

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)
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COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	168081	172262	148017	83325	72900	58252	93541	114357	Continuing	Continuing
BJ5 BIOLOGICAL DEFENSE (SDD)	12428	14308	0	0	0	0	0	0	0	26736
CA5 CONTAMINATION AVOIDANCE (SDD)	83162	64296	83070	37713	46369	25097	14427	20177	Continuing	Continuing
CM5 WMD - CIVIL SUPPORT TEAM (SDD)	0	977	984	14202	390	0	0	0	0	16553
CO5 COLLECTIVE PROTECTION (SDD)	8440	4200	2954	2582	4129	4585	2669	2720	Continuing	Continuing
DE5 DECONTAMINATION SYSTEMS (SDD)	2246	4859	11332	3327	5725	5423	9915	4776	Continuing	Continuing
IP5 INDIVIDUAL PROTECTION (SDD)	15347	38075	42335	20995	5451	972	0	8665	Continuing	Continuing
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	45032	43621	5880	3087	3653	14961	58971	71758	Continuing	Continuing
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	1426	1926	1462	1419	7183	7214	7559	6261	Continuing	Continuing

Line No: 083	Page 1 of 167 Pages	Exhibit R-2 (PE 0604384BP)
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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	
<p>A. <u>Mission Description and Budget Item Justification:</u> Operational forces have an immediate need to survive, safely operate, and sustain operations in a chemical and biological agent threat environment across the continuum of global, contingency, special operations/low-intensity conflict, counter-narcotics, and other high risk missions. Operating forces have a critical need for defense against worldwide proliferation of Chemical and Biological (CB) warfare capabilities and for medical treatment of casualties in medical treatment facilities. Congress has directed centralized management of Department of Defense (DoD) CB Defense initiatives, both medical and non-medical. This program element supports the System Development and Demonstration (SDD) of CB defensive equipment, both medical and non-medical. These projects have been restructured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. The consolidation will provide for development and operational testing of equipment for Joint Service as well as Service-unique requirements.</p> <p>Contamination avoidance efforts under this system development program will provide U.S. forces with real-time hazard assessment capabilities. They include advanced multi-agent point and remote chemical detection systems for ground, aircraft, and shipboard applications; automated warning and reporting systems; integrated radiation detection and monitoring equipment; and enhanced battlefield reconnaissance capabilities. Force protection efforts will increase protection levels while decreasing physical and psychological burdens imposed by protective equipment. They include improved aircrew respiratory protection, lightweight integrated suit technology, and shipboard collective protection equipment.</p> <p>Weapons of Mass Destruction Civil Support Team (WMD CST) efforts provide for testing and development of a Unified Command Suite (UCS) and a Analytical Laboratory Platform (ALS) for these teams.</p>		
Line No: 083	Page 2 of 167 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2003
---	------------------------------

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

The medical chemical defense system development program funds improved medical equipment and drugs essential to counteracting lethal and performance-degrading effects of chemical threats and medical equipment essential to meeting medical requirements on the integrated battlefield with emphasis on decreased size/weight and high mobility, yet supporting large numbers of combat casualties. Additionally, foreign medical materiel may be procured for exploitation of advanced technology and development to meet medical defense goals. This program element supports the development of prophylactic and therapeutic drugs and rapid identification and diagnostic systems.

DoD Biological Defense mission requires the detection of validated biological threat agents to provide early warning capabilities on mobile and fixed platforms. This program element will provide theater protection through the development of point and stand-off detection systems. The detection system concept will provide detection, identification, warning, and sample collection for verification that a biological agent attack has occurred. This program element also provides for the development of biological defense medical programs. DoD Biological Defense medical mission will address: (1) protective vaccines - vaccination capability against the most probable biological threat agents; (2) identification - clinical identification of biological threat agents through medical evaluation and laboratory analysis to augment early warning capabilities.

The projects in this Program Element support efforts in the system development phases of the acquisition strategy and are therefore correctly placed in Budget Activity 5.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)
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B. <u>Program Change Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Previous President's Budget (FY 2003 PB)	161383	169018	126678	108418
Current Biennial Budget Estimates (FY 2004/2005)	168081	172262	148017	83325
Total Adjustments	6698	3244	21339	-25093
a. Congressional General Reductions	0	-4256	0	0
b. Congressional Increases	15000	7500	0	0
c. Reprogrammings	-5573	-2225	0	0
d. SBIR/STTR Transfer	-2729	0	0	0
e. Other Adjustments	0	0	21339	-25093

Change Summary Explanation:

Funding: FY02 - Adjustment for CBD (+15,000K CA5).

FY03 - Adjustment for CBD (+\$7,500K CA5).

FY04 - Adjustment for CBD (+\$22,898 CA5).

Schedule:

Technical:

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT BJ5	
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COST (In Thousands)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Complete							
BJ5 BIOLOGICAL DEFENSE (SDD)	12428	14308	0	0	0	0	0	0	0	26736

A. Mission Description and Budget Item Justification:

Project BJ5 BIOLOGICAL DEFENSE (SDD): The Department of Defense's (DoD) Biological Defense mission requires the detection and identification of biological threat agents to provide early-warning capabilities to mobile forces and high-value, fixed-site assets. This detection system concept will provide detection, identification, warning, and sample collection for verification of large area and point source biological agent attacks.

The Joint Biological Point Detection System (JBPDS) program is an evolutionary advancement of the Army Biological Integration Detection System (BIDS), Navy Interim Biological Agent Detection System (IBADS), and Air Force and Marine Corps Service-specific development programs. The JBPDS suite will be integrated onto Service-specific platforms (e.g., Joint Service Lightweight NBC Reconnaissance System (JSLNBCRS), Army Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV), ships, etc.), employed at fixed sites (e.g., air bases, and ports), and may be deployed as a portable system for expeditionary and forward operating forces. The JBPDS is a common detection system employed by all services, thus greatly enhancing Joint Service interoperability. 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 (JBPDS BLKII program) will be used to take advantage of emerging technologies and to provide the Services with enhanced bio detection performance at lower life cycle costs.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
<p>This project includes IBADS continued operational support. IBADS gives the Navy an interim point detection capability aboard ships at sea, which will be part of the theater protection strategy. The JBPDS BLKI will replace the IBADS beginning in FY04.</p> <p>The Critical Reagent Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/DNA biological detection requirements from Advanced Component Development and Prototype (ACD&P) through production. The CRP ensures the availability of high-quality reagents throughout the life-cycle of all Biological Warfare (BW) detection/identification systems. This project supports all aspects of manufacturing "scale-up" of developmental protocols for CRP-developed products, including maintenance of repositories and validation laboratories.</p> <p>The Joint Biological Standoff Detection System (JBSDS) will be employed to provide remote detection of biological hazards and will provide early warning via the Joint Warning and Reporting Network (JWARN). JBSDS will augment and integrate with existing biological detection systems to provide a biological detection network capable of near real time detection and warning theater-wide, to limit the effects of biological agent hazards against U.S. forces at the tactical and operational level. It will be employed in support of various areas of interest (e.g., fixed sites, air/sea ports of debarkation, amphibious landing sites, etc.). JBSDS will be capable of operating remotely or on platforms including vehicles, aircraft, and ships.</p> <p>The JBPDS, IBADS, and JBSDS programs will transition from BJ5 to CA5 starting in FY04. The CRP program will transition from BJ5 to MB5 starting in FY04.</p>		
Project BJ5/Line No: 083	Page 6 of 167 Pages	Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CRITICAL REAGENTS PROGRAM	1113	2008	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 900 CRP - Transitioned three newly developed International Task Force (ITF)-6B targets. Maintained reagent repositories and validation processes.
- 213 CRP - Develop65d valid61tion/conformance test protocols for Electrochemiluminescence (ECL) Assays.

Total 1113

FY 2003 Planned Program:

- 984 CRP - Continue transition of ITF-6B targets. Initiate insertion of ITF-6B reagents into end assay formats. Maintain reagent repositories and validation processes.
- 1024 CRP - Initiate transition of three (out of 30) Nucleic Acid Assays, develop validation, and conformance testing protocols in support of ongoing Homeland Defense/National Capital Region Bio-Detection Efforts.

Total 2008

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
INTERIM BIO AGENT DETECTOR SYS (IBADS)	326	390	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 326 IBADS - Continued engineering and material support of rapid prototype systems.

Total 326

FY 2003 Planned Program:

- 390 IBADS - Continue engineering and material support of rapid prototype systems.

Total 390

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	6825	2395	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 4650 JBPDS BLKI - Conducted Initial Operational Test and Evaluation (IOT&E) for the Army at the Dugway Proving Ground, UT.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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FY 2002 Accomplishments (Cont):

- 2175 JBPDS BLKI - Initiated planning for USAF, USMC, and USN IOT&E.

Total 6825

FY 2003 Planned Program:

- 2395 JBPDS BLKI - Complete Army IOT&E and final report. Initiate USAF, USMC, and USN IOT&E.

Total 2395

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM	4164	9310	0	0
RDT&E Articles (Quantity)	5	0	0	0

FY 2002 Accomplishments:

- 4164 JBSDS - Continued system development and integration of a lightweight, short range, biological standoff detection system. Two contractors built candidates for testing. One contractor built two systems at \$750K each, and the other, three systems at \$500K each.

Total 4164

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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FY 2003 Planned Program:

- 5356 JBSDS - Initiate the transition of the early warning standoff systems developed in the TT-Bio program into the Systems Integration phase of the JBSDS program. This includes software development, modeling and simulation analysis, and preparation of program documentation.
- 1954 JBSDS - Initiate and complete Developmental Testing (DT) of competing candidate systems.
- 2000 JBSDS - Initiate limited Operational Testing (OT) and assessment of JBSDS competing candidate systems.

Total 9310

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	205	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 205 SBIR

Total 205

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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C. <u>Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	4730	0	7459	7651	16742	30711	24300	0	0	91593
JP0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	44623	72245	0	0	0	0	0	0	0	116868
JPO210 CRITICAL REAGENTS PROGRAM (CRP)	3903	2969	0	0	0	0	0	0	0	6872
JPO230 PORTAL SHIELD EQUIPMENT	27345	0	0	0	0	0	0	0	0	27345
M93001 BIO INTEGRATED DETECTOR SYSTEM (BIDS)	54754	0	0	0	0	0	0	0	0	54754
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	4000	27870	44806	65189	72296	79790	38880	38791	Cont	Cont

Project BJ5/Line No: 083 Page 11 of 167 Pages Exhibit R-2a (PE 0604384BP)
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UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5

D. Acquisition Strategy:

CRP The Critical Reagents Program (CRP) is a consolidation of all antibody/antigen based identification requirements within the biological warfare (BW) detection program. Supported systems include the Biological Integrated Detection System (BIDS), Portal Shield, and the Joint Biological Point Detection System (JBPDS) Block I and II. This program also supports the development and manufacture of individual Handheld Immunochromatographic Assays (HHA) and the DoD Biological Sampling Kit. This results in improved identification performance and ensures comparable results across disparate systems. The program is designed along a stepwise strategy. BA4 funding develops new targets and target production protocols and develops multiple antibody candidates. Those candidate antibodies are then transitioned into multiple end item assay formats (e.g. HHAs) and their performance is validated. This transition, validation and production scale-up occurs under BA5 funding. After successful end item scale-up, those end items are transitioned to full-scale production in support of the detection platforms that are supported. Reagents have been developed to meet baseline BIDS, Portal Shield, and JBPDS Block I requirements. Some performance improvements in those reagents will be pursued. However, the bulk of the FY04-09 development activity will focus on antibody and HHA development against JBPDS Block II requirements. This includes roughly tripling the inventory of agents that can be detected using antibody based methods. The antibody components of the critical reagents are Government Furnished Equipment (GFE) to the HHA manufacturer. The HHA production was awarded 1QFY03. The CRP also seeks to improve the performance and producibility of the current reagent inventory through a program-wide testing and science and technology (S&T) transition strategy with the end goal of horizontally integrated reagent improvements. New DNA-based detection methods are being actively supported as of FY02.

IBADS In-house development, fabrication and fielding of 19 rapid prototypes.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5

JBPDS The Joint Biological Point Detection System (JBPDS) uses a spiral development strategy to expedite fielding of a credible force protection strategy as quickly as possible to the Services, while ensuring that a process is in place to insert maturing technologies and lessons learned. 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 the testing to launch upgrades of the system's line replaceable units (LRUs). Upgraded LRUs that demonstrate improved system performance, availability, and total ownership cost, will be supplied to field units throughout the LRIP phase, until new Full Rate Production (FRP) systems or LRUs are developed and made available to meet a broader range of warfighter requirements.

JBSDS The JBSDS will use an evolutionary acquisition strategy with phased developments for the JBSDS program supporting the time-phased JORD requirements. JBSDS will initially provide an operationally useful and supportable capability in as short a time as possible. Initial JBSDSs will incorporate an accelerated development cycle relying on the modification of existing GOTS and COTS technologies. A down-select of existing systems via a competitive test fly-off will result in a selection of a single system to enter Low Rate Initial Production to support the government testing program. The next generation JBSDS follow-on development contract will be competitively awarded with emphasis on increasing sensitivity, range, and reliability, while reducing acquisition life cycle costs, weight, power requirements, and size. The system is to be used by all Services, thus reducing acquisition life cycle costs.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
HW C - Transition of ITF-6B and insertion of ITF-6B reagents into end assay formats.	MIPR	Naval Medical Research Center, Bethesda, MD	U	921	191	2Q FY03	0	NONE	0	NONE	0	1112	0
HW C - Transition of ITF-6B and insertion of ITF-6B reagents into end assay formats.	MIPR	USAMRIID, Ft. Detrick, MD	U	0	191	1Q FY03	0	NONE	0	NONE	0	191	0
HW C - Transition nucleic acid assays, and develop validation and conformance testing protocols.	MIPR	Naval Medical Research Center, Bethesda, MD	U	0	181	1Q FY03	0	NONE	0	NONE	0	181	0
SW SB - Transition nucleic acid assays, and develop validation and conformance testing protocols.	MIPR	ECBC, Aberdeen, MD	U	0	181	1Q FY03	0	NONE	0	NONE	0	181	0
JBSDS													
HW S - Develop Initial JBSDS Prototypes	C/CPFF	Fibertek, Herndon, VA	C	3866	0	NONE	0	NONE	0	NONE	0	3866	0
HW S - Develop Initial JBSDS Prototypes	C/CPFF	SESI, Burtonsville, MD	C	2200	0	NONE	0	NONE	0	NONE	0	2200	0
SW S - Development and Integration	C/CPFF	TBS	C	0	2928	2Q FY03	0	NONE	0	NONE	0	2928	0
Subtotal I. Product Development:				6987	3672		0		0		0	10659	

Remarks:

Project BJ5

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
TD/D SB - Critical Reagent Product	MIPR	Naval Medical Research Center, Bethesda, MD	U	600	27	2Q FY03	0	NONE	0	NONE	0	627	0
TD/D SB - Critical Reagent Product	MIPR	USAMRIID, Ft. Detrick, MD	U	0	27	1Q FY03	0	NONE	0	NONE	0	27	0
TD/D SB - Critical Reagent Product	MIPR	Naval Medical Research Center, Bethesda, MD	U	0	19	1Q FY03	0	NONE	0	NONE	0	19	0
TD/D SB - Critical Reagent Product	PO			0	23	1Q FY03	0	NONE	0	NONE	0	23	0
IBADS													
ILS S - Continued Support of Fielded IBAD Systems	MIPR	NSWC, Dahlgren, VA	U	901	372	1Q FY03	0	NONE	0	NONE	0	1273	0
JBSDS													
ES S - Modeling and Simulation	MIPR	BSM, Inc., Kennett Square, PA	F	0	161	2Q FY03	0	NONE	0	NONE	0	161	0
TD/D S - Modeling and Test Support	MIPR	NSSC/Johns Hopkins University, Baltimore, MD	N	0	850	1Q FY03	0	NONE	0	NONE	0	850	0
Subtotal II. Support Costs:				1501	1479		0		0		0	2980	

Remarks:

Project BJ5

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
OTE C - Transition of ITF-6B and insertion of ITF-6B reagents into end assay formats.	MIPR	Naval Medical Research Center, Bethesda, MD	U	600	254	2Q FY03	0	NONE	0	NONE	0	854	0
OTHT C - Transition of ITF-6B and insertion of ITF-6B reagents into end assay formats.	MIPR	USAMRIID, Ft. Detrick, MD	U	461	254	2Q FY03	0	NONE	0	NONE	0	715	0
OTHT C - Transition nucleic acid assays, and develop validation and conformance testing protocols.	MIPR	Naval Medical Research Center, Bethesda, MD	U	0	287	1Q FY03	0	NONE	0	NONE	0	287	0
OTHT C - Transition nucleic acid assays, and develop validation and conformance testing protocols.	MIPR	ECBC, Aberdeen, MD	U	0	287	1Q FY03	0	NONE	0	NONE	0	287	0
JBPDS													
OTE C - Initiate and Complete Army Initial Operational Test & Evaluation	MIPR	ATEC/AFOTEC, Washington, DC	U	6886	2395	1Q FY03	0	NONE	0	NONE	0	9281	0
JBSDS													
DTE S - Developmental Testing I	MIPR	Dugway Proving Ground, UT	U	0	1454	2Q FY03	0	NONE	0	NONE	0	1454	0
DTE S - Developmental Testing I	MIPR	SBCCOM, APG, MD	U	0	500	2Q FY03	0	NONE	0	NONE	0	500	0
OTE S - Operational Testing I	MIPR	Dugway Proving Ground, UT	U	0	2000	3Q FY03	0	NONE	0	NONE	0	2000	0
Subtotal III. Test and Evaluation:													
				7947	7431		0		0		0	15378	

Project BJ5	Page 16 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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III. Test and Evaluation - Cont.
Remarks:

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	0	8	2Q FY03	0	NONE	0	NONE	0	8	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	C	0	22	2Q FY03	0	NONE	0	NONE	0	22	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	28	1Q FY03	0	NONE	0	NONE	0	28	0
PM/MS S - Program Executive Office	Allot	PEO, Falls Church, VA	U	0	28	1Q FY03	0	NONE	0	NONE	0	28	0
IBADS													
PM/MS S - Program Management/Program Manager Support	Various	JPO-BD, Falls Church, VA	U	53	18	1Q FY03	0	NONE	0	NONE	0	71	0
JBPDSBLK2													
PM/MS S - BAWS Test Planning	PO	PMNBCDS, APG, MD	U	49	0	NONE	0	NONE	0	NONE	0	49	0
JBSDS													
PM/MS S - Program Management/Management Support	PO	PM NBCDS, APG, MD	U	333	1417	1Q FY03	0	NONE	0	NONE	0	1750	0

Project BJ5 Page 17 of 167 Pages Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT BJ5
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA		0	205	1Q FY03	0	NONE	0	NONE	0	205	0
Subtotal IV. Management Services:				435	1726		0		0		0	2161	

Remarks: JBSDS - Integrated Product Team includes: Chemical School, FT Leonard Wood, MO; Brooks Air Force Base, San Antonio, TX; and Navy Surface Warfare Center, Dahlgren, VA.

TOTAL PROJECT COST:	16870	14308	0	0	0	31178
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Project BJ5	Page 18 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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Exhibit R-4a, Schedule Profile

DATE
February 2003

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT
BJ5

D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
CRP																																
ITF-6A List Complete	>>			4Q																												
ITF-6B List Complete		2Q														4Q																
DNA Panels for 10 Threat Agents				4Q												4Q																
DNA Efforts to ITF-6A and ITF-6B				4Q																												
ITF 6C List Complete																1Q																4Q
IBADS																																
Fielding Support	>>															4Q																
JBPDS																																
Operational Assessment 2 (OA2)				1Q																												
LRIP Phase 2 Start				1Q				4Q																								
Block I Army IOT&E								4Q				2Q																				
Multi Service IOT&E								4Q																								2Q
Block I First Unit Equipped (FUE)																																3Q
JBSDS																																
Initial JBSDS Tech Readiness Review								4Q																								
Initial JBSDS Milestone B												2Q																				
Initial JBSDS Competitive Test Fly-off																																3Q

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
BJ5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JBSDS (Cont)																																
Initial JBSDS Developmental Testing					2Q																											
Initial JBSDS Milestone C									2Q																							
Initial JBSDS Initial Operational Test and Evaluation (IOT&E)													2Q	3Q																		
Initial JBSDS Production																	1Q	-----	1Q													
Initial JBSDS First Unit Equipped (FUE)																	1Q															
Next Generation JBSDS Concept Exploration					1Q	-----	4Q																									
Next Generation JBSDS Component Advanced Development									1Q	-----	4Q																					
Next Generation JBSDS Milestone B													1Q																			
Next Generation JBSDS System Development and Demo																	3Q	-----	2Q													
Next Generation JBSDS Developmental Test (DT)/Operational Test (OT)																	4Q	-----	3Q													
Next Generation JBSDS Critical Design Review (CDR)																					2Q											
Next Generation JBSDS Milestone C																									3Q							

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
BJ5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JBSDS (Cont)																																
Next Generation JBSDS Low Rate Initial Production (LRIP)																																
Next Generation JBSDS Initial Operational Test and Evaluation (IOT&E)																																
Next Generation JBSDS Full Rate Production																																
Next Generation JBSDS First Unit Equipped (FUE)																																

3Q ~~2Q~~

3Q 4Q

2Q ~~4Q~~

4Q

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CA5	
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COST (In Thousands)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Complete							
CA5 CONTAMINATION AVOIDANCE (SDD)	83162	64296	83070	37713	46369	25097	14427	20177	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

Efforts funded in this project are: (1) Artemis (Active Standoff Chemical Warfare Detection System), (2) Joint Biological Point Detection System (JBPDS), (3) Joint Biological Standoff Detection System (JBSDS), (4) Joint Chemical Agent Detector (JCAD), (5) Joint Contaminated Surface Detector (JCSD), (6) Joint Effects Model (JEM), (7) Joint Operational Effect Federation (JOEF) (8) Joint Service Lightweight Nuclear, Biological and Chemical Reconnaissance System (JSLNBCRS), (9) Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), (10) Joint Warning and Reporting Network (JWARN), (11) Mobile Chemical Agent Detector (MCAD), (12) Nuclear, Biological and Chemical Reconnaissance Vehicle (NBCRV), and the (13) Multi-Mission Sensor (MMS).

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

Artemis will be a near-real time, modular, autonomous, active standoff Chemical Warfare (CW) agent detection and identification capability, with 360-degree coverage, from a variety of platforms, at ranges on the order of 20 kilometers (km) or more. Full fielding of the operational capability is expected to occur in blocks. Block I will provide an enhanced chemical vapor and aerosol standoff detection and identification system for fixed sites. Block II builds upon Block I and provides additional Services' assets and improved capabilities in the areas of physical dimensions, sensitivity, early warning, reliability, and life cycle cost. Specifically Block II will provide on-the-move chemical agent standoff detection capability for moving platforms such as ground mobile vehicles, ships, rotary wing aircraft, Unmanned Aerial Vehicles (UAV), and Tactical Unmanned Ground Vehicles (TUGV). Block II will also be in a configuration that can be utilized by foot-mobile forces.

The Joint Biological Point Detection System (JBPDS) program is an evolutionary advancement of the Army Biological Integration Detection System (BIDS), Navy Interim Biological Agent Detection System (IBADS), and Air Force and Marine Corps Service-specific development programs. The JBPDS suite will be integrated onto Service-specific platforms (e.g., Joint Service Lightweight NBC Reconnaissance System (JSLNBCRS), Army Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV), ships, etc.), employed at fixed sites (e.g., air bases and ports), and may be deployed as a portable system for expeditionary and forward operating forces. The JBPDS is a common detection system employed by all services, thus greatly enhancing Joint Service interoperability. 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 (JBPDS BLKII program) will be used to take advantage of emerging technologies and to provide the Services with enhanced bio detection performance at lower life cycle costs.

This project includes IBADS continued operational support. IBADS gives the Navy an interim point detection capability aboard ships at sea, which will be part of the theater protection strategy. The JBPDS BLKI will replace the IBADS beginning in FY04.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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The Joint Biological Standoff Detection System (JBSDS) will be employed to provide remote detection of biological hazards and will provide early warning via the Joint Warning and Reporting Network (JWARN). JBSDS will augment and integrate with existing biological detection systems to provide a biological detection network capable of near real time detection and warning theater-wide, to limit the effects of biological agent hazards against U.S. forces at the tactical and operational level. It will be employed in support of various areas of interest (e.g., fixed sites, air/sea ports of debarkation, amphibious landing sites, etc.). JBSDS will be capable of operating remotely or on platforms including vehicles, aircraft, and ships.

The JCAD program is developing a miniaturized, ruggedized, and portable point chemical agent detector that automatically and simultaneously detects, identifies, quantifies, and alerts in the presence of nerve, blister, and blood chemical warfare agents. JCAD will be used for aircraft, shipboard, wheeled vehicles, stand alone, and individual soldier applications. JCAD will replace the ACADA, CAM, ICAM and other legacy systems currently used by the individual Services.

The JCSD will operate from host platforms and will provide non-contact detection of chemical agents on contaminated surfaces. The JCSD will replace the Double Wheel Sample System in the NBCRV and the JSLNBCRS. The JCSD will provide near-term instantaneous detection and identification of chemical agents at vehicle speeds greater than possible with the Double Wheeled Sample System.

The JEM will be a general-purpose, accredited model for predicting hazards associated with the release of contaminants into the environment. JEM will be developed in blocks and will be capable of modeling hazards in a variety of scenarios including: counterforce, passive defense, accident and/or incidents (Block I), high altitude releases, urban NBC environments (Block II), building interiors, and human performance degradation (Block III).

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

JOEF will be a near real-time course of action analysis software tool developed in blocks. Using a detailed NBC hazard prediction, JOEF will be capable of modeling the operational impact that results from an CBRNE release or attack on fixed land assets, aerial ports of debarkation (Block I), seaports of debarkation (Block II), mobile land assets and littoral areas (Block III).

The JSLNBCRS is a new lightweight NBC detection and identification system and will consist of a Base Vehicle (BV) equipped with hand-held, portable and mounted, current, and advanced NBC detection and identification equipment. The JSLNBCRS will provide on-the-move reconnaissance and surveillance in support of combat, combat support, and combat service support forces. There will be two variants of the JSLNBCRS: the High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) variant and the Light Armored Vehicle (LAV) variant.

The JSLSCAD, provides the first real-time, on-the-move, chemical agent vapor detection for contamination avoidance or reconnaissance operations. The JSLSCAD detects, identifies, and reports nerve, blister, and blood agent vapors. These systems have detection capabilities of up to five kilometers. The JSLSCAD will replace the M21 Remote Standoff Chemical Agent Alarm (RSCAAL).

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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The JWARN will provide standard integration and analysis of NBC detection information with Command, Control, Communication, Computers, Intelligence Surveillance and Reconnaissance (C4ISR) on the battlefield automating the NBC warning and reporting processes currently performed manually throughout the Services. The JWARN will collectively consist of Commercial Off the Shelf (COTS) materiel and JWARN software for C4ISR. JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. Block I was the initial acquisition and fielding of COTS and Government Off the Shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. Block II will provide automatic NBC message capability at the Global Command and Control System (GCCS) level. Block II will integrate NBC legacy and future detector systems, NBC Warning and Reporting Software Modules, and NBC battlespace Management Modules in the Joint Services C4I systems. Block III will integrate NBC warning and reporting software to all targeted C4ISR systems and interface with NBC detectors and sensors. P3I will investigate new detectors/sensors and software changes to Service C4I systems.

The MCAD will use passive infrared technology to provide real-time, on-the-move, chemical agent and other hazardous vapor detection for contamination avoidance or reconnaissance operations. The MCAD is a commercial variant of the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD).

The Multi-Mission Sensor (MMS) is a stand-off program that provides early warning and hazard prediction to protect the United States against chemical and biological aerosol events. This effort will upgrade the software capability of the national network of Doppler radars to provide early warning through an integrated reporting network. Congressional guidance requires the project office to accelerate the development, testing, training, and deployment of this system using existing Doppler radar sites of the National Weather Service (NWS) and Federal Aviation Administration (FAA).

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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The NBCRV is a dedicated system of nuclear and chemical detection and warning equipment, and biological sampling equipment integrated into a high speed, high mobility armored carrier capable of performing NBC reconnaissance on primary, secondary, or cross country routes throughout the battlefield. The NBCRV will meet all of the requirements contained in the approved requirements document.

The JBPDS, IBADS, and JBSDS programs will transition from BJ5 to CA5 starting in FY04.

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
INTERIM BIO AGENT DETECTOR SYS (IBADS)	0	0	310	293
RDT&E Articles (Quantity)	0	0	0	0

FY 2004 Planned Program:

- 310 IBADS - Continue engineering and material support of rapid prototype systems.

Total 310

FY 2005 Planned Program:

- 293 IBADS - Continue engineering and material support of rapid prototype systems.

Total 293

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	0	0	5900	2939
RDT&E Articles (Quantity)	0	0	0	0

FY 2004 Planned Program:

- 3900 JBPDS BLKI - Complete and transition Advanced Biological Aerosol Warning System (BAWS) upgrade to Low Rate Initial Production (LRIP) to meet Joint Operational Requirements Documents (JORD) objective requirements for detection. Initiate identifier upgrade. Incorporate software upgrades featuring prognostics for enhanced maintenance and reliability.
- 1000 JBPDS BLKI - Initiate configuration management including Reliability, Availability, and Maintainability, and Integrated Logistics Support (ILS).
- 1000 JBPDS BLKI - Complete and report USAF, USMC, and USN of IOT&E.

Total 5900

FY 2005 Planned Program:

- 800 JBPDS BLKI - Complete identifier component upgrades to meet Joint Operational Requirements Document (JORD) objective requirements for identification.
- 1339 JBPDS BLKI - Initiate Production Qualification Testing (PQT) and integrate into production JBPDS platforms for system simulant and live agent testing.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2005 Planned Program (Cont):

- 800 JBPS BLKI - Continue configuration management including Reliability, Availability, and Maintainability, and Integrated Logistics Support (ILS).

Total 2939

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM	0	0	16307	15637
RDT&E Articles (Quantity)	0	0	6	24

FY 2004 Planned Program:

- 1931 JBSDS - Initiate Initial Operational Test and Evaluation planning.
- 4731 JBSDS - Select one of two competing candidate systems and award a development contract. Initiate Low Rate Initial Production (six systems at \$800K each).
- 3131 JBSDS - Initiate Developmental Testing (Production Verification Test) of the Low Rate Initial Production (LRIP) units.
- 6514 JBSDS - Initiate development of next generation JBSDS system. This includes modeling and simulation analysis, and market research analysis.

Total 16307

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2005 Planned Program:

- 1200 JBSDS - Initiate next generation JBSDS Engineering Developmental Testing.
- 9837 JBSDS - Continue the development of next generation JBSDS. Produce engineering prototypes (early prototypes, six at \$400K each, advanced prototypes, 18 at \$375K each) and support products for demonstration phase. Continue modeling and simulation analysis and preparation of documentation.
- 2000 JBSDS - Complete Initial Operational Test and Evaluation.
- 2600 JBSDS - Conduct transition of the initial model JBSDS to Full Rate Production. This includes preparation of program documentation, analysis of the final test report, and development of logistics support.

Total 15637

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT CHEMICAL AGENT DETECTOR (JCAD)	16726	22576	9181	0
RDT&E Articles (Quantity)	234	0	0	0

FY 2002 Accomplishments:

- 4499 JCAD - Continued Contractor Validation Test (CVT). Continued to plan for government development test (DT). Started planning for Initial Operational Test & Evaluation (IOT&E).
- 6215 JCAD - Continued hardware and software development on 234 contractor prototype units at an average unit cost of \$7272.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>FY 2002 Accomplishments (Cont):</p> <ul style="list-style-type: none"> • 3728 JCAD - Continued systems engineering and logistics planning. • 2284 JCAD - Began to design JCAD system interface with user platforms. <p>Total 16726</p> <p>FY 2003 Planned Program:</p> <ul style="list-style-type: none"> • 4767 JCAD - Complete hardware and software development based upon results from contractor and government DT. • 1355 JCAD - Continue systems engineering and logistics planning. Begin engineering support for Low Rate Initial Production (LRIP). • 3108 JCAD - Continue to design JCAD system interface with user platforms. • 9397 JCAD - Complete CVT and government DT. • 3949 JCAD - Continue to plan for IOT&E. <p>Total 22576</p> <p>FY 2004 Planned Program:</p> <ul style="list-style-type: none"> • 974 JCAD - Complete systems engineering and logistics planning. • 5118 JCAD - Conduct IOT&E using 918 LRIP units, which will be purchased with production funds, at an average unit cost of \$7272. • 1810 JCAD - Complete system interface design based on results of IOT&E. 		
Project CA5/Line No: 083	Page 31 of 167 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2004 Planned Program (Cont):

- 1279 JCAD - Complete software algorithm update based on results of IOT&E.

Total 9181

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT CONTAMINATED SURFACE DETECTOR (JCSD)	2421	3203	0	0
RDT&E Articles (Quantity)	1	1	0	0

FY 2002 Accomplishments:

- 1721 JCSD - Initiated systems engineering, software, and hardware development. Built one prototype system for \$600K. Initiated logistics planning.
- 700 JCSD - Initiated testing of the prototype system.

Total 2421

FY 2003 Planned Program:

- 2384 JCSD - Initiate planning for and implement process for resolving vehicle integration issues and militarization of components. Continue logistics planning.
- 580 JCSD - Initiate field testing.
- 239 JCSD - Initiate development of systems specifications and competitive procurement package.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2003 Planned Program (Cont):
Total 3203

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Joint Effects Model	0	0	13045	976
RDT&E Articles (Quantity)	0	0	0	0

FY 2004 Planned Program:

- 2078 JEM Block I - Complete development of logistics/training plans and materials. Complete Post Deployment Software Support (PDSS) plans. Conduct MS C. Support continued Warfighter Integrated Process Team (IPT) involvement in program. Perform financial management, scheduling, planning, and reporting.
- 5692 JEM Block I - Award contract for formal software development. Finalize service command and control system integration plans. Complete formal software development. Perform contractor level software testing. Perform integration activities with all Service Global Command and Control System (GCCS) variants and other Command and Control (C2) system. Verify system interoperability requirements.
- 5275 JEM Block I - Conduct Developmental and Operational testing. Continue Independent Validation & Verification (IV&V). Update the Test and Evaluation Master Plan (TEMP) and the Verification Validation and Accreditation (VV&A) plan to support Milestone (MS) C. Produce T&E and VV&A reports.

Total 13045

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2005 Planned Program:

- 976 JEM Block I - Conduct Full Rate Production (FRP) review. Transition to software production and installation on host systems. Conduct software maintenance to fulfill Initial Operational Capability (IOC) requirements. Perform financial management, scheduling, planning, and reporting.

Total 976

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Joint Operations Effects Federation	0	0	0	2478
RDT&E Articles (Quantity)	0	0	0	0

FY 2005 Planned Program:

- 2478 JOEF Block I - Continue IV&V. Conduct Developmental and Operational Testing.

Total 2478

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS LTWT NBC RECON SYS (JSLNBCRS)	19595	7700	13766	6758
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2002 Accomplishments:

- 6831 JSLNBCRS - Completed software and hardware engineering development and integration of commercial off the shelf, government off the shelf software/hardware, and non-developmental item software/hardware products for HMMWV variant.
- 8495 JSLNBCRS - Conducted system test and evaluation (HMMWV DT II/Limited User Team) at Dugway and Yuma Proving Grounds.
- 2269 JSLNBCRS - Initiated LAV variant design/fabrication.
- 2000 JSLNBCRS - Conducted MCAD hand-off capability.

Total 19595

FY 2003 Planned Program:

- 1000 JSLNBCRS - Conduct DT I for LAV variant.
- 1711 JSLNBCRS - Continue development of Toxic Industrial Chemicals (TICs) and Toxic Industrial Materials (TIMs) software for Chemical Biological Mass Spectrometer (CBMS) Block II transition to JSLNBCRS procurement.
- 1200 JSLNBCRS - Conduct DT III for LRIP HMMWV variant and conduct MS C LRIP.
- 3789 JSLNBCRS - Start IOT&E for HMMWVs and LAVs for full rate production/Milestone C.

Total 7700

FY 2004 Planned Program:

- 3000 JSLNBCRS - Complete IOT&E for HMMWVs and LAVs variants.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2004 Planned Program (Cont):

- 4500 JSLNBCRS - Prepare MS C Full Rate Production (FRP) documentation for HMMWV and LAV; technical data package, ILS spares and provisioning, and fielding preparation. Conduct MS C FRP review.
- 6266 JSLNBCRS - Continue TICs and TIMs software upgrade for CBMS Block II transition to JSLNBCRS procurement. Initiate improvements to biological detection/identification capability.

Total 13766

FY 2005 Planned Program:

- 6758 JSLNBCRS - Continue TICs and TIMs software upgrades for CBMS Block II transition to JSLNBCRS procurement. Continue improvements to biological detection/identification capability.

Total 6758

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS LIGHTWEIGHT STANDOFF CHEMICAL AGENT DET (JSLSCAD)	8691	13971	3714	0
RDT&E Articles (Quantity)	35	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

FY 2002 Accomplishments:

- 4834 JSLSCAD - Initiated Production Qualification Testing and Initial Operational Test & Evaluation (PQT/IOT&E).
- 500 JSLSCAD - Continued technical data package and acquisition documentation for Milestone III (MSIII). All program documentation was reviewed and updated to support MS III. This included: Acquisition Strategy, Acquisition Baseline, Performance Specifications, and Environment Assessment. In Process Review (IPR) package preparation and coordination is also included.
- 957 JSLSCAD - Initiated the review and preparation of technical manuals, logistics support, and training materials. All logistics documentation to include: Technical Manuals; Integrated System Support Plans; and Logistics Support Plans will be updated based on test results. In addition, Materiel Fielding Plans, fielding schedules, and platform integration guides were prepared and approved.
- 2400 JSLSCAD - Completed the fabrication of 35 PQT/IOT&E test articles at \$100K each.

Total 8691

FY 2003 Planned Program:

- 11005 JSLSCAD - Continue PQT/IOT&E.
- 1000 JSLSCAD - Continue technical data package and acquisition documentation for MS III. All program documentation will be reviewed and updated to support MS III. This includes: Acquisition Strategy, Acquisition Baseline, Performance Specifications, and Environment Assessment. In Process Review (IPR) package preparation and coordination is also included.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2003 Planned Program (Cont):

- 1966 JSLSCAD - Continue the review and preparation of technical manuals, logistics support, and training materials. All logistics documentation to include: Technical Manuals, Integrated System Support Plans, and Logistics Support Plans will be updated based on test results. In addition, Materiel Fielding Plans, fielding schedules, and platform integration guides will be prepared and approved.

Total 13971

FY 2004 Planned Program:

- 2300 JSLSCAD - Complete PQT/IOT&E.
- 1414 JSLSCAD - Complete Technical Data Package and acquisition documentation for MS III. Prepare and coordinate In Process Review (IPR) package. Conduct MS III IPR.

Total 3714

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT WARNING & REPORTING NETWORK (JWARN)	8426	8330	20847	8632
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
<p>FY 2002 Accomplishments:</p> <ul style="list-style-type: none"> • 4030 JWARN - Started Block II integration of NBC legacy and future detector systems. Initiated development of NBC warning and reporting modules and battlespace management modules for use by Joint Services C4I2 systems. • 3379 JWARN - Started Block II Modeling and Simulation for compatibility with the Joint Effect Model (JEM). • 1017 JWARN - Prepared integrated logistics support technical data and Test and Evaluation Master Plan (TEMP) for Block II. <p>Total 8426</p> <p>FY 2003 Planned Program:</p> <ul style="list-style-type: none"> • 7405 JWARN - Continue Block II integration of NBC legacy and future detector systems and conduct DT I/Operational Assessment for full system requirements. • 925 JWARN - Prepare documentation for Block II MS C. <p>Total 8330</p> <p>FY 2004 Planned Program:</p> <ul style="list-style-type: none"> • 18421 JWARN - Start Block III Software Development, award contract option. • 1728 JWARN - Conduct Development Testing (DT) and Operational Assessment (OA) for Block II. • 698 JWARN - Complete documentation for Block II Milestone C and conduct Block III Milestone C. <p>Total 20847</p>		
Project CA5/Line No: 083	Page 39 of 167 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2005 Planned Program:

- 7813 JWARN - Continue integration DT/OA for Block III.
- 819 JWARN - Prepare documentation for MS C for Block III and conduct MS C for Low Rate Initial Production (LRIP) decision.

Total 8632

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
MOBILE CHEMICAL AGENT DETECTOR	0	4076	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 1000 MCAD - Continue agent testing at Dugway Proving Ground (DPG).
- 250 MCAD - Initiate environmental testing at White Sands Missile Range and Aberdeen Test Center.
- 2300 MCAD - Initiate outdoor simulant testing at DPG and NAVSEA.
- 526 MCAD - Initiate contractor support of outdoor simulant testing at DPG and NAVSEA.

Total 4076

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Multi-Mission Sensors (MMS)	15000	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 4581 MMS - Initiated development of a Chemical/Biological (CB) algorithm and developed data inputs for various National Information Technology Networks.
- 2886 MMS - Initiated system engineering and program support.
- 7533 MMS - Initiated planning and execution of a series of statistical radar tests (Developmental Testing).

Total 15000

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
NBC Recon Vehicle	12303	3506	0	0
RDT&E Articles (Quantity)	4	0	0	0

FY 2002 Accomplishments:

- 1875 NBCRV - Conducted Modeling and Simulation (M&S) of human factors.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
---	---	-----------------------

FY 2002 Accomplishments (Cont):

- 5503 NBCRV - Continued sensor suite engineering development and built prototypes (four prototypes, estimated cost \$1.1M each).
- 2624 NBCRV - Continued integration of developmental detectors into vehicles.
- 2301 NBCRV - Conducted warfighter operational capability assessment.

Total 12303

FY 2003 Planned Program:

- 2204 NBCRV - Complete sensor suite engineering development and conduct Interim Progress Review to begin Low Rate Initial Production (LRIP) phase.
- 1302 NBCRV - Initiate and complete Production Qualification Test (PQT) and Early User Test (EUT).

Total 3506

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	934	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 934 SBIR

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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FY 2003 Planned Program (Cont):
Total 934

<u>C. Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
B96801 RADIAC - POCKET AN/UDR - 13	1989	0	0	0	0	0	0	0	0	1989
CA7 CONTAMINATION AVOIDANCE OPERATIONAL SYS DEV	0	0	3442	3428	1949	0	0	0	0	8819
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	4730	0	7459	7651	16742	30711	24300	0	0	91593
JC1500 NBC RECON VEHICLE (NBCRV)	0	16202	23861	18459	24351	7956	0	0	0	90829
JF0100 JOINT CHEM AGENT DETECTOR (JCAD)	0	6926	6297	26981	26364	29506	25309	25700	Cont	Cont
M98801 AUTO CHEMICAL AGENT ALARM (ACADA), M22	3188	5291	0	0	0	0	0	0	0	8479
MA0601 RECON SYSTEM, FOX NBC (NBCRS) MODS	25878	0	0	0	0	0	0	0	0	25878

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)								DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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C. <u>Other Program Funding Summary (Cont):</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	4000	27870	44806	65189	72296	79790	38880	38791	Cont	Cont
N00041 SHIPBOARD DETECTOR MODIFICATIONS	4644	4593	0	0	0	0	0	0	0	9237
S02201 IMPROVED CHEMICAL AGENT MONITOR (ICAM)	16261	376	0	0	0	0	0	0	0	16637
S10801 JS LTWT STANDOFF CW AGT DETECTOR (JSLSCAD)	7099	0	15112	22740	38963	43743	43740	44126	Cont	Cont

Project CA5/Line No: 083	Page 44 of 167 Pages	Exhibit R-2a (PE 0604384BP)
--------------------------	----------------------	-----------------------------

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

D. Acquisition Strategy:

- ARTEMIS** Develop a system specification and issue a draft Request for Proposal (RFP) for Block I prior to Milestone (MS) B to resolve industry comments. Award a cost-type contract after MS B, for engineering development models in support of the System Development and Demonstration (SDD) phase. Conduct developmental testing and early operational assessments of engineering development models to ensure compliance with the Operational Requirements Document (ORD). After MS C, issue a fixed-fee contract for Low Rate Initial Production (LRIP) units to support Initial Operational Test & Evaluation (IOT&E). A Full Rate Production (FRP) option to this contract will be exercised after FRP Decision Review.
- IBADS** In-house development, fabrication and fielding of 19 rapid prototypes.
- JBPDS** The Joint Biological Point Detection System (JBPDS) uses a spiral development strategy to expedite fielding of a credible force protection strategy as quickly as possible to the Services, while ensuring that a process is in place to insert maturing technologies and lessons learned. 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 the testing to launch upgrades of the system's line replaceable units (LRUs). Upgraded LRUs that demonstrate improved system performance, availability, and total ownership cost, will be supplied to field units throughout the LRIP phase, until new Full Rate Production (FRP) systems or LRUs are developed and made available to meet a broader range of warfighter requirements.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

<p>JBSDS</p>	<p>The JBSDS will use an evolutionary acquisition strategy with phased developments for the JBSDS program supporting the time-phased JORD requirements. JBSDS will initially provide an operationally useful and supportable capability in as short a time as possible. Initial JBSDSs will incorporate an accelerated development cycle relying on the modification of existing GOTS and COTS technologies. A down-select of existing systems via a competitive test fly-off will result in a selection of a single system to enter Low Rate Initial Production to support the government testing program. The next generation JBSDS follow-on development contract will be competitively awarded with emphasis on increasing sensitivity, range, and reliability, while reducing acquisition life cycle costs, weight, power requirements, and size. The system is to be used by all Services, thus reducing acquisition life cycle costs.</p>
<p>JCAD</p>	<p>Joint Chemical Agent Detector (JCAD) acquisition strategy focused Joint Service science and technology efforts into development of a small lightweight chemical agent detector. JCAD System Design and Development (SDD) approval was given on 2 Dec 97. JCAD utilized acquisition reform initiatives to the fullest extent possible, to include contract award based on a performance specification, the use of a statement of objectives, and early industry involvement. Pre-SDD activities keyed on evaluation of promising technologies for JCAD applications. SDD contract source selection resulted in a 24 Feb 98 contract award to BAE SYSTEMS. BAE SYSTEMS baselined the detector unit at the Critical Design Review (CDR3) 26-27 Feb 02. The PMO modified the Acquisition Program Baseline (APB) 27 Jun 02. Milestone C, Low Rate Initial Production (LRIP), is projected for Jun 03. The Full Rate Production (FRP) decision is planned for Mar 05. The production contract will be sole-source and will include both LRIP & FRP units IAW the program acquisition strategy.</p>

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
JCSD	<p>The JCSD program will develop and test platform specific prototype laser interrogation of surface agents system. The development of the system is under contract with ITT Industries. Sole source contracts with ITT Industries will finalize the technical approach and increase the ruggedness of the prototype. The detector hardware will be miniaturized and be designed into a sealed unit. The control components of the system will be transition from commercially assembled controller and software packages into a militarized controller with formal software.</p>	
JEM	<p>The JEM program will use a three block evolutionary acquisition approach for the design, development, testing and fielding of JEM (Blocks I, II, and III). Upon completion of an Independent Model Analysis, JEM interface, credibility and performance requirements will be refined in an iterative process through a series of design reviews, using cost-effective graphical storyboarding prior to actual implementation of the algorithms and data harvested from the legacy Nuclear, Biological, and Chemical (NBC) models. A cost plus award/incentive fee contract will be used for model development.</p>	
JOEF	<p>JOEF will be developed in three blocks. Block I provides an M&S analysis capability for assessing "fighter type" air base operability and aerial ports of debarkation (APODs). Output centered on sortie generation and cargo throughput respectively. Interoperable with JWARS Block I and will provide initial tools & data analysis to support CBD ORMS. Block II will further extend capabilities to include seaports of debarkation (SPODs) & other land based fixed site targets (e.g., depots) and will include: cargo throughput and manpower/hardware consideration trade-offs as well as the capability to link output to theater and campaign level models. Block III will add capabilities to include mobile land & littoral forces and will provide links into manpower, logistics and training planning architectures. A cost plus incentive fee contract will be utilized for the Block I effort with options to support Block II and III.</p>	
<p>Project CA5/Line No: 083 Page 47 of 167 Pages Exhibit R-2a (PE 0604384BP)</p>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

JSLNBCRS	This joint program follows a modified Non Developmental Item (NDI) strategy integrating GFE, NDI, and systems undergoing development in parallel programs into an integrated suite of detection, analysis, and dissemination of equipment/software. Technical risk is considered low. Cost risk is considered moderate to low. Schedule risk is considered moderate to low. The System Development and Demonstration (SDD) phase is expected to be completed during 4QFY04, with the Full-Rate Production and Deployment phase expected to begin during 1QFY05. A Low Rate Initial Production Contract Award Decision, 14 M1113 HMMWV variants, is anticipated for 1QFY03. Initial Operational Capability (IOC), HMMWV variant, is expected during FY05 and FY06 for LAV. Full Operational Capability (FOC) is anticipated in FY13.
JSLSCAD	The JSLSCAD is in a five year developmental effort with General Dynamics - Armament Technical Product, DeLand, FL. Development includes ground, air, and sea based platforms. Production is scheduled to start after Milestone III in 3QFY04. Three follow-on production options are planned: the first option is to refurbish the EMD test units; the second option is for initial production; the third option is for full-scale production.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

JWARN JWARN is a three block program plus a P3I. Block I (interim capability), which consisted of Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) NBC warning and reporting software, immediately satisfies many of the required capabilities outlined in the Joint Operational Requirements Document (JORD) and was fielded during FY98. Existing computers are be used to run the Block I software. Block II provides the capability to automatically send NBC messages at the GCCS level NBC software modules into the Services GCCS stakeholder systems. Detector/sensor information is input manually. Block II will initiate fielding during FY04. Block III will provide the full JWARN capability to provide the commanders with automatic reporting of NBC data from sensor/detector to C4ISR systems. For Blocks II and III, JWARN will use a commercial contractor to integrate COTS and/or GOTS-, NDI components.

MCAD The MCAD program will use a sole-source contract with Northrop Grumman to procure MCADs for test and evaluation in order to make a rapid determination of MCAD capability to meet emerging National Defense and military requirements. The MCAD evaluation will be conducted as a two-year, Congressionally requested effort. There will be a follow-on program based on the results of testing conducted at Dugway Proving Ground.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

MMS In accordance with Congressional Conference Committee report dated 19 July 02, the Program Executive Office for CB Defense has established a two-year effort to provide CB aerosol early warning capable Radio Detection and Ranging (RADAR) systems. The MMS program will coordinate, plan and execute a series of statistical radar tests to develop a CB algorithm and develop data inputs to various National Information Technology Networks to provide an early warning and hazard prediction capability. Fielding of the initial radar and Information Technology (IT) capability is scheduled for 30 Mar 04. Program products: (1) transportable CB algorithm for national and civilian RADAR systems installed in five cities, (2) Information technology network for early warning of a CB event, and (3) training and support package. Some of the Government agencies involved in the radar algorithm/software development are the National Weather Service (NWS), Federal Aviation Administration (FAA), Environmental Protection Agency (EPA), National Severe Storm Laboratory (NSSL), and the PM NBCDS. In addition to those agencies there are some contractors participating in the radar tests: Advanced Design Corporation (ADC), Baron Services, Enterprise Electronics Corporation (EEC), and a federal funded laboratory, Lincoln Labs. The information technology aspect of the program involves the Intelligence Community Meta-Data Working Group, a multi-agency group that includes the Defense Intelligence Agency (DIA), Central Intelligence Agency (CIA), National Imagery and Mapping Agency (NIMA), National Security Agency (NSA), Central Measurements and Signals Intelligence Office (CMO), and the Federal Bureau of Investigation (FBI), among others.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5

NBCRV

Development of the Nuclear Biological Chemical Reconnaissance Vehicle consists of two parts. Part I is a sensor suite developmental effort, led by PM NBC Defense. Part II is an integration effort of the sensor suite into the Stryker IAV-NBCRV variant, led by the PM IBCT. The NBCRV will improve the current ability of US forces to detect and report NBC threats. The design and development of the sensor suites is under contract to CACI Technologies, Inc. Contract is a single year (with four options), cost plus fixed fee (CPFF) contract. Integration of the sensor suite and vehicle production will follow an Initial Production In-Process Review (IPR), and is under contract to General Motors (GM) General Dynamics Land System (GDLS) LLC, Inc.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBPDS													
HW S - Detection & Identification Component Upgrades	C/CPFF	TBS	C	0	0	NONE	3400	2Q FY04	650	2Q FY05	0	4050	0
JBSDS													
SW SB - Develop Next Generation Prototype Technologies	C/CPFF	TBS	C	0	0	NONE	6400	2Q FY04	0	NONE	0	6400	0
HW S - Low Rate Initial Production of Initial JBSDS	C/CPFF	TBS	C	0	0	NONE	1350	2Q FY04	0	NONE	0	1350	0
HW S - Develop Next Generation Prototypes	C/CPFF	TBS	C	0	0	NONE	0	NONE	8572	1Q FY05	0	8572	0
JCAD													
HW/SW Development	C/CPAF	BAE SYSTEMS Inc, Austin, TX	C	36989	5915	Nov-02	0	NONE	0	NONE	0	42904	0
LRIP HW/SW Development	SS/FFP	BAE SYSTEMS Inc, Austin, TX	C	0	1160	3Q FY03	1297	3Q FY03	0	NONE	0	2457	0
JCSD													
HW S - System Development and Prototypes	SS/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	1200	1847	2Q FY03	0	NONE	0	NONE	0	3047	0
SW SB - Software Development	SS/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	442	584	2Q FY03	0	NONE	0	NONE	0	1026	0
JEM													
SW SB - Hazard Prediction Model - Formal Software Development	C/CPIF	TBD	C	0	0	NONE	5279	Feb-04	561	Jan-05	0	5840	5850

Project CA5	Page 52 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSLNBCRS													
SW S - Toxic Industrial Chemicals/Toxic Industrial Materials and Biological Detection Software Improvement for CBMS	MIPR	Oak Ridge National Laboratory, Oak Ridge, TN	U	0	1711	1Q FY03	5766	2Q FY04	5858	2Q FY05	0	13335	0
JSLSCAD													
SW S - Develop Software	C/CPFF	General Dynamics ATP, DeLand, FL	C	14975	1351	Nov-02	0	NONE	0	NONE	0	16326	11095
HW S - Design and Build Test Hardware	C/CPFF	General Dynamics ATP, DeLand, FL	C	37500	3594	1Q FY03	0	NONE	0	NONE	0	41094	0
JWARN													
SW S - JWARN Block II System Development and Demonstration Contract	C/FPI	TBS	C	0	3562	2Q FY03	15403	2Q FY04	3100	2Q FY05	0	22065	0
NBCRV													
HW S - NBCRS Sensor Suite Engineering Development; Fabricate Prototypes; Complete Development	C/CPFF	CACI Technologies Inc, Manassas, VA	C	9264	1303	Dec-02	0	NONE	0	NONE	0	10567	16401
Subtotal I. Product Development:				100370	21027		38895		18741		0	179033	

Project CA5
Page 53 of 167 Pages
Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDTE&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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I. Product Development - Cont.

Remarks: JSLSCAD - HW S - FY02 develop test articles, 35 PQT/IOTE articles at \$100,000 each. FY03 complete software. FY02 information changed due to contract schedule extension and Acquisition Program Baseline (APB) update.

NBCRV - HWS - FY00-FY03 sensor suite engineering development. FY02 prototype fabrication (four prototypes, estimated cost \$1.1M each). FY03 - complete development. HW GFPP - FY01 & FY02 provide sensor suite components to include Chemical Biological Mass Spectrometer (CBMS) and Joint Service Lightweight Chemical Agent Detector (JSLSCAD) to contractor - four each.

JBSDS - FY04 LRIP, four at \$500K each. FY05 advanced prototypes, 18 at \$375K each. FY05 Next Generation early prototypes, six at \$400K each.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IBADS													
ILS S - Continued Support of Fielded IBAD Systems	MIPR	NSWC, Dahlgren, VA	U	0	0	NONE	295	1Q FY04	279	1Q FY05	0	574	0
JBPDS													
ILS S - Plan & Develop Configuration Management	PO	PM NBCDS, APG, MD	U	0	0	NONE	1000	1Q FY04	800	1Q FY05	0	1800	0
JBSDS													
ES S - Modeling and Simulation	PO	FT Detrick, MD and BSM Inc., Kennett Square, PA	C	0	0	NONE	200	2Q FY04	50	1Q FY05	0	250	0
TD/D S - Modeling and Test Support	MIPR	NAVSEA/Johns Hopkins University, Baltimore, MD	N	0	0	NONE	600	1Q FY04	200	1Q FY05	0	800	0
ILS S - Develop Logistics Support Plan	MIPR	PM NBCDS, APG, MD	U	0	0	NONE	983	1Q FY04	0	NONE	0	983	0
JCAD													
Technical Data and Logistics Support	MIPR	Various	U	1188	1370	Nov-02	1411	Nov-03	0	NONE	0	3969	0
JCSD													
ILS S - Initiate Logistics Planning	MIPR	PM NBCDS, APG, MD	U	50	50	1Q FY03	0	NONE	0	NONE	0	100	0
JEM													
ES S - IPT - System Engineering, Logistics, & Program Support	MIPR	Various	U	0	0	NONE	2171	Jan-04	0	NONE	0	2171	2171
JSLNBCRS													
ES C - CSS Support	C/FFP	Sverdrup, Dumfries, VA	C	1400	469	1Q FY03	700	1Q FY04	0	NONE	0	2569	0

Project CA5	Page 55 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ILS S - Technical Data Package/Integrated Logistics Support Spares Documentation	MIPR	Various	U	0	0	NONE	2000	1Q FY04	0	NONE	0	2000	0
JSLSCAD													
TD/D SB - JSLSCAD Evaluation of Engineering Changes	MIPR	PM NBCDS, APG, MD	U	1070	80	Nov-02	50	Nov-03	0	NONE	0	1200	870
TD/D SB - JSLSCAD ILS Analysis and Documentation	MIPR	PM NBCDS, APG, MD	U	2515	575	Nov-02	75	Nov-03	0	NONE	0	3165	2315
TD/D SB - JSLSCAD Technical Manuals and Documents	MIPR	PM NBCDS, APG, MD	U	740	580	Nov-02	0	NONE	0	NONE	0	1320	650
Subtotal II. Support Costs:													
				6963	3124		9485		1329		0	20901	

Remarks: JSLSCAD - Technical Documentation and Integrated Logistics Support also provided by Marine Corps, Quantico, VA and Navy, Naval Air Station, Patuxent River, MD

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2003		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CA5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBPDS													
OTHT C - Complete and Report USAF,USMC,USN IOT&E	MIPR	ATEC/AFOTEC, Washington, DC	U	0	0	NONE	1000	1Q FY04	0	NONE	0	1000	0
OTHT S - Production Qualification Test	MIPR	ATEC/AFOTEC, Washington, DC	U	0	0	NONE	0	NONE	1339	1Q FY05	0	1339	0
JBSDS													
OTE S - Operational Testing I	MIPR	Dugway Proving Ground, DPG, UT	U	0	0	NONE	1931	2Q FY04	0	NONE	0	1931	0
DTE S - Engineering Developmental Test Next Generation JBSDS	MIPR	Dugway Proving Ground, DPG, UT	U	0	0	NONE	0	NONE	3200	4Q FY05	0	3200	0
OTE S - Operational Testing I	MIPR	Operational Test Command, FT Hood, TX		0	0	NONE	1800	2Q FY04	0	NONE	0	1800	0
JCAD													
DTE S - JCAD Developmental Test (DT)	MIPR	Various Govt	U	10327	9397	Oct-02	0	NONE	0	NONE	0	19724	0
OTE S - JCAD Initial Operational Test & Evaluation (IOT&E) Supporting LRIP	MIPR	Various Govt	U	0	3949	Oct-02	5189	Oct-03	0	NONE	0	9138	0
JCSD													
DTE C - Engineering Design Test	MIPR	Dugway Proving Ground, DPG, UT	U	0	580	Feb-03	0	NONE	0	NONE	0	580	0
JEM													
DTE S - Hazard Prediction Model - Developmental Test	MIPR	Various	U	0	0	NONE	2510	Feb-04	0	NONE	0	2510	2510

Project CA5

Page 57 of 167 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTE S - Hazard Prediction Model - Operational Test	MIPR	Various	U	0	0	NONE	2375	May-04	0	NONE	0	2375	2375
OTHT S - Hazard Prediction Model - Independent Verification & Validation	C/FFP	TBS	C	0	0	NONE	240	Jan-03	0	NONE	0	240	240
JOEF													
DTE S - JOEF - Developmental Testing	MIPR	Various	U	0	0	NONE	0	NONE	720	May-05	0	720	720
OTE S - JOEF - Operational Testing	MIPR	Various	U	0	0	NONE	0	NONE	1008	Jun-05	250	1258	1258
OTHT S - JOEF - Independent Verification & Validation	C/FFP	TBS	C	0	0	NONE	0	NONE	750	Feb-05	500	1250	1250
JSLNBCRS													
OTHT SB - Conduct Limited User Test of HMMWV	MIPR	Various	U	2400	900	1Q FY03	0	NONE	0	NONE	0	3300	0
DTE S - HMMWV Variant Developmental Test - III	MIPR	Various	U	0	931	1Q FY03	0	NONE	0	NONE	0	931	0
OTE C - LAV and HMMWV Initial Operational Test & Evaluation	MIPR	Various	U	0	3089	3Q FY03	3800	1Q FY04	0	NONE	0	6889	0
OTHT SB - Developmental Testing for CBMS	MIPR	Dugway Proving Ground, Dugway, UT	U	0	0	NONE	200	2Q FY04	600	NONE	0	800	0

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSLSCAD													
OTHT SB - JSLSCAD PQT/IOTE and Integration Test	MIPR	Various	U	8876	5546	Nov-02	2237	Nov-03	0	NONE	0	16659	9767
OTHT SB - Engineering Design Test, and Production Qualification Test and Initial Operational Test & Evaluation Support	MIPR	Various	C	4100	1000	Nov-02	0	NONE	0	NONE	0	5100	3464
JWARN													
OTHT SB - Developmental Test II /Operational Assessment Full requirements.	MIPR	Various	U	0	2125	2Q FY03	2062	2Q FY04	2859	2Q FY05	0	7046	0
MCAD													
DTE C - Agent response testing	MIPR	Various Government test sites	U	0	3450	2Q FY03	0	NONE	0	NONE	0	3450	0
DTE C - Contractor support Developmental Testing	C/CPFF	Northrup Grumman, Linthicum, MD	C	0	526	2Q FY03	0	NONE	0	NONE	0	526	0
NBCRV													
OTE S - Support Production Qualification Test/Early User Test	MIPR	PM NBCDS, APG, MD	U	2160	492	Dec-02	0	NONE	0	NONE	0	2652	3244
Subtotal III. Test and Evaluation:				27863	31985		23344		10476		750	94418	

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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III. Test and Evaluation - Cont.

Remarks: JSLSCAD - Test performers include: Aberdeen Proving Ground, APG, MD; Naval Air Station, Patuxent River, MD; NAVSEA, Dahlgren, VA; Eglin Air Force Base, FL; Yuma Proving Ground, AZ; White Sands Missile Range, NM; and Dugway Proving Ground, UT.

JBSDS - Developmental and Operational Testing of competing candidate systems.

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IBADS													
PM/MS S - Program Management/Program Manager Support	PO	JPO-BD, Falls Church, VA	U	0	0	NONE	15	1Q FY04	14	1Q FY05	0	29	0
JBPDS													
PM/MS S - Project Management	MIPR	PM NBCDS, APG, MD	U	0	0	NONE	500	1Q FY04	150	1Q FY05	0	650	0
JBSDS													
PM/MS S - Program management/Management Support	MIPR	PM NBCDS, APG, MD	U	0	0	NONE	1662	1Q FY04	2915	1Q FY05	0	4577	0
PM/MS S - Other Services (Army, Navy and Air Force)	MIPR	Various	U	0	0	NONE	1381	1Q FY04	700	1Q FY05	0	2081	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCAD													
PM/MS SB - Joint Service Support	MIPR	Various - Government/Contractor Support	U	4706	785	1Q FY03	1284	1Q FY04	0	NONE	0	6775	0
JCSD													
PM/MS S - Project Management	MIPR	PM NBCDS, APG, MD	U	79	142	1Q FY03	0	NONE	0	NONE	0	221	0
JEM													
PM/MS S - Program Office - Planning & Programming	MIPR	SPAWARSYSCOM, San Diego, CA	U	0	0	NONE	470	Jan-04	415	Jan-05	0	885	895
JSLNBCRS													
PM/MS C - Joint Service Integrated Product Team Support	MIPR	Various	U	1475	600	1Q FY03	1000	1Q FY04	0	NONE	0	3075	0
PM/MS SB - Project/Program Management for CBMS	PO	PMNBCDS, APG, MD	U	0	0	NONE	300	1Q FY04	300	1Q FY05	0	600	0
JSLSCAD													
PM/MS S - JSLSCAD - Core Team Salaries and Other Government Agencies Support Through Milestone III IPR.	MIPR	PM NBCDS, APG, MD and Other Service Support	U	3670	1245	Nov-02	1352	Nov-03	0	NONE	0	6267	2580
JWARN													
PM/MS C - Joint Integrated Product Team Support	MIPR	Various	U	2664	2643	1Q FY03	3382	1Q FY04	2673	1Q FY05	0	11362	0
MCAD													
PM/MS S - Planned Project Support	MIPR	PM NBCDS, APG, MD	U	0	100	2Q FY03	0	NONE	0	NONE	0	100	0

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
NBCRV													
PM/MS S - Engineering Management	MIPR	PM NBCDS, APG, MD	U	4340	1711	Dec-02	0	NONE	0	NONE	0	6051	4197
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	934	1Q FY03	0	NONE	0	NONE	0	934	0
Subtotal IV. Management Services:				16934	8160		11346		7167		0	43607	

Remarks: NBCRV - Salaries and Other Government Agencies (OGAs).

JSLSCAD - Other Service Support includes Marine Corps, Quantico, VA, NAVSEA, Dahlgren, VA, Naval Air Station, Patuxent River, MD and Brooks Air Force Base, San Antonio, TX.

JBSDS - Integrated Product Team includes: Chemical School, FT Leonard Wood, MO; Brooks Air Force Base, San Antonio, TX; and Navy Surface Warfare Center, Dahlgren, VA.

TOTAL PROJECT COST:	152130	64296		83070		37713		750	337959
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Exhibit R-4a, Schedule Profile

DATE
February 2003

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT
CA5

D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009					
	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		
IBADS																																		
Fielding Support	>>	—————												4Q																				
JBPDS																																		
Operational Assessment 2 (OA2)	1Q																																	
LRIP Phase 2 Start	1Q	—		4Q																														
Block I Army IOT&E				4Q	—		2Q																											
Multi Service IOT&E				4Q	—————												2Q																	
Block I First Unit Equipped (FUE)								3Q	—		1Q																							
JBSDS																																		
Initial JBSDS Tech Readiness Review				4Q																														
Initial JBSDS Milestone B								2Q																										
Initial JBSDS Competitive Test Fly-off								3Q																										
Initial JBSDS Developmental Testing								2Q																										
Initial JBSDS Milestone C												2Q																						
Initial JBSDS Initial Operational Test and Evaluation (IOT&E)																2Q 3Q																		
Initial JBSDS Production																1Q	—		1Q															
Initial JBSDS First Unit Equipped (FUE)																1Q																		

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
CA5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JBSDS (Cont)																																
Next Generation JBSDS Concept Exploration					1Q	—		4Q																								
Next Generation JBSDS Component Advanced Development									1Q	—		4Q																				
Next Generation JBSDS Milestone B													1Q																			
Next Generation JBSDS System Development and Demo													3Q	—			—				2Q											
Next Generation JBSDS Developmental Test (DT)/Operational Test (OT)													4Q	—			3Q															
Next Generation JBSDS Critical Design Review (CDR)																	2Q															
Next Generation JBSDS Milestone C																					3Q											
Next Generation JBSDS Low Rate Initial Production (LRIP)																					3Q	—			2Q							
Next Generation JBSDS Initial Operational Test and Evaluation (IOT&E)																									3Q	4Q						
Next Generation JBSDS Full Rate Production																													2Q	—		4Q

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
CA5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JBSDS (Cont)																																
Next Generation JBSDS First Unit Equipped (FUE)																																4Q
JCAD																																
Systems Development & Demonstration (SDD) Contract	>>							3Q																								
Contractor Validation Test			3Q					2Q																								
Government Development Test				4Q								1Q																				
Milestone C (LRIP) Decision								3Q																								
Initial Operational Test & Evaluation								3Q				4Q																				
Full Rate Production Decision													1Q																			
JCSD																																
Fabricate Eng Prototypes (Generation I)	>>			4Q																												
R&D Contract Award (Generation II)				4Q																												
Lab/Field Testing (Generation I)					1Q																											
Fabricate Eng Prototypes Generation II					1Q			3Q																								
Lab/Field Testing (Generation II)								3Q 4Q																								
Fabricate Generation III Eng Prototypes								3Q 4Q																								
Production Qualification Test													1Q			4Q																

Exhibit R-4a, Schedule Profile	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CA5
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D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JSLNBCRS (Cont)																																
Milestone C Low Rate Initial Production (LRIP)						2Q																										
Engineering Developmental Test (EDT) (LAV)							3Q																									
Developmental Test I (DT I) LAV variant							3Q 4Q																									
Initial Operational Test and Evaluation (IOT&E) for High Mobility Multipurpose Wheeled Vehicle (HMMWV) and the LAV							3Q	1Q																								
Milestone C Full Rate Production (FRP)											3Q																					
Chemical test CBMS II			3Q	1Q																												
Developmental Testing CBMS II											3Q	3Q																				
JSLSCAD																																
Production Qualification Test (PQT)/Initial Operational Test and Evaluation (IOT&E)			3Q					1Q																								
Complete Test and Operational Documentation											2Q																					
Joint Service Milestone III In Process Review (IPR)											3Q																					

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) **PROJECT**
CA5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JWARN																																
Block II System Demonstration and Development (SDD) Contract Award							2Q																									
Block II Developmental Test/Operational Assessment								4Q				2Q																				
Block II Milestone C												3Q																				
Block III Software Development Contract Award								3Q																								
Block III DT/OA																3Q 4Q																
Block III Milestone C																4Q																
Block III LRIP Contract Award																				1Q 2Q												
Block III Production Contract Option																				2Q 3Q												
MCAD																																
Initiate agent and interference testing							1Q 2Q																									
Initiate urban interference trials							2Q																									
Environmental Trials							2Q 3Q																									
Field Trials							2Q	4Q																								
MMS																																
Program Prep & Data Analysis (SDT)							4Q	2Q																								
CONOPS Development							1Q	4Q																								

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
CA5

D. Schedule Profile (cont):

	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
MMS (Cont)																																
Test Location Surveys				4Q																												
Statistical Radar Test Planning					1Q																											
Statistical Radar Test Execution								3Q																								
Data Analysis								3Q																								
Down Select Support						2Q	3Q																									
Algorithm/Software Development						3Q		2Q																								
Training & Logistics Development						2Q		3Q																								
Information Technology						2Q		2Q																								
Deliverable Systems (Software Pkg)									2Q	3Q																						
NBCRV																																
Fabricate Engineering Prototypes				>>				2Q																								
Production Qualification Test							3Q		1Q																							
NBCRV Initial Production In Process Review (IPR) - Milestone C									1Q																							
NBCRV Production Verification Test													1Q			4Q																

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5
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	COST (In Thousands)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
		Actual	Estimate	Complete							
CM5	WMD - CIVIL SUPPORT TEAM (SDD)	0	977	984	14202	390	0	0	0	0	16553

A. Mission Description and Budget Item Justification:

Project CM5 WMD - CIVIL SUPPORT TEAM (SDD): Program funds the development of the Unified Command Suite (UCS) and Analytical Laboratory System (ALS) Block upgrades. This funding profile provides the resources for the modernization to address the WMD CSTs objective operational capabilities and the United States Army Reserve (USAR) Recon/Decon Teams. It provides full funding for: (1) type-classified protection, detection, modeling/simulation and training equipment; (2) development and fielding of upgraded analytical platforms for the detection, identification, and characterization of chemical, biological, and radiological agents used by terrorists in a civilian environment; (3) development and fielding of communication capabilities that are interoperable with other-federal, state, and local agencies; (4) testing and evaluation to ensure that the systems fielded are safe and effective; and (5) program management funds to successfully execute the Consequence Management RDA program. WMD CSTs and USAR Recon/Decon Teams would receive the systems developed and procured under this program in accordance with the Joint Service Agreement for Chemical and Biological Defense Program Management.

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
WMD - CIVIL SUPPORT TEAMS	0	963	984	14202
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5
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- FY 2003 Planned Program:**
- 500 WMD CST- Initiate development of Unified Command Suite (UCS) and Analytical Laboratory System (ALS) upgrades.
 - 463 WMD CST - Initiate support and planning for UCS and ALS upgrade program.
- Total 963**
- FY 2004 Planned Program:**
- 984 WMD CST- Continue development of UCS and ALS upgrades.
- Total 984**
- FY 2005 Planned Program:**
- 1600 WMD CST- Initiate Developmental Test 2 (DT2) for UCS and ALS.
 - 7502 WMD CST- Initiate Initial Operational Test and Evaluation (IOT&E).
 - 5100 WMD CST- Continue development of UCS and ALS upgrades.
- Total 14202**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	14	0	0
RDT&E Articles (Quantity)	0	0	0	0

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5
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FY 2003 Planned Program:

- 14 SBIR

Total 14

C. <u>Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
CM6 WMD - CIVIL SUPPORT TEAM (RDT&E MGT SUPPORT)	0	1555	1574	1568	1559	1555	0	0	0	7811
JA0004 WMD - CIVIL SUPPORT TEAM EQUIPMENT	25000	18647	7858	2983	43270	1560	0	0	0	99318

Project CM5/Line No: 083

Page 72 of 167 Pages

Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5

D. Acquisition Strategy:

WMD CST

This program utilizes multiple acquisition vehicles: 1) This program funds for the acquisition of Chemical and Biological Defense equipment as outlined in the Defense Reform Directive #25 (DRID #25); 2) Uses existing contract vehicles to design and develop new Mobility Platform for the Analytical Laboratory System-System Enhancement Program (ALS-SEP) that displaces interim Dismounted Analytical Platform (DAP) and legacy Mobile Analytical Laboratory Systems (MALS); 3) Conduct Operational Test and Evaluation (OT&E) of entire WMD-CST and its equipment in FY03.; 4) Initiate system improvement upgrades in FY03 of Unified Command Suite (UCS) and ALS systems to incorporate technology insertion via to be selected contracts, conduct Developmental Test (DT) and Initial Operational Test and Evaluation (IOTE) of prototype systems and produce system improvement/enhancement upgrades; 5) Continue evaluation of existing and new commercial off-the-shelf (COTS) equipment to incorporate into Table of Distribution and Allowances (TDA) to meet increasing requests; 6) Continue US Army Reserve (USAR) type-classified chemical biological (CB) equipment refurbishment.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
HW S - Development Upgrades Unified Command Suite and Analytical Lab Sys	C/CPFF	TBS	U	0	900	2Q FY03	900	2Q FY04	900	2Q FY05	0	2700	0
HW S - Development Upgrades Unified Command Suite	C/CPFF	TBS	C	0	0	NONE	0	NONE	2000	2Q FY05	0	2000	0
HW S - Development Upgrades Analytical Lab Sys	C/CPFF	TBS	C	0	0	NONE	0	NONE	2000	2Q FY05	0	2000	0
Subtotal I. Product Development:				0	900		900		4900		0	6700	

Remarks:

II. Support Costs: Not applicable

Project CM5

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CM5
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
PM/MS S - Management Services	MIPR	PM NBCDS, APG, MD	U	0	63	1Q FY03	84	1Q FY04	302	1Q FY05	0	449	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	14	1Q FY03	0	NONE	0	NONE	0	14	0
Subtotal IV. Management Services:				0	77		84		302		0	463	

Remarks:

TOTAL PROJECT COST:	0	977		984		14202		0	16163
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Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
CM5

D. Schedule Profile:

	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
WMD CST																																
ALS SEP Prototype Fabrication			3Q	4Q																												
ALS & UCS Upgrade Market Survey					1Q	2Q																										
ALS & UCS Upgrade MS B					2Q																											
ALS & UCS Upgrade Design					2Q	3Q		1Q																								
ALS & UCS Upgrade Initial Prototype								1Q	2Q																							
ALS & UCS Upgrade DT I								2Q	3Q																							
ALS & UCS Upgrade EUT&E								3Q	4Q																							
ALS & UCS Upgrade IOT&E Fabrication								4Q	1Q	2Q																						
ALS & UCS Upgrade DT II									2Q	3Q																						
WMD System Level IOT&E										3Q	4Q																					
ALS& UCS Upgrade MS C Full Rate Production (FRP)											4Q																					

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)				PROJECT CO5	
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COST (In Thousands)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Complete							
CO5 COLLECTIVE PROTECTION (SDD)	8440	4200	2954	2582	4129	4585	2669	2720	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project CO5 COLLECTIVE PROTECTION (SDD): Funding supports System Demonstration and Low Rate Initial Production (SD/LRIP) of Joint Service Nuclear, Biological & Chemical (NBC) collective protection systems that are smaller, lighter, less costly to build and maintain, and more logistically supportable to enable mission accomplishment in NBC environments. Collective protection platforms include shelters, vehicles, ships, aircraft, buildings, and hospitals. As Techbase Non-Medical Collective Protection efforts become mature, they will be transitioned into the following SD&ED efforts.

Systems funded under this project are: (1) Chemical Biological Protective System (CBPS) P3I; (2) Joint Collective Protection Equipment (JCPE); (3) Joint Transportable Collective Protection System (JTCOPS); and (4) Shipboard Collective Protection Equipment (SCPE).

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5

The CBPS-P3I will improve the operational suitability and reliability of the CBPS for light divisions, currently in production. This phase of the P3I will develop a self-sustained Environmental Support System (ESS) that does not require the HMMWV engine for power. This results in the reduction of fuel consumption, vehicle maintenance, and sustainment costs. To improve operational capability, the resulting weight reductions will be implemented to allow more medical equipment to be transported inside the CBPS. Improvements will be made to the CB tent using lightweight, low cost CB materials being developed in R&D. All these improvements will be available for incorporation into the CBPS production line in FY05 following a Production Verification Test. It will also provide a capability to address the critical need for collective protection within Level 1 and 2 Heavy and Airborne units. Currently, no capability exists to provide medical treatment in a CB contaminated environment for these types of units. The self-sustained ESS and CB tent of CBPS-light will be used to maximize commonality of components. These components will be integrated onto platforms suitable for Airborne and Heavy divisions. The CBPS P3I will have three phases: Phase 1: Develop design concepts and fabricate prototype ESS; Phase 2: Fabricate two ESS prototypes for integration onto each of three CBPS platforms; and Phase 3: Integrate ESS modules onto platforms for use in Light, Heavy and Airborne prototype systems.

The JCPE program will provide needed improvements and cost saving standardization to currently fielded systems. Standardization of individual system components (specifically filter systems) across Joint Service mission areas will reduce logistics burden while maintaining the industrial base. JCPE will focus on fixing specific problems and deficiencies with currently fielded CPS equipment designated high priority by each Service. JCPE provides improvements to current fixed site, building, shipboard, and vehicle collective protection systems. JCPE's efforts on portable shelters are limited to providing improvements in the form of CBR-D capability sets to existing shelters. JCPE will specifically insert off-the-shelf technologies into these older systems to: (1) solve reliability, maintainability, and operational problems, (2) significantly reduce manufacturing and/or operating costs, (3) solve previously unmet requirements, and (4) provide improved interim capabilities.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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The Joint Transportable Collective Protection System (JTCOPS) will be a modular shelter system that will provide the ability to process contaminated personnel through a Contamination Control Area into a Toxic Free Area, and will be expandable to meet changing mission needs. It will allow collectively protected vehicles/vans to be connected for safe personnel ingress/egress. The system will include air filtration, environmental control, and power generation elements, and will be capable of using other available generator/power systems.

The SCPE program provides an NBC free environment within specified zone boundaries of high priority ships by over pressurization with filtered air. Two of the major goals of this program are to develop a high efficiency, quiet Collective Protection System (CPS) fan rotor, and extend the service life of shipboard High Efficiency Particulate Air (HEPA) filters. Current efforts are focused on extending the service life of HEPA filters from three years to four years. The program will continue testing of collective protection system components that decrease Total Ownership Costs (TOC), reduce shipboard maintenance requirements, and provide energy-efficient equipment.

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CB PROTECTIVE SHELTER/P3I	780	1376	0	0
RDT&E Articles (Quantity)	0	2	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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FY 2002 Accomplishments:

- 480 CBPS P3I - Initiated design concept for CBPS airborne and heavy versions interfaced with non-HMMWV platforms suitable for airborne and other applications. Coordinated with user and field representatives on requirements and logistics supportability. Developed Statement of Work (SOW) for design and fabrication of Environmental Support System (ESS).
- 300 CBPS P3I - Awarded contract for design and fabrication of a self-powered ESS that will meet the requirements for CBPS-light, heavy, and airborne versions. Continued development of virtual prototype and limited Technical Data Package.

Total 780

FY 2003 Planned Program:

- 829 CBPS P3I - Fabricate two ESS prototypes at unit cost of \$250K, finalize design and complete Technical Data Package.
- 200 CBPS P3I - Conduct performance testing on one ESS prototype.
- 347 CBPS P3I - Finalize design concept for ESS and document in technical data package. Integrate ESS onto non vehicle based platform. Manage CBPS P3I.

Total 1376

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT COLLECTIVE PROTECTION EQUIPMENT	6543	2104	2954	2582
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5

FY 2002 Accomplishments:

- 1875 JCPE - Initiated development and testing of one improved recirculation filter unit to reduce logistics costs. Initiated development and testing of noise reduction and abatement for Chemical Biological (CB) shelter systems utilizing sound barriers. Initiated testing of 30 in service 100/200 Cubic Feet per Minute (CFM) gas filters to determine service life. Initiated testing of ten improved 100/200 CFM gas filters with live agents to complete qualification of filter design. Initiated development and testing of 2000 CFM particulate filters to reduce logistics costs. Completed development and testing of a pleatable charcoal/High Efficiency Particulate Absorbing (HEPA) bonded filter to replace two CB filters used in collective protection systems to reduce installation time, logistics, and cost.
- 1519 JCPE - Completed study investigating the viability of permanent bar magnet and variable speed drives to improve the efficiency of shipboard Collective Protective System (CPS) supply fan motors to allow the CPS system to operate at peak performance over the entire range of filter loading. Continued development and testing of Fan Filter Assembly (FFA) 400-100 and M93 Modular Collective Protection Equipment (MCPE) candidate motorblowers for CB shelter systems to improve efficiency, reliability, size, and weight. Initiated development and testing of automatic power transfer switch for Collective Protection Expeditionary Medical Support (CPEMEDS). Completed development and testing of a modified Environmental Control Unit (ECU) for CPEMEDS to allow rapid deployment of a reduced weight and size unit. Initiated design and test of CP modification kit for fielded heater systems. Initiated design and testing to reduce the CB filter blower heat load. Initiated study to investigate ECU and power applications to CP shelters.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5

FY 2002 Accomplishments (Cont):

- 2209 JCPE - Initiated development of a modified M28 liner for large capacity shelters. Initiated design and testing of the thermal efficiency of CB protected shelter systems. Initiated testing of CB liners for long term storage in temperature extremes and alternate seam configurations. Initiated development and testing a CB liner seam tester. Initiated development and testing of a improved repair process for CB liners. Initiated design and testing of an improved liner material, construction, and enclosures.
- 940 JCPE - Initiated development of a suite of improved airlocks to reduce purge times and simultaneous entry/exits for all existing CB shelter systems. Initiated study to determine the contamination control area requirements that meet NATO standards. Initiated development of logistical support plan for prior JCPE items. Initiated the system engineering of capability sets with improved components. Continued development and testing of a CP latrine for CPEMEDS.

Total 6543

FY 2003 Planned Program:

- 937 JCPE - Complete development of 2000 CFM particulate filters to reduce logistics costs. Complete live agent testing of improved 100/200 CFM gas filters. Complete development and testing of one improved recirculation filter unit to reduce logistics costs. Complete development and testing of noise reduction and abatement for CB shelter systems utilizing sound barriers. Complete testing of 30 in service 100/200 CFM gas filters to determine service life. Complete design and testing of the thermal efficiency of CB protected shelter systems.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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FY 2003 Planned Program (Cont):

- 550 JCPE - Perform development and testing to increase efficiency of CPS supply fan motors to operate at peak performance over the entire range of filter loading. Complete development and testing of Fan Filter Assembly (FFA) 400-100 and M93 Modular Collective Protection Equipment (MCPE) candidate motorblowers for CB shelter systems to improve efficiency, reliability, size, and weight. Continue development of a suite of improved airlocks to reduce purge times and provide simultaneous entry/exits for all existing CB shelter systems. Complete study to determine the contamination control area requirements that meet NATO standards. Complete development of logistical support plan for prior JCPE items. Continue the system engineering of capability sets with improved components.

- 617 JCPE - Complete development of a modified M28 liner for large capacity shelters. Continue design and testing of an improved liner material, construction, and enclosures. Complete development and testing of automatic power transfer switch for CPEMEDS. Complete design and test of CP modification kit for fielded heater systems. Complete design and testing to reduce the CB filter blower heat load. Complete study to investigate ECU and power applications to CP shelters. Continue testing of CB liners for long term storage in temperature extremes and alternate seam configurations. Complete development and testing a CB liner seam tester. Complete development and testing of a improved repair process for CB liners. Complete development and testing of a CP latrine for CPEMEDS.

Total 2104

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5

FY 2004 Planned Program:

- 722 JCPE - Complete development and testing to increase efficiency of CPS supply fan motors to operate at peak performance over the entire range of filter loading. Initiate development of shipboard CP improvements to reduce total operating costs.
- 1725 JCPE - Complete testing of developmental prototypes of a suite of improved airlocks to reduce purge times and simultaneous entry/exits for all existing CB shelter systems. Complete design and testing of an improved liner material, construction, and enclosures.
- 507 JCPE - Complete testing of CB liners for long term storage in temperature extremes. Initiate development and testing of 10 modified 100/200 CFM gas filters to provide Toxic Industrial Chemicals (TICs) protection. Complete the system engineering of capability sets with improved components.

Total 2954

FY 2005 Planned Program:

- 1248 JCPE - Complete development and testing of 10 modified 100/200 CFM gas filters to provide TICs protection. Initiate development and testing of a temporary filter for ship intakes. Initiate development and testing of reducing degradation of particulate media by TICs. Initiate development and testing of a residual life indicator.
- 417 JCPE - Initiate development and testing of improvements to the lightweight ECU.
- 917 JCPE - Continue development of shipboard CP improvements to reduce total operating costs.

Total 2582

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT TRANSPORTABLE COLLECTIVE PROTECTION SHELTER	420	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 420 JTCOPS - Continued preparation of program documentation including the Single Acquisition Management Plan, the System Requirements Document, and the Life Cycle Cost Assessment. Continued engineering support, and conducted program management activities.

Total 420

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SHIPBOARD COLL PROTECTION EQUIP	697	660	0	0
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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FY 2002 Accomplishments:

- 697 SCPE - Continued shipboard testing of improved CPS fan rotor to verify actual noise reduction in a fan room and adjacent manned spaces on board ship. Revised CPS fan rotor performance specification. Improved CPS fan rotors to increase efficiency and reduce noise levels by 12 to 17 decibels. Completed third year of verification testing to validate the four-year performance of improved prefilters and HEPA filters. Began testing and evaluation of HEPA filter performance degradation after TICs/Toxic Industrial Materials (TIMs) exposure. Continued development and testing of two electronic differential pressure gauges for remote reading to improve shipboard CPS maintenance.

Total 697

FY 2003 Planned Program:

- 660 SCPE - Complete shipboard testing of improved CPS fan rotors. Test data will be used to revise CPS fan rotor performance specification. Complete final year of verification testing to validate the four-year performance of improved prefilters and HEPA filters. Complete testing and evaluation of HEPA filter performance degradation after TICs/TIMs exposure. Complete development and testing of two electronic differential pressure gauges for remote reading to improve shipboard CPS maintenance.

Total 660

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	60	0	0
RDT&E Articles (Quantity)	0	0	0	0

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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FY 2003 Planned Program:

- 60 SBIR

Total 60

C. <u>Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
JCP001 COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM	2980	1077	0	0	0	0	0	0	0	4057
JF0102 TRANSPORTABLE COLLECTIVE PROT SYS	0	0	0	0	0	0	0	0	0	0
JN0014 COLLECTIVE PROT SYS AMPHIB BACKFIT (CPS BACKFIT)	17611	17057	14732	16250	11105	7388	0	0	0	84143
JN0017 JOINT COLLECTIVE PROTECTION EQUIPMENT (JCPE)	2366	1353	1893	2188	2047	1800	2916	0	0	14563
R12301 CB PROTECTIVE SHELTER (CBPS)	24387	28587	983	0	16282	29744	29646	30724	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5

D. Acquisition Strategy:

CBPS Based on urgent need, limited procurement was authorized for the production of up to 152 systems prior to MS III. A logistics demonstration, first article testing, and IOTE-Phase I were conducted in FY98. IOTE-Phase I identified the need for various system and doctrinal improvements. To support TC-STD, a RAM Qualification Test and Limited User Test and Evaluation (LUTE) were conducted Jul-Nov 00. A MS III was conducted Jun 02 that recommended approval for full production. Approval was granted Nov 02 for MSIII.

First Unit Equipped is scheduled for Apr 03, fielding to Level I and Level II medical units and Forward Surgical Teams.

The CBPS P3I program was initiated in FY02 to improve the current version of CBPS and develop versions suitable for forward deployed medical units within airborne/air assault and heavy divisions. An up front analysis will be performed to develop design concepts for heavy and airborne versions of CBPS. A contract is in place to develop a self-sustained ESS that does not require an external primary power source. An ESS prototype will be fabricated and subjected to performance and reliability testing. The design will be finalized and two ESS prototypes will be fabricated. One will be integrated with the current version of CBPS with other weight reductions incorporated. The remaining ESS will be integrated onto a platform suitable for use in airborne/air assault and heavy divisions determined through the up front analysis.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
JCPE	<p>The JCPE acquisition strategy is to consolidate planned improvements to fielded collective protection systems into one Joint product improvement program for addressing deficiencies, improvements and cost saving initiatives. The JCPE program goal is to execute as many distinct deficiency corrections and improvements as possible within funding constraints. The Navy PM conducts In-Process Reviews (IPR) and is the decision authority for this product improvement program. JCPE solicits inputs from the four Services through a Joint Service management IPT process that evaluates the proposals, prioritizes, and recommends a list of the tasks to the Navy PM for review and approval annually. System improvements, after successful prototyping and testing, are delivered via a performance specification that can then be implemented by respective Services through an Engineering Change Proposal (ECP) process. All modified components will be fabricated and tested to ensure Service compatibility. Fielding will be accomplished through phased-replacement or attrition through the supply system. Existing procurement contracts are leveraged to expedite fielding improvement upgrades.</p>	
JTCOPS	<p>JTCOPS will develop a new collective protection capability. A competitive contract will be awarded for the design and prototype fabrication phase, with options for Low Rate Initial Production (LRIP). After successful completion of development testing and the Milestone (MS) B decision, the LRIP option will be exercised to produce systems for Operational Testing (OT). After completion of OT and the MS C decision, the production option of the contract will be exercised.</p>	
SCPE	<p>In-house/contract design and fabrication of prototype components with in-house/contract testing. Initial fans, motors, and filters will be procured as part of new ship construction using Ship Conversion Navy (SCN) funds. Replacements will be provided with Operation & Maintenance, Navy (O&M,N) funds.</p>	
Project CO5/Line No: 083		Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2003		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CO5		
I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
HW SB - Contractor Hardware Development	C/CPFF	Radian, Inc, Alexandria, VA	C	300	829	Dec-02	0	NONE	0	NONE	0	1129	0
HW SB - Hardware Development	MIPR	Red River Army Depot, Texarkana, TX ; CECOM, Ft Monmouth, NJ	U	259	0	NONE	0	NONE	0	NONE	0	259	0
JCPE													
HWSB - Modified 100/200 CFM Filter for TICs - Development & Engineering	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	150	Dec-03	23	Dec-04	0	173	173
HW C - 2000 CFM Particulate Filter - Improvements	WR	NSWCDD, Dahlgren, VA	U	226	95	Dec-02	0	NONE	0	NONE	0	321	321
SW SB - Capability Sets	MIPR	Various	U	150	20	Dec-02	200	Dec-03	0	NONE	0	370	370
HW C - Improved Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	400	0	NONE	50	Dec-03	0	NONE	0	450	450
SW SB - Development of Modified M28 Liner System for Large Capacity Shelter	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	400	90	Dec-02	0	NONE	0	NONE	0	490	490
SW SB - Shipboard CPS Supply fans - Development	WR	NSWCDD, Dahlgren, VA	U	0	153	Dec-02	0	NONE	0	NONE	0	153	153
SW SB - Improved Liner - Materials/Construction/Closures	MIPR	SBCCOM, Natick, MA	U	600	122	Dec-02	229	Dec-03	0	NONE	0	951	951
Project CO5													

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
HW C - Thermal Efficiency of CB Protected Shelter Systems	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	75	25	Dec-02	0	NONE	0	NONE	0	100	100
HW C - Shipboard CP Improvements	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	288	Jan-04	500	Dec-04	0	788	788
HW C - Residual Life Indicator	MIPR	SBCCOM, Edgewood, MD	U	0	0	NONE	0	NONE	213	Dec-04	400	613	613
HW C - Temporary Filter for Ship Intake	WR	NSWCDD, Dahlgren, VA		0	0	NONE	0	NONE	300	Dec-04	200	500	500
HW C - Lightweight Environmental Control Unit Improvements	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	0	NONE	300	Dec-04	100	400	400
HW C - Particulate Media Degradation by TICs	WR	NSWCDD Dahlgren, VA	U	0	0	NONE	0	NONE	500	Dec-04	400	900	900
SCPE													
SW SB - CPS Fan, Electronic Differential Pressure Gauge, Filter Performance - Development	WR	NSWCDD, Dahlgren, VA	U	175	91	Dec-02	0	NONE	0	NONE	0	266	266
Subtotal I. Product Development:				2585	1425		917		1836		1100	7863	

Remarks:

Project CO5

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2003		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT CO5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
DTE S - Shelter - Development Test and Evaluation	MIPR	DTC, APG, MD	U	0	200	Apr-03	0	NONE	0	NONE	0	200	0
JCPE													
OTHT C - 100/200 CFM Gas Filter - Live Agent Testing	MIPR	SBCCOM, APG, MD	U	388	301	Dec-02	0	NONE	0	NONE	0	689	689
OTHT C - Shipboard CPS Supply Fans	WR	NSWCDD, Dahlgren, VA	U	0	200	Dec-02	0	NONE	0	NONE	0	200	200
OTHT SB - Modified M28 Liner System for Large Capacity Shelters	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	100	Dec-02	0	NONE	0	NONE	0	100	100
OTHT C - Modified 100/200 CFM Filters for TICs	MIPR	SBCCOM, APG, MD	U	0	0	NONE	50	Dec-03	96	Dec-04	150	296	296
OTHT SB - Capability Sets	MIPR	Various	U	675	250	Dec-02	241	Dec-03	0	NONE	0	1166	1166
OTHT C - 2000 CFM Particulate Filter	MIPR	SBCCOM, Edgewood, MD	U	150	275	Dec-02	0	NONE	0	NONE	0	425	425
OTHT C - Improved Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	25	Dec-02	350	Dec-03	0	NONE	0	375	375
OTHT C - Improved Liner Materials/Construction/Closures	MIPR	SBCCOM, Natick, MA	U	0	60	Dec-02	971	Dec-03	0	NONE	0	1031	1031
OTHT C - Shipboard Collective Protection Improvements	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	300	Dec-04	0	300	300
SCPE													
OTHT SB - Improved CPS Fan - Shipboard Testing	WR	NSWCDD, Dahlgren, VA	U	229	138	Dec-02	0	NONE	0	NONE	0	367	367

Project CO5

Page 94 of 167 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
PM/MS S - Management Support	MIPR	PM NBCDS, Natick, MA	U	24	25	Oct-02	0	NONE	0	NONE	0	49	0
JCPE													
PM/MS S - Overall Program Management and Integrated Product Team Oversight	WR	NSWCDD, Dahlgren, VA	U	729	174	Dec-02	250	Dec-03	250	Dec-04	0	1403	1403
PM/MS S - Integrated Product Team Support	MIPR	Various	U	456	164	Dec-02	100	Dec-03	100	Dec-04	0	820	820
JTCOPS													
PM/MS S - Preparation of Acquisition Documentation	MIPR	PM NBCDS, APG, MD		420	0	NONE	0	NONE	0	NONE	0	420	0
SCPE													
PM/MS S - Overall Program Management	WR	NSWCDD, Dahlgren, VA	U	395	95	Dec-02	0	NONE	0	NONE	0	490	490
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	60	1Q FY03	0	NONE	0	NONE	0	60	0
Subtotal IV. Management Services:				2024	518		350		350		0	3242	

Remarks:

Project CO5

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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TOTAL PROJECT COST:	9117	4200		2954		2582		1250	20103
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Exhibit R-4a, Schedule Profile	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
CBPS																																
CBPS P3I- Award Contract for Design and Virtual Prototyping			3Q	—	2Q																											
CBPS P3I- Award Contract Option to Fabricate Two Prototypes & integrate onto vehicle and trailer platforms							3Q	4Q																								
CBPS P3I- Conduct Performance Testing							4Q	1Q																								
JCPE																																
Develop & Test Modified M28 Liner for CPEMEDS			>>	2Q																												
Develop & Test FIF Packaging and Housing Improvements			>>	—	3Q																											
Develop & Test Improved 200 CFM Particulate Filter			>>	—	3Q																											
Develop & Test Modified Environmental Control Unit for CPEMEDS			>>	—	3Q																											
Develop Improved 100/200 CFM Gas Filters			>>	—	3Q																											
Market Survey & Testing of CP Latrine for CPEMEDS			>>	—	—	—	—	2Q																								

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
CO5

D. Schedule Profile (cont):

	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JCPE (Cont)																																
Develop & Test Pleatable Charcoal/High Efficiency Particulate Arresting (HEPA) Bonded Filter	>>			4Q																												
Market Study to Increase Efficiency of Shipboard CPS Supply Fan Motors	1Q			4Q																												
Develop & Test FFA400-100 and M93 MCPE	>>							4Q																								
Agent Testing of 100/200 CFM Gas Filters	1Q							4Q																								
Develop Modified M28 Liner System for Large Capacity Shelters	1Q							4Q																								
Develop & Test 2000 CFM Particulate Filters	1Q							4Q																								
Develop Thermal Efficiency of CB Protected Shelter Systems					3Q			4Q																								
Develop Capability Sets					3Q							4Q																				
Develop Improved Airlock					3Q							4Q																				
Develop Improved Liner - Materials/Construction/Closures					3Q							4Q																				

Exhibit R-4a, Schedule Profile	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				
	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	
JCPE (Cont)																																	
Develop & Test Efficiency Improvement to Shipboard CPS Supply Fan Motors					1Q	—————			4Q																								
Develop & Test Modified 100/200 CFM Gas Filters for TICs.									1Q	—————			4Q																				
Residual Life Indicator													1Q	—————			4Q																
Develop Temporary Filter for Ship Intake													1Q	—————			4Q																
Develop Lightweight ECU Improvements													1Q	—————			4Q																
Particulate Media Degradation by TICs													1Q	—————			4Q																
Develop Shipboard CP Improvements													1Q	—————											4Q								
JTCOPS																																	
Award Development Contract								3Q																									
Design and Fabricate Prototypes for Development Test (DT)								3Q	—————			4Q																					
SCPE																																	
Define CPS Fan Performance Specification	>>	—————			4Q																												
Fan Testing & Evaluation (Shipboard)	>>	—————			4Q																												
Develop and Test Electronic Differential Pressure Gauge	>>	—————			4Q																												

Exhibit R-4a, Schedule Profile	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT CO5
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D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
SCPE (Cont)																																
CPS Filter TICs/TIMs Evaluation	>>							4Q																								

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
DE5 DECONTAMINATION SYSTEMS (SDD)	2246	4859	11332	3327	5725	5423	9915	4776	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project DE5 DECONTAMINATION SYSTEMS (SDD): This project funds System Development and Demonstration (SDD) of decontamination equipment for the Joint Service Family of Decontamination Systems (JSFDS). The JSFDS consists of a family of decontaminants and a family of applicators that provide each Service with the capability to decontaminate mission critical assets to restore mission operations. These items will be used to decontaminate equipment, personnel, and vital areas to sustain critical cargo flow and operation tempo at ports, airfields, logistic nodes, and key command and control centers. The program is divided into four blocks. Block I will field improved decontaminants that will be used with integral or existing applicators. Block II will field any additional applicators and containment systems required to enhance the servicemembers decontamination capability. Block III will provide Food and Drug Administration (FDA) approved skin decontaminants that have the capability to decontaminate casualties with open wounds. Block IV will insert technology as it matures to the point of being cost effective to provide substantial enhancement to the warfighters decontamination capability.

In late FY02 U.S. Central Command (CENTCOM) identified an Urgent Need Statement (UNS) for a more environmentally friendly decontaminant. Upon validation of this requirement, the JSFDS program procured and tested DF-200 (Department of Energy) decontaminant to meet this need.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS FAMILY OF DECON SYSTEMS (JSFDS)	2246	4788	11332	3327
RDT&E Articles (Quantity)	0	0	245	0

FY 2002 Accomplishments:

- 1700 JSFDS - Conducted Developmental Testing (DT) of the decontaminant to satisfy CENTCOM UNS, including chemical and biological live agent, environmental compatibility, and packaging tests.
- 206 JSFDS - Conducted detail test planning, program support, environmental and safety studies.
- 340 JSFDS - Conducted Operational Testing (OT) of the decontaminant to satisfy CENTCOM UNS.

Total 2246

FY 2003 Planned Program:

- 40 JSFDS - Complete OT report for decontaminant to satisfy CENTCOM UNS.
- 600 JSFDS - Complete Developmental Test and Evaluation (DT&E) animal safety studies and preliminary animal efficacy studies for Block III skin decontaminants.
- 1200 JSFDS - Conduct detail test planning and procure decontaminants for testing for Block I (approximately 8,000 gallons at average cost of \$18 per gallon).

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5

FY 2003 Planned Program (Cont):

- 634 JSFDS - Initiate OT&E for Block I for improve decontaminants to support a Milestone III.
- 1244 JSFDS - Conduct DT I and initiate DT II test for Block I decontaminant and update program documentation. Conduct optimization/feasibility testing of various Block I decontaminant applicators to support Block II performance specifications development.
- 1070 JSFDS - Initiate DT II for Block III Skin decontaminants to generate data to support Food and Drug Administration (FDA) approval.

Total 4788

FY 2004 Planned Program:

- 1201 JSFDS - Complete OT&E for Block I decontaminants. Conduct MS III to support procurement decision.
- 5700 JSFDS - Procure Block II applicator and containment systems for lab testing and Operational Assessment (AO) (200 systems at average cost of \$25K each).
- 1267 JSFDS - Conduct lab testing and operational assessment and downselect the candidates to take to DT/OT.
- 1764 JSFDS - Procure Block II applicator and containment systems for DT testing (45 systems at average cost of \$36K).
- 1400 JSFDS - Continue DT II testing of Block III skin decontaminants to generate data to support FDA approval.

Total 11332

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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FY 2005 Planned Program:

- 1100 JSFDS - Conduct and complete DT and conduct OT for Block II applicator and containment systems (OT systems procured under Low Rate Initial Production procurement contract).
- 1930 JSFDS - Continue DT II for Block III skin decontaminants to generate data to support FDA approval.
- 297 JSFDS - Update program documentation and conduct MS C for Block II applicator and containment systems.

Total 3327

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	71	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 71 SBIR

Total 71

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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C. <u>Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
G47001 MODULAR DECON SYSTEM	4970	4925	5007	4869	4871	0	0	0	0	24642
JN0010 JOINT SERVICE FAMILY OF DECON SYSTEMS (JSFDS)	1882	1966	7374	6441	0	11696	19440	30548	Cont	Cont
JN0018 SORBENT DECON	8530	9405	262	0	0	0	0	0	0	18197

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5

D. Acquisition Strategy:

JSFDS The JSFDS program is subdivided into four blocks. Block I though III will provide non-personnel decontaminants, applicators and containment systems, and skin decontaminants. The requirements for these blocks will be met though the use of Commercial-Off-The-Shelf Items/Non-Development Items (COTS/NDI). Block IV will address those requirements that cannot be met with COTS/NDI or that require further definition. All blocks will use full and open competition. Procurement of CENTCOM UNS decontaminant will be made through GSA schedule to ensure availability and configuration management for the interim CENTCOM decontaminant. The Marine Corps will procure and manage the CENTCOM decontaminant inventory from which the Service requirements will be filled. The CENTCOM interim decontaminant will be phased out with the fielding of JSFDS Block I decontaminant.

JSSSED Utilize a three block approach to address individual key capabilities to reduce program risk and support production schedule.

Block I: Sensitive Equipment/Items Decontamination
 Block II: Aircraft/Vehicle Interior Decontamination
 Block III: Aircraft/Vehicle Interior Decontamination "On-the-Move"

Concurrent Phase 0 for all three Blocks, exploring technologies applicable to one or more areas. Phase 0 for Blocks II and III will take longer to mitigate technical risk associated with less mature technologies.

Competitive award for Block I and Block II leading to Type Classification. Block III may be a Pre-Planned Product Improvement (P3I) of Block II systems.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
HW C - Block II	C/FFP	TBS	C	0	0	NONE	6620	2Q FY04	0	NONE	0	6620	0
HW C - Block I Decontaminants	C/FFP	TBS	C	0	1200	2Q FY03	0	NONE	0	NONE	0	1200	0
Subtotal I. Product Development:				0	1200		6620		0		0	7820	

Remarks:

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
ILS C - Logistics Planning	C/CPFF	SVERDRUP, Dumfries, VA	C	0	170	1Q FY03	300	1Q FY04	147	1Q FY05	0	617	0
Subtotal II. Support Costs:				0	170		300		147		0	617	

Remarks:

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
OTHT C - Block I & III Test Planning	MIPR	Various	U	0	157	1Q FY03	0	NONE	0	NONE	0	157	0
OTHT C - Block II Test Planning	MIPR	Various	U	0	0	NONE	300	1Q FY04	0	NONE	2900	3200	0
DTE C - Block III Developmental Test II	C/CPFF	Battelle, Columbus, OH	C	0	877	1Q FY03	1300	1Q FY04	1600	1Q FY05	0	3777	0
DTE C - Block I Developmental Test I/II	MIPR	Various	U	0	400	2Q FY03	0	NONE	0	NONE	0	400	0
OTE C - Block I OT	MIPR	AFOTEC, Albuquerque, NM	U	0	634	2Q FY03	960	1Q FY04	0	NONE	0	1594	0
DTE C - Block I Optimization Feasibility Testing	MIPR	Various	U	0	200	2Q FY03	0	NONE	0	NONE	0	200	0
DTE C - Block II Lab Downselect Testing	MIPR	Various	U	0	0	NONE	565	1Q FY04	0	NONE	0	565	0
OTE C - Block II Operational Assessment	MIPR	AFOTEC, Albuquerque, NM	U	0	0	NONE	800	2Q FY04	0	NONE	0	800	0
DTE C - Block II Developmental Test	MIPR	Various	U	0	0	NONE	200	4Q FY04	500	1Q FY05	0	700	0
OTHT SB - Block III DT I	C/FFP	Battelle, Columbus, OH	C	0	600	1Q FY03	0	NONE	0	NONE	0	600	0
OTE C - Block II Operational Test	MIPR	AFOTEC, Albuquerque, NM	U	0	0	NONE	0	NONE	800	1Q FY05	0	800	0
OTE C - CENTCOM UNS OT Report	MIPR	AFOTEC, Albuquerque, NM	U	0	40	1Q FY03	0	NONE	0	NONE	0	40	0

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal III. Test and Evaluation:				0	2908		4125		2900		2900	12833	

Remarks:

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFDS													
PM/MS S - Joint Integrated Product Team Support	MIPR	Various	U	246	510	1Q FY03	287	1Q FY04	280	1Q FY05	0	1323	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	71	1Q FY03	0	NONE	0	NONE	0	71	0
Subtotal IV. Management Services:				246	581		287		280		0	1394	

Remarks:

TOTAL PROJECT COST:	246	4859		11332		3327		2900	22664	
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Project DE5 Page 110 of 167 Pages Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
DE5

D. Schedule Profile:

	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JSFDS																																
Block I Milestone II Decontaminant					2Q																											
Block I Developmental Test I (DT I)					2Q	—		4Q																								
Block I Developmental Test II (DT II)					2Q	—		1Q																								
Block I Optimization Feasibility Study					2Q	3Q																										
Block I Operational Test (OT)								4Q	1Q																							
Block I Milestone III									2Q																							
Block II Milestone B Applicators									2Q																							
Block II DT/Operational Test (OT) for Family of Applicators												4Q	—	2Q																		
Block II Milestone C (LRIP)															3Q	4Q																
Block II Follow-on Operational Test (OT)							3Q	—	—	—	—	—	—	—	—	4Q																
Block II Full Rate Production																	1Q															
Block III Developmental Test I (DT I) Skin Decon					2Q	—		1Q																								
Block III Milestone B								2Q																								
Block III DT II							3Q	—	—	—	—	—	—	—	—	1Q																
Block III Obtain FDA Approval															3Q	—	—	2Q														
Block III OT															3Q	4Q																

Exhibit R-4a, Schedule Profile							DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT DE5
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D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JSFDS (Cont)																																
Block III Milestone C																	2Q															

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UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)							DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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COST (In Thousands)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Complete							
IP5 INDIVIDUAL PROTECTION (SDD)	15347	38075	42335	20995	5451	972	0	8665	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

Funding is provided for:

- (1) Design of Aircrew Eye-Respiratory Protection (AERP) systems modification kits for aircraft compatibility.
- (2) Development of a Joint Protective Aircrew Ensemble (JPACE) to standardize aircrew ensembles across the services and reduce user fatigue.
- (3) Development of the Joint Service Aircrew Mask (JSAM), to replace multiple Service-specific aircrew chemical protective masks.
- (4) Development of a Joint Service General Purpose Mask (JSGPM) to replace and improve upon the multiple masks currently used by U.S. ground forces; development of a Joint Service Chemical Environment Survivability Mask (JSCESM) to provide a lightweight, disposable mask for special operations; and development of an Improved Protective Mask (IPM) for the unique needs of counterproliferation missions.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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- (5) Development of a JSLIST Block I glove upgrade (JBIGU) and JSLIST Block II glove upgrade (JBIIGU) to meet joint aircrew and ground hand protection requirements.
- (6) Development of a JSLIST Multi-Purpose Sock (MPS).

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
AERP AIRCRAFT MODIFICATIONS	53	81	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 53 AERP Mods - Maintained configuration control on 135 series and B-2 Aircraft AERP modification design.

Total 53

FY 2003 Planned Program:

- 81 AERP Mods - Maintaining configuration control on B-2 Aircraft modification design.

Total 81

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT PROTECTIVE AIRCREW ENSEMBLE	3699	6444	6819	3624
RDT&E Articles (Quantity)	250	700	1100	0

FY 2002 Accomplishments:

- 2642 JPACE - Downselected and conducted Milestone B. Awarded two contracts with Low Rate Initial Production (LRIP) and Full Rate Production (FRP) options to develop two candidate materials based on Developmental Test (DT) IIA material swatch test results. Fabricated 125 prototype ensembles of each of the selected candidates for use in DT IIB (250 total at \$525 each). Initiated DT IIB testing on the candidates to verify system level performance requirements have been met.
- 1057 JPACE - Completed development of patterns for use in fabrication. Continued developing and updating program, logistics, and technical documentation required to support development and fielding.

Total 3699

FY 2003 Planned Program:

- 5658 JPACE - Complete DT IIB testing. Conduct Critical Design Review (CDR). Fabricate 350 prototype ensembles of each candidate for combined DT/Operational Test (OT) (700 total at \$525 each). Initiate combined DT/OT system level testing and initial Operational Assessment (OA) to verify system level performance and assess operational suitability and durability. Testing includes aircraft integration testing (crash worthiness, early flight, and aircraft compatibility) on six aircraft and system level chemical simulant testing (Man In Simulant Test).

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>FY 2003 Planned Program (Cont):</p> <ul style="list-style-type: none"> 786 JPACE - Continue developing and updating program, logistics, and technical documentation required to ensure that ensembles will be fully supported when fielded. Continue updating garments specifications and patterns. <p>Total 6444</p> <p>FY 2004 Planned Program:</p> <ul style="list-style-type: none"> 4130 JPACE - Complete combined DT/OT with durability and other system level testing. Initiate Independent Operational Test & Evaluation (IOT&E) of LRIP ensembles. 2689 JPACE - Conduct Milestone C decision for LRIP of ensembles. Award contract options to manufacture LRIP ensembles. Fabricate 550 suits from two vendors maximum (1100 total at \$525/unit (avg)). Continue developing and updating program, logistics, and technical documentation required to ensure that ensembles will be fully supported when fielded. Initiate finalization of garment specifications and patterns. <p>Total 6819</p> <p>FY 2005 Planned Program:</p> <ul style="list-style-type: none"> 2474 JPACE - Complete Independent Operational Test & Evaluation (IOT&E). 750 JPACE - Finalize garment specifications and patterns. Conduct System Verification Review (SVR). Conduct Full Rate Production decision. 400 JPACE - Finalize program, logistics, and technical documentation required to ensure that ensembles are fully supported. <p>Total 3624</p>		
Project IP5/Line No: 083	Page 116 of 167 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS AIRCREW MASK (JSAM)	1831	11765	15200	12474
RDT&E Articles (Quantity)	0	0	500	275

FY 2002 Accomplishments:

- 1831 JSAM - Initiated System Development and Demonstration (SDD) source selection.

Total 1831

FY 2003 Planned Program:

- 4676 JSAM - Finalize system design and complete development. Begin logistics activities and sustainment planning to include tech order preparation, provisioning, and fielding plan.
- 884 JSAM - Complete source selection, receive Milestone B approval, and award contract. Continue program management activities, to include updating programmatic and technical documentation. Continue test planning documents such as the Test Evaluation Master Plan in preparation for Developmental Testing (DT) and Operational Testing (OT).
- 3793 JSAM - Start and complete system validation, develop production processes and hard tooling to fabricate DT and OT units.
- 2412 JSAM - Initiate material buy for DT units.

Total 11765

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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FY 2004 Planned Program:

- 4645 JSAM - Complete material buy and assembly of 500 DT units at an average unit cost of \$6112 and continue all contract activities to include logistics/sustainment activities and contractor support of DT.
- 6671 JSAM - Conduct of ground DT and flight DT by Government Test and Evaluation agencies on selected aircraft.
- 2684 JSAM - Prepare program and technical documentation in preparation for Milestone C.
- 1200 JSAM - Continue documentation and planning in preparation for OT and participation of OT agencies during DT.

Total 15200

FY 2005 Planned Program:

- 4014 JSAM - Complete ground and flight DT.
- 1357 JSAM - Manufacture 275 OT units at an average unit cost of \$4935.
- 2160 JSAM - Conduct OT for rotary wing aircraft.
- 2828 JSAM - Continue preparation of program documentation to achieve MS C.
- 2115 JSAM - Continue all contract activities, to include logistics/sustainment activities and continue support of DT. Correct DT deficiencies.

Total 12474

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS GENERAL PURPOSE MASK	8301	14039	15400	0
RDT&E Articles (Quantity)	5000	0	0	0

FY 2002 Accomplishments:

- 4500 JSGPM - Initiated System Demonstration phase. Awarded the System Demonstration contract option which delivers 5,000 prototypes at an estimated cost of \$500 each. Initiated the design and assembly of the System Support Packages for Production Qualification Testing, and Operational Testing and Evaluation.
- 836 JSGPM - Prepared program/project documentation. Documentation included: Single Acquisition Management Plan (SAMP), the Manpower and Personnel Integration (MANPRINT) Plan, ORD Update, and performance specifications.
- 386 JSGPM - Completed Low Level Operational Toxicology Studies.
- 443 JSGPM - Initiated the documentation and planning for Developmental and Operational Testing (DT/OT). Tested redesigned prototypes to assess shortcomings exposed during System Integration Phase.
- 2136 JSGPM - Initiated development of the Joint Service Chemical Environment Survivability Mask (JSCESM) as a lightweight complement to the JSGPM against limited threats.

Total 8301

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
<p>FY 2003 Planned Program:</p> <ul style="list-style-type: none"> • 699 JSGPM - Continue preparation of program/project documentation. Documentation includes Single Acquisition Management Plan (SAMP), the Manpower and Personnel Integration (MANPRINT) Plan, and Performance Specifications. • 371 JSGPM - Continue preparation of the Logistics Support Plan. This effort includes development of manuals and finalization of supportability plans. • 8000 JSGPM - Continue System Demonstration. System Demonstration includes system support packages for Production Qualification Testing, and Initial Operational Testing and Evaluation. • 2859 JSGPM - Continue documentation and planning for Developmental and Operational Testing (DT/OT). Test redesigned prototypes to assess shortcomings identified during System Integration Phase. • 2110 JSGPM - Continue development of the JSCESM as a lightweight complement to the JSGPM against limited threats. <p>Total 14039</p> <p>FY 2004 Planned Program:</p> <ul style="list-style-type: none"> • 5752 JSGPM - Continue System Demonstration. System Demonstration includes system support packages for Production Qualification Testing and Initial Operational Testing and Evaluation. • 935 JSGPM - Continue preparation of program/project documentation. Documentation includes the Manpower and Personnel Integration (MANPRINT) Plan, and Performance Specifications. • 5782 JSGPM - Continue Developmental and Operational Testing. Generate test incident reports and corrective action plans to address test results during mask design and prototype production. 		
Project IP5/Line No: 083	Page 120 of 167 Pages	Exhibit R-2a (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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FY 2004 Planned Program (Cont):

- 438 JSGPM - Continue preparation of the Logistics Support Plan. This effort includes development of manuals, and finalization of supportability plans.
- 1934 JSGPM - Complete development of the JSCESM as a lightweight complement to the JSGPM against limited threats.
- 559 JSGPM - Initiate support for the development of the Improved Protective Mask (IPM).

Total 15400

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
PROTECTIVE CLOTHING (JSLIST)	1463	5190	4916	4897
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 1009 JSLIST Block II Glove Upgrade (JBIIGU) - Completed requirements analysis of JSLIST Block I glove upgrade (JBIIGU) program results for transition to JBIIGU program. Formed JBIIGU program team, conducted market survey, and completed Acquisition Strategy.
- 154 JSLIST Block II Glove Upgrade - Prepared program documentation for Interim Process Review (IPR).
- 300 JSLIST Block II Glove Upgrade - Prepared Request for Proposal (RFP) for acquisition of competitive materiel for source selection.

Total 1463

Project IP5/Line No: 083

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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FY 2003 Planned Program:

- 300 JSLIST Block I Glove Upgrade - Complete air/ground Operational Test (OT) and complete Milestone C.
- 474 JSLIST Block II Glove Upgrade - Award multiple competitive contracts for system development and demonstration.
- 2453 JSLIST Block II Glove Upgrade - Conduct durability and chemical validation testing for air/ground missions.
- 401 JSLIST Block II Glove Upgrade - Conduct project management and plan test readiness reviews.
- 250 JSLIST Multi-Purpose Sock (MPS) - Conduct field durability trials for air/ground missions.
- 786 JSLIST MPS - Conduct chemical validation test trials.
- 526 JSLIST MPS - Conduct air/ground OT and prepare Milestone C documentation.

Total 5190

FY 2004 Planned Program:

- 2500 JSLIST Block II Glove Upgrade - Complete IOT&E and initiate chemical validation testing.
- 400 JSLIST Block II Glove Upgrade - Conduct preparations for MS C Low Rate Initial Production (LRIP).
- 600 JSLIST MPS - Complete air/ground operational tests and complete MS C.
- 1416 JSLIST Mulo - Form alternative footwear solutions project team, conduct market survey, form Acquisition Strategy, initiate durability and chemical testing.

Total 4916

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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FY 2005 Planned Program:

- 2897 JSLIST Block II Glove Upgrade - Complete chemical agent validation testing and complete FOT&E.
- 300 JSLIST Block II Glove Upgrade - Complete preparations for MS C Full Rate Production (FRP).
- 1700 JSLIST Mulo - Complete alternative footwear solutions chemical and durability testing, complete IOT&E, and complete MS C.

Total 4897

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	556	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 556 SBIR

Total 556

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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C. <u>Other Program Funding Summary:</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
AF0015 AIRCREW EYE/RESPIRATORY PROT (AERP)	2786	1786	0	0	0	0	0	0	0	4572
JN0011 AERP AIRCRAFT MODS	2818	883	0	0	0	0	0	0	0	3701
JN0013 NAVY INDIVIDUAL PROTECTIVE GEAR	2300	3129	0	0	0	0	0	0	0	5429
JSM001 JOINT SERVICE MASK LEAKAGE TESTER (JSMLT)	0	11663	8646	8216	8649	0	0	0	0	37174
JX0055 INDIVIDUAL PROTECTION (IP) ITEMS LESS THAN \$5M	1727	1790	0	0	0	0	0	0	0	3517
M99501 MASK, AIRCRAFT M45	3172	994	0	0	0	0	0	0	0	4166
M99601 MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD: M40/M40A	250	1491	0	0	0	0	0	0	0	1741
MA0400 PROTECTIVE CLOTHING	126372	89680	74166	93880	92314	83016	86508	88711	Cont	Cont
MA0480 SECOND SKIN, MASK MCU-2/P	1722	12966	0	0	0	0	0	0	0	14688

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RD&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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C. <u>Other Program Funding Summary (Cont):</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
N00020 CB RESPIRATORY SYSTEM - AIRCREW	3877	3085	0	0	0	0	0	0	0	6962

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5

D. Acquisition Strategy:

AERPMODS	Each aircraft in the USAF inventory that has a chemical defense requirement has been/will be modified for AERP. Individual aircraft program offices control the design and implementation of AERPMODS, with 311 HSW/YAC providing overall system program management and technical assistance services.
JPACE	JPACE - The acquisition strategy employs a time-phased approach, commonly referred to as "Blocking". Block I will address 90% of the JPACE requirements, including key performance parameters. Block II is intended to address any deficiencies found in Block I and specifically to address CB protection in a rotorwash or high velocity wind environment and to enhance the thermal burden reduction capabilities of the JPACE system. Block I included a competitive material search for advanced material technologies addressing aviation material performance requirements from the JPACE Joint ORD. Multiple Firm Fixed Price delivery order type contracts were awarded to finalize design and verify system level requirements. These contract vehicles include quantities for System Development and Demonstration (SDD), Low Rate Initial Production (LRIP), and Full Rate Production (FRP).
JSAM	Separate Cost Plus Fixed Fee PDRR contracts were awarded to Gentex and SAIC on 18 July 00. A Full & Open competition was conducted for the SDD effort. Cost Plus Award Fee System Demonstration contract with Fixed Price production options awarded to Scott Aviation on 26 Nov 02. Current quantity requirement is 76,140.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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JSGPM	The JSGPM completed a technical demonstration November 1995. The Concept Evaluation program began 1 October 1998. The Acquisition Strategy (AS) is a combined full scale development (System Development and Demonstration) and production with Contractor Logistics Support (CLS). The AS was approved in October 1998. The contract for development/production is based on a Joint Service performance specification with special emphasis on the lowest total ownership cost. The Developmental Test (DT) and Operational Test (OT) are scheduled to start in April 04, and a Milestone C is scheduled for May 04.
PROT CLTH	JSLIST employs a modified NDI, rapid-prototyping strategy. The JSLIST acquisition strategy consolidates Service and USSOCOM chemical protective ensemble (suits, gloves, boots) development in order to eliminate redundant efforts and obtain significant efficiencies by eliminating the different ensemble types currently fielded among the Services. JSLIST is an evolutionary program using technology insertion to meet Joint Service needs.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AERPMODS													
HW C - Engineering Configuration Control Maintenance	PO	Various	U	163	81	1Q FY03	0	NONE	0	NONE	0	244	0
JPACE													
HW C - Prototype Pattern Design	MIPR	NCTRF, Natick, MA	U	828	656	Jan-03	527	Dec-03	150	Dec-04	0	2161	2161
HW S - Prototype Procurement	C/FFP	Tennessee Apparel Corporation, Tullahoma, TN	C	88	439	May-03	320	Jun-04	0	NONE	0	847	847
HW S - Prototype Procurement	C/FFP	Creative Apparel Associates, Belmont, ME	C	88	224	May-03	258	Jun-04	0	NONE	0	570	570
JSAM													
HW S - Contractor Development	C/CPAF	Scott Aviation, Lancaster, NY	C	0	2412	2Q FY03	2849	2Q FY04	1357	2Q FY05	0	6618	1831
JSGPM													
HW S - Develop JSGPM Hardware	C/CPIF	Avon, Inc. Cadillac, MI	C	7157	8000	1Q FY03	5752	1Q FY04	0	NONE	0	20909	0
HW S - Develop JSCESM	C/FFP	TBS	C	0	1709	3Q FY03	1200	1Q FY04	0	NONE	0	2909	0
PROT CLTH													
HW SB - Block II Prototypes	C/FFP	TBS	U	0	500	2Q FY03	0	NONE	0	NONE	0	500	0
Subtotal I. Product Development:				8324	14021		10906		1507		0	34758	

Remarks: JSGPM - System Demonstration includes 5,000 prototypes at \$500 each.

AERP Mods - FY03 continues aircraft modification effort.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
OTHT S - Hazard Prediction Model - Independent Verification & Validation	WR	NAWCAD, Patuxent River, MD	U	704	101	Jan-03	344	Dec-03	100	Dec-04	0	1249	1249
ILS S - Systems Logistics	WR	NAWCAD, Patuxent River, MD	U	302	55	Jan-03	355	Dec-03	300	Dec-04	0	1012	1012
JSAM													
ES S - JSAM - Design Engineering	C/CPAF	Scott Aviation	C	0	3793	2Q FY03	0	NONE	0	NONE	0	3793	0
TD/D SB - System Engineering, Integrated Logistic Support, Technical Manual Prep	C/CPAF	Scott Aviation	C	0	3462	2Q FY03	1796	2Q FY04	2115	2Q FY05	0	7373	0
JSGPM													
ES S - Engineering Support	MIPR	PM NBCDS, APG, MD	U	400	468	1Q FY03	438	1Q FY04	0	NONE	0	1306	2852
TD/D S - Tech Data and Documentation of JSGPM System	MIPR	PM NBCDS, APG, MD	U	250	206	1Q FY03	125	1Q FY04	0	NONE	0	581	1000
ILS S - Logistics Support of JSGPM System	MIPR	PM NBCDS, APG, MD	U	336	190	1Q FY03	200	1Q FY04	0	NONE	0	726	1700
ES S - Systems Engineering for JCESM	MIPR	PM NBCDS, APG, MD - Various	U	1100	300	1Q FY03	200	1Q FY04	0	NONE	0	1600	0
ES S - Engineering Support	MIPR	Other Joint Services	U	357	386	1Q FY03	330	1Q FY04	0	NONE	0	1073	0
TD/D S - Technical Data	MIPR	Other Joint Services	U	250	168	1Q FY03	125	1Q FY04	0	NONE	0	543	0
ILS S - Logistics Support	MIPR	Other Joint Services	U	300	150	1Q FY03	220	1Q FY04	0	NONE	0	670	0

Project IP5	Page 129 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2003		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT IP5		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
DTE S - Aircraft Integration Testing	WR	NAWCAD, Patuxent River, MD	U	610	687	Jan-03	0	NONE	0	NONE	0	1297	1297
DTE S - Physical Property/Fit Testing	WR	NCTRF, Natick, MA	U	309	297	Jan-03	344	Dec-03	0	NONE	0	950	950
DTE C - Chemical Agent Testing	C/CPFF	Battelle, Columbus, OH	N	367	598	Jan-03	0	NONE	0	NONE	0	965	965
DTE S - Chemical Testing	MIPR	USA DTC, Dugway, UT	U	1377	139	Jan-03	738	Dec-03	0	NONE	0	2254	2254
DTE S - Don/Doff Testing	WR	LANL, Los Alamos, NM	U	420	55	Mar-03	0	NONE	0	NONE	0	475	475
DTE S - Fit Testing	SS/FFP	Anthrotech, Yellow Springs, OH	C	106	73	3Q FY03	148	Dec-03	0	NONE	0	327	327
DTE S - Human Factors Testing	MIPR	SBCCOM, Natick, MA	U	226	359	Jan-03	0	NONE	0	NONE	0	585	585
DTE S - Durability	MIPR	USA ATEC, Aberdeen, MD	U	0	828	Jan-03	644	Dec-03	0	NONE	0	1472	1472
OTE S - Initial Operational Test & Evaluation	MIPR	AFOTEC DET 1, Albuquerque, NM	U	150	350	Jan-03	1512	Dec-03	900	Dec-04	0	2912	2912
OTE S - Initial Operational Test & Evaluation	MIPR	USA ATEC, Aberdeen, MD	U	40	10	Jan-03	208	Dec-03	924	Dec-04	0	1182	1182
OTE S - Initial Operational Test & Evaluation	WR	COMOPTEVFOR, Norfolk, VA		0	70	Jan-03	536	Dec-03	650	Dec-04	0	1256	1256
JSAM													
OTHT SB - Govt Developmental Test Activities	MIPR	NAVAIR, Patuxent River, MD	U	0	700	Jan-03	6671	Jan-04	4014	Jan-05	0	11385	0
OTE S - Govt Operational Test Activities	PO	AFOTEC, Alamogordo, NM	U	0	514	Jan-03	1200	Jan-04	2160	Jan-05	0	3874	0

Project IP5

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSGPM													
DTE S - Plan and Conduct of Developmental Testing of JSGPM System	MIPR	ATEC, Falls Church VA; DTC; HRED, APG, MD	U	788	400	1Q FY03	2785	1Q FY04	0	NONE	0	3973	1250
OTE S - Plan and Conduct Operational Testing of JSGPM System	MIPR	Various	U	538	906	1Q FY03	1938	1Q FY04	0	NONE	0	3382	8050
OTE C - PQT for IPM variant	MIPR	PM NBCDS, APG, MD		0	0	NONE	374	2Q FY04	0	NONE	0	374	0
PROT CLTH													
OTE S - Block II Glove Test	MIPR	Various	U	685	2093	3Q FY03	2416	1Q FY04	2897	1Q FY05	0	8091	0
DTE S - JSLIST MPS Durability Trials	MIPR	Various	U	0	196	2Q FY03	200	2Q FY04	1700	1Q FY05	0	2096	0
DTE C - JSLIST Mulo Chemical Validation	MIPR	Various	U	0	650	3Q FY03	1200	1Q FY04	0	NONE	0	1850	0
OTE C - JSLIST MPS Air/Ground Operational Test	C/FPI	Various	C	0	430	1Q FY03	400	2Q FY04	0	NONE	0	830	0
Subtotal III. Test and Evaluation:				5616	9355		21314		13245		0	49530	

Remarks: JSAM - Responsible test organization is the Naval Air Warfare Center in Patuxent River, MD. Operational test organization is AFOTEC.

JPACE - Responsible test organization is the Naval Air Warfare Center in Patuxent River, MD. Operational test organization is AFOTEC DET 1.

UNCLASSIFIED

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
PM/MS S - Overall Program Coordination	WR	NAWCAD, Patuxent River, MD	U	840	689	Jan-03	493	Dec-03	300	Dec-04	0	2322	2322
PM/MS SB - Air Force Program Coordination	MIPR	311 HSW Brooks AFB, TX	U	763	242	Jan-03	98	Dec-03	100	Dec-04	0	1203	1203
PM/MS SB - Management Support	C/CPFF	Battelle, Columbus, OH	N	726	154	Jan-03	98	Dec-03	0	NONE	0	978	978
PM/MS SB - US Army Program Coordination	MIPR	PMSOLDIER, Ft. Belvoir, VA	U	0	272	Jan-03	98	Dec-03	100	Dec-04	0	470	470
PM/MS SB - US Marine Corps Program Coordination	WR	MARCORSYSCOM, Quantico, VA	U	0	146	Jan-03	98	Dec-03	100	Dec-04	0	344	344
JSAM													
PM/MS C - Program Management/Management Support	MIPR	Various	U	0	884	1Q FY03	2684	1Q FY04	2828	1Q FY05	0	6396	0
JSGPM													
PM/MS S - Program Management by Army (Lead Service)	MIPR	PM NBCDS, APG, MD	U	574	556	1Q FY03	1113	1Q FY04	0	NONE	0	2243	1400
PM/MS S - Program Management by Joint Services other than Army	MIPR	USN, USAF, USMC various locations	U	600	500	1Q FY03	500	1Q FY04	0	NONE	0	1600	1900
PM/MS S - Program Management for JSCESM	MIPR	PM NBCDS, APG, MD	U	1100	100	1Q FY03	100	1Q FY04	0	NONE	0	1300	0
PROT CLTH													
PM/MS C - Integrated Product Team Support	MIPR	Various	U	1060	961	1Q FY03	700	1Q FY04	300	1Q FY05	0	3021	0

Project IP5	Page 133 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT IP5
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	556	1Q FY03	0	NONE	0	NONE	0	556	0
Subtotal IV. Management Services:				5663	5060		5982		3728		0	20433	

Remarks:

TOTAL PROJECT COST:	24611	38075		42335		20995		0	126016
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Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
IP5

D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
AERPMODS																																
B-2 Configuration Maintenance of Design	1Q	—————						4Q																								
JPACE																																
Pattern Development	>>	— 3Q																														
Milestone B	2Q																															
Award System Test Quantity	2Q																															
Fabricate Prototypes for Developmental Test - DT IIB & Combined DT/Operational Test (OT)		3Q	—		3Q																											
Developmental Testing - DT IIB				4Q	1Q																											
Pattern Finalization				1Q	—————						1Q																					
Developmental Testing - Combined DT/OT Operational Assessment						3Q	—		2Q																							
Developmental Test - Durability Testing									1Q	—			4Q																			
Milestone C - Low Rate Initial Production (LRIP)									2Q																							
Independent Operational Testing									2Q	—			2Q																			
Award Low Rate Initial Production (LRIP) Delivery Order Contract Option									3Q																							

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
IP5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				
	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	
JPACE (Cont)																																	
System Verification Review													1Q																				
Full Rate Production Decision													2Q																				
JSAM																																	
Milestone B IPR (IP5)					1Q																												
System Demonstration					1Q	—————											4Q																
Development Test									2Q	—————		3Q																					
Operational Test (Rotary Wing)													3Q	—————		3Q																	
Operational Test (Fixed Wing)																	1Q	—————		4Q													
Milestone C (Full Rate Production Decision - Rotary Wing)																					3Q												
MS C (Full Rate Production Decision - Fixed Wing)																									4Q								
JSGPM																																	
Award Systems Demonstration Option																																	
Conduct System Demonstration					3Q	—————											2Q																
Develop a JSCESM variant to JSGPM									1Q	—————				1Q																			
Documentation for DT and OT Test					3Q	—————						3Q																					
Developmental Testing													3Q	4Q																			

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) **PROJECT**
IP5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
JSGPM (Cont)																																
Prepare and Execute Log Spt Plan			3Q		—————				1Q																							
Preparation of MS C Documentation			3Q		—————				1Q																							
MS C TC In Process Review (IPR)											2Q																					
OT with Prod Representative Articles															1Q																	
Produce Test Items for IPM											2Q	4Q																				
PROT CLTH																																
JSLIST Block I Glove Operational Test (OT)							2Q																									
JSLIST Block I Glove Milestone C							2Q																									
JSLIST Block II - Started IPT and program documentation							1Q	4Q																								
JSLIST Block II Glove Prototype Build							3Q	1Q																								
JSLIST Block II Glove Conduct Developmental Test (DT)/Operational Test (OT)											1Q	2Q																				
JSLIST Block II Glove Milestone C Low Rate Initial Production (LRIP)												4Q																				

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
IP5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
PROT CLTH (Cont)																																
JSLIST MPS Foreign Compatibility Test (FCT) data transfer to System Design and Demonstration Phase.					1Q																											
JSLIST MPS Developmental Test (DT)/Operational Test (OT)					1Q	---		4Q																								
JSLIST MPS - Milestone C								4Q																								
JSLIST MPS - Production Contract Award									1Q																							
JSLIST - IOT&E Alternative Footwear Solutions													1Q	---		3Q																
JSLIST- MS C Alternative Footwear Solutions																																

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	45032	43621	5880	3087	3653	14961	58971	71758	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

The Critical Reagent Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/DNA biological detection requirements from Advanced Component Development and Prototype (ACD&P) through production. The CRP ensures the availability of high-quality reagents throughout the life-cycle of all Biological Warfare (BW) detection/identification systems. This project supports all aspects of manufacturing "scale-up" of developmental protocols for CRP-developed products, including maintenance of repositories and validation laboratories. CRP was previously funded in BJ5 and was transferred to MB5 beginning in FY04.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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The Joint Biological Agent Identification and Diagnostic System (JBAIDS) is a reusable, portable, modifiable biological agent identification and diagnostic system. JBAIDS will enhance force protection by providing commanders and medical personnel with the capability to determine appropriate treatment, effective preventive measures, and prophylaxis, in response to the presence of biological agents. JBAIDS will be configured to support reliable, fast, and specific identification of biological agents from a variety of clinical sources and preventive medicine samples. Technologies will be selected based on their reliability, technological maturity, and supportability. In addition to mobile and fixed site facilities, the JBAIDS will be used on ground vehicles, aircraft (fixed and rotary wing), and ships.

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CRITICAL REAGENTS PROGRAM	0	0	3126	3087
RDT&E Articles (Quantity)	0	0	0	0

FY 2004 Planned Program:

- 800 CRP - Continue transition of International Task Force (ITF)-6B targets.
- 1626 CRP - Continue transition of Nucleic Acid Assays, validation of assays and Nucleic Acid Panels.
- 700 CRP - Develop and validate next generation Hand Held Assay (HHA) technology.

Total 3126

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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FY 2005 Planned Program:

- 833 CRP - Continue transition of ITF-6B targets.
- 1482 CRP - Continue transition of Nucleic Acid Assays and validation and scale-up of Nucleic Acid Panels.
- 772 CRP - Continue validation and scale-up of next generation HHA technologies.

Total 3087

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL AGENT IDENT AND DIAG SYSTEM	10222	9889	2754	0
RDT&E Articles (Quantity)	0	0	25	0

FY 2002 Accomplishments:

- 8202 JBAIDS - Conducted full and open competition to select winning JBAIDS contractor; four-phased down selection process used. Fourteen contractors initially evaluated, seven asked to participate in "Fly-Off"/laboratory test of performance capabilities (identification of Biological Warfare (BW) agents).
- 1220 JBAIDS - Conducted laboratory tests at Dugway Proving Grounds, UT. Two contractors passed the test and will receive JBAIDS Requests for Proposals (RFPs). Objective was to ensure "Low Risk", short development program in FY03, and rapid fielding in FY04.
- 800 JBAIDS - Completed DoD acquisition documentation requirements.

Total 10222

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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FY 2003 Planned Program:

- 1888 JBAIDS - Select winning JBAIDS contractor from the remaining two candidate "Fly-Off" tested designs.
- 4778 JBAIDS - Purchase 25 development prototype JBAIDS systems and 128,000 test assay kits (unit cost of \$10) to support development and operational testing requirements.
- 1387 JBAIDS - Conduct Development Testing (DT) at the contractor's facility and government laboratories. Conduct JBAIDS hardware reliability and environmental testing.
- 512 JBAIDS - Submit JBAIDS agent (Anthrax - two targets) 510k package for FDA review and clearance. The two targets for Anthrax refer to two different assays to two different target identification sites. Each target site assay will be submitted to the FDA for review and clearance as it is required for use as a medical diagnostic tool.
- 1324 JBAIDS - Review contractor developed JBAIDS technical manuals, review training packages, complete system drawing requirements to support a physical configuration audit of the design.

Total 9889

FY 2004 Planned Program:

- 1804 JBAIDS - Complete DT and Operational Test (OT) programs.
- 950 JBAIDS - Submit additional nine JBAIDS BW agents identification test assays (510k packages) to the FDA for review and clearance (required to use JBAIDS as a medical diagnostic device).

Total 2754

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SMALLPOX VACCINE	27035	33101	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 19150 JVAP - Smallpox Vaccine - Continued process optimization and lot manufacture validation. Conducted stability testing for Smallpox vaccine. Completed three parts of a 5-cohort Phase 1 clinical trial.
- 7885 JVAP - Smallpox Vaccine - Developed manufacturing capability for Vaccinia Immune Globulin (VIG). Initialized accelerated manufacture and release of VIG.

Total 27035

FY 2003 Planned Program:

- 501 JVAP - Smallpox Vaccine - Submit Investigational New Drug (IND) annual reports and manufacturing amendments to the FDA for Smallpox vaccine and VIG.
- 20864 JVAP - Smallpox Vaccine - Continue Smallpox and VIG stability studies. Complete 4th and 5th stages of a Phase 1 clinical trial (safety and immunogenicity).
- 11736 JVAP - Smallpox Vaccine - Complete process optimization and lot manufacture validation. Produce three consistency lots, achieving first-year baseline stockpile quantities (4 million doses).

Total 33101

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
BIOLOGICAL VACCINES	7775	0	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2002 Accomplishments:

- 3997 JVAP - Prime Systems Contract activities - Conducted systems integration, Earned Value Management System (EVMS), Integrated Digital Environment (IDE) initiatives, special studies, regulatory compliance, and quality assurance for all vaccine efforts.
- 3778 JVAP - Pentavalent Botulinum Toxoid - Completed serologies and data analysis of the Pentavalent Botulinum Toxoid booster study and prepared final report for submission to the FDA.

Total 7775

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	631	0	0
RDT&E Articles (Quantity)	0	0	0	0

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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FY 2003 Planned Program:

- 631 SBIR

Total 631

C. <u>Other Program Funding Summary:</u>											
	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>	
JX005 DOD BIOLOGICAL VACCINE PROCUREMENT	82779	42886	63097	60938	56756	57350	60676	59343	Cont	Cont	

Project MB5/Line No: 083

Page 145 of 167 Pages

Exhibit R-2a (PE 0604384BP)

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5

D. Acquisition Strategy:

CRP The Critical Reagents Program (CRP) is a consolidation of all antibody/antigen based identification requirements within the biological warfare (BW) detection program. Supported systems include the Biological Integrated Detection System (BIDS), Portal Shield, and the Joint Biological Point Detection System (JBPDS) Block I and II. This program also supports the development and manufacture of individual Handheld Immunochromatographic Assays (HHA) and the DoD Biological Sampling Kit. This results in improved identification performance and ensures comparable results across disparate systems. The program is designed along a stepwise strategy. BA4 funding develops new targets and target production protocols and develops multiple antibody candidates. Those candidate antibodies are then transitioned into multiple end item assay formats (e.g. HHAs) and their performance is validated. This transition, validation and production scale-up occurs under BA5 funding. After successful end item scale-up, those end items are transitioned to full-scale production in support of the detection platforms that are supported. Reagents have been developed to meet baseline BIDS, Portal Shield, and JBPDS Block I requirements. Some performance improvements in those reagents will be pursued. However, the bulk of the FY04-09 development activity will focus on antibody and HHA development against JBPDS Block II requirements. This includes roughly tripling the inventory of agents that can be detected using antibody based methods. The antibody components of the critical reagents are Government Furnished Equipment (GFE) to the HHA manufacturer. The HHA production was awarded 1QFY03. The CRP also seeks to improve the performance and producibility of the current reagent inventory through a program-wide testing and science and technology (S&T) transition strategy with the end goal of horizontally integrated reagent improvements. New DNA-based detection methods are being actively supported as of FY02.

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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JBAIDS JBAIDS is an evolutionary development program. Block I development effort will focus on militarizing and hardening of critical identification technologies selected from a competitive market survey. This will be a rapid development and fielding effort to deliver a critical capability to identify bacteria, viral agents, and biological toxins to the field in the shortest time. FDA clearance for the initial set of gene probes and primers and hardware will be coordinated and obtained. Block II will focus on the automation of the sample preparation process, inclusion of new technologies for toxin identification, reductions in size, weight and reliability, and obtaining FDA clearance for all remaining gene probe and primer sets.

VAC BOT Using a prime systems contract as the single integrator for the advanced development, testing, licensure, production, and storage, a contract was awarded in Nov 97 for three vaccines with options to produce another 15 vaccines. Successful FDA licensure of biological defense vaccines will be achieved by the prime contractor who 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 advanced development of a rBotulinum Multivalent (AB) vaccine, a requirement in the Joint Chiefs of Staff threat list.

VAC PLG Using a prime systems contract as the single integrator for the advanced development, testing, licensure, production, and storage, a contract was awarded in Nov 97 for three vaccines with options to produce another 15 vaccines. Successful FDA licensure of biological defense vaccines will be achieved by the prime contractor who 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 of a Plague vaccine, a requirement in the Joint Chiefs of Staff threat list.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5

VAC SPX	<p>The original acquisition strategy assumed that successful advanced development and FDA licensure of biological defense (BD) vaccines would be achieved by a prime contractor who 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. A prime systems contract was awarded in Nov 97 for the development and production of the smallpox vaccine as well as other BW vaccines. Three recent events necessitate modification of the original strategy: 1) the 11 Sep 01 attacks; 2) the increase in stockpile requirements from 300,000 to 12,000,000 doses of vaccine; and 3) competing efforts by the Department of Health and Human Services (DHHS) to develop, produce, and license a smallpox vaccine. A down selection among the DoD and DHHS smallpox vaccine candidates has been scheduled following completion of the Phase 1 clinical trials. Following the down selection decision, a new Acquisition Program Baseline (APB) for the smallpox vaccine program will be developed and submitted.</p>
VACCINES	<p>Approximately 18 new BD vaccine candidates are being developed against validated BW threat agents through Biological Defense Medical Research Programs (S&T). To ensure the availability of these vaccines for protection of U.S. forces, a prime systems contract was awarded in Nov 97 for a single integrator to manage the advanced development, production, storage, and testing of these products. Successful FDA licensure of BD vaccines can best be achieved using the prime contractor who will function as the "responsible head" and license holder to perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The anthrax vaccine procurement is sole-sourced to the only FDA-licensed supplier, BioPort Corporation.</p>

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
HW C - Transition of ITF-6B Targets	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	175	1Q FY04	247	1Q FY05	0	422	0
HW C - Transition of ITF-6B Targets	MIPR	USAMRIID, Fort Detrick, MD	U	0	0	NONE	175	1Q FY04	247	1Q FY05	0	422	0
HW C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	375	1Q FY04	363	1Q FY05	0	738	0
HW C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	ECBC, APG, MD	U	0	0	NONE	385	1Q FY04	373	1Q FY05	0	758	0
HW C - Development & Validation of Next Generation HHA Technology	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	175	1Q FY04	168	1Q FY05	0	343	0
JBAIDS													
SW SB - Design and Fabricate Identification Assays & System Hardware	PO	TBS		2000	4778	3Q FY03	0	NONE	0	NONE	0	6778	0
VAC SPX													
HW S - Vaccine Development-Includes consistency lot, pilot lot and scale-up production	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	10854	1Q FY03	0	NONE	0	NONE	0	10854	0

Project MB5	Page 149 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal I. Product Development:				2000	15632		1285		1398		0	20315	

Remarks: Biological Vaccines - Cost to Complete: "Continuing"
Prior to FY03, funding was not provided by individual vaccine.

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
TD/D SB - Transition of ITF-6B Targets	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	17	1Q FY04	21	1Q FY05	0	38	0
TD/D SB - Transition of ITF-6B Targets	MIPR	USAMRIID, Fort Detrick, MD	U	0	0	NONE	17	1Q FY04	18	1Q FY05	0	35	0
TD/D SB - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	17	1Q FY04	18	1Q FY05	0	35	0
TD/D SB - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	ECBC, APG, MD	U	0	0	NONE	23	1Q FY04	24	1Q FY05	0	47	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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II. Support Costs - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TD/D SB - Development & Validation of Next Generation HHA Technology	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	17	1Q FY04	18	1Q FY05	0	35	0
JBAIDS													
TD/D SB - Update/Develop TDPs, Performance Specs, Drawings, and Reports	Various	TBS		300	496	3Q FY03	0	NONE	0	NONE	0	796	0
TD/D SB - Logistics Support Analysis Development/Technical Drawing Package	Various	TBS		350	828	3Q FY03	0	NONE	0	NONE	0	1178	0
TD/D SB - FDA Submission and Regulatory Approval of Assays/Hardware	PO	TBS		754	512	4Q FY03	0	NONE	0	NONE	0	1266	0
VAC SPX													
TD/D SB - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	501	1Q FY03	0	NONE	0	NONE	0	501	0
Subtotal II. Support Costs:				1404	2337		91		99		0	3931	

Remarks: Biological Vaccines - Cost to Complete: "Continuing"

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
DTE C - Transition of ITF-6B Targets	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	180	1Q FY04	120	1Q FY05	0	300	0
DTE C - Transition of ITF-6B Targets	MIPR	USAMRIID, Fort Detrick, MD	U	0	0	NONE	190	1Q FY04	130	1Q FY05	0	320	0
DTE C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	190	1Q FY04	145	1Q FY05	0	335	0
DTE C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	ECBC, APG, MD	U	0	0	NONE	190	1Q FY04	150	1Q FY05	0	340	0
DTE C - Development & Validation of Next Generation HHA Technology	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	485	1Q FY04	115	1Q FY05	0	600	0
OTE C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	190	1Q FY04	215	1Q FY05	0	405	0
OTE C - Transition of Nucleic Acid Assays, Validation of Assays & Nucleic Acid Panels	MIPR	ECBC, APG, MD	U	0	0	NONE	190	1Q FY04	221	1Q FY05	0	411	0
OTE C - Development & Validation of Next Generation HHA Technology	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	0	NONE	350	1Q FY05	0	350	0

Project MB5	Page 152 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)											DATE February 2003		
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)						PROJECT MB5		
IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	0	0	NONE	12	2Q FY04	13	2Q FY05	0	25	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	C	0	0	NONE	35	2Q FY04	37	2Q FY05	0	72	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	44	1Q FY04	47	1Q FY05	0	91	0
PM/MS S - Program Executive Office	Allot	PEO, Falls Church, VA	U	0	0	NONE	44	1Q FY04	47	1Q FY05	0	91	0
JBAIDS													
PM/MS SB - Program Management Support (Source Selection)	MIPR	PEO, Falls Church, VA	U	150	1462	1Q FY03	950	1Q FY04	0	NONE	0	2562	0
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	0	38	2Q FY03	11	2Q FY04	0	NONE	0	49	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	C	0	109	2Q FY03	30	2Q FY04	0	NONE	0	139	0
PM/MS SB - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	139	1Q FY03	39	1Q FY04	0	NONE	0	178	0
PM/MS S - Program Executive Office	Allot	PEO, Falls Church, VA		0	140	1Q FY03	39	1Q FY04	0	NONE	0	179	0
VAC SPX													
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Fort Detrick, MD	U	0	464	1Q FY03	0	NONE	0	NONE	0	464	0

Project MB5

Page 154 of 167 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	PEO, Falls Church, VA	U	0	469	1Q FY03	0	NONE	0	NONE	0	469	0
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	Camber Corporation, Frederick, MD	C	0	366	2Q FY03	0	NONE	0	NONE	0	366	0
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	SAIC, Frederick, MD	C	0	128	2Q FY03	0	NONE	0	NONE	0	128	0
PM/MS S - Award Fee (10%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	1022	2Q FY03	0	NONE	0	NONE	0	1022	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	631	1Q FY03	0	NONE	0	NONE	0	631	0
Subtotal IV. Management Services:				150	4968		1204		144		0	6466	

Remarks: Biological Vaccines - Cost to Complete: "Continuing"

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MB5
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TOTAL PROJECT COST:	3554	43621		5880		3087		0	56142
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Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD) PROJECT
MB5

D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
CRP																																
ITF-6A List Complete	>>			4Q																												
ITF-6B List Complete		2Q														4Q																
DNA Panels for 10 Threat Agents				4Q												4Q																
DNA Efforts to ITF-6A and ITF-6B				4Q																												
ITF 6C List Complete																1Q																4Q
JBAIDS																																
Block I Advanced Concept Technology Demonstration (ACTD)				3Q 4Q																												
Block I Request for Proposal (RFP) Release								1Q 2Q																								
Milestone B								2Q																								
Procure Systems for Engineering Design Test (EDT)/Developmental Test (DT)								3Q				1Q																				
Engineering Design Test (EDT)/Developmental Testing (DT)												1Q 2Q																				
Milestone C (LRIP)												3Q																				
Initial Operational Test and Evaluation (IOT&E)												3Q																				

Exhibit R-4a, Schedule Profile

DATE **February 2003**

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

PE NUMBER AND TITLE
0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)

PROJECT
MB5

D. <u>Schedule Profile (cont):</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009			
	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
VAC SPX																																
Milestone C	1Q																															
Consistency Lot Production	>>	2Q																														
Phase 2b Clinical Trial			3Q						1Q																							
Baseline Stockpile Quantities Obtained							4Q																									
Biological Licensure Application (BLA) Submission													3Q																			
FDA Licensure/Full Rate Production IN Process Review (IPR)																	3Q															
VACCINES																																
Botulinum Toxoid Booster Study	>>			4Q																												

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CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	1426	1926	1462	1419	7183	7214	7559	6261	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

B. Accomplishments/Planned Program

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
MEDICAL CHEMICAL DEFENSE	1426	1899	1462	1419
RDT&E Articles (Quantity)	0	0	0	0

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)		DATE February 2003
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5

FY 2002 Accomplishments:

- 191 Antidote Treatment, Nerve Agent, Autoinjector (ATNAA) - Conducted a full rate production in-process review with a requirement that the manufacturer provide three-year shelf life stability data to the FDA.
- 96 Pyridostigmine Bromide - Continued storage and stability testing of the Pyridostigmine Bromide used in human clinical trials.
- 138 Pyridostigmine Bromide - Continued three studies to validate surrogate markers for human efficacy (human ex vivo muscle study, human ex vivo blood study, and higher animal species ex vivo study).
- 852 SERPACWA - Continued FDA manufacturing requirements, redesigned packaging, continued production line process validation, shelf-life monitoring, and FDA required Phase 4 testing.
- 149 Pyridostigmine Bromide - Completed a study to validate surrogate markers in small animal ex vivo muscle for human efficacy.

Total 1426

FY 2003 Planned Program:

- 608 Pyridostigmine Bromide - Initiate New Drug Application (NDA) preparation for submission to the FDA.
- 589 Pyridostigmine Bromide - Conduct ex vivo human muscle study to demonstrate efficacy vs. surrogate markers.
- 114 Pyridostigmine Bromide - Provide the FDA with a plan for redesign of human ex vivo muscle study protocol to obtain FDA concurrence.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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FY 2003 Planned Program (Cont):

- 228 Pyridostigmine Bromide - Complete validation of markers of efficacy in higher animal studies and receive the FDA compliant report.
- 360 SERPACWA - Complete FDA manufacturing requirements and shelf-life monitoring.

Total 1899

FY 2004 Planned Program:

- 970 Pyridostigmine Bromide - Complete human ex vivo muscle study to demonstrate efficacy vs. surrogate marker.
- 492 Pyridostigmine Bromide - Finalize and submit NDA to the FDA.

Total 1462

FY 2005 Planned Program:

- 1224 Pyridostigmine Bromide - Initiate efforts to relabel/repackage licensed product for fielding.
- 145 Pyridostigmine Bromide - Review and answer FDA inquiries regarding NDA obtaining additional data as required.
- 50 Pyridostigmine Bromide - Obtain FDA approval of NDA.

Total 1419

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)	DATE February 2003
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	27	0	0
RDT&E Articles (Quantity)	0	0	0	0

FY 2003 Planned Program:

- 27 SBIR

Total 27

C. Other Program Funding Summary: N/A

D. Acquisition Strategy:

MEDCHEM These Advanced Component Development and Prototypes and the System Development and Demonstration efforts are designed to develop, license and field prophylactic and therapeutic drugs, diagnostic equipment, and other life support equipment for protection against and management of chemical warfare agent intoxication. The current acquisition strategy of in-house development and the use of prime contractors will be continued.

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CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEDCHEM													
SW SB - Pyridostigmine Bromide Relabel/Repackage Licensed Product	C/FFP	ICN Pharmaceutical, Costa Mesa, CA	C	0	0	NONE	0	NONE	936	1Q FY05	0	936	0
SW SB - SERPACWA Manufacturing & Shelf-Life Monitoring	C/FFP	McKesson Bioservices, Rockville, MD	C	0	310	1Q FY03	0	NONE	0	NONE	0	310	0
Subtotal I. Product Development:													
				0	310		0		936		0	1246	

Remarks: No prior year costs are exhibited as the Medical Chemical Defense Program transferred to Chemical Medical Biological Systems at the start of FY 2003.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEDCHEM													
TD/D SB - Pyridostigmine Bromide NDA Preparation & Submission	Allot	Chem Bio Medical Systems, Frederick, MD	U	0	45	1Q FY03	46	1Q FY04	93	1Q FY05	0	184	0
TD/D SB - Pyridostigmine Bromide FDA Redesign Protocol	Allot	Chem Bio Medical Systems, Frederick, MD	U	0	95	1Q FY03	0	NONE	0	NONE	0	95	0
TD/D S - Pyridostigmine Bromide NDA Preparation & Submission	C/FFP	EER Systems, Inc., Frederick, MD	C	0	475	1Q FY03	423	1Q FY04	94	1Q FY05	0	992	0
TD/D S - Pyridostigmine Bromide FDA Compliant Documentation	MIPR	USA Medical Research Institute of Chemical Defense, APG, MD	U	0	45	1Q FY03	0	NONE	0	NONE	0	45	0
TD/D S - Pyridostigmine Bromide Documentation to Relabel/Repackage Licensed Product	Allot	Chem Bio Medical Systems, Frederick, MD	U	0	0	NONE	0	NONE	230	1Q FY05	0	230	0
Subtotal II. Support Costs:				0	660		469		417		0	1546	

Remarks: No prior year costs are exhibited as the Medical Chemical Defense Program transferred to Chemical Medical Biological Systems at the start of FY 2003.

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2003 Cost	FY2003 Award Date	FY2004 Cost	FY2004 Award Date	FY2005 Cost	FY2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEDCHEM													
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	0	7	2Q FY03	6	2Q FY04	6	2Q FY05	0	19	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Frederick, MD	C	0	21	2Q FY03	16	2Q FY04	17	2Q FY05	0	54	0
PM/MS SB - Chem Bio Medical Medical Systems Office	Allot	CBMS, Fort Detrick, MD	U	0	27	1Q FY03	21	1Q FY04	21	1Q FY05	0	69	0
PM/MS S - Program Executive Office	Allot	PEO, Falls Church, VA	U	0	27	1Q FY03	21	1Q FY04	22	1Q FY05	0	70	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	27	1Q FY03	0	NONE	0	NONE	0	27	0
Subtotal IV. Management Services:													
				0	109		64		66		0	239	

Remarks: No prior year costs are exhibited as the Medical Chemical Defense Program transferred to Chemical Medical Biological Systems at the start of FY 2003.

TOTAL PROJECT COST:	0	1926		1462		1419		0	4807
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Project MC5	Page 166 of 167 Pages	Exhibit R-3 (PE 0604384BP)
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UNCLASSIFIED

Exhibit R-4a, Schedule Profile	DATE February 2003
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BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)	PROJECT MC5
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D. <u>Schedule Profile:</u>	FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				
	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	
MEDCHEM																																	
PB - Conduct Studies to Support New Drug Application (NDA)	1Q	—————											3Q																				
PB - Approval of New Drug Application (NDA)													2Q																				
SERPACWA - Complete FDA Requirements			3Q		—————				3Q																								
ATNAA - Full Rate Production Decision				4Q																													