillance) - Op Assessment of Capabilities	MIPR	Brooks AFB, TX	U	C	45	2Q FY05	0	NONE	C	NONE	(45	
Assessment of missions and requirements	SS/FFP	GovWorks, Herndon, VA	С	C	1600	4Q FY05	0	NONE	0	NONE	(1600	
Assessment of missions and requirements	SS/FFP	SAIC, San Diego, CA	С	C	400	4Q FY05	0	NONE	0	NONE	(400	
CBDIF - Modeling and simulation/battlespace mgmt	MIPR	TBS	U	C	9918	2Q FY06	0	NONE	O	NONE	(9918	

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Project CA4

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation - Cont. Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Туре Cost Date Date Date Contract MMSP - Technical Evaluation The Johns Hopkins F 149 1Q FY06 C/CPFF NONE NONE 149 Laboratory, Laurel, MD Subtotal III. Test and Evaluation: 28894 17776 0 47678 1008

Remarks: TT Bio - pBSCAV funding continues in FY06 and FY07, but is located under MC4, Medical Chemical Defense.

Project CA4 Page 29 of 151 Pages Exhibit R-3 (PE 0603884BP)

CBDF	PRO	JECT COST	ALYSI	S (R-3	Exhil	oit)		D.	ATE Fe l	oruary 2	006		
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/				PE NUMBE 06038841			BIOLO	GICAL 1	DEFENS	SE (ACI	PR D&P) C A	ЮЈЕСТ \4
BA4 - Advanced Comport	nent Dev	relopment and Pro	totyp	es									
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
ARTEMIS	Турс			Cost		Bute		Bute		Bute			Contract
PM/MS S - Program Office Planning and Programming	MIPR	NSWCDD, Dahlgren, VA	U	1889	165	2Q FY05	0	NONE	0	NONE	(2054	1007
PM/MS S - Program Office Program Support	MIPR	Various	U	0	330	2Q FY05	0	NONE	0	NONE	(330	
JBPDS PM/MS S - Engineering Support	MIPR	JPM NBC CA, APG,	U	0	903	2Q FY05	0	NONE	0	NONE	(903	(
JBPDSBLK2													
PM/MS S - Program Management and Technical Support	MIPR	JPM NBC CA, APG, MD	U	0	1010	2Q FY05	0	NONE	0	NONE	(1010	
JBTDS													
PM/MS SB - Milestone B Preparation and Acquisition Documentation Development	MIPR	JPM BD, APG, MD	U	0	0	NONE	0	NONE	800	1Q FY07	(800	
JCBRAWM													
PM/MS S - Joint Service Support	MIPR	Various	U	0	72	3Q FY05	552	2Q FY06	0	NONE	C	624	
NTA													
PM/MS SB - Support Services	MIPR	Various	U	160	300	1Q FY05	0	NONE	0	NONE	(460	
PAWSS													
PM/MS S - Program Management	MIPR	JPM NBC CA, APG, MD	U	887	431	2Q FY05	0	NONE	0	NONE	(1318	'

UNCLASSIFIED

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Project CA4

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

PROJECT

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

PE NUMBER AND TITLE

0603884BP CHEMICA

**The component of the compo

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4

IV Managamant Carriage Cont	Contract	Doufoussing Astivity 0	US	Total	FY2005	FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Towast
IV. Management Services - Cont.	Method &	Performing Activity & Location	NF	PYs	Cost	Award	Cost	Award	Cost	Award	Cost to	Cost	Target Value of
	Type	Location	CC	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TT Bio	71												
pBSCAV - Program Management	Allot	Chemical Bio Medical	U	0	500	4Q FY05	0	NONE	0	NONE	0	500	0
Support		Systems, Frederick, MD											
EOS (Epidemic Outbreak	MIPR	JPM-NBC-CA, APG,	U	0	70	2Q FY05	0	NONE	0	NONE	0	70	0
Surveillance) - Program		MD											
management/logistics support.													
EOS (Epidemic Outbreak	SS/FFP	SAIC, San Diego, CA	С	0	100	3Q FY05	0	NONE	0	NONE	0	100	0
Surveillance) - Assess technologies													
EOS (Epidemic Outbreak	MIPR	TBS - Air Force	U	0	700	2Q FY06	0	NONE	0	NONE	0	700	0
Surveillance) - Assess technologies													
ZSBIR													
SBIR/STTR - Aggregated from	PO	HQ, AMC, Alexandria,	U	0	0	NONE	299	NONE	0	NONE	0	299	0
ZSBIR-SBIR/STTR		VA											
Subtotal IV. Management				2936	4581		851		800		0	9168	
Services:													

Remarks: TT Bio - pBSCAV funding continues in FY06 and FY07, but is located under MC4, Medical Chemical Defense.

Project CA4

(ACD&P)

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DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) TOTAL PROJECT COST: 7464 50885 31140 1000 90489 Project CA4 Exhibit R-3 (PE 0603884BP) Page 32 of 151 Pages

Exhibi	it R-4a, Scl	nedule P	rofi	lle				DA'		brua	ıry 2006	
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/				JMBER ANI 884BP C		AL/	BIOLOGIC	AL D	EFEN	SE (ACD&P	ROJECT A4
BA4 - Advanced Component Developm (ACD&P)	ent and Proto	types										
D. <u>Schedule Profile:</u>	FY 2004 1 2 3 4	FY 2005		FY 2006 2 3 4	FY 20 1 2 3		FY 2008 1 2 3 4		Y 2009 3 4		FY 2010 2 3 4	FY 201 2 3
ARTEMIS												
Complete Input to MIT Chem Standoff Analysis		2Q — 4	4Q									
Provide Close Out Documentation		3Q 4	4Q									
BPDS												
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								
ECP/Sys Documentation for Upgrade via Spares				4Q	— 2Q							
Multi-service Operational Test and Evaluation (IOT&E) (Phase VI) FOT&E					2Q 30	Q						
Whole System Live Agent Test		4	4Q —		2Q							
MS C Full Rate Production Decision							3Q 4Q					
BPDSBLK2												
Methodology Development and Testing	2Q ——			——— 4Q								

Exhibi	t R-4a, Scl	hedule P	rofile			DATE Fe l	bruary 2006	
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			pe number ani 0603884BP C		BIOLOGICA	L DEFEN	SE (ACD&P)	PROJECT CA4
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types						
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4
JBPDSBLK2 (Cont)								
Modeling and Simulation	4Q		4Q					
Design and Development of WSLAT Facilities		1Q —	4Q					
Standardization of Challenge Materials		3Q -	1 Q					
WSLAT Record Test in Support of JBPDS			4Q	3Q				
JBTDS								
Milestone A Decision				2Q				
Market Survey				2Q 3Q				
System Engineering Trade Study				2Q — 4Q				
CDD				3Q —	3Q			
MS B Doc Prep				4Q	4Q			
MS B Decision						1Q		
SDD						1Q —	4Q	
Milestone C Decision								1Q
DT/OT							1Q —	40
JCBRAWM								

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/	nedule P	Profile PE NUMBER AND TITLE PROJE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CA4									
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types									
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005		FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4			
JCBRAWM (Cont)											
Purchase Test Items		3Q •	2Q								
6.4 Contractor Test & Evaluation Efforts		3Q •	4Q								
NTA											
NTA Tradeoff Studies	2Q — 4Q										
Conduct Technology Down-select	3Q —	— 2Q									
Integrate Technologies on First Selected Detector	4Q		4Q								
Developmental Testing of Detector Technologies	4Q		4Q								
Integrate Technologies on Other Detectors		4	4Q ——— 4Q								
Development of Chamber Test Methodology			2Q 3Q								
Chamber Test Equipment Purchase/Fabrication			2Q 3Q								
Equipment/Chamber Validation			3Q 4Q								
PAWSS											

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/	t R-4a, Sch		PE NUMBER AN		/BIOLOGICA		bruary 2006 SE (ACD&P	PROJECT) CA4
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types						
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4		FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4
PAWSS (Cont)								
Modeling and Simulation	4Q	3Q						
Limited Technology Demonstration		3Q						
Technology Demonstration Report		4	Q — 2Q					
TT Bio								
Developmental Testing (DT)		2Q 3Q						
pBSCAV - Milestone A	4Q							
pBSCAV - Conduct Small-Scale Manufacturing, Process Development, & Assay Qualification		3Q -		1Q				
pBSCAV - Investigational New Drug (IND) Application		4	.Q 3Q					
pBSCAV - Conduct Pre-Clinical Studies			1Q — 3Q					
pBSCAV - Conduct Phase 1 Clinical Safety Study			3Q —	3Q				
EOS - Development/Assay Validation Efforts		2Q 3Q						

CBDP BUDGET ITEM JUSTIFICA	SHEE	Γ (R-2a	Exhibi	it)	DATE	February	2006		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototy (ACD&P)	0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CN								PROJECT I M4
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
CM4 HOMELAND DEFENSE (ACD&P)	36.	11086	0	0	0	0	0	0	11451

A. Mission Description and Budget Item Justification:

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

B. Accomplishments/Planned Program

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
MILITARY MAIL SCREENING PROGRAM	365	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

• 365 MMSP - Examined mail processes and mail flow throughout numerous DoD installations and USPS (United States Postal Service) Distribution Centers.

Project CM4/Line No: 070 Page 37 of 151 Pages Exhibit R-2a (PE 0603884BP)

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DATE

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4

FY 2005 Accomplishments (Cont):

Total 365

	FY 2005	<u>FY 2006</u>	FY 2007
TECHNOLOGY TRANSFER FOR BIO SENSORS	0	8417	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 8417 TT Bio - Congressional Interest Item - Countermeasures to Chemical and Biological Threats/ Rapid Response.

Total 8417

	FY 2005	<u>FY 2006</u>	FY 2007
WMD - CIVIL SUPPORT TEAMS	0	2561	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 2411 WMD-CST - Conduct component testing of Commercial off-the-shelf (COTS) detection, protection and decontamination equipment.

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BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4

FY 2006 Planned Program (Cont):

• 150 WMD-CST - Provide Government Engineering and Planning Support.

Total 2561

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	108	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 108 SBIR

Total 108

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

 $0603884BP\ CHEMICAL/BIOLOGICAL\ DEFENSE\ (ACD\&P)\ CM4$

C. Other Program Funding Summary:									
	<u>FY 2005</u>	FY 2006	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
CM5 HOMELAND DEFENSE (SDD)	8754	390	0	0	0	0	0	0	9144
CM6 HOMELAND DEFENSE (RDT&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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BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4

D. Acquisition Strategy:

MMSP - Military Mail Screening Program. The Program utilizes a spiral development acquisition strategy in order to

implement the screening of all mail within the military mail system in order to detect the presence of biological, chemical, or radiological weapons, agents, or pathogens or explosive devices before mail within the military mail system is delivered

to its intended recipients and to ensure the mail is safe for delivery.

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).

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

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

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

COTS Evaluation:

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

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)								D	DATE February 2006				
	RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes 0603884BP CHEMICAL/BIOLOGICA 0707								GICAL :	DEFEN;	SE (ACD		:ОЈЕСТ //4
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
MMSP - Examine mail processes	MIPR	DTRA, Fort Belvoir, VA (Contractor TBS)	С		0 365	2Q FY06	0	NONE	0	NONE	0	365	0
TT Bio TT Bio - Threats/Rapid Response	SS/FP	TBS	С		0 (NONE	8417	4Q FY06	0	NONE	0	8417	0
Subtotal I. Product Development:					0 365	i	8417		0		0	8782	
Remarks: MMSP - Additional Milita	ary Mail Sc	creening Program funds exe	cuted	under FY()5, TT Bio, C	ZA4.	1						

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Project CM4

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Туре Date Date Date Contract WMD CST OTHT SB - COTS Chem Bio **MIPR** TBS U NONE 2411 2Q FY06 NONE 2411 **Detection Protection Validation** Testing Subtotal III. Test and Evaluation: 2411 0 2411 Remarks:

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Project CM4

CBDI	PRO.	JECT COST A	\N ∤	ALYS	IS ((R-3	Exhi	bit)		I	DATE Fe l	bruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/						R AND TI BP CHE	TLE MICAL/	BIOLO	GICAL	DEFEN	SE (ACI		ојест /14
BA4 - Advanced Compo (ACD&P)	nent Dev	elopment and Prot	otyp	ies										
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY20 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 SB - COTS Chem Bio Detection Protection Validation Testing	MIPR	Aberdeen Proving Ground, MD	U	(0	0	NONE	150	1Q FY06	() NONE	C	150	0
ZSBIR SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	(0	0	NONE	108	NONE) NONE	C	108	0
Subtotal IV. Management Services:				(0	0		258			0	C	258	
Remarks:														
TOTAL PROJECT COST:				(0	365		11086			0	C	11451	
Project CM4				Page	e 45 o	of 151 I	Pages				Exhibit	R-3 (PE	0603884]	BP)

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			PE NUMBER AND TITLE PROJ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4								
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types									
D. Schedule Profile:	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4			
MMSP											
MMSP - Review of DoD and USPS Distribution Centers			1Q 2Q								
WMD CST											
ALS INCREMENT I PROGRAM	>>				1Q						
Incr I - Component Testing			2Q								
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						
COTS - GOTS PROGRAM	>>		4Q								
Testing - Phase II HAPSITE Multi-Service	4Q		1Q								

		UIN	CLASSIFIEL									
Exhibi	t R-4a, Scl	hedule P	rofile			DATE Fel	oruary 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CM4									
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types										
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4				
WMD CST (Cont)												
Testing - COTS Detection, Protection, Decontamination Equipment Validation Testing			1Q —— 4Q									
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CBDP BUDGET ITEM JUSTIFICA	TION	SHEE	Γ (R-2a	Exhibi	it)	DATE	February	2006	
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/		PE NUMBER 0603884B			OLOGIC.	AL DEFI	ENSE (AC	_	ROJECT O4
BA4 - Advanced Component Development and Prototy (ACD&P)									
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
CO4 COLLECTIVE PROTECTION (ACD&P)	C	7472	0	0	0	0	0	0	7472

A. Mission Description and Budget Item Justification:

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

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

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4

JECP - Results of a Baseline Capability Assessment conducted by the Joint Requirements Office (JRO) identified expeditionary Collective Protection (CP) as the highest priority capability gap within the commodity area. JECP 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 Chemical, Biological, Radiological, and Nuclear (CBRN) threat or hazard area.

B. Accomplishments/Planned Program

	FY 2005	<u>FY 2006</u>	FY 2007
JOINT EXPEDITIONARY COLLECTIVE PROTECTION	0	7399	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 817 JECP - Conduct an Analysis of Alternatives (AoA) leveraging the market survey, test results, and lessons learned from the FY05 ColPro Technology Readiness Evaluation (TRE). Collaborate with the JRO Shield Integrator in preparing acquisition documentation and decision review package for Milestone (MS) A. Provide subject matter expert support to the Joint Requirements Office (JRO) in development of the Concept of Operation (ConOps) and the Capability Development Document (CDD).

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

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0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4

FY 2006 Planned Program (Cont):

- 3195 JECP Leverage the findings of the ColPro TRE and the AoA for the basis of selected technology demonstrations. The purpose of the technology demonstrations is to mitigate risk and identify affordable mature technologies that individually or together meet the warfighters needs. Technologies to be demonstrated include, but may not be limited to; new filtrations systems, quick erect liners, airlocks, contamination control areas, and complete portable shelter systems. The Systems Engineering Working Integrated Product Team (SE WIPT) will work closely with the System Management Office (SMO) to plan, procure, test, and oversee all of the selected technology demonstrations.
- 995 JECP Establish the Test & Evaluation Working-level IPT (TE WIPT) to lead all aspects of the JECP test program including but not limited to the Test & Evaluation Master Plan (TEMP), Operational Assessments (OA), Developmental Testing (DT), and coordination with the Operational Test Agency (OTA) for Operational Testing (OT). The TE WIPT will coordinate with T&E Executive, the Product Director for Test Evaluation Systems and Support (PD-TESS) and the Test & Evaluation Capability Management IPT (TECM IPT) to ensure infrastructures and methodologies are available, and certified, to support proposed system testing.
- 900 JECP Establish the Systems Engineering Working-level IPT (SE WIPT) to be responsible for implementing a disciplined
 and robust systems engineering process throughout the acquisition life cycle in accordance with the JPEO-CBD Systems
 Engineering Policy. The SE WIPT will be the lead for all performance and technical related efforts and issues associated
 with JECP. Major tasks include developing and maintaining a System Engineering Plan, Work Breakdown Structure (WBS),
 system architecture, System Performance Specification, Technology Development Strategy, and oversee all technology
 demonstrations.

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4

FY 2006 Planned Program (Cont):

• 1492 JECP - Establish the Systems Management Office (SMO) to oversee the day-to-day program execution including overall guidance and direction to the JECP IPT, financial management and tracking, budget preparation, schedule planning and monitoring, generation of acquisition documentation to support milestone decisions and JPEO/JPM reporting requirements. The SMO will lead all contracting related efforts, providing the core framework and language for all JECP contractual documentation including but not limited to RFP's, source selection plans, source selection criteria, contract language, contract modifications, and contract options.

Total 7399

	FY 2005	<u>FY 2006</u>	FY 2007
SBIR/STTR	0	73	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 73 SBIR

Total 73

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PE NUMBER AND TITLE

PROJECT

BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4

C. Other Program Funding Summary:									
	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
CO5 COLLECTIVE PROTECTION (SDD)	2460	662	12581	21450	28306	20466	18826	Cont	Cont
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 (JECP)	0	0	0	0	5069	6305	8240	Cont	Cont
R12301 CB PROTECTIVE SHELTER (CBPS)	25676	16237	30586	31051	32001	33118	33827	Cont	Cont

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4

D. Acquisition Strategy:

JECP

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.

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DATE CBDP PROJECT COST ANALYSIS (R-3 Exhibit) February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CO4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US I. Product Development Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Туре Date Date Date Contract JECP HW S - Technology Demonstrators C/CPIF TBS C NONE 3195 2Q FY06 NONE 3195 HW S - Systems Engineering 900 1Q FY06

NONE

4095

0

NONE

0

0

900

4095

0

0

Remarks:

Subtotal I. Product Development:

MIPR

Various

U

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BUDGET ACTIVITY RDT&E DEFENSE-V	WIDE/							R AND TIT BP CHE	TLE MICAL/	BIOLO(GICAI	Ι	DEFENS	SE (ACI)&P)		:ОЈЕСТ)4
BA4 - Advanced Com	ponent Dev	elopment and Prot	otyp	es													
(ACD&P)					T												
I. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost		FY2005 Cost		FY2005 Award Date	Cost	FY2006 Award Date	FY2007 Cost		FY2007 Award Date	Cost to Complete	Total Cost		Target Value of Contract
JECP TD/D S - Milestone Documentation	MIPR	Various	U		0		0	NONE	417	1Q FY06		0	NONE	0)	417	0
TD/D S - AoA	C/FP	CBRTA Independent Assessments and Evaluations, Arlington, VA	С		0		0	NONE	400	1Q FY06		0	NONE	0)	400	0
Subtotal II. Support Costs:					0		0		817			0		0		817	
Remarks:																	
Project CO4				Pa	ıge	56 of 151	1 I	Pages					Exhibit	R-3 (PE	0603	884I	BP)

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CBDF	PRO.	JECT COST A	ALYS	SI	S (R-	.3	Exhil	bit)			DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/					PE NUMBER AND TITLE PR 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CC									.0јест)4	
BA4 - Advanced Compo (ACD&P)	nent Dev	elopment and Prot	otyp	es	L											
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	- 1	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 PM/MS S - Project Management Office (PMO) and IPT Support	MIPR	Various	U		0		0	NONE	1492	1Q FY06		0	NONE	0	1492	0
ZSBIR SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U		0		0	NONE	73	NONE		0	NONE	0	73	0
Subtotal IV. Management Services:					0		0		1565			0		0	1565	
Remarks:																
TOTAL PROJECT COST:					0		0		7472			0		0	7472	
Project CO4				Paş	ge :	58 of 15	1 I	Pages					Exhibit	R-3 (PE	0603884	BP)

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Exhibi	t R-4 a, Scl	hedule P	rofile			DATE Fel	bruary 2006				
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			pe number an 0603884BP C		BIOLOGICA	AL DEFENS	PROJECT L DEFENSE (ACD&P) CO4				
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types									
D. Schedule Profile:	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4			
JECP											
AoA			1Q 2Q								
MS-A Decision			3Q								
Complete CDD	mplete CDD										
SOO and DRAFT P-Spec		3Q									
Procurement of Technology Demonstrators			2Q 3Q								
Technology Demonstration Testing			3Q —	1Q							
MS-B Decision				1Q							
			3Q —								
Project CO4		Page	59 of 151 Pages			Exhibit	R-4a (PE 060)3884BP)			

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	CBDP BUDGET ITEM JUSTIFICA	ATION	SHEET	Γ (R-2a	Exhibi	DATE]	DATE February 2006				
	T ACTIVITY &E DEFENSE-WIDE/		PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4								
	- Advanced Component Development and Prototy		- 1	,			(, -			
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	
CP4	COUNTERPROLIFERATION SUPPORT (ACD&P)	15853	24239	25452	26152	15083	14344	26674	Continuing	Continuing	

A. Mission Description and Budget Item Justification:

Project CP4 COUNTERPROLIFERATION SUPPORT (ACD&P): Providing full dimensional protection to deployed forces and critical fixed sites, to include Sea Ports of Debarkation (SPODs) under threat of chemical or biological attack is one of the highest Combatant Commanders' highest priorities. Future adversaries will likely use CB weapons to deny U.S. and allied forces use of these facilities. U.S. forces, both mobile and at fixed sites, must be able to survive CB attacks and quickly recover to continue operations. This project supports the accelerated fielding of operational capabilities (technology, Concept of Operations (CONOPS), and automation tools) to Combatant Commanders through Advanced Concept Technology Demonstrations (ACTDs) and Advanced Technology Demonstrations (ATDs).

The Contamination Avoidance at Sea Ports of Debarkation (CASPOD) ACTD provides technologies, tools, tactics and procedures for the recovery of throughput operations after a chemical or biological attack at a seaport during times of a major logistics operation. The CASPOD ACTD will demonstrate those mitigating actions needed before, during and after an attack to protect against and immediately react to the consequences of a CB attack. These actions are aimed at restoring operating tempo (OPTEMPO) in mission execution and the movement of individuals and materiel to support combat operations at a seaport in an overseas Central Command (CENTCOM) Area of Responsibility (AOR).

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

The Biological Warfare Countermeasures Initiatives (BWCI) effort began when the Commander of the Pacific Command (PACOM) requested assistance from Under Secretary of Defense for Acquisition, Technology, and Logistics (DUSD (AT&L)) and the Chairman, Joint Chiefs of Staff (CJCS) to address Biological Warfare concerns in the PACOM area of operation. Recommended actions included conducting a risk assessment, providing planning guidance, assessing key lessons, and proposing a way ahead. The Deputy Under Secretary of Defense for Advanced Systems and Concepts (DUSD (AS&C)) responded and identified a three-phase approach to be implemented over three fiscal years. The three-phased approach is as follows: (1) Phase I (FY03) - Defined the problem(s); (2) Phase II (FY04) - developed solutions to include a fusion cell approach and force protection initiatives; and (3) Phase III (FY05) - Implementation Advanced Technology Demonstrations (ATD) and experiments to demonstrate solution sets identified during Phase II such as fusion cell, medical surveillance, force protection condition triggers, infrared scanning devices and other concepts.

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DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

The Counterproliferation Support Program ACTD is executing an FY05 ACTD called Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR). CUGR will address several critical operational issues to enhance the speed, effectiveness, capabilities, and automation of surface and area CBRN contamination detection and identification. The ACTD technologies will be used to enhance the Joint Service Light NBC Reconnaissance System (JSLNBCRS) and the FOX NBC Reconnaissance system by using a non-surface contacting optical system that provides both surface contamination detection and identification in near real time. Capabilities include traditional chemical agents, Non-Traditional Agents (NTAs) and Toxic Industrial Chemicals (TICs). The technology has the potential to detect biological warfare agents and offers a new capability to conduct unmanned CBRN reconnaissance. A new thrust area for ACTD small CBRN unmanned ground reconnaissance platform will be added to the JSLNBCRS. This unmanned platform will enable the reconnaissance crew to conduct CBRN reconnaissance in limited maneuver areas using a robotic platform carrying CBRN sensors that report findings to the operator using active telemetry.

The Counterproliferation Support Program will initiate two ATDs in FY06. The Chemical Biological Training System will be demonstrated at Ft Leonard Wood and will demonstrate Commercial off-the-shelf systems in use in the United Kingdom for military training of soldiers on Chemical and Biological Defense. The Chemical Biological Networked Early Warning System (CBNEWS) ATD will test existing battlefield radar systems and demonstrate their use as Chemical detection and warning devices.

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

B. Accomplishments/Planned Program

	FY 2005	<u>FY 2006</u>	FY 2007
COUNTERPROLIFERATION ACTD	15853	23999	25452
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

(ACD&P)

- 730 Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD Initiated program management and planning, documentation, Integrated Product Team (IPT) meetings, technical liaisons and transition planning.
- 1412 CUGR ACTD Initiated Concepts-of-Operations (CONOP) and techniques, tactics, and procedures (TTP) development, operational test planning and execution.
- 1119 CUGR ACTD Initiated Joint Contaminated Surface Detector (JCSD) systems engineering and technical testing.
- 5764 CUGR ACTD Initiated JCSD prototyping, technical testing and integration.
- 266 CUGR ACTD Initiated modification of Joint Service Light Nuclear Biological Chemical Reconnaissance System (JSLNBCRS) shelter design, fabricate and integrate on High Mobility Multipurpose Wheeled Vehicles (HMMWVs).
- 1784 CUGR ACTD Initiated CBRN Unmanned Ground Vehicle (CUGV) systems engineering, prototyping, technical testing and integration.

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FY 2005 Accomplishments (Cont):

- 1421 Contamination Avoidance at Seaports of Debarkation (CASPOD) ACTD (DTO JD23) (BCA#34) Executed residual support for CASPOD fielded technologies.
- 1684 CASPOD ACTD (DTO JD23) (BCA#34) Completed transition planning, acquired logistics support, and completed logistics support planning.
- 1173 Biological Warfare Countermeasures Initiatives (BWCI) Supported United States Pacific Command (PACOM) Biological
 Warfare Countermeasures Initiative.
- 500 Chemical Biological Defense Program Initiative Fund.

Total 15853

FY 2006 Planned Program:

- 1500 Contamination Avoidance at Seaports of Debarkation (CASPOD) ACTD (DTO JD23) (BCA#34) Complete procurement and contractor logistics support services for residual support on selected technologies.
- 1500 CASPOD ACTD (DTO JD23) (BCA#34) Finalize lessons learned, incorporate into ACTD final report, complete service doctrinal changes and techniques, tactics, and procedures changes.

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit) BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P) PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4 PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

FY 2006 Planned Program (Cont):

- 4114 Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD Continue program
 management and planning, documentation, IPT meetings, technical liaisons and transition planning. Continue Joint
 Contaminated Surface Detector (JCSD) systems engineering and technical testing. Continue modification of JSLNBCRS
 shelter design, fabricate and integrate on HMMWVs.
- 5300 CUGR ACTD Continue Concepts-of-Operations (CONOP) and techniques, tactics, and procedures (TTP) development, operational test planning and execution. Continue CBRN Unmanned Ground Vehicle (CUGV) systems engineering, prototyping, technical testing and integration.
- 5711 CUGR ACTD Complete JCSD prototyping, technical testing and integration.
- 1000 CUGR ACTD Initiate CUGR residual support for extended user evaluation.
- 2437 Chemical Biological Training System (CBTS) ATD Demonstrate Chemical Biological Training System for use at Ft. Leonard Wood.
- 2437 Chemical Biological Networked Early Warning System (CBNEWS) Initiate test and demonstration of tactical radar for early tactical warning of chemical attack.

Total 23999

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FY 2007 Planned Program:

- 965 Chemical Biological Radiological Nuclear (CBRN) Unmanned Ground Reconnaissance (CUGR) ACTD Continue program management and planning, documentation, Integrated Product Team (IPT) meetings, technical liaisons and transition planning.
- 5000 CUGR ACTD Continue Concepts-of-Operations (CONOPs) and techniques, tactics, and procedures (TTPs) development, operational test planning and execution.
- 378 CUGR ACTD Complete Joint Contaminated Surface Detector (JCSD) systems engineering and technical testing. Complete modification of JSLNBCRS shelter design, fabricate and integrate on HMMWVs.
- 907 CUGR ACTD Complete CBRN Unmanned Ground Vehicle (CUGV) systems engineering, prototyping, technical testing and integration.
- 500 CUGR ACTD Continue CUGR residual support for extended user evaluation.
- Situational Awareness and Response Network (STARNET) ACTD Initiate Combatant Commands (COCOM) information technology system for biological defense fusion cell, develop prototype medical surveillance integration module for Joint Operational Effects Federation (JOEF) Information Technology system.
- 3025 STARNET ACTD Initiate prototype sensor fusion integration module for Joint Operational Effects Federation (JOEF) Information Technology system.
- 3121 STARNET ACTD Initiate prototype Chemical Biological Defense systems readiness module.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

FY 2007 Planned Program (Cont):

- 432 STARNET ACTD Initiate prototype Chemical Biological Radiological Nuclear knowledge module.
- 3841 Chemical Biological Networked Early Warning System (CBNEWS) ATD Complete radar system and algorithm system integration for technology demonstration.
- 4516 CBNEWS ATD Complete technology demonstration and test and evaluation.

Total 25452

	FY 2005	<u>FY 2006</u>	FY 2007
SBIR/STTR	0	240	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 240 SBIR

Total 240

C. Other Program Funding Summary: N/A

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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D. Acquisition Strategy:

CPSP ACTD

This project is a generic block description for future ACTD and ATDs. The CUGR ACTD will execute its demonstration phase in FY05, FY06, and FY07. CUGR will transition laser detection technology into various reconnaissance vehicles that are currently in an Acquisition Program under Joint Program Executive Office (JPEO) Program Manager for Reconnaissance. No ACTD candidate was selected for FY06, in its place three leading candidates TCARS, STARNET, and CBNEWS ACTD proposals were revised to ATDs or experimentation to be coordinated with the BA6, O49, Joint Concept Development and Experimentation effort for FY06 and FY07. An additional ATD proposal for CB Training System is being planned for FY06 as an ATD. CBNEWS will be executed as a CBDP ATD vice and ACTD. STARNET and TCARS will be subject to more studies and experimentation with subsequent planning for STARNET as an FY07 ACTD.

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CBDP	PRO.	JECT COST A	٩N	ALYS	SIS (R-3	8 Exhi	bit)		D	ATE Fel	oruary 2	006			
BUDGET ACTIVITY RDT&E DEFENSE-WID						PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)									
BA4 - Advanced Compon (ACD&P)	ient Dev	elopment and Prot	otyp	oes											
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		
CPSP ACTD HW C - CUGR - CSD System Design and Integration	C/CPFF	ITT, Colorado Springs, CO	С		0 1119	2Q FY05	1745	2Q FY06	327	2Q FY07	(3191	0		
HW C - CUGR CSD - Begin Prototype Shelter Assembly	Allot	Army - RDECOM, ECBC, Edgewood, MD	U			2Q FY05		2Q FY06		2Q FY07	(709	0		
HW C - CUGR - UGV - Initiate System Design and Integration	Allot	Army - RDECOM, ECBC, Edgewood, MD	U			1Q FY05		2Q FY06		1Q FY07	(
HW S - Develop CB Training system	WR	DTRA, Alexandria, VA	U		0 0			2Q FY06	0		(
HW S - Develop STARNET system	Allot	Air Force - AFRL - Wright Patterson AFB, OH	U		0 0	NONE	0	NONE	8994	2Q FY07	(8994	0		
HW S - Complete CBNEWS ATD	Allot	Army - RDECOM, Aberdeen Proving Ground, MD	U		0 0	NONE	2280	2Q FY06	8708	2Q FY07	C	10988	0		
HW C - CUGR - JCSD Prototyping	Allot	Army - RDECOM, Aberdeen Proving Ground, MD	U		0 5764	2Q FY05	5711	2Q FY06	0	NONE	C	11475	0		
CBDP Initiative Fund	C/FP	TBS	С		0 500	3Q FY06	0	NONE	0	NONE	(500	0		
Subtotal I. Product Development: Remarks:					0 9433		13694		18934		(42061			
Project CP4				Pag	ge 70 of 151	Pages				Exhibit	R-3 (PE	0603884	BP)		

CBDP PROJECT COST ANALYSIS (R-3 Exhibit) BUDGET ACTIVITY PE NUMBER AND TITLE

DATE

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BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

PE NUMBER AND TITLE

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4

II. Support Costs	Contract	Performing Activity &	US	Total	FY2005	FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Target
III Support Cooks	Method &	Ų ,		PYs	Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of
	Туре		CC	Cost		Date		Date		Date	1		Contract
CPSP ACTD													
ILS C - CUGR CONOPS	Allot	PACOM - USA Army	U	0	415	1Q FY05	515	2Q FY06	580	1Q FY07	0	1510	0
Development		Pacific, Fort Shafter, HA											
ILS C - CUGR CONOPS and	Allot	USA Chemical School Ft	U	0	997	1Q FY05	700	2Q FY06	122	1Q FY07	0	1819	0
doctrine development		Leonard Wood, MO											
ILS S - CASPOD Complete	Allot	Army - RDECOM,	U	0	1421	2Q FY05	1500	2Q FY06	0	NONE	0	2921	0
residual support		ECBC, Edgewood, MD											
ILS S - CASPOD Finalize doctrine	Allot	Army - CHEMSCHOOL,	U	0	1684	2Q FY05	1500	2Q FY06	0	NONE	0	3184	0
and lessons learned		Ft Leonard Wood MO											
ILS C - CUGR - JCSD Residual	Allot	Army - RDECOM,	U	0	0	NONE	263	2Q FY06	549	1Q FY07	0	812	0
Support		ECBC, Edgewood, MD											
Subtotal II. Support Costs:				0	4517		4478		1251		0	10246	

Remarks:

(ACD&P)

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DATE CBDP PROJECT COST ANALYSIS (R-3 Exhibit) February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Туре Date Date Date Contract CPSP ACTD OTE C - OTE C - CUGR Allot Army Test and U NONE 4886 2Q FY06 4302 1Q FY07 9188 Operational Test for JCSD Evaluation Command -Alexandria, VA Subtotal III. Test and Evaluation: 4886 4302 9188 Remarks: Project CP4 Exhibit R-3 (PE 0603884BP) Page 72 of 151 Pages

CBDI	P PRO	JECT COST A	\NA	ALYS	IS (R-3	8 Exhil	oit)		D.	DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WI	DE/				PE NUMBE 0603884			BIOLO	GICAL 1	DEFENS	SE (ACD		.ОЈЕСТ '4
BA4 - Advanced Compo (ACD&P)	nent Dev	elopment and Prot	otyp	es									
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
CPSP ACTD PM/MS S - CUGR Program Management	Allot	Army - RDECOM, ECBC, Edgewood, MD	U		0 730	2Q FY05	941	2Q FY06	965	2Q FY07	0	2636	0
PM/MS S - BWCI - Program Management	MIPR	PACOM - Camp Smith Hawaii	U		0 1173	1Q FY05	0	NONE	0	NONE	0	1173	0
ZSBIR SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U		0 0	NONE	240	NONE	0	NONE	0	240	0
Subtotal IV. Management Services:					0 1903		1181		965		0	4049	
Remarks:													
TOTAL PROJECT COST:					0 15853		24239		25452		0	65544	
Project CP4				Pag	e 73 of 151	Pages				Exhibit	R-3 (PE	06038841	BP)

DATE Exhibit R-4a, Schedule Profile February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) CP4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) **D. Schedule Profile:** FY 2008 FY 2004 FY 2005 FY 2006 FY 2007 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 **CPSP ACTD CUGR JCSD Demonstration** 3Q 4Q **CUGR JCSD Residual Support** 1Q 40 **CUGR CUGV Demonstration** 3Q 4Q CUGR CUGV Residual Support 4Q **CB** Training System Demonstration **CBNEWS ATD Demonstration** 3Q 4Q

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Project CP4

CBDP BUDGET ITEM JUSTIFICA	TION	SHEET	Γ (R-2a	Exhibi	DATE]	DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/		PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4							
BA4 - Advanced Component Development and Prototy (ACD&P)	pes								
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
DE4 DECONTAMINATION SYSTEMS (ACD&P)	16950	998	2000	4517	2577	2278	4002	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

This funding supports Joint Service Family of Decontamination Systems (JSFDS), Joint Service Sensitive Equipment Decontamination (JSSED) and Joint Platform Interior Decontamination (JPID) programs.

The funding for JSFDS covers the Joint Service Personnel/Skin Decontamination System (JSPDS) and Joint Service Transportable Decontamination Systems, Small-scale (JSTDS-SS) programs. These programs will provide the warfighter with an enhanced fixed site and personnel decontamination capability.

The JSSED program will perform sensitive equipment/item decontamination.

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4

The JPID program will fill an immediate need to decontaminate chemical and biological warfare agents from vehicle/aircraft/buildings interiors, and associated cargo. The JPID program will utilize incremental and spiral approaches to address individual key capabilities to reduce program risk and support production schedule.

B. Accomplishments/Planned Program

	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
JS FAMILY OF DECON SYSTEMS (JSFDS)	10801	989	2000
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 3990 JSFDS/JSTDS-SS Performed down-selection testing (DT I) on four candidate JSTDS-SS decontamination systems for Low Rate Initial Production (LRIP) contract award. DT I included live agent efficacy testing, material compatibility testing, and reliability testing.
- 370 JSFDS/JSTDS-SS Developed logistics documentation and performed training to support testing for JSTDS-SS.
- 2400 JSFDS/JSTDS-SS Updated Single Acquisition Management Plan (SAMP), Test and Evaluation Master Plan (TEMP) and other program documentation to support Milestone C Low Rate Initial Production (LRIP) for JSTDS-SS.
- 510 JSFDS/JSTDS-SS Performed an operational assessment on candidate JSTDS-SS decontamination systems.

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit) BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P) PENUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) 06038BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)

FY 2005 Accomplishments (Cont):

- 1850 JSFDS/JSPDS Performed developmental packaging testing, compatibility testing and a clinical safety study on JSPDS.
- 1681 JSFDS/JSPDS Updated SAMP, TEMP and other program documentation to support Milestone B for JSPDS.

Total 10801

FY 2006 Planned Program:

- 204 JSFDS (T&E Capability) Overarching Decontamination Model throughout RDT&E Develop a model to predict contamination-caused hazards for all phases of chemical and biological threats.
- 785 JSFDS (T&E Capability) Develop and validate chemical decontamination test methods for full-system tests.

Total 989

FY 2007 Planned Program:

- 300 JSPDS (T&E Capability) Upgrade and Standardize Laboratory Decontamination Test Methods Develop and validate standardized, common test and analysis methods that will yield performance data that can be used across DoD.
- 1700 JSSED/JPID (T&E Capability) Certify chamber fixtures for use with biological agents, develop and validate biological decontamination methods for subsequent use in the Biological Decontamination Chamber.

Total 2000

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
JS SENSITIVE EQUIP DECON	6149	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 2700 JSSED Designed and fabricated prototypes for Limited Objective Experiment (LOE) (Six units at \$450K each).
- 600 JSSED Designed and fabricated prototypes of pre-clean kits for LOE.
- 1768 JSSED Coordinated, managed and executed LOE for JSSED.
- 450 JPID Coordinated, managed and executed SED LOE.
- 375 JPID Continued studies for interior platform material identification, characteristics/market analysis.
- 256 JPID Planned, managed and conducted JPID technical demonstration.

Total 6149

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
SBIR/STTR	0	9	0
RDT&E Articles (Quantity)	0	0	0

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BA4 - Advanced Component Development and Prototypes $\,$

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4

FY 2006 Planned Program:

9 SBIR

Total 9

C. Other Program Funding Summary:									
	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	FY 2009	<u>FY 2010</u>	FY 2011	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
DE5 DECONTAMINATION SYSTEMS (SDD)	4169	16496	11050	5397	15053	15353	7365	Cont	Cont
JD0055 JOINT SERVICE PERSONNEL/SKIN DECONTAMINATION SYSTEM (JSPDS)	0	0	9584	12775	0	0	0	0	22359
JD0056 JS TRANS DECON SYSTEM - SMALL SCALE (JSTDS-SS)	0	2911	7209	11343	13432	18970	23889	Cont	Cont
JD0061 JOINT SERVICE SENSITIVE EQUIPMENT DECON (JSSED)	0	0	0	0	6860	6991	6591	Cont	Cont

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

D. Acquisition Strategy:

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.

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.

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PE NUMBER AND TITLE

PROJECT

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JSSED

The JSSED 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 JSSED system. The second step is the System Integration of the JSSED Increment I. The third step is the production phase of the JSSED Increment I variant. The fourth and final step is the spiral development of the JSSED 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.

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CBDP	PRO.	JECT COST A	NA	ALYSI	S (R-3	Exhil	bit)		D	ATE Fe l	bruary 20	006	
BUDGET ACTIVITY RDT&E DEFENSE-WIL BA4 - Advanced Compor (ACD&P)		elopment and Prot	otyp	(PE NUMBE)6038841			BIOLO	GICAL :	DEFEN:	SE (ACD		ОЈЕСТ 24
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
JSFDS HW S - JSFDS Systems for JSTDS-SS Down-selection Testing	C/FFP	Various	С	0	1061	2Q FY05	0	NONE	0	NONE	0	1061	(
JSSED HW S - JSSED LOE prototype build	C/CPFF	Battelle Memorial Institute, Aberdeen MD	С	0	799	2Q FY05	0	NONE	0	NONE	0	799	(
HW S - JSSED LOE prototype build	C/CPFF	Guild Associates, Dublin OH	С	0	799	2Q FY05	0	NONE	0	NONE	0	799	(
SW SB - JSSED Develop Pre-Clean Capability	C/CPFF	TBS	С	2000	1000	2Q FY05	0	NONE	0	NONE	0	3000	(
HW S - JPID Material Identification and Analysis for JPID	C/CPFF	Battelle Memorial Institute, San Antonio, TX	С	0	400	3Q FY05	0	NONE	0	NONE	0	400	(
Subtotal I. Product Development:				2000	4059		0		0		0	6059	
Remarks: Project DE4				Dago	82 of 151	Радес				Fyhihit	R-3 (PE))60388 <i>4</i> 1	RP)

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US II. Support Costs Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Туре Date Date Date Contract JSFDS ILS S - JSFDS Documentation and **MIPR** Various U 400 681 1Q FY05 NONE NONE 1081 analysis for JSPDS 530 10 FY05 ILS S - JSFDS Documentation and MIPR Various U 300 NONE NONE 830 analysis for JSTDS-SS JSSED TD/D S - JPID - Technical Allot HSG, Brooks City-Base, 0 261 2Q FY05 0 NONE 0 NONE 0 261 demonstration and market analysis TX Subtotal II. Support Costs: 700 1472 0 2172 Remarks:

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Project DE4

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE **PROJECT** RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Type **JSFDS** DTE S - JSFDS - JSTDS-SS Various U 1689 10 FY05 NONE NONE 1689 **MIPR** Down-selection Testing (DT I) DTE S - JSFDS - JSTDS-SS Battelle, Columbus, OH C 600 10 FY05 NONE NONE 0 C/CPFF 0 600 Down-selection Testing (DT I) OTHT S - JSFDS - JSTDS-SS test **MIPR** Various U 250 400 10 FY05 NONE NONE 650 planning OTHT S - JSFDS - JSTDS-SS test 240 1Q FY05 C/CPFF Various C 650 NONE 0 NONE 0 890 planning OTHT S -**MIPR** Various U 0 NONE 989 1Q FY06 2000 1Q FY07 2989 JSTDS/JSSED/JPID/JSPDS OTE S - JSFDS-JSTDS-SS **MIPR** Army Operational Test U 510 1Q FY05 NONE NONE 510 Operational Assessment Command, Ft. Hood, TX DTE S - JSFDS-JSPDS 900 1Q FY05 MIPR Various IJ 0 NONE NONE 0 900 Developmental Test DTE S - JSFDS-JSPDS C/CPFF Battelle, Columbus, OH 950 10 FY05 NONE NONE 0 950 Developmental Test ISSED OTHT SB - JSSED - Block I MIPR Various U 684 202 10 FY05 0 NONE 0 NONE 886 Testing DTE S - JSSED Developmental MIPR AFOTEC, Kirtland AFB, 1337 500 20 FY05 NONE **NONE** 1837 NM Planning Exhibit R-3 (PE 0603884BP) Project DE4

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BA4 - Advanced Component	CBDP PROJECT COST ANALY BUDGET ACTIVITY RDT&E DEFENSE-WIDE/						SIS (R-3 Exhibit) PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) DE4 PROJECT								
(ACD&P)	t Deve	elopment and Pro	ototyp	es											
<u> </u>	thod &	Performing Activity & Location	US NF CC	Total PYs Cost	FY2005 Cost	FY2005 Award Date	Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract		
Subtotal III. Test and Evaluation: Remarks:				292	599	1	989		2000		0	11901			
	ntract ethod &	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	/CPFF	Various	С	15	0 50) 1Q FY05	0		0		0	650			
-	MIPR	Various	U	19	0 126	5 1Q FY05	0	NONE	0	NONE	0	1455			
PM/MS S - JSFDS - JSTDS-SS C/ Programmatic Support - acquisition documentation development	/CPFF	Various	С	13	9 97	5 1Q FY05	0	NONE	0	NONE	0	1114			

CBDP	PRO	JECT COST A	\N /	ALYSI	IS (R-3	S Exhil	bit)		Γ	DATE Fel	bruary 2	006	
BUDGET ACTIVITY				1	PE NUMBE	R AND TI	ΓLE					PR	OJECT
RDT&E DEFENSE-WID)E/			(06038841	BP CHE	MICAL	/BIOLO	GICAL	DEFENS	SE (ACI	D&P) DE	Ľ 4
BA4 - Advanced Compor	nent Dev	elopment and Prot	otyp	es									
(ACD&P)													
IV. Management Services - Cont.	Contract	Performing Activity &	US	Total		FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Target
	Method &	Location	NF	PYs		Award	Cost	Award	Cost	Award	Complete	Cost	Value of
PM/MS S - JSFDS - JSPDS	Type MIPR	Various	CC U	Cost		Date 10 EV05		Date NONE	 	Date 0 NONE		500	Contract
	MIPK	Various	U	U	500	1Q FY05	0	NONE	,	0 NONE	U	500	0
Programmatic Support -													
acquisition documentation													
development					-			-	 				
JSSED PM/MS C - JSSED LOE	MIPR	Various	U	0	1768	2Q FY05	0	NONE	+ (0 NONE	(1768	0
PM/MS C - JSSED LOE PM/MS S - JPID - Services	MIPR	Various	U	0		1Q FY05				0 NONE	_) 150	
Integrated Product Team Support	WIII IX	various		0	150	101.103	0	NONE	,	NONE	0	150	V
PM/MS SB - JPID - SED LOE	MIPR	Various	 	0	270	2Q FY05	0	NONE	+	0 NONE	+	270	0
ZSBIR	WIII K	Various	 		210	2Q F 105	0	NONE		NONE		210	V
SBIR/STTR - Aggregated from	PO	HQ, AMC, Alexandria,	U	0	0	NONE	9	NONE	+ (0 NONE	() 9	0
ZSBIR-SBIR/STTR	10	VA			0	NONE	′	NONE	`	NONE		'	٥
ZSDIK-SDIK/STTK	+	VA	+	+			+		+	+		+	
Subtotal IV. Management			+-	479	5428	,	9	,	(0	(5916	
Services:													
Remarks:			Ь										
Remarks.													
Project DE4				Page	86 of 151	Pages				Exhibit	R-3 (PE	06038841	BP)

CBDP PROJECT COST ANA	LYS	IS (R-3 Exhib	oit)		DATE Feb	ruary 2006	6
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototype (ACD&P)	es	PE NUMBER AND TIT 0603884BP CHE)GICA	L DEFENS	E (ACD&)	PROJECT P) DE4
TOTAL PROJECT COST:	610	0 16950	998	20	000	0	26048
Project DE4	Pag	e 87 of 151 Pages			Exhibit I	R-3 (PE 060)3884BP)

Exhibit BUDGET ACTIVITY RDT&E DEFENSE-WIDE/	nedule P	PE NUMBER A			PROJECT ENSE (ACD&P) DE4					
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types								
D. <u>Schedule Profile:</u>	FY 2004 1 2 3 4	FY 2005		FY 2007 1 2 3 4	FY 2008 1 2 3 4 1	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4		
SFDS										
JSFDS Restructuring of Requirements/ORD Acquisition Strategy	>> 2Q									
JSFDS Requirement feasibility and acquisition strategy development	1Q —— 4Q									
JSFDS Compatibility Testing for JSPDS	2Q 3Q									
JSFDS Multi-purpose Decontamination System Reliability Testing	2Q — 4Q									
JSFDS Milestone (MS) B for JSPDS	3Q									
JSFDS Developmental Testing (DT) II for JSPDS	1Q —		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 — 3Q								

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Developm (ACD&P)	(PE NUMBER AN 0603884BP (Fel	PROJECT) DE4			
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4
JSFDS (Cont)								
JSFDS MS C (LRIP) for JSTDS-SS		3Q						
JSFDS DT II for JSTDS-SS		40	Q					
JSFDS Funding Transition		40	Q					
JSSED								
Phase I - Optimization of Fluid System	>>	40	Q					
Phase I - Pre Clean Decontamination System	3Q —	40	Q					
Phase I - Pre Clean Military Utility Test		2Q 3Q						
Phase I - Design and fabricate prototypes for LOE (6 units at \$450K each)		1Q — 3Q						
Phase I - Conduct LOE		3Q						
Phase I - IPR for LOE Decision		40	Q					
JPID - Plan and conduct SED LOE		2Q ——	1Q					
JPID - Technology Demonstration		2Q — 40	Q					

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CBDP BUDGET ITEM JUSTIFICA	TION	SHEET	Γ (R-2a	Exhibi	DATE	DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototy (ACD&P)		PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4							
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
IS4 INFORMATION SYSTEMS (ACD&P)	5750	3000	0	0	0	0	0	0	8750

A. Mission Description and Budget Item Justification:

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

JOEF will be a near real-time course of action analysis tool developed in three blocks using a detailed NBC 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:

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) and crisis planning for the operational users in a COE.

Increment II will support deliberate and crisis planning for the tactical users in a COE, Non-COE, and Non-Networked environment; deliberate planning for operational and strategic users in a Non-COE; crisis planning for the operational users in a Non-COE; and crisis planning for the strategic users in a COE. The second increment supports planning for consequence management and development of consequence management for military capabilities.

Project IS4/Line No: 070 Page 91 of 151 Pages Exhibit R-2a (PE 0603884BP)

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DATE

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4

Increment III will support deliberate planning for operational and strategic users in a Non-Networked environment; crisis planning for operational users in a Non-COE; and crisis planning for strategic users in a Non-COE and Non-Networked environments. The third increment extends consequence management capabilities to include civilian facilities.

Note: JOEF was funded in FY04 under project CA4.

B. Accomplishments/Planned Program

	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
JOINT OPERATIONAL EFFECTS FEDERATION	5750	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

• 966 JOEF Block I - Conducted Interim Progress Review (IPR). Performed financial management, scheduling, planning, and financial and technical reporting. Used the EVMS process. Completed M/S B acquisition documentation.

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BUDGET ACTIVITY

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4

FY 2005 Accomplishments (Cont):

- JOEF Block I Continued development of prototype. Enhanced Aerial Ports of Debarkation (APOD) and medical capabilities. Added Sea Ports of Debarkation (SPOD) capabilities. Designed open C4ISR architecture. Interfaced with standard Geographic Information Systems (GIS). Initiated the process of generating data tables in support of mobile force assessments using models that support the operational commands. Funded the System Engineering, Test and Evaluation, Warfighter and Logistics IPTs.
- 3238 JOEF Block I Initiated design of mobile force and automated TTP capabilities to the prototype. Initiated the development of Graphical User Interface (GUI) compatible with JEM and JWARN. Improved the post-process capabilities for the JOEF Measures of Effectiveness. Prepared for MS B and subsequent transition program to system development and demonstration (SDD).

Total 5750

	FY 2005	<u>FY 2006</u>	FY 2007
TECHNOLOGY TRANSFER FOR BIO SENSORS	0	2971	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4

FY 2006 Planned Program:

• 2971 TT Bio - Congressional Interest Item - E-Smart Threat Agent Network for Liberty Island.

Total 2971

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	29	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 29 SBIR

Total 29

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes

(ACD&P)

BUDGET ACTIVITY

PE NUMBER AND TITLE PROJECT
0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4

C. Other Program Funding Summary:								Tan.	m . 1
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	FY 2009	<u>FY 2010</u>	FY 2011	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	8809	5112	6544	21455	21570	22752	29033	Cont	Cont
IS5 INFORMATION SYSTEMS (SDD)	19884	73761	25838	17285	8812	5537	3274	Cont	Cont
JC0208 JOINT EFFECTS MODEL (JEM)	994	1996	2058	1046	0	0	0	0	6094

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4

D. Acquisition Strategy:

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.

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.

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.

Increment III will extend consequence management capabilities to include civilian facilities.

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DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US I. Product Development Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Date Date Date Contract Туре JOEF SW S - Engineering Builds -C/CPIF Cubic Applications, Inc., С 2477 1Q FY05 NONE NONE 2477 Development, Design and Coding Lacy, WA SW S - Integration, Interoperability SPAWAR Systems 721 10 FY05 MIPR U NONE NONE 721 Center, San Diego, CA TT Bio TT Bio - Network for Liberty SS/FP TBS C 0 NONE 2971 4Q FY06 0 NONE 0 2971 Island Subtotal I. Product Development: 3198 2971 0 6169 Remarks:

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CBDP	PRO	JECT COST	ANA	ALYS	IS (R-3	Exhil	oit)		D	ATE Fel	oruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WID	E/				ре numbe 0603884]			BIOLO	GICAL	DEFEN:	SE (ACE		PROJECT S4
BA4 - Advanced Compon (ACD&P)	ent Dev	elopment and Pro	ototyp	es									
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
JOEF ES S - Integrated Product Teams - System Engineering, Test, and Logistics	MIPR	Various	U		697	1Q FY05	0	NONE	() NONE	0	69	07 0
Subtotal II. Support Costs:				() 697		0		()	0) 69	97
Remarks: III. Test and Evaluation	Contract Method &	Performing Activity &	US NF	Total PYs	FY2005 Cost	FY2005 Award	FY2006 Cost	FY2006 Award	FY2007 Cost	FY2007 Award	Cost to Complete	Total Cost	Target Value of
	Type	Location	CC	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
JOEF DTE S - JOEF - Developmental Testing	MIPR	Various	U	() 480	3Q FY05	0	NONE	(NONE	0	48	30 0
Subtotal III. Test and Evaluation:				() 480		0		()	0) 48	30
Remarks:		I		1	1	1	1	1	1	1	1	1	
Project IS4				Page	e 98 of 151	Pages				Exhibit	R-3 (PE	060388	4BP)

CBDP	PRO	JECT COST A	\N /	ALYS	SI	S (R-3	Exhib	oit)			DA	ATE Feb	oruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WIL	E/					E NUMBEI 603884E			BIOLO	GICAI	ΙI	DEFENS	SE (ACD	PR D&P) IS 4	.ОЈЕСТ 1
BA4 - Advanced Compor (ACD&P)	ient Dev	elopment and Prot	otyp	es											
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	- 1	Cost	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost		FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JOEF PM/MS S - Program Mgt Office - Planning and Programming	MIPR	Various	U		0	1375	1Q FY05	0	NONE		0	NONE	0	1375	0
ZSBIR SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U		0	0	NONE	29	NONE		0	NONE	0	29	0
Subtotal IV. Management Services:					0	1375		29			0		0	1404	
Remarks:															
TOTAL PROJECT COST:					0	5750		3000			0		0	8750	
Project IS4				Paş	ge S	99 of 151 I	Pages					Exhibit	R-3 (PE	06038841	BP)

Exhibit	R-4a, Scl	nedule P	rofile			DATE Fe l	bruary 2006								
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/	RDT&E DEFENSE-WIDE/					PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) IS4									
BA4 - Advanced Component Developme (ACD&P)	ent and Proto	types													
D. Schedule Profile:	FY 2004 1 2 3 4	FY 2005		FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4							
JOEF															
Concept and Technology Development Phase	>>		1Q												
Prototype Development	2Q —		1Q												
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 —	3Q											
Incr I - Tech Reviews			1Q —		1Q										
Incr 1 - Developmental Testing (DT) Build 1				1Q											
Incr I - Operational Assessment				3Q											
Incr 1 - Full Operational Capability						40)								

CBDP BUDGET ITEM JUSTIFICA	ATION	N SHEET (R-2a Exhibit)					DATE February 2006			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototy (ACD&P)	pes	PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4								
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	

22574

24215

71022

99435

138474

A. Mission Description and Budget Item Justification:

MEDICAL BIOLOGICAL DEFENSE (ACD&P)

MB4

Project MB4 MEDICAL BIOLOGICAL DEFENSE (ACD&P): This project funds Advanced Component Development and Prototypes for vaccines, drugs, and diagnostic medical devices that are directed against validated biological warfare (BW) agents to include bacteria, viruses, and toxins of biological origin. This project also funds special studies to develop, test, and evaluate novel vaccine formulations to reduce or eliminate injections and to protect U.S. forces from BW agents. Efforts for medical biological defense product development include establishing standards and reference material for manufacturing and preliminary safety studies in animals. This data (manufacturing process development, pilot lot manufacturing, and non-clinical safety/toxicology studies) are submitted in support of an Investigational New Drug (IND) application with the Food and Drug Administration (FDA) so that human studies to evaluate product safety and immunogenicity can be conducted. At the end of System Development and Demonstration (SDD), the product will transition to the Production and Deployment phase. Products being developed under the Joint Vaccine Acquisition Program (JVAP) include: Recombinant Botulinum, Plague (Yersinia Pestis), Equine Encephalitis and Ricin vaccines.

B. Accomplishments/Planned Program

		FY 2005	FY 2006	<u>FY 2007</u>
JOINT BIOLOGICAL AGENT IDENT AND DIAG	SYSTEM INCREMENT II	2500	0	0
RDT&E Articles (Quantity)		0	0	0
Project MB4/Line No: 070	Page 101 of 151 Pages		Exhibit R-2a (PE 0603884BP)

166246 Continuing Continuing

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

FY 2005 Accomplishments:

- 289 JBAIDS Increment II Initiated down select process to determine commercial-off-the-shelf (COTS)/Non-Developmental Items (NDI) systems' potential applicability.
- 1577 JBAIDS Increment II Purchased Government Furnished Material (GFM) to manufacture test samples, and initiated and completed Technology Readiness Assessment (TRA).
- 634 JBAIDS Increment II Initiated source selection planning activities, technical specification development, and support activities.

Total 2500

	FY 2005	<u>FY 2006</u>	FY 2007
TECHNOLOGY TRANSFER FOR BIO SENSORS	0	2526	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 2526 TT Bio - Congressional Interest Item - Roll-on-Roll-Off Infection Control Facility.

Total 2526

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

	FY 2005	<u>FY 2006</u>	FY 2007
TECHNOLOGY TRANSFER MEDICAL SYSTEMS	150	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

• 150 TT Med - Initiated medical technology transition, including clinical trials, of medical countermeasures against biological and chemical agents, including novel threat agents, for therapeutics, prophylaxes and pretreatments, and diagnostics capabilities.

Total 150

	FY 2005	<u>FY 2006</u>	FY 2007
BOTULINUM VACCINE	13335	1980	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

• 8534 JVAP - Recombinant Botulinum Vaccine - Completed manufacturing process scale-up and continued process validation efforts for serotypes A and B.

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DATE

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

FY 2005 Accomplishments (Cont):

- 3600 JVAP Recombinant Botulinum Vaccine Continued Phase 1 clinical trial for serotypes A and B and received interim report.
- 1201 JVAP Recombinant Botulinum Vaccine Continued non-clinical studies and continued stability testing for serotypes A and B.

Total 13335

FY 2006 Planned Program:

• 1980 JVAP - Recombinant Botulinum Vaccine - Initiate Phase 1B clinical trial and continue non-clinical studies.

Total 1980

	FY 2005	<u>FY 2006</u>	FY 2007
ENCEPHALITIS VACCINE	0	6810	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 6810 JVAP - Equine Encephalitis Vaccine - Continue Phase 1 clinical trial on the VEE 1 AB vaccine.

Total 6810

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

	FY 2005	<u>FY 2006</u>	FY 2007
PLAGUE VACCINE	8230	5591	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 5972 JVAP Plague Vaccine Initiated Phase 1 clinical trial of US candidate.
- 576 JVAP Plague Vaccine Continued non-clinical studies of US candidate.
- 576 JVAP Plague Vaccine Continued stability testing of US candidate.
- 906 JVAP Plague Vaccine Continued full-scale manufacturing process development of US candidate.
- 200 JVAP Plague Vaccine Submitted IND.

Total 8230

FY 2006 Planned Program:

- 511 JVAP Plague Vaccine Continue Phase 1 clinical trial of US candidate.
- 498 JVAP Plague Vaccine Continue non-clinical studies of US candidate.
- 99 JVAP Plague Vaccine Continue stability testing of US candidate.
- 4283 JVAP Plague Vaccine Continue full-scale manufacturing process development of US candidate.

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PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

FY 2006 Planned Program (Cont):

• 200 JVAP - Plague Vaccine - Complete MS B and transition to SDD.

Total 5591

	FY 2005	<u>FY 2006</u>	FY 2007
VACCINE RICIN	0	5448	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

- 1012 JVAP Ricin Vaccine Initiate technology transfer from the technology base to advanced development. Transfer will consider several possible candidates, to include genetically modified variants.
- 1600 JVAP Ricin Vaccine Initiate assay development for vaccine candidate.
- 2836 JVAP Ricin Vaccine Initiate manufacturing process development for vaccine candidate.

Total 5448

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
SBIR/STTR	0	219	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4-Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

FY 2006 Planned Program:

• 219 SBIR

Total 219

C. Other Program Funding Summary:									
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>To</u> <u>Compl</u>	<u>Total</u> <u>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
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	9843	60612	71834	92533	95113	77377	181423	Cont	Cont

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BA4 - Advanced Component Development and Prototypes (ACD&P)

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D. Acquisition Strategy:

JBAIDS II 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.

VAC BOT A prime systems contractor will function as the "responsible head" and license holder and will perform all ancillary,

regulatory, quality assurance, and data management as required by the FDA. The current budget supports development 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.

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).

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BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

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.

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.

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.

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).

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BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

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0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

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.

VAC PLG

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.

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).

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.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

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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.

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.

VAC RICIN

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 transition into advanced development and FY06 non-clinical and process development activities. Chemical Biological Medical Systems (CBMS) will consider the possibility of requesting funding under the BioShield Act of 2004, or transitioning this product to the Department of Health and Human Services for development and procurement under the BioShield Act, when the product in question meets both National and DoD requirements.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)							D	DATE February 2006					
BUDGET ACTIVITY RDT&E DEFENSE-WIL	DE/				PE NUMBE 0 603884]			BIOLO	GICAL	DEFEN	SE (ACD		ЮЈЕСТ В4
BA4 - Advanced Compor	nent Dev	elopment and Pro	totvr	oes									
(ACD&P)			roej r	CS									
(ACD&I)													
I. Product Development	Contract Method &	Performing Activity & Location	US NF	Total PYs	FY2005 Cost	FY2005 Award	FY2006 Cost	FY2006 Award	FY2007 Cost	FY2007 Award	Cost to Complete	Total Cost	Target Value of
	Туре	200000	CC	Cost	Cost	Date	0050	Date	Cost	Date	Complete		Contract
TT Bio	71												
TT Bio - Infection Control Facility	SS/FP	TBS	С	0	0	NONE	2526	4Q FY06	C	NONE	0	2526	(
TT MED													
Biological Warfare Standoff	SS/FP	MIT Lincoln Labs,	F	0	150	1Q FY06	0	NONE	C	NONE	0	150	(
Analysis		Lexington, MA											
VAC BOT													
HW S - Vaccine Development -	C/CPAF	DynPort Vaccine	С	19891	3970	1Q FY05	661	1Q FY06	C	NONE	0	24522	C
Includes Consistency Lot, Pilot		Company, Frederick,											
Lot, and Scale-up Production		MD											
VAC ENC													
HW S - Vaccine Development -	C/CPAF	DynPort Vaccine	С	5218	0	NONE	2100	1Q FY06	C	NONE	0	7318	C
Includes Consistency Lot, Pilot		Company, Frederick,											
Lot, and Scale-up Production		MD											
VAC PLG													
HW S - Vaccine Development -	C/CPAF	DynPort Vaccine	C	18135	2469	1Q FY05	1869	1Q FY06	C	NONE	0	22473	C
Includes Consistency Lot, Pilot		Company, Frederick,											
Lot, and Scale-up Production		MD											
VAC RICIN													
HW S - Vaccine Development -	C/CPAF	DynPort Vaccine	C	0	0	NONE	1680	2Q FY06	C	NONE	0	1680	C
Includes Consistency Lot, Pilot		Company, Frederick,											
Lot, and Scale-up Production		MD											
Subtotal I. Product Development:				43244	6589		8836		C		0	58669	
	<u>I</u>	1		1	1		l .	l	1	1	1	l .	l .
Project MB4				Page	112 of 151	Pages				Exhibit	R-3 (PE	06038841	RP)

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes
(ACD&P)

PE NUMBER AND TITLE

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

PROJECT
0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4

I. Product Development - Cont.

Remarks:

II. Support Costs	Contract	Performing Activity &	US	Total	FY2005	FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Target
	Method &	Location	NF	PYs	Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of
	Туре		CC	Cost		Date		Date		Date			Contract
JBAIDS II													
TD/D C - JBAIDS Inc II -	MIPR	Dugway Proving Ground,	U	0	759	3Q FY05	0	NONE	0	NONE	0	759	0
Government Labs & Fly-Off		UT											
Support													
TD/D C - JBAIDS Inc II - LCCE	C/CPFF	Tecolote, Falls Church,	С	0	107	3Q FY05	0	NONE	0	NONE	0	107	0
and Fly-Off Support		VA											
TD/D C - JBAIDS Inc II - Update	MIPR	RDECOM, Edgewood,	U	0	33	3Q FY05	0	NONE	0	NONE	0	33	0
ICE/IGE		MD											
VAC BOT													
TD/D S - Vaccine Development -	C/CPAF	DynPort Vaccine	С	4373	1278	1Q FY05	300	1Q FY06	0	NONE	0	5951	0
Includes Regulatory Integration		Company, Frederick,											
(Environmental and FDA		MD											
Documentation) and Delivery													
System													

Project MB4

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CBDF	PRO	JECT COST	ANA	ALYSI	S (R-3	Exhil	oit)		Γ	OATE Fe l	bruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/				PE NUMBE 06038841			BIOLO	GICAL	DEFEN:	SE (ACE		ЮЈЕСТ В4
BA4 - Advanced Comport (ACD&P)	nent Dev	elopment and Pro	totyp	es									
I. 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 - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company, Frederick, MD	С	951	0	NONE	1050	1Q FY06	() NONE	0	2001	0
VAC PLG TD/D S - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery	C/CPAF	DynPort Vaccine Company, Frederick, MD	С	4817	823	1Q FY05	849	1Q FY06	() NONE	0	6489	0
System VAC RICIN TD/D S - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company, Frederick, MD	С	0	0	NONE	840	2Q FY06	() NONE	0	840	0
Subtotal II. Support Costs:				10141	3000		3039		()	0	16180	
Remarks: Project MB4			•	Page	114 of 151	Pages				Exhibit	R-3 (PE	0603884]	BP)

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) Performing Activity & US III. Test and Evaluation Contract Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Type JBAIDS II DTE C - JBAIDS Inc II - Fly-Off C/FFP Various C 450 30 FY05 NONE NONE 450 Efforts DTE C - JBAIDS Inc II -Dugway Proving Ground, U 131 30 FY05 NONE 0 NONE MIPR 131 Optimization and Testing of UT Assays, QA/QC, & Fly-Off Efforts DTE C - JBAIDS II -43 30 FY05 NONE **MIPR** US Developmental Test 0 NONE 0 43 Developmental Test and Site Command, Aberdeen, MD Support DTE C - JBAIDS II - QA/QC NAVSEA, Washington, 148 4Q FY05 NONE MIPR NONE 148 Support, Test and Evaluation DC VAC BOT OTHT S - Vaccine Development -671 1Q FY06 C/CPAF DynPort Vaccine C 7917 3970 10 FY05 0 NONE 12558 Includes Testing, Evaluation, and Company, Frederick, Non-Clinical/Clinical Trials MD VAC ENC OTHT S - Vaccine Development -C/CPAF DynPort Vaccine C 2367 NONE 2695 10 FY06 NONE 5062 Includes Testing, Evaluation, and Company, Frederick, Non-Clinical/Clinical Trials MD Exhibit R-3 (PE 0603884BP) Project MB4 Page 115 of 151 Pages

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation - Cont. Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Date Date Date Contract Туре VAC PLG OTHT S - Vaccine Development -C/CPAF DynPort Vaccine С 7266 2450 1Q FY05 1895 1Q FY06 NONE 11611 Includes Testing, Evaluation, and Company, Frederick, Non-Clinical/Clinical Trials MD VAC RICIN OTHT S - Vaccine Development -C/CPAF DynPort Vaccine C NONE 2156 2Q FY06 NONE 2156 Includes Testing, Evaluation, and Company, Frederick, Non-Clinical/Clinical Trials MD 7192 0 Subtotal III. Test and Evaluation: 17550 7417 32159 Remarks:

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DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US IV. Management Services Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Туре JBAIDS II PM/MS S - JBAIDS Inc II -C/CPFF Camber Corporation, C 149 30 FY05 NONE NONE 149 Program Management Support Frederick, MD 680 40 FY05 PM/MS S - JBAIDS II - Source U NONE NONE MIPR Various 680 Selection Support VAC BOT PM/MS S - Vaccine Development Allot JPEO, Falls Church, VA 62.1 487 4Q FY05 40 40 FY06 0 NONE 0 1148 - Program Management/Program Manager Support 706 40 FY05 PM/MS S - Vaccine Development Allot CBMS, Fort Detrick, U 563 60 40 FY06 0 NONE 0 1329 MD - Joint Vaccine Acquisition Program Management Office Camber Corporation, PM/MS S - Contractor Systems C/CPFF \mathbf{C} 130 244 10 FY05 NONE 0 NONE 0 374 Engineering/Program Management Frederick, MD Support. PM/MS S - Contractor Systems C/CPFF SAIC, Frederick, MD \mathbf{C} 45 55 10 FY05 NONE 0 NONE 100 Engineering/Program Management Support PM/MS S - Award Fee (Maximum DynPort Vaccine 2591 1Q FY05 112 1Q FY06 C/CPAF C 2446 NONE 5149 10%) Company, Frederick, MD Exhibit R-3 (PE 0603884BP) Project MB4 Page 117 of 151 Pages

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MB4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US IV. Management Services - Cont. Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Date Type Cost Date Date Contract PM/MS S - Program Management C/CPFF American Institute of Ν 34 1Q FY05 136 10 FY06 NONE 170 Biological Science, Reston, VA VAC ENC PM/MS S - Vaccine Development Allot CBMS. Fort Detrick. IJ 353 NONE 189 40 FY06 NONE 542 - Joint Vaccine Acquisition MD Program Management Office PM/MS S - Vaccine Development Allot JPEO, Falls Church, VA 259 NONE 126 40 FY06 NONE 385 - Program Management/Program Manager Support PM/MS S - Contractor Systems C/CPFF Camber Corporation, C 327 NONE 57 1Q FY06 0 NONE 0 384 Engineering/Program Management Frederick, MD Support PM/MS SB - Contractor Systems C/CPFF SAIC, Frederick, MD C 37 NONE 31 10 FY06 0 NONE 0 68 Engineering/Program Management Support PM/MS S - Program Management SS/FFP Goldbelt Raven, LLC. C NONE 562 10 FY06 0 NONE 0 562 Frederick, MD VAC PLG PM/MS S - Vaccine Development 247 4Q FY05 Allot JPEO, Falls Church, VA 630 113 40 FY06 NONE 990 - Program Management/Program Manager Support

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Project MB4

CBDP	PRO.	JECT COST A	N	ALYS]	IS (R-3	Exhil	oit)		D	ATE Fe l	bruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WIL	DE/				ре numbe 0603884]			BIOLO	GICAL	DEFEN:	SE (ACE		ROJEСТ [В4
BA4 - Advanced Compor (ACD&P)	nent Dev	elopment and Prot	otyp	es									
V. 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 - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Fort Detrick, MD	U	499	436	4Q FY05	170	4Q FY06	(NONE	0	110	5
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	Camber Corporation, Frederick, MD	С	83	151	1Q FY05	0	NONE	(NONE	O	23	4
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	SAIC, Frederick, MD	С	29	34	1Q FY05	0	NONE	(NONE	0	6	3
PM/MS S - Award Fee (10%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	С	2300	1599	1Q FY05	327	1Q FY06	(NONE	0	422	6
PM/MS S - Program Management	C/CPFF	American Institute of Biological Science, Reston, VA	N	1282	21	1Q FY05	368	1Q FY06	() NONE	C	167	1
VAC RICIN PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Fort Detrick, MD	U	(0	NONE	151	4Q FY06	() NONE	0	15	1
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	JPEO, Falls Church, VA	U	(0	NONE	101	4Q FY06	() NONE	0	10	1

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit							oit)		Ε	OATE Fel	bruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WID	E/				PE NUMBE 16038841		TLE MICAL /	BIOLO	GICAL	DEFEN:	SE (ACD		:ОЈЕСТ В4
BA4 - Advanced Compon (ACD&P)	ent Dev	elopment and Prot	otyp	es									
IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	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%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	С	0	0	NONE	336	1Q FY06	(NONE	0	336	0
PM/MS S - Program Management	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	С	0	0	NONE	184	1Q FY06	(NONE	0	184	0
ZSBIR SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	РО	HQ, AMC, Alexandria, VA	U	0	0	NONE	219	NONE	() NONE	0	219	0
Subtotal IV. Management Services:				9604	7434		3282		()	0	20320	
Remarks:													
TOTAL PROJECT COST:				80539	24215		22574		()	0	127328	
Project MB4				Page	120 of 151	Pages				Exhibit	R-3 (PE	0603884]	BP)

Exhibi BUDGET ACTIVITY	t R-4a, Sc		PE NUMBER AN	D TITI E		February 2006			
RDT&E DEFENSE-WIDE/					BIOLOGICA	L DEFEN	SE (ACD&P		
BA4 - Advanced Component Developme (ACD&P)	ent and Proto						`	,	
D. <u>Schedule Profile:</u>	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4	
JBAIDS II									
JBAIDS Increment II - Advanced Concept Block II Technology "Fly-Off"		4	Q						
VAC BOT									
Non-Clinical Testing	>>						3Q		
Manufacturing Process Development	>>			1Q					
Investigational New Drug (IND) Application Submission	3Q								
Phase 1 Clinical Trial (A/B)	3Q —					— 2Q			
Milestone B					1Q				
AC ENC									
Investigational New Drug (IND) Application	40)							
Manufacturing Process Development		2Q —	1 Q						
Phase 1 Clinical Trial		4	Q ———		1Q				
VEE Milestone B				3Q					
AC PLG									

BUDGET ACTIVITY		PE NUMBER ANI		February 2006 PHICAL/BIOLOGICAL DEFENSE (ACD&P) M					
RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Developm (ACD&P)	BIOLOGICA	L DEFEN	SE (ACD&P) MB4					
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4	
VAC PLG (Cont)									
Process Development (Pilot Lot Scale)	>> — 3Q								
Non-Clinical Studies	>>						4Q		
Current Good Manufacturing Practices (cGMP) Pilot Lot	1Q —— 4Q								
Manufacturing Process Development	4Q			3Q					
Investigational New Drug (IND) Application Submission		1Q							
Phase 1 Clinical Trial		2Q —		1Q					
PLG Milestone B			2Q						
AC RICIN									
Transition from Tech Base to Advanced Development		4	Q — 2Q						
Non-Clinical Testing			2Q — 4Q						
Process Development			3Q 4Q						

CBDP BUDGET ITEM JUSTIFICA	TION	SHEET	Γ (R-2 a	Exhibi	it)	DATE]			
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/			R AND TITLI S P CHEM		OLOGIC	AL DEFF	ENSE (AC	_	PROJECT IC4
BA4 - Advanced Component Development and Prototypes (ACD&P)									
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
MC4 MEDICAL CHEMICAL DEFENSE (ACD&P)	11402	21765	37663	15217	5028	5010	4880	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project MC4 MEDICAL CHEMICAL DEFENSE (ACD&P): This project funds Technology Development of countermeasures for chemical agents including life support equipment, diagnostic equipment, prophylactic and therapeutic drugs, and individual/casualty decontamination compounds. A system of medical defense against chemical agents is required to provide protection, to sustain performance in a chemical environment, and to provide for self-aid and medical treatment of chemical casualties. Fielding of prophylactic and therapeutic drugs requires Food and Drug Administration (FDA) approval. Multiple long-term studies are required to obtain FDA approval resulting in longer program timelines and greater program cost than other non-pharmaceutical product programs. Efficacy testing of most candidate drugs against chemical warfare (CW) agents cannot be conducted in humans; therefore, animal surrogate models must be developed. The program currently funds the:

(1) Advanced Anticonvulsant System (AAS), which will be used as a treatment for seizures from exposure to nerve agents; (2) Improved Nerve Agent Treatment System (INATS), which will be used as a treatment for nerve agent intoxication to include new indications for Pyridostigmine Bromide (PB) that will be integrated with current therapeutic regimens; (3) Plasma Bioscavenger (pBSCAV) and Bioscavenger Increment II (BSCAV II), which will be used as a prophylaxis against nerve agents; (4) Vesicant antidotes (VES CM), which will be used to prevent and/or treat the devastating effects of vesicant CW agents (e.g., sulfur mustard); and (5) Chemical Surety Facility, which will be used to test and evaluate medical chemical defense products utilizing chemical agents under Good Laboratory Practices (GLP) conditions.

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^{*} Plasma Bioscavenger initiated in FY05. Data located under CA4, TT Bio.

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DATE

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

B. Accomplishments/Planned Program

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

FY 2006 Planned Program:

- 592 AAS Complete non-Good Laboratory Practices (GLP) pre-clinical sand acute toxicology studies.
- 1097 AAS Complete Phase 1 clinical safety study.
- 236 AAS Complete and submit Investigational New Drug (IND) application.
- 80 AAS Continue process development and current Good Manufacturing Practices (cGMP) requirements.

Total 2005

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
BIOSCAVENGER	0	13628	28128
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit) BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototypes (ACD&P) PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

FY 2006 Planned Program:

- 4222 BSCAV II Initiate small-scale manufacturing, process development, assay qualification, and test/evaluate medical defense products against traditional and non-traditional agents. Achieve MS A.
- 1421 BSCAV II Initiate pre-clinical safety studies.
- 689 BSCAV II Initiate IND application.
- 800 pBSCAV Complete IND application.
- 4010 pBSCAV Continue small-scale manufacturing, process development, and assay qualification.
- 500 pBSCAV Initiate and complete pre-clinical safety studies.
- 1715 pBSCAV Initiate Phase 1 clinical safety study.
- 271 Chemical Surety Facility Continue test and evaluation of medical chemical defense products under GLP conditions in a chemical agent research and development facility.

Total 13628

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CBDP BUDGET ITEM JUSTIFICATION	SHEET (R-2a Exhibit)	February 2006
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/	0603884BP CHEMICAL/BIOLOGICA	L DEFENSE (ACD&P) MC4
BA4 - Advanced Component Development and Prototypes		
(ACD&P)		

FY 2007 Planned Program:

- 1759 BSCAV II Complete pre-clinical safety studies.
- 723 BSCAV II Complete and submit IND application.
- 8419 BSCAV II Continue small-scale manufacturing, process development, assay qualification, and test/evaluate medical defense products against traditional and non-traditional agents.
- 3121 BSCAV II Initiate large-scale manufacturing, process development, and assay validation.
- 4378 BSCAV II Initiate Phase 1 clinical safety study.
- 6747 pBSCAV Complete small-scale manufacturing, process development, and assay qualification.
- 2105 pBSCAV Complete Phase 1 clinical safety study.
- 605 pBSCAV Transition product to Department of Health and Human Services (DHHS).
- 271 Chemical Surety Facility Continue test and evaluation of medical chemical defense products under GLP conditions in a chemical agent research and development facility.

Total 28128

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
IMPROVED NERVE AGENT TREATMENT SYSTEM	0	5919	9535
RDT&E Articles (Quantity)	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION	N SHEET (R-2a Exhibit)	February 2006
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/	0603884BP CHEMICAL/BIOLOGICA	L DEFENSE (ACD&P) MC4
BA4 - Advanced Component Development and Prototypes		
(ACD&P)		

FY 2006 Planned Program:

- 460 INATS Complete and submit IND application.
- 1445 INATS Continue GLP pre-clinical safety studies.
- 2500 INATS Continue Phase 1 clinical safety study.
- 1514 INATS Continue process development and cGMP manufacturing requirements.

Total 5919

FY 2007 Planned Program:

- 1750 INATS Complete GLP pre-clinical safety studies.
- 2133 INATS Complete Phase 1 clinical safety study. Achieve Milestone B.
- 4230 INATS Continue process development and cGMP manufacturing requirements.
- 1422 INATS Initiate non-clinical studies (non-GLP Absorption, Distribution, Metabolism, and Excretion (ADME) range-finding animal studies).

Total 9535

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
MEDICAL CHEMICAL DEFENSE	6665	0	0
RDT&E Articles (Quantity)	0	0	0

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PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

FY 2005 Accomplishments:

- 551 AAS Continued non-GLP pre-clinical and acute toxicology studies.
- 717 AAS Continued FDA IND/regulatory strategy to submit IND.
- 146 AAS Initiated process development and cGMP requirements.
- 814 INATS Continued GLP pre-clinical safety studies.
- 3906 INATS Continued process development and cGMP requirements.
- 531 INATS Initiated preparation of IND application.

Total 6665

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
NTA MEDICAL COUNTERMEASURES	4737	0	0
RDT&E Articles (Quantity)	0	0	0

FY 2005 Accomplishments:

- 368 AAS Continued non-GLP pre-clinical and acute toxicology studies of anticonvulsant against non-traditional agents.
- 1049 AAS Continued Phase 1 clinical safety study of anticonvulsant for treatment of non-traditional agent induced seizures.

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BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

FY 2005 Accomplishments (Cont):

- 171 Chemical Surety Facility Initiated test and evaluation of medical chemical defense products under GLP conditions in a chemical agent research and development facility against non-traditional agents.
- 764 INATS Continued non-GLP pre-clinical safety studies of oximes for treatment of non-traditional agent intoxication.
- 2385 INATS Initiated Phase 1 clinical safety study of oximes for treatment of non-traditional agent intoxication.

Total 4737

	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
SBIR/STTR	0	213	0
RDT&E Articles (Quantity)	0	0	0

FY 2006 Planned Program:

• 213 SBIR

Total 213

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BA4 - Advanced Component Development and Prototypes

(ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

C. Other Program Funding Summary:	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	1350	5029	6417	38151	29405	14025	11702	Cont	Cont

D. Acquisition Strategy:

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.

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^{*} Starting in FY06, all Medical Chemical Defense Program products transition to individual product line items under their respective Program Elements.

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BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

BSCAV

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.

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.

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RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

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INATS

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.

* Starting in FY06, all Medical Chemical Defense Program products transition to individual product line items under their respective Program Elements.

VES CM

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.

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RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4	CBDP BUDGET ITEM JUSTIFICATION	N SHEET (R-2a Exhibit)	DATE February 2006
BA4 - Advanced Component Development and Prototypes			PROJECT L DEFENSE (ACD&P) MC4
(ACD&P)	BA4 - Advanced Component Development and Prototypes (ACD&P)		

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^{*} Starting in FY06, all Medical Chemical Defense Program products transition to individual product line items under their respective Program Elements.

CBDP	PRO.	JECT COST A	Ν	ALYS	IS (R-3	8 Exhil	bit)		D	DATE February 2006				
BUDGET ACTIVITY RDT&E DEFENSE-WID	E/				PE NUMBE 0603884]			BIOLO	GICAL	DEFENS	SE (ACI		0јест С4	
BA4 - Advanced Compor (ACD&P)	es													
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 - Process Development and cGMP Requirements	C/CPFF	Meridian Medical Technologies, Columbia, MD	С	(0 0	NONE	80	3Q FY06	0	NONE	(80	0	
BSCAV BSCAV II - Pilot Lot & Small/Large Scale-Up Production	C/CPIF	TBS	С		0 0	NONE	1900	3Q FY06	8000	3Q FY07	(9900	0	
pBSCAV - Small Scale Manufacturing	C/CPFF	DynPort Vaccine Company (DVC), Frederick, MD	С	(0	NONE	2108	2Q FY06	6448	1Q FY07	(8556	0	
INATS INATS - Pilot Lot & Small Scale-Up Production	C/CPFF	Southwest Research Institute, San Antonio, TX	С	(0 0	NONE	454	2Q FY06	2861	2Q FY07	(3315	0	
MEDCHEM AAS - Process Development and cGMP Requirements	C/CPFF	Meridian Medical Technologies, Columbia, MD	С	(0 80	3Q FY05	0	NONE	0	NONE	(80	0	
INATS - Process Development and cGMP Requirements	C/CPFF	Southwest Research Institute, San Antonio, TX	С	(0 2309	4Q FY05	0	NONE	0	NONE	(2309	0	
Subtotal I. Product Development:					0 2389		4542		17309		(24240		
Project MC4				Page	134 of 151	Pages				Exhibit	R-3 (PE	0603884	BP)	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE

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BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4

I. Product Development - Cont.

Remarks: BSCAV - FY05 pBSCAV funding is located under CA4, TT Bio.

Contract	Performing Activity &	US	Total	FY2005	FY2005	FY2006	FY2006	FY2007	FY2007	Cost to	Total	Target
Method &	Location	NF	PYs	Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of
Type		CC	Cost		Date		Date		Date			Contract
MIPR	Chemical Biological	U	0	(NONE	167	2Q FY06	0	NONE	0	167	0
	Information & Analysis											
	Center, Edgewood, MD											
MIPR	USAMMDA, Fort	U	0	(NONE	138	2Q FY06	0	NONE	0	138	C
	Detrick, MD											
C/CPIF	TBS	С	0	(NONE	950	3Q FY06	1854	3Q FY07	0	2804	(
C/CPFF	DynPort Vaccine	С	0	(NONE	1054	2Q FY06	2250	3Q FY07	0	3304	(
	Company (DVC),											
	Frederick, MD											
MIPR	USAMMDA, Fort	U	0	(NONE	400	2Q FY06	1430	2Q FY07	0	1830	(
	Detrick, MD											
	Method & Type MIPR MIPR C/CPIF C/CPFF	Method & Location MIPR Chemical Biological Information & Analysis Center, Edgewood, MD MIPR USAMMDA, Fort Detrick, MD C/CPIF TBS C/CPFF DynPort Vaccine Company (DVC), Frederick, MD MIPR USAMMDA, Fort MIPR USAMMDA, Fort	Method & Location NF Type CC MIPR Chemical Biological U Information & Analysis Center, Edgewood, MD MIPR USAMMDA, Fort Detrick, MD C/CPIF TBS C C/CPFF DynPort Vaccine Company (DVC), Frederick, MD MIPR USAMMDA, Fort U MIPR USAMMDA, Fort U	Method & Location NF PY's CC Cost MIPR Chemical Biological U 0 Information & Analysis Center, Edgewood, MD MIPR USAMMDA, Fort U 0 Detrick, MD C/CPIF TBS C 0 C/CPFF DynPort Vaccine C 0 Company (DVC), Frederick, MD	Method & Location	Method & Location NF PY's Cost Award Date MIPR Chemical Biological Information & Analysis Center, Edgewood, MD MIPR USAMMDA, Fort Detrick, MD C/CPIF TBS C 0 0 NONE C/CPFF DynPort Vaccine Company (DVC), Frederick, MD MIPR USAMMDA, Fort U 0 0 NONE MIPR USAMMDA, Fort U 0 NONE	Method & Location	Method & Location NF PYs Cost Award Date Date MIPR Chemical Biological Information & Analysis Center, Edgewood, MD MIPR USAMMDA, Fort Detrick, MD C/CPIF TBS C C 0 0 NONE 950 3Q FY06 C/CPFF DynPort Vaccine C C 0 NONE 1054 2Q FY06 Company (DVC), Frederick, MD MIPR USAMMDA, Fort U 0 NONE 1054 2Q FY06 MIPR USAMMDA, Fort U 0 NONE 1054 2Q FY06	Method & Location Location NF CC PYs CC Cost Date Award Date Cost Date Date	Method & Location NF CC Cost Sost Award Date Cost Award Date Date Date Date Date Date Date Date	Method & Type Location NF CC PYs Cost Cost Date Award Date Cost Date Award Date	Method & Type Location NF CC PYs Cost Cost Date Award Date Cost Date Award Date Cost Date Award Date Cost Date Award Date Cost Date Cost Date Award Date <

Project MC4

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DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4 RDT&E DEFENSE-WIDE/ **BA4 - Advanced Component Development and Prototypes** (ACD&P) US II. Support Costs - Cont. Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Туре Cost Date Date Date Contract INATS - Regulatory Integration, Chemical Biological MIPR NONE 487 20 FY06 NONE 487 IND, and NDA Support Efforts Information & Analysis Center, Edgewood, MD **MEDCHEM** AAS - IND Application and MIPR Chemical Biological U 268 445 30 FY05 NONE NONE 713 Regulatory Support Information & Analysis Center, Edgewood, MD INATS - IND Application and **MIPR** USAMMDA, Fort U 164 2Q FY05 NONE NONE 164 Detrick, MD Regulatory Support AAS and INATS - IND USAMRICD, Edgewood, U 95 2Q FY05 MIPR 374 NONE NONE 469 Application and Regulatory MD Support NTA MED INATS - IND/Regulatory Support Chemical Biological U 821 30 FY05 NONE NONE 821 **MIPR** for Phase 1 Clinical Safety Study Information & Analysis Center, Edgewood, MD Subtotal II. Support Costs: 642 1525 3196 5534 10897 Remarks: BSCAV - FY05 pBSCAV funding is located under CA4, TT Bio.

UNCLASSIFIED

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DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MC4 RDT&E DEFENSE-WIDE/ **BA4 - Advanced Component Development and Prototypes** (ACD&P) III. Test and Evaluation Performing Activity & US Contract Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target Method & Location NF PYs Cost Award Cost Award Cost Award Complete Cost Value of CC Cost Date Date Date Contract Type AAS AAS - Phase 1 Clinical Safety Chemical Biological U NONE 908 2Q FY06 NONE 908 **MIPR** Information & Analysis Study Center, Edgewood, MD AAS - Non-GLP Pre-Clinical & MIPR USAMRICD, Edgewood, U NONE 407 20 FY06 NONE 407 Acute Toxicology Studies MD BSCAV BSCAV II - Test & Evaluation of C/CPIF TBS C n NONE 2533 30 FY06 4945 30 FY07 7478 Pre-Clinical, Animal Efficacy and Clinical Safety Studies 1601 1Q FY06 pBSCAV - Conduct Pre-Clinical C/CPFF DynPort Vaccine C 0 NONE NONE 1601 Safety Studies Company (DVC), Frederick, MD pBSCAV - Conduct Phase 1 C/CPFF DynPort Vaccine \mathbf{C} 0 **NONE** 1655 30 FY06 2105 10 FY07 3760 Clinical Safety Study Company (DVC), Frederick, MD CSF - Test & Evaluation of Med MIPR USAMRAA, Fort U NONE 271 2Q FY06 271 10 FY07 542 Chem Products Under GLP Detrick, MD Conditions

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CBDP	PRO	JECT COST A	N	ALYS]	IS (R-3	Exhil	oit)		D	ATE Fel	oruary 20	006	
BUDGET ACTIVITY RDT&E DEFENSE-WIL	E/				PE NUMBE 0603884]			BIOLO	GICAL I	DEFENS	SE (ACD		0јест С 4
BA4 - Advanced Compor (ACD&P)	nent Dev	relopment and Proto	otyp	es									
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
INATS INATS - Conduct Pre-Clinical, Non-Clinical and Clinical Studies	MIPR	USAMMDA, USAMRICD, CBIAC, Fort Detrick & Edgewood, MD	U	C	0	NONE	2009	2Q FY06	4308	2Q FY07	0	6317	(
INATS - Conduct Pre-Clinical and Dose Ranging Finding Studies	MIPR	USAMRICD, Edgewood, MD	U	C	0	NONE	1919	3Q FY06	0	NONE	0	1919	(
MEDCHEM AAS - Pre-clinical, Acute Toxicology, & Animal Efficacy Studies	MIPR	USAMRICD, Edgewood, MD	U	308	279	2Q FY05	0	NONE	0	NONE	0	587	(
INATS - Pre-Clinical and Acute Toxicology Studies	MIPR	USAMMDA, Fort Detrick, MD	U	607	542	2Q FY05	0	NONE	0	NONE	0	1149	(
NTA MED Chemical Surety Facility of Med Chem Products Under GLP Conditions	MIPR	USAMRAA, Fort Detrick, MD	U	C	171	3Q FY05	0	NONE	0	NONE	0	171	(
AAS and INATS - Phase I Clinical Safety Study	MIPR	Chemical Biological Information & Analysis Center, Edgewood, MD	U	C	2716	1Q FY05	0	NONE	0	NONE	0	2716	(
AAS and INATS - Pre-Clinical Safety and Toxicology Studies	MIPR	USAMRICD, Edgewood, MD	U	C	1029	2Q FY05	0	NONE	0	NONE	0	1029	(

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Project MC4

CBDF	PRO.	JECT COST A	ALYS	IS (R-	3 Exhi	bit)		D.	ATE Fel	oruary 2	006		
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/					ER AND TI BP CHE	TLE E MICAL /	BIOLO	GICAL 1	DEFENS	SE (ACE		OJECT C 4
BA4 - Advanced Comport (ACD&P)	es												
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
Subtotal III. Test and Evaluation:	71			91	5 473		11303		11629		0	28584	
IV. Management Services	Contract Method &	Performing Activity & Location	US NF	Total PYs	FY2005 Cost	FY2005 Award	FY2006 Cost	FY2006 Award	FY2007 Cost	FY2007 Award	Cost to Complete	Total Cost	
C			1						1				Target Value of Contract
AAS PM/MS S - AAS - Program	Method &		NF	PYs Cost	Cost	Award	Cost	Award	1	Award Date		Cost	Value of Contract
AAS	Method & Type	Goldbelt Raven, LLC,	NF CC	PYs Cost	Cost	Award Date NONE	Cost	Award Date	Cost	Award Date NONE	Complete	Cost	Value of Contract
AAS PM/MS S - AAS - Program Management Support PM/MS S - AAS - Joint Program	Method & Type SS/FFP	Location Goldbelt Raven, LLC, Frederick, MD	NF CC C	PYs Cost	Cost 0 (Award Date NONE	Cost 159	Award Date 1Q FY06	Cost 0	Award Date NONE NONE	Complete 0	Cost 159	Value of Contract
AAS PM/MS S - AAS - Program Management Support PM/MS S - AAS - Joint Program Executive Office PM/MS S - AAS - Chem Bio Medical Systems BSCAV	Method & Type SS/FFP Allot Allot	Goldbelt Raven, LLC, Frederick, MD JPEO, Falls Church, VA CBMS, Frederick, MD	NF CC C	PYs Cost	Cost	Award Date NONE NONE NONE	Cost 159 41 105	Award Date 1Q FY06 4Q FY06 4Q FY06	0 0 0	Award Date NONE NONE NONE	Complete 0	Cost 159 41 105	Value of Contract
AAS PM/MS S - AAS - Program Management Support PM/MS S - AAS - Joint Program Executive Office PM/MS S - AAS - Chem Bio Medical Systems	Method & Type SS/FFP Allot	Goldbelt Raven, LLC, Frederick, MD JPEO, Falls Church, VA	NF CC C	PYs Cost	Cost	Award Date NONE NONE	Cost 159 41 105	Award Date 1Q FY06 4Q FY06	0 0 0	Award Date NONE NONE	Complete 0	Cost 159 41 105	Value of Contract
AAS PM/MS S - AAS - Program Management Support PM/MS S - AAS - Joint Program Executive Office PM/MS S - AAS - Chem Bio Medical Systems BSCAV PM/MS S - BSCAV - Program	Method & Type SS/FFP Allot Allot	Goldbelt Raven, LLC, Frederick, MD JPEO, Falls Church, VA CBMS, Frederick, MD Goldbelt Raven, LLC,	NF CC C	PYs Cost	Cost	Award Date NONE NONE NONE	Cost 159 41 105 820	Award Date 1Q FY06 4Q FY06 4Q FY06	0 0 0 825	Award Date NONE NONE NONE	Complete 0	Cost 159 41 105 1645	Value of Contract

CBDP	PRO.	JECT COST A	NA	ALYSI	S (R-3	Exhil	bit)		D.	ATE Fe l	oruary 2	006	
BUDGET ACTIVITY RDT&E DEFENSE-WIL			,	(PE NUMBE 16038841			BIOLO	GICAL 1	DEFENS	SE (ACI	PR D&P) M (ојест С4
BA4 - Advanced Compor (ACD&P)	ent Dev	elopment and Prot	otyp	oes									
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
INATS PM/MS S - INATS - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	С	0	0		310	1Q FY06	451	1Q FY07	(761	
PM/MS S - INATS - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	120	4Q FY06	194	4Q FY07	(314	
PM/MS S - INATS - Chem Bio Medical Systems	Allot	CBMS, Frederick, MD	U	0	0	NONE	220	4Q FY06	291	4Q FY07	(511	
MEDCHEM PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	С	6	95	1Q FY05	0	NONE	0	NONE	() 101	
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	С	18		1Q FY05		1,01,2	0	- , , ,	(390	
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	317		4Q FY05		1,01,2	0		(, 011	
PM/MS S - Joint Program Executive Office ZSBIR	Allot	JPEO, Falls Church, VA	U	417	1787	4Q FY05	0	NONE	0	NONE	(2204	
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC, Alexandria, VA	U	0	0	NONE	213	NONE	0	NONE	(213	
Subtotal IV. Management Services:				758	2751		2724		3191		(9424	

UNCLASSIFIED

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Project MC4

CBDP PROJECT COST ANA	LYS	IS (R-3	Exhib	oit)	DA	DATE February 2006				
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Development and Prototype (ACD&P)	(PE NUMBER 0603884B			BIOLOGIC	CAL I	DEFENS	SE (ACD&	PROJI &P) MC4	
IV. Management Services - Cont. Remarks:										
TOTAL PROJECT COST:	2315	5 11402		21765		37663		0	73145	
Project MC4	Page	141 of 151 F	Pages				Exhibit l	R-3 (PE 06	503884BP)

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA4 - Advanced Component Developme	t R-4a, Scl		PE NUMBER ANI 0603884BP C		Fel	PROJECT P) MC4		
(ACD&P)								
D. Schedule Profile:	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 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		4	-Q ———					1Q
AAS - Milestone B				1Q				
BSCAV								
BSCAV II - Milestone A			2Q					
BSCAV II - Small Scale Manufacturing			3Q —		4Q			
BSCAV II - Pre-Clinical Safety Studies			4Q	4Q				
BSCAV II - IND Application			4Q	4Q				
BSCAV II - Phase 1 Clinical Safety Study				3Q —		1Q		
BSCAV II - Large Scale Manufacturing, Process Qualification & Validation				4Q				
BSCAV II - Milestone B					4Q			

Exhibi	t R-4a, Scl	nedule P	rofile		February 2006 PROJECT AL DEFENSE (ACD&P) MC4					
UDGET ACTIVITY RDT&E DEFENSE-WIDE /			PE NUMBER AN 0603884BP C							
BA4 - Advanced Component Developm (ACD&P)	ent and Proto	types								
D. Schedule Profile (cont):	FY 2004 1 2 3 4	FY 2005 1 2 3 4	FY 2006 1 2 3 4	FY 2007 1 2 3 4	FY 2008 1 2 3 4	FY 2009 1 2 3 4	FY 2010 1 2 3 4	FY 2011 1 2 3 4		
SCAV (Cont)										
pBSCAV - Milestone A	4Q									
pBSCAV - Small Scale Manufacturing, Process Dev, Assay Validation Efforts		3Q –		1Q						
pBSCAV - IND Application		4	Q 3Q							
pBSCAV - Pre-Clinical Safety Studies			1Q — 3Q							
pBSCAV - Phase 1 Clinical Safety Study			3Q —	3Q						
CSF - Maintain Chemical Surety Facility		2Q —						40		
NATS										
INATS - Milestone A	3Q									
INATS - GLP Pre-Clinical Safety Studies	4Q			3Q						
INATS - Process Development and cGMP Manufacturing Requirements	4Q						2Q			
INATS - Phase 1 Clinical Safety Study		3Q –		4Q						
INATS - IND Application		4	Q ——— 4Q)						
INATS - Non-Clinical Studies (Non-GLP ADME Range-Finding Animal Studies)				2Q ——	3Q					

FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011	Exhibi	le Pı	Profile									DATE February 2006											
FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 1 2 3 4 1 2 3	BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ RAA Advanced Common and Development	ont ond T) 4	4 0 0						L/F	BIO	LOC	GICA	λL	DE l	FEN	SE	(A (CD&	P)			Т
1 2 3 4 1 2 3	BA4 - Advanced Component Developm (ACD&P)																						
4Q 1Q 2Q	D. Schedule Profile (cont):	2005	FY	2006		FY 200	7]	FY 20	08		FY 2009 FY 2010					FY 2011						
1Q ————————————————————————————————————		1 2 3	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 1	2	3	4
1Q 2Q	INATS (Cont)																						
	INATS - Milestone B									4Q													
1Q4Q	INATS - Phase 2 Clinical Safety Study (Comparative Bioavailability Study)										1Q			_	2Q								
	INATS - GLP Animal Efficacy Studies										1Q								∠	ĮQ			
	(Comparative Bioavailability Study)														2Q				2	1Q			

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	CBDP BUDGET ITEM JUSTIFICA	SHEET	Γ (R-2a	Exhibi	it)	DATE	February	2006		
ſ	BUDGET ACTIVITY RDT&E DEFENSE-WIDE/	PE NUMBER 0603884B			OI OCIC	AI DEFI	INSF (A)		ROJECT IR4	
	BA4 - Advanced Component Development and Prototy (ACD&P)	pes	00030041	T CHEW	TC/TE/DI	ozogie		erion (m	3041) IV.	
	COST (In Thousands)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to	Total Cost

6996

15051

15188

11040

A. Mission Description and Budget Item Justification:

MEDICAL RADIOLOGICAL DEFENSE

Project MR4 MEDICAL RADIOLOGICAL DEFENSE: The requirement for medical countermeasures against the effects of nuclear or radiological threats is supported in the Joint Requirements Office (JRO) baseline capability assessment for the Department of Defense (DoD) Nuclear, Biological and Chemical Defense. The Chemical Biological Radiological Nuclear (CBRN) agent therapeutic pharmaceuticals Initial Capabilities Document (ICD) covers a broad spectrum of medical countermeasures to include radiological medical prophylaxis and treatment that mitigates the consequences of nuclear or radiological attacks, thus fulfilling a critical need for force protection in this area. Medical Radiological Countermeasures supports the concept of improved joint force protection, allowing the joint force to operate safely, over the long term, and at near normal level of effectiveness while in a contaminated environment.

B. Accomplishments/Planned Program

MR4

	<u>FY 2005</u>	<u>FY 2006</u>	FY 2007
MEDICAL RADIOLOGICAL COUNTERMEASURES	0	0	6996
RDT&E Articles (Quantity)	0	0	0

Project MR4/Line No: 070 Page 145 of 151 Pages Exhibit R-2a (PE 0603884BP)

Continuing Continuing

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

DATE

February 2006

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4

FY 2007 Planned Program:

- 3697 MRADC Initiate process development and current Good Manufacturing Practices (cGMP) small-scale manufacturing. Achieve Milestone (MS) A.
- 2250 MRADC Initiate pre-clinical safety and toxicology studies.
- 649 MRADC Initiate Investigational New Drug (IND) application.
- 400 MRADC Initiate protocol approval to begin Phase I clinical safety study.

Total 6996

C. Other Program Funding Summary:									
								<u>To</u>	<u>Total</u>
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>Compl</u>	<u>Cost</u>
JN0789 MULTI-SERVICE RADIACS (MSR)	5800	8293	8547	11097	11017	0	0	0	44754

Project MR4/Line No: 070

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

DATE

February 2006

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/

BA4 - Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PROJECT

0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4

D. Acquisition Strategy:

MRADC

Medical Identification and Treatment Systems (MITS) and/or 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, that appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and that 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. Medical Radiation Countermeasures will be developed using a systems level approach to address multiple organ system effects of radiation exposure. Individual countermeasure solutions will be developed using a single step to full capability (FDA licensure).

Project MR4/Line No: 070 Page 147 of 151 Pages Exhibit R-2a (PE 0603884BP)

CBDP	PRO.	JECT COST	AN	ALY	SI	S (R-	3 Exhi	bit)		D	DATE February 2006						
BUDGET ACTIVITY RDT&E DEFENSE-WID	E/				PE NUMBER AND TITLE 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)												
BA4 - Advanced Compon (ACD&P)	ent Dev	elopment and Pro	ototyp	oes													
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			
MRADC MRADC - Pilot Lot & Small Scale Production	C/CPFF	TBS	С		0	(0 NONE	(2760	2Q FY07	0	2760	0			
Subtotal I. Product Development: Remarks:					0		0	()	2760		0	2760				
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			
MRADC MRADC - Regulatory Integration Support Efforts	C/CPFF	TBS	С		0		0 NONE	() NONE	1049	2Q FY07	0	1049	0			
Subtotal II. Support Costs:					0	(0	()	1049		0	1049				
Remarks:			1	'					1		1	1					
Project MR4				Pa	ge	148 of 15	1 Pages				Exhibit	R-3 (PE	06038841	3P)			

DATE **CBDP PROJECT COST ANALYSIS (R-3 Exhibit)** February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) US III. Test and Evaluation Contract Performing Activity & Total FY2005 FY2005 FY2006 FY2006 FY2007 FY2007 Cost to Total Target NF Method & Location PYs Cost Award Cost Award Cost Award Complete Cost Value of Cost CC Туре Date Date Date Contract MRADC MRADC - Pre-clinical, Safety and C/CPFF TBS C NONE NONE 2678 2Q FY07 2678 **Toxicology Studies** Subtotal III. Test and Evaluation: 0 0 2678 2678 Remarks:

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Project MR4

CBDF	PRO.	JECT COST A	NA	ALYS	IS (F	R- 3	B Exhi	bit)		D.	DATE February 2006						
BUDGET ACTIVITY RDT&E DEFENSE-WII	DE/						R AND TI BP CHE	TLE E MICAL /	BIOLO	GICAL 1	DEFENS	SE (ACD		OJECT R4			
BA4 - Advanced Comport (ACD&P)	nent Dev	elopment and Prot	otyp	es													
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY200: Cost	5	FY2005 Award Date	FY2006 Cost	FY2006 Award Date	FY2007 Cost	FY2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract			
MRADC PM/MS S - MRADC - Chem Bio Medical Systems	Allot	CBMS, Fort Detrick,	U	()	0		0	NONE	210	4Q FY07	0	210				
PM/MS S - MRADC - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	()	0	NONE	0	NONE	140	4Q FY07	0	140	0			
PM/MS S - MRADC - Program Management Support	SS/FFP	Goldbelt Raven, LLC, Frederick, MD	С	()	0	NONE	0	NONE	159	1Q FY07	0	159	0			
Subtotal IV. Management Services:				()	0		0		509		0	509				
Remarks:	1							ı									
TOTAL PROJECT COST:				()	0		0		6996		0	6996				
Project MR4				Page	150 of	151	Pages				Exhibit	R-3 (PE	0603884	BP)			

DATE Exhibit R-4a, Schedule Profile February 2006 BUDGET ACTIVITY PE NUMBER AND TITLE PROJECT RDT&E DEFENSE-WIDE/ 0603884BP CHEMICAL/BIOLOGICAL DEFENSE (ACD&P) MR4 **BA4 - Advanced Component Development and Prototypes** (ACD&P) **D. Schedule Profile:** 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 **MRADC** MRADC - Milestone A 1Q MRADC - Process Development and 2Q — **3Q** cGMP Small-Scale Manufacturing MRADC - Pre-Clinical Safety and 2Q -**2**Q **Toxicology Studies** MRADC - IND Application 4Q — 2Q MRADC - Phase 1 Clinical Safety Study 4Q 40 MRADC - Milestone B 4Q MRADC - Phase 2 Clinical Safety Study 1Q Project MR4 Exhibit R-4a (PE 0603884BP) Page 151 of 151 Pages