

**UNCLASSIFIED**

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>							DATE <b>February 2004</b>		
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>					
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	COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
		Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
	Total Program Element (PE) Cost	168723	176337	152379	72702	58133	93488	114511	Continuing	Continuing
BJ5	BIOLOGICAL DEFENSE (SDD)	16185	0	0	0	0	0	0	0	16185
CA5	CONTAMINATION AVOIDANCE (SDD)	69977	112432	70136	39138	23627	13438	20204	Continuing	Continuing
CM5	HOMELAND DEFENSE (SDD)	956	5974	24274	389	0	0	0	0	31593
CO5	COLLECTIVE PROTECTION (SDD)	4106	2923	2590	4118	4576	2668	2724	Continuing	Continuing
DE5	DECONTAMINATION SYSTEMS (SDD)	4415	8586	3337	5710	5412	9910	4782	Continuing	Continuing
IP5	INDIVIDUAL PROTECTION (SDD)	36487	37719	24067	5436	970	0	8677	Continuing	Continuing
IS5	INFORMATION SYSTEMS (SDD)	0	0	18742	7105	1419	982	0	0	28248
MB5	MEDICAL BIOLOGICAL DEFENSE (SDD)	34819	7264	7810	3643	14930	58935	71855	Continuing	Continuing
MC5	MEDICAL CHEMICAL DEFENSE (SDD)	1778	1439	1423	7163	7199	7555	6269	Continuing	Continuing

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	
<p><b>A. <u>Mission Description and Budget Item Justification:</u></b> 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>		
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<p>The medical chemical defense system development program funds improved medical equipment and drugs essential to counteracting lethal and performance-degrading effects of chemical threats and medical equipment essential to meeting medical requirements on the integrated battlefield with emphasis on decreased size/weight and high mobility, yet supporting large numbers of combat casualties. Additionally, foreign medical materiel may be procured for exploitation of advanced technology and development to meet medical defense goals. This program element supports the development of prophylactic and therapeutic drugs and rapid identification and diagnostic systems.</p> <p>DoD Biological Defense mission requires the detection of validated biological threat agents to provide early warning capabilities on mobile and fixed platforms. This program element will provide theater protection through the development of point and stand-off detection systems. The detection system concept will provide detection, identification, warning, and sample collection for verification that a biological agent attack has occurred. This program element also provides for the development of biological defense medical programs. DoD Biological Defense medical mission will address: (1) protective vaccines - vaccination capability against the most probable biological threat agents; (2) identification - clinical identification of biological threat agents through medical evaluation and laboratory analysis to augment early warning capabilities.</p> <p>The projects in this Program Element support efforts in the system development phases of the acquisition strategy and are therefore correctly placed in Budget Activity 5.</p>		
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<b>B. <u>Program Change Summary:</u></b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>
Previous President's Budget (FY 2004 PB)	172262	148017	83325
Current Biennial Budget Estimates (FY 2005)	168723	176337	152379
Total Adjustments	-3539	28320	69054
a. Congressional General Reductions	0	-1580	0
b. Congressional Increases	0	300	0
c. Reprogrammings	-716	29600	0
d. SBIR/STTR Transfer	-2498	0	0
e. Other Adjustments	-325	0	69054

**Change Summary Explanation:**

**Funding:** FY04 - Congressional adjustments for CBD (+\$6,653K CA5; -\$2,653K DE5; -\$4,200K IP5; +\$500K MC5).

FY04 - Proposed reprogrammings from CBDP Defense Wide procurement account to support risk reduction (+\$24,600K CA5 (+\$6,300K JCAD; +\$12,000K JSLSCAD; +\$6,300K JWARN); +\$5,000K CM5).

FY05 - Funding to realign programs to support risk reduction (+\$43,100K CA5 (+\$7,000K JCAD; +\$14,400K JSLNBCRS; +\$20,000K JSLSCAD; +\$1,700K JWARN); +\$10,000K CM5; +\$3,000K IP5 JSGPM).

FY05 - Funding changes to support high priority efforts (+\$7,800K CA5 (+\$2,900K JBSDS; +\$4,900K JWARN); +\$4,700K MB5 JBAIDS); other adjustments +\$454K).

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BUDGET ACTIVITY <b>RD&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>
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**Funding (cont.)**

FY05 - Realigns funds from CA5 to IS5 (-\$18,742K CA5; +\$18,742K IS5).

**Schedule:**

**Technical:**

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>				PROJECT <b>BJ5</b>	
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
BJ5 BIOLOGICAL DEFENSE (SDD)	16185	0	0	0	0	0	0	0	16185

**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.

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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.

The Critical Reagents Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/select agent panels/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. The CRP supports all aspects of manufacturing "scale-up" of developmental protocols for CRP-developed products, including maintenance of repositories and validation laboratories.

The Joint Biological Stand-off 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. The program will transition from BJ5 to MB5 starting in FY04.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CRITICAL REAGENTS PROGRAM	1992	0	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>BJ5</b>
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**FY 2003 Accomplishments:**

- 972 CRP - Continued transition of International Task Force (ITF)-6B targets. Maintained reagent repositories and validation processes.
- 1020 CRP - Transitioned eight (out of 60) Nucleic Acid Assays, developed validation, and performed conformance testing protocols in support of ongoing Homeland Defense/National Capital Region bio-detection efforts.

**Total** 1992

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
INTERIM BIO AGENT DETECTOR SYS (IBADS)	388	0	0
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 388 IBADS - Continued to provide engineering and technical support to maintain fielded systems.

**Total** 388

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	4575	0	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>BJ5</b>
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**FY 2003 Accomplishments:**

- 2375 JBPDS BLKI - Completed Multi-Service Initial Operational Test and Evaluation (MOT&E) Phase I for US Army. Initiated MOT&E Phases II-IV for US Air Force (USAF), US Marines Corp (USMC) and US Navy (USN).
- 400 JBPDS BLK1 - Completed Military Utility Assessment for Dry Filter Units.
- 1800 JBPDS BLK1 - Continue reliability, availability and Maintainability (RAM) growth towards meeting objective requirements including Built in Test (BIT).

**Total** 4575

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM	9230	0	0
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 5276 JBSDS - Initiated the transition of the early warning stand-off systems developed in the TT-Bio program into the Systems Integration phase of the JBSDS program. This included software development, modeling and simulation analysis, and preparation of program documentation.
- 1954 JBSDS - Initiated and completed Developmental Testing (DT) of competing candidate systems.
- 2000 JBSDS - Initiated limited Operational Testing (OT) and assessment of JBSDS competing candidate systems.

**Total** 9230

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<b>C. <u>Other Program Funding Summary:</u></b>	<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)	0	1104	5937	16703	30670	24308	0	0	78722
JP0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	89482	0	0	0	0	0	0	0	89482
JPO210 CRITICAL REAGENTS PROGRAM (CRP)	2959	0	0	0	0	0	0	0	2959
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	10569	44472	50664	72126	79680	38892	38879	Cont	Cont

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**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, Joint Biological Agent and Identification System (JBAIDS), and the Joint Biological Point Detection System (JBPDS) Blocks I and II. This program also supports the development and manufacture of individual Handheld Immunochromatographic Assays (HHA), freeze-dried electrochemiluminescence (ECL) immunoassays, and the Department of Defense (DoD) Biological Sampling Kit. This program results in improved identification performance and ensures comparable results across disparate systems. The program is designed along a stepwise strategy. After successful end item scale-up, 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, JBAIDS, and JBPDS Block I requirements. Performance improvements in those reagents must be pursued. A large portion of the FY04-09 development activity will focus on antibody and immunoassay development against JBAIDS and JBPDS Block II requirements. This includes roughly tripling the inventory of agents that can be detected using antibody based methods. The antibody components of the critical reagents are Government Furnished Equipment (GFE) to the HHA manufacturer. The HHA production was awarded 2QFY03. 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 such as polymerase chain reaction (PCR) were supported as of FY03. Expansion of Gold Standard Reference Panels in support of ongoing detection reagent validation will be a major focus between FY04 and FY10.

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IBADS	Technical support and maintenance of 13 fielded systems.	
JBPDS	The Joint Biological Point Detection System (JBPDS) utilizes an open systems approach as part of the overall acquisition strategy to expedite fielding of a credible force protection strategy, while ensuring a process is in place to inserting maturing and validated technologies. 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 time-phased JORD requirements. JBSDS will 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.	
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>BJ5</b>
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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, Edgewood, MD	U	921	0	NONE	0	NONE	0	NONE	0	921	0
HW C - Antigen Development	MIPR	Dugway Proving Ground, Dugway, UT	U	0	300	2Q FY03	0	NONE	0	NONE	0	300	0
HW C - HHA and Antibody Upgrades	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	68	3Q FY03	0	NONE	0	NONE	0	68	0
HW C - New Assays and Antigens	MIPR	USAMRIID, Fort Detrick, MD	U	0	234	2Q FY03	0	NONE	0	NONE	0	234	0
JBPDS													
HW S - Reliability, Availability, and Maintainability Growth	C/FFP	GD ATP, DeLand, FL	C	0	1800	3Q FY04	0	NONE	0	NONE	0	1800	0
JBSDS													
HW S - Develop Initial JBSDS Prototypes	C/CPFF	Fibertek, Herndon, VA	C	3866	1414	2Q FY03	0	NONE	0	NONE	0	5280	0
HW S - Develop Initial JBSDS Prototypes	C/CPFF	SESI, Burtonsville, MD	C	2200	1414	2Q FY03	0	NONE	0	NONE	0	3614	0
Subtotal I. Product Development:				6987	5230		0		0		0	12217	

Remarks:

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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													
OTHT C - HHA and Antibody Upgrades	MIPR	Naval Medical Research Center, Silver Spring, MD	U	600	67	3Q FY03	0	NONE	0	NONE	0	667	0
OTHT C - New Assays and Antigens	MIPR	USAMRIID, Fort Detrick, MD	U	461	237	2Q FY03	0	NONE	0	NONE	0	698	0
OTE C - Transition of ITF-6B Agents (ABATS Reagent Development)	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	160	3Q FY03	0	NONE	0	NONE	0	160	0
OTHT C - JBPDS Carrier Assembly	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	17	1Q FY03	0	NONE	0	NONE	0	17	0
JBPDS													
OTE C - Initiate and Complete Army Initial Operational Test and Evaluation	MIPR	ATEC/AFOTEC, Washington, DC	U	6886	2375	1Q FY03	0	NONE	0	NONE	0	9261	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	ECBC, 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	6810		0		0		0	14757	

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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	68	2Q FY03	0	NONE	0	NONE	0	68	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	28	3Q FY03	0	NONE	0	NONE	0	28	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	28	2Q FY03	0	NONE	0	NONE	0	28	0
PM/MS C - Program Management Support	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	282	2Q FY03	0	NONE	0	NONE	0	282	0
IBADS													
PM/MS S - Program Management/Program Manager Support	Various	JPO-CBD, Falls Church, VA	U	53	18	1Q FY03	0	NONE	0	NONE	0	71	0
JBPDS													
PM/MS S - Military Utility Assessment For Dry Filter Units	MIPR	JPM NBC CA, APG, MD	U	0	400	2Q FY04	0	NONE	0	NONE	0	400	0

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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
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	JPM NBCCA, APG, MD	U	333	1337	1Q FY03	0	NONE	0	NONE	0	1670	0
Subtotal IV. Management Services:				435	2169		0		0		0	2604	

Remarks:

<b>TOTAL PROJECT COST:</b>	16870	16185		0		0		0		0	33055	
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Project BJ5

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

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

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

**PROJECT**  
**BJ5**

**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	
CRP																																	
International Task Force (ITF)-6A List Complete	>>			4Q																													
DNA and Select Agent Panels for Ten Threat Agents				4Q	—————												4Q																
DNA Efforts to ITF-6A and ITF-6B								4Q	—————												4Q												
Upgrade Antibodies for ITF-6A												2Q	—————				1Q																
ITF-6B List Complete												2Q	—————				4Q																
ITF-6C List Complete																				1Q	—————				4Q								
IBADS																																	
Fielding Support	>>				—————												4Q																
JBPDS																																	
Operational Assessment 2 (OA2)	1Q																																
Low Rate Initial Production (LRIP) Phase 2 Start	1Q			4Q																													
Block I Army Initial Operational Test and Evaluation (IOT&E) (Multiservice Operational Test and Evaluation (MOT&E) Phase I)				4Q	1Q																												

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>BJ5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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
JBPDS (Cont)																																
Multiservice Initial Operational Test and Evaluation (IOT&E) (Phase II thru VI)									1Q	—————			2Q																			
Block I First Unit Equipped (FUE)							3Q	—	1Q																							
JBSDS																																
Initial JBSDS Technology Readiness Review				4Q																												
Initial JBSDS Milestone B								4Q																								
Initial JBSDS Competitive Test Fly-off								3Q 4Q																								
Initial JBSDS Developmental Testing								3Q 4Q																								
Initial JBSDS Milestone C Low Rate Initial Production (LRIP)											2Q																					
Initial JBSDS Low Rate Initial Production (LRIP)											3Q	—	1Q																			
Initial JBSDS Multi-Service Operational Test & Evaluation (MOT&E)															2Q 3Q																	
Initial JBSDS Production																	1Q	—————			1Q											
Initial JBSDS First Unit Equipped (FUE)																	1Q															

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>BJ5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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 Expl							3Q	4Q																								
Next Generation JBSDS Component Advanced Development											1Q	4Q																				
Next Generation JBSDS Advanced Development Contract											1Q																					
Next Generation JBSDS Milestone B															1Q																	
Next Generation JBSDS System Development and Demonstration (SDD)															2Q									2Q								
Next Generation JBSDS Developmental Testing (DT)																							3Q	2Q								
Next Generation JBSDS CDR																							3Q									
Next Generation JBSDS Milestone C																								3Q								
Next Generation JBSDS Low Rate Initial Production (LRIP)																								3Q				3Q				
Next Generation JBSDS Multiservice Operational Test and Evaluation (MOT&E)																																4Q

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<b>D. <u>Schedule Profile (cont):</u></b>	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)																																
Low Rate Initial Production (LRIP) Contract Award For Initial JBSDS									2Q																							

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>				PROJECT <b>CA5</b>	
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
CA5 CONTAMINATION AVOIDANCE (SDD)	69977	112432	70136	39138	23627	13438	20204	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) Joint Biological Point Detection System (JBPDS), (2) Joint Biological Stand-off Detection System (JBSDS), (3) Joint Chemical Agent Detector (JCAD), (4) Joint Contaminated Surface Detector (JCSD), (5) Joint Effects Model (JEM), (6) Joint Operational Effect Federation (JOEF) (7) Joint Service Lightweight Nuclear, Biological and Chemical Reconnaissance System (JSLNBCRS), (8) Joint Service Lightweight Stand-off Chemical Agent Detector (JSLSCAD), (9) Joint Warning and Reporting Network (JWARN), (10) Mobile Chemical Agent Detector (MCAD), (11) Nuclear, Biological and Chemical Reconnaissance Vehicle (NBCRV), (12) Force Protection - CB Installation/Force Protection Program.

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The Joint Biological Point Detection System (JBPDS) program is an evolutionary advancement of the Army Biological Integrated 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 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.

The Joint Biological Stand-off 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 theaterwide, 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.

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The JCAD program is developing a miniaturize, rugged and portable point chemical agent detector that automatically and simultaneously detects, identifies, quantifies, and alerts in the presence of nerve, blister, and blood chemical warfare agents. 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 program will develop a laser interrogation of surface agent system that 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). This program has been transitioned to IS5 beginning FY05.

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 CBRN 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). This program has been transitioned to IS4 and IS5 beginning FY05.

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<p>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.</p> <p>The JSLSCAD will provide the first real-time, on-the-move, chemical agent vapor detection for contamination avoidance or reconnaissance operations. The JSLSCAD detects, identifies, and reports nerve, blister, and blood agent vapors. These systems have detection capabilities of up to five kilometers. The JSLSCAD will replace the M21 Remote Stand-off Chemical Agent Alarm (RSCAAL).</p> <p>The JWARN will provide standard integration and analysis of NBC detection information with Command, Control, Communication, Computers, Intelligence Surveillance and Reconnaissance (C4ISR) on the battlefield automating the NBC warning and reporting processes currently performed manually throughout the Services. The JWARN will collectively consist of Commercial Off the Shelf (COTS) materiel and JWARN software for C4ISR. JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. JWARN ID was the initial acquisition and fielding of COTS and Government Off the Shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. JWARN will provide automatic NBC message capability at the Global Command and Control System (GCCS) level. JWARN will integrate NBC legacy and future detector systems, NBC Warning and Reporting Software Modules, and NBC battlespace Management Modules in the Joint Services C4I systems. In addition to JWARN development, a JWARN Initial Capability (JIC) will be developed and provided to warfighters in order to support refinement of Service CONOPS and provide feedback to the JWARN developer. P3I will investigate new detectors/sensors and software changes to Service C4I systems. This program has been transitioned to IS5 beginning FY05.</p>		
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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 NBCRV is a dedicated system of nuclear and chemical detection and warning equipment, and biological sampling equipment integrated into the Stryker vehicle chassis and is 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 transitioned from BJ5 to CA5 in FY04.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
INTERIM BIO AGENT DETECTOR SYS (IBADS)	0	303	294
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 303 IBADS - Continue to provide engineering and technical support to maintain fielded systems.

**Total**     303

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**FY 2005 Planned Program:**

- 294 IBADS - Continue to provide engineering and technical support to maintain fielded systems.

**Total** 294

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIO POINT DETECTION SYSTEM (JBPDS)	0	5739	2948
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 791 JBPDS BLKI - Complete advanced Biological Aerosol Warning System (BAWS) upgrade for Low Rate Initial Production (LRIP) systems to meet Joint Operational Requirements Document (JORD) objective requirements for detection.
- 4948 JBPDS BLKI - Complete Multi-Service Operational Test and Evaluation (MOT&E) for the Army, Navy, and Air Force (Phases II-V). Provide final System Evaluation Report (SER).

**Total** 5739

**FY 2005 Planned Program:**

- 2148 JBPDS BLKI - Initiate planning and execution of MOT&E Phase VI for the Army, Navy, and Air Force.
- 800 JBPDS BLKI - Continue configuration management including reliability, availability, and maintainability, and Integrated Logistics Support (ILS) improvements.

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**FY 2005 Planned Program (Cont):**

**Total** 2948

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL STANDOFF DETECTOR SYSTEM	0	15873	18592
RDT&E Articles (Quantity)	0	6	2

**FY 2004 Planned Program:**

- 2554 JBSDS - Initiate planning for Initial Operational Test and Evaluation (IOT&E).
- 7267 JBSDS - Award development contract to one of two competing candidate systems to enhance performance, develop Integrated Logistic Support (ILS) and documentation (technical manuals, specifications, etc.), and support Low Rate Initial Production (LRIP).
- 3369 JBSDS - Initiate development of next generation JBSDS system. This includes modeling and simulation analysis, market research analysis, and Cost As An Independent Variable (CAIV) analysis.
- 1737 JBSDS - Initiate background testing and analysis at multiple locations to refine detection/discrimination algorithm.
- 946 JBSDS - Initiate evaluation of CBMS II Chemical Biological Monitoring System.

**Total** 15873

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**FY 2005 Planned Program:**

- 2570 JBSDS - Complete contract (including contractor support of Production Verification Test (PVT) and Initial Operational Test and Evaluation (IOT&E).
- 2610 JBSDS - Complete PVT.
- 4176 JBSDS - Complete IOT&E.
- 9236 JBSDS - Continue the development of Next Generation JBSDS. Award Advanced Development contract to develop the Next Generation JBSDS.

**Total** 18592

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT CHEMICAL AGENT DETECTOR (JCAD)	22116	13758	7021
RDT&E Articles (Quantity)	0	105	0

**FY 2003 Accomplishments:**

- 2850 JCAD - Continued hardware and software development based upon results from Contractor Validation Testing (CVT).
- 2220 JCAD - Continued systems engineering and logistics planning.
- 2387 JCAD - Continued technical data and logistics support.
- 1179 JCAD - Continued designing JCAD system interface with user platforms.

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<p><b>FY 2003 Accomplishments (Cont):</b></p> <ul style="list-style-type: none"> <li>• 13270 JCAD - Completed CVT and preplanning for government Developmental Testing (DT).</li> <li>• 210 JCAD - Continued planning for Initial Operational Test and Evaluation (OT&amp;E).</li> </ul> <p><b>Total</b> 22116</p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 2105 JCAD - Complete hardware and software development.</li> <li>• 4967 JCAD - Initiate government evaluation of commercial detectors.</li> <li>• 3900 JCAD - Purchase commercial off-the-shelf (COTS) systems and support (up to 105 systems at \$26K each).</li> <li>• 2786 JCAD - Continue systems engineering support.</li> </ul> <p><b>Total</b> 13758</p> <p><b>FY 2005 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 4775 JCAD - Continue government evaluation of commercial detectors.</li> <li>• 2021 JCAD - Continue systems engineering support.</li> <li>• 225 JCAD - Continue contract support of COTS systems.</li> </ul> <p><b>Total</b> 7021</p>		
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT CONTAMINATED SURFACE DETECTOR (JCSD)	3179	4672	0
RDT&E Articles (Quantity)	0	1	0

**FY 2003 Accomplishments:**

- 2360 JCSD - Initiated planning for and implemented process to resolve vehicle integration issues and militarization of components. Initiated sensor performance and qualification testing and interface control document. Continued logistics planning.
- 580 JCSD - Initiated field testing.
- 239 JCSD - Initiated systems development and engineering to include design, development of systems specifications and competitive procurement packages.

**Total** 3179

**FY 2004 Planned Program:**

- 1358 JCSD - Complete systems engineering and design, and continue logistics support planning. Build first prototype unit (\$500K), and order parts for two additional units for laboratory and field testing.
- 884 JCSD - Continue sensor performance and qualification testing. Initiate modifications to vehicle platform, integrate system in vehicle, and conduct dust/smoke effects testing as well as customer demonstration.

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**FY 2004 Planned Program (Cont):**

- 478 JCSD - Initiate design of vehicle interfaces and complete the interface control document.
- 1952 JCSD - Initiate evaluation of CB Warfare Agent Detector Chip.

**Total** 4672

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT EFFECTS MODEL	0	12688	0
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 2021 JEM Block I - Complete development of logistics/training plans and materials. Complete Post Deployment Software Support (PDSS) plans. Support continued warfighter Integrated Process Team (IPT) involvement and conduct Milestone (MS) B.
- 5536 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. Initiate integration activities with Service Global Command and Control System (GCCS) variants and other Command and Control (C2) systems. Verify system interoperability requirements.

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**FY 2004 Planned Program (Cont):**

- 5131 JEM Block I - Develop detailed Developmental and Operational test plans. Perform Independent Validation & Verification (IV&V) activities during software development. Update the Test and Evaluation Master Plan (TEMP) and the Verification Validation and Accreditation (VV&A) plan to support MS C. Complete data gap analysis of CBRN/TIC/TIM field trials. Produce IV&V exhibits to support class accreditation. Initiate Government Developmental Testing.

**Total** 12688

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS LTWT NBC RECON SYS (JSLNBCRS)	14047	13389	21221
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 550 JSLNBCRS - Completed HMMWV Developmental Test II Electromagnetic Interference (EMI), Electromagnetic compatibility (EMC), High Altitude Electromagnetic Pulse (HEMP), interoperability, and Limited User Test.
- 407 JSLNBCRS - Completed chemical software and algorithm development. Performed chemical agent tests for Chemical Biological Mass Spectrometer (CBMS) Block II transition to JSLNBCRS procurement.
- 500 JSLNBCRS - Completed program analysis and preparation for Milestone C Low Rate Initial Production (LRIP) review. Program analysis included review of test data, and future program layout.

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<p><b>FY 2003 Accomplishments (Cont):</b></p> <ul style="list-style-type: none"> <li>• 9990 JSLNBCRS - Continued development/design/integration of LAV variant under System Demonstration and Development (SDD) contract and to support additional work effort during the extended period of performance.</li> <li>• 2300 JSLNBCRS - Initiated and completed the design, integration, and conduct of the Mobile Chemical Agent Detector (MCAD) excursion.</li> <li>• 300 JSLNBCRS - Continued the development of the integrated training package.</li> </ul> <p><b>Total 14047</b></p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 3329 JSLNBCRS - Initiate DT I for LAV variant.</li> <li>• 6331 JSLNBCRS - Initiate TICs and TIMs software upgrade for CBMS Block II transition to JSLNBCRS procurement. Initiate improvements to biological detection/identification capability. Initiate Non-Traditional Agent (NTA) and chemical vapor algorithm, and start testing.</li> <li>• 1354 JSLNBCRS - Continue development/design of LAV enhancements, install automatic fire suppression system, LAV Generation II upgrades and test support.</li> <li>• 2375 JSLNBCRS - Initiate multiservice Operational Test and Evaluation (MOT&amp;E) planning/coordination.</li> </ul> <p><b>Total 13389</b></p>		
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**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. Complete NTA and chemical vapor testing.
- 9124 JSLNBCRS - Initiate multi-service Operational Test and Evaluation (MOT&E).
- 2550 JSLNBCRS - Initiate LAV Developmental Test (DT) of sensors and regression testing of Engineering Change Proposals.
- 2789 JSLNBCRS - Continue multi-service engineering support.

**Total** 21221

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS LIGHTWEIGHT STANDOFF CHEMICAL AGENT DET (JSLSCAD)	13851	15559	20060
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 11005 JSLSCAD - Continued Production Qualification Test (PQT) for initial development JSLSCAD.
- 1000 JSLSCAD - Continued technical data package and acquisition documentation for Milestone (MS) III. All program documentation was reviewed and updated to support LRIP MS C.
- 1846 JSLSCAD - Continued the review and preparation of technical manuals, logistics support, and training materials. All logistics documentation was updated based on test results.

**Total** 13851

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**FY 2004 Planned Program:**

- 2714 JSLSCAD - Initiate support of the Stryker Nuclear Biological Reconnaissance Vehicle (NBCRV) Production Qualification Test and Limited User Test (LUT).
- 1000 JSLSCAD - Initiate methodology development to support the comparison of commercially available remote sensing detectors.
- 9600 JSLSCAD - Choose and purchase candidate remote sensing detectors for testing.
- 2245 JSLSCAD - Initiate and conduct testing of remote detectors to support National Research Council (NRC) findings.

**Total** 15559

**FY 2005 Planned Program:**

- 5000 JSLSCAD - Continue testing to support NRC findings.
- 8000 JSLSCAD - Initiate evaluation of candidate commercial remote detection systems.
- 3000 JSLSCAD - Integrate commercial systems into platforms.
- 4060 JSLSCAD - Support remote sensing test facility design and use for testing of commercial detectors.

**Total** 20060

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT WARNING & REPORTING NETWORK (JWARN)	8362	25550	0
RDT&E Articles (Quantity)	0	0	0

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<p><b>FY 2003 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 5687 JWARN - Developed JWARN C4I hosted mission application software and assessed system communication requirements.</li> <li>• 2675 JWARN - Prepared and improved documentation and processes for JWARN Quality Assurance, Configuration Management, Program Management, and Integration.</li> </ul> <p><b>Total 8362</b></p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 3864 JWARN - Conduct Program Management and Oversight of JWARN and JWARN Initial Capability (JIC) Development efforts.</li> <li>• 772 JWARN - JIC Component Development.</li> <li>• 1824 JWARN - Plan for and initiate JWARN Developmental Test/Operational Assessment (DT/OA).</li> <li>• 2000 JWARN - Provide integration support for JWARN with Joint Effects Model (JEM) and Joint Operational Effect Federation (JOEF).</li> <li>• 5509 JWARN - Integrate JIC with C4I Systems.</li> <li>• 932 JWARN - Mission Application Software Integration Support</li> <li>• 1824 JWARN - Operational Assessment Planning</li> <li>• 8825 JWARN - Development of JWARN Communications Interface Device (JCID)</li> </ul> <p><b>Total 25550</b></p>		
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
MOBILE CHEMICAL AGENT DETECTOR	4045	3409	0
RDT&E Articles (Quantity)	0	6	0

**FY 2003 Accomplishments:**

- 1000 MCAD - Continued agent testing at Dugway Proving Ground (DPG).
- 250 MCAD - Initiated environmental testing at White Sands Missile Range and Aberdeen Test Center.
- 2795 MCAD - Initiated outdoor simulant testing at DPG and NAVSEA with contractor support.

**Total** 4045

**FY 2004 Planned Program:**

- 3100 MCAD - Procure six commercial MCADs and support equipment for testing (\$380K each) and support equipment.
- 178 MCAD - Initiate Toxic Industrial Chemical Testing
- 131 MCAD - Continue engineering and contract support.

**Total** 3409

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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
NBC RECON VEHICLE	4377	0	0
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 2835 NBCRV - Completed sensor suite engineering development, and provided sensor suite equipment to Project Manager Brigade Combat Teams (PM BCT) for the testing of four Stryker vehicles.
- 1542 NBCRV - Initiated Production Qualification Test (PQT) and initiated and completed Limited User Test (EUT).

**Total** 4377

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	1492	0
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 1492 SBIR - Small Business Innovative Research

**Total** 1492

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<b>C. <u>Other Program Funding Summary:</u></b>	<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>
CA7 CONTAMINATION AVOIDANCE OPERATIONAL SYS DEV	0	0	2178	1944	0	0	0	0	4122
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	0	1104	5937	16703	30670	24308	0	0	78722
JC1500 NBC RECON VEHICLE (NBCRV)	6205	23684	18415	24295	7946	0	0	0	80545
JF0100 JOINT CHEM AGENT DETECTOR (JCAD)	5900	2085	1933	26303	29466	25317	25758	Cont	Cont
M98801 AUTO CHEMICAL AGENT ALARM (ACADA), M22	10022	14889	38900	0	0	0	0	0	63811
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	10569	44472	50664	72126	79680	38892	38879	Cont	Cont
N00041 SHIPBOARD DETECTOR MODIFICATIONS	4575	0	0	0	0	0	0	0	4575
S02201 IMPROVED CHEMICAL AGENT MONITOR (ICAM)	375	0	4100	0	0	0	0	0	4475

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CA5</b>
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<b>C. <u>Other Program Funding Summary (Cont):</u></b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	<b><u>FY 2008</u></b>	<b><u>FY 2009</u></b>	<b><u>To Compl</u></b>	<b><u>Total Cost</u></b>
S10801 JS LTWT STANDOFF CW AGT DETECTOR (JSLSCAD)	0	2999	2733	38871	43682	43753	44226	Cont	Cont

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**D. Acquisition Strategy:**

IBADS	Technical support and maintenance of 13 fielded systems.
JBPDS	The Joint Biological Point Detection System (JBPDS) utilizes an open systems approach as part of the overall acquisition strategy to expedite fielding of a credible force protection strategy, while ensuring a process is in place to inserting maturing and validated technologies. 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 time-phased JORD requirements. JBSDS will 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.

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JCAD	<p>Joint Chemical Agent Detector (JCAD) acquisition strategy focused Joint Service science and technology efforts into development of a small lightweight chemical agent detector. During limited user testing (LUT) and pilot production qualification test (PQT), issues were identified in meeting two key performance parameters. Testing was terminated. The acquisition strategy is being restructured to meet the JCAD requirements. A new Acquisition Program Baseline is being developed.</p>	
JCSD	<p>The JCSD program will develop and test platform specific prototype laser interrogation of surface agents system via a spiral development acquisition strategy. System development is under contract with ITT Industries, and will demonstrate a technology readiness level (TRL) of 6 in laboratory and field testing, and will be used in the upcoming FY05 Chemical Unmanned Ground vehicle (CUGR) Advance Concept Technology Demonstration (ACTD). The Sole Source contract with ITT Industries will finalize the technical approach and produce three prototypes. The system algorithm and design will be optimized and later integrated onto the Joint Service Lightweight Reconnaissance System (JSLNBCRS). Extensive laboratory and early user testing will be conducted in preparation for an Operational Test (OT) in FY06. Upon successful completion of OT, a Milestone C In-Process Review (IPR) will be held to initiate the formal Acquisition Program, and approve low-rate initial production of the JCSD. The JCSD will be introduced to the JSLNBCRS and Stryker Fleets via Pre-Planned Product Improvements in FY07.</p>	
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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>	
JSLNBCRS	<p>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. A Low Rate Initial Production Contract Award Decision, for 14 M1113 HMMWV variants is anticipated for 2QFY04. Initial Operational Capability (IOC), HMMWV/LAV variant, is expected during FY06.</p>	
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JSLSCAD

The present Production Qualification Test (PQT) effort has been cancelled. The program is now the Commercial JSLSCAD. The JPM NBCCA will adjust the program to reflect an incremental approach to an interim solution, and an evaluation of commercial systems against the JSLSCAD Operational Requirements Document (ORD) requirements. The following documents will be prepared to address the new direction of the program: Acquisition Strategy; Request for Proposal; Statement of Work; Acquisition Program Baseline; Test and Evaluation Master Plan, etc. Increment 1 represents an interim solution with the present JSLSCAD since it is equal to or better than the M21. Systems will go to Stryker, JSLNBCRS, and the Navy. Increment 2 will likely pursue an evaluation of three commercially available systems from three contractors who responded to the Market Survey. The commercial system evaluation will consist of technical performance tests and operational tests to support a production decision. An APB has been prepared for Increment 1. The APB for Increment 2 will be completed by Jan 04.

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JWARN	<p>The revised AS is based on the contract awarded on July 15, 2003 to Northrop Grumman - Information Technology and updates key program milestones and events accordingly. The revised AS accelerates the development effort to provide a JWARN Initial Capability (JIC) limited, end-to-end JWARN capability to the warfighter by 4QFY04. This acceleration will be accomplished by leveraging the technology of an extant end-to-end JIC. The JIC will be completed early in the contract cycle, will be demonstrated in 2QFY04, and will be made available to key operational users by 4QFY04 in accordance with U.S. Central Command (CENTCOM) operational needs. Usage of this initial integrated capability by the warfighter will generate operational feedback to the JWARN developer and provide a venue to validate and refine Measures of Performance (MOPs) and Measures of Effectiveness (MOEs). Further, it will provide an opportunity to refine Service Concepts of Operations (CONOPS) and Tactics, Techniques, and Procedures (TTPs) for the system. The revised strategy further accelerates the delivery of the full system by developing a single increment JWARN-Full Capability (JWARN-FC) system vice development in two separate Blocks. This acceleration is achieved through the concurrent integration of sensor connectivity initially planned for Block III. The revised strategy eliminates the Block II Milestone Decision process as well as Block II Development Testing/Operational Assessment (DT/OA). This shortens the delivery schedule for the full capability of JWARN by approximately 12 months.</p>	
MCAD	<p>The program procures 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 is being conducted as a two-year effort. There may be a follow-on program based on the results of testing conducted at Dugway Proving Ground.</p>	
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NBCRV

Development of the Nuclear Biological Chemical Reconnaissance Vehicle consists of two parts. Part I is a sensor suite developmental effort, led by JPM NBC Contamination Avoidance. Part II is an integration effort of the sensor suite into the Stryker 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 Dynamics Land System (GDLS).

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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 and Identification Component Upgrades	C/CPFF	TBS	C	0	0	NONE	791	2Q FY04	650	2Q FY05	0	1441	0
JBSDS													
SW SB - Develop Next Generation Technologies	C/CPFF	TBS	C	0	0	NONE	350	3Q FY04	0	NONE	0	350	0
HW S - Develop and Integrate JBSDS, Initiate LRIP, Develop ILS and Documentation	C/CPFF	TBS	C	0	0	NONE	6755	2Q FY04	2370	1Q FY05	0	9125	0
HW S - Develop Next Generation JBSDS	C/CPFF	TBS	C	0	0	NONE	0	NONE	8152	1Q FY05	0	8152	0
SW S - Software Development for Initial JBSDS	C/CPFF	TBS	C	0	0	NONE	409	2Q FY04	0	NONE	0	409	0
HW S - Evaluate CBMS II Chemical Biological Monitoring System	PO	TBS		0	0	NONE	946	2Q FY04	0	NONE	0	946	0
JCAD													
HW/SW Development	C/CPAF	BAE SYSTEMS Inc, Austin, TX	C	36989	9455	Nov-02	2105	1Q FY04	0	NONE	0	48549	0
SW SB - Purchase Commercial Detectors	Reqn	TBS	C	0	0	NONE	3900	2Q FY04	0	NONE	0	3900	0

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>JCSD</b>													
HW S - System Development and Prototypes	SS/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	1200	2126	2Q FY03	900	2Q FY04	0	NONE	0	4226	0
SW SB - Software Development	SS/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	442	784	2Q FY03	258	2Q FY04	0	NONE	0	1484	0
HW S - Vehicle Integration and Design	C/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	0	0	NONE	478	2Q FY04	0	NONE	0	478	0
HW S - Prototype Build and System Integration	C/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	0	0	NONE	490	2Q FY04	0	NONE	0	490	0
HW S - CB Warfare Agent Detector Chip	PO	TBS		0	0	NONE	1951	2Q FY04	0	NONE	0	1951	0
<b>JEM</b>													
SW SB - Hazard Prediction Model - Formal Software Development	C/CPIF	TBD	C	0	0	NONE	5135	Feb-04	0	NONE	0	5135	5850
<b>JSLNBCRS</b>													
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	2300	1Q FY03	5766	2Q FY04	5858	2Q FY05	0	13924	0

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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 S - Development/Design/Integration of LAV Variant	C/CPFF	Northrup Grumman Mission Systems, Sierra Vista, AZ	C	0	6477	2Q FY03	1100	1Q FY04	0	NONE	0	7577	0
<b>JSLSCAD</b>													
SW S - Develop Software	C/CPFF	General Dynamics-ATP, DeLand, FL	C	14975	0	NONE	0	NONE	0	NONE	0	14975	11095
SW SB - Design and Build Test Hardware	C/CPFF	General Dynamics-ATP, DeLand, FL	C	37500	0	NONE	0	NONE	0	NONE	0	37500	0
SW SB - Develop and Manage Test Methodology	PO	Various	U	0	0	NONE	1000	1Q FY04	8000	1Q FY05	0	9000	0
HW S - Purchase and Support Commercial Systems	PO	JPM NBCCA/RDECOM, APG, MD	U	0	0	NONE	9445	2Q FY04	4060	2Q FY05	0	13505	0
<b>JWARN</b>													
SW SB - JWARN System Development and Demonstration Contract	C/FPI	Northrop Grumman, Stafford, VA	C	0	5687	4Q FY03	9597	2Q FY04	0	NONE	0	15284	0
<b>MCAD</b>													
HW GFPR - Procure Six Commercial MCADs for testing.	SS/FFP	Northup Grumman Security Systems LLC, Linthicum, MD	C	0	0	NONE	3100	3Q FY04	0	NONE	0	3100	0

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
NBCRV													
HW S - NBCRS Sensor Suite Engineering Development, Fabricate Prototypes, Complete Development	C/CPFF	CACI Technologies Inc, Manassas, VA	C	9264	1274	Dec-02	0	NONE	0	NONE	0	10538	16401
HW C - Redesign of Chem Vapor Sampling System (CVSS) Canister	C/CPFF	Battelle, APG, MD	C	0	400	Dec-03	0	NONE	0	NONE	0	400	0
Subtotal I. Product Development:				100370	28503		54476		29090		0	212439	

Remarks: JBSDS - JBSDS - FY04 LRIP, six at \$500K each.

JCAD - JCAD - COTS, up to 15 systems from each of seven vendors at \$26K per system (total 105 systems)

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>IBADS</b>													
ILS S - Continued Support of Fielded IBAD Systems	MIPR	NSWC, Dahlgren, VA	U	0	0	NONE	288	1Q FY04	279	1Q FY05	0	567	0
<b>JBSDS</b>													
ES S - Modeling and Simulation	PO	FT Detrick, MD and BSM Inc., Kennett Square, PA	C	0	0	NONE	200	2Q FY04	200	1Q FY05	0	400	0
TD/D S - Modeling and Test Support	MIPR	NAVSEA/Johns Hopkins University, Baltimore, MD	N	0	0	NONE	600	1Q FY04	600	1Q FY05	0	1200	0
<b>JCAD</b>													
ILS S - Technical Data and Logistics Support	MIPR	Various	U	1188	1370	Nov-02	0	NONE	0	NONE	0	2558	0
ES SB - Contractor Support of Technical Evaluation	Reqn	TBS		0	0	NONE	0	NONE	225	1Q FY05	0	225	0
<b>JCS D</b>													
ILS S - Initiate Logistics Planning	MIPR	JPM NBC CA, APG, MD	U	50	50	1Q FY03	100	2Q FY04	0	NONE	0	200	0
<b>JEM</b>													
ES S - IPT - System Engineering, Logistics, and Program Support	MIPR	Various	U	0	0	NONE	2111	Jan-04	0	NONE	0	2111	2171
<b>JSLNBCRS</b>													
ES C - CSS Support	C/FFP	SVERDRUP, Dumfries, VA	C	1400	469	1Q FY03	600	1Q FY04	0	NONE	0	2469	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>JBPDS</b>													
OTE C - Plan and Conduct Multi-Service OT&E	MIPR	Various	U	0	0	NONE	4448	1Q FY04	1348	1Q FY05	8000	13796	0
<b>JBSDS</b>													
OTE S - Planning and Operational Testing I	MIPR	AFOTEC, Albuquerque, NM	U	0	0	NONE	818	2Q FY04	620	2Q FY05	0	1438	0
OTE C - Production Verification Test	MIPR	Developmental Test Command, APG, MD	U	0	0	NONE	100	2Q FY04	800	4Q FY05	0	900	0
OTE S - Operational Testing I	MIPR	Operational Test Command, FT Hood, TX		0	0	NONE	700	2Q FY04	2500	1Q FY05	0	3200	0
OTHT S - OT/DT Initial JBSDS	MIPR	AEC, APG, MD		0	0	NONE	450	2Q FY04	450	2Q FY05	0	900	0
<b>JCAD</b>													
DTE S - JCAD Developmental Test (DT)	MIPR	Various Govt	U	10327	10064	Oct-02	0	NONE	0	NONE	0	20391	0
OTE S - JCAD Initial Operational Test and Evaluation (IOT&E) Supporting LRIP	MIPR	Various Govt	U	0	210	Oct-02	0	NONE	0	NONE	0	210	0
OTHT C - Methodology Development for Hand Held Detectors	MIPR	JPM, NBC, CA, APG, MD		0	0	NONE	2000	2Q FY04	0	NONE	0	2000	0
OTHT C - Evaluate Commercial Detectors	MIPR	Various	U	0	0	NONE	3000	2Q FY04	5775	1Q FY05	0	8775	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>JCSD</b>													
DTE C - Engineering Design Test	MIPR	Dugway Proving Ground, DPG, UT	U	0	77	Feb-03	9	Mar-04	0	NONE	0	86	0
OTHT S - Hardware Engineering Test	C/CPFF	ITT Advanced Engineering & Sciences, Albuquerque, NM	C	0	0	NONE	386	2Q FY04	0	NONE	0	386	0
<b>JEM</b>													
DTE S - Hazard Prediction Model - Developmental Test	MIPR	Various	U	0	0	NONE	2442	Feb-04	0	NONE	0	2442	2510
OTE S - Hazard Prediction Model - Operational Test	MIPR	Various	U	0	0	NONE	2310	May-04	0	NONE	0	2310	2375
OTHT S - Hazard Prediction Model - Independent Verification and Validation	C/FFP	TBS	C	0	0	NONE	233	Jan-03	0	NONE	0	233	240
<b>JSLNBCRS</b>													
OTHT SB - Conduct Limited User Test of HMMWV	MIPR	Various	U	2400	800	1Q FY03	0	NONE	0	NONE	0	3200	0
OTHT SB - HMMWV Variant Developmental Test II	MIPR	Various	U	0	220	1Q FY03	0	NONE	0	NONE	0	220	0
OTHT SB - Developmental Testing for CBMS	MIPR	Dugway Proving Ground, Dugway, UT	U	0	0	NONE	433	2Q FY04	600	2Q FY05	0	1033	0
DTE S - LAV DT I	MIPR	Dugway Proving Ground, Dugway, UT	U	0	0	NONE	2500	1Q FY04	2500	1Q FY05	0	5000	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
OTHT S - MCAD Versus JSLSCAD Comparison Test	MIPR	Dugway Proving Ground, Dugway, UT	U	0	2100	2Q FY03	0	NONE	0	NONE	0	2100	0
OTHT S - MOTE Test Site Support	PO	Various	U	0	0	NONE	1375	2Q FY04	9174	1Q FY05	0	10549	0
<b>JSLSCAD</b>													
OTHT C - Support Stryker NBCRV PQT, LUT and Integration Test	MIPR	Various	U	8876	5060	Nov-02	2362	Nov-03	0	NONE	0	16298	9767
OTHT S - Engineering Design Test, Production Qualification Test, and Initial Operational Test and Evaluation	MIPR	Various	C	4100	5940	Nov-02	0	NONE	0	NONE	0	10040	3464
OTHT SB - Remote Vapor Sensing to Support NRC Findings	PO	Various	U	0	0	NONE	2400	2Q FY04	2000	1Q FY05	0	4400	0
OTHT S - Evaluate Commercial Remote Sensing Systems	PO	Various		0	0	NONE	0	NONE	6000	2Q FY05	0	6000	0
<b>JWARN</b>													
OTHT SB - Developmental Test II /Operational Assessment Full Requirements	MIPR	Various	U	0	0	NONE	1824	2Q FY04	0	NONE	0	1824	0
<b>MCAD</b>													
DTE C - Agent Response Testing	MIPR	Various Government test sites	U	0	3450	2Q FY03	0	NONE	0	NONE	0	3450	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
DTE C - Contractor Support Developmental Testing	C/CPFF	Northrup Grumman, Linthicum, MD	C	0	495	2Q FY03	0	NONE	0	NONE	0	495	0
OTHT S - Toxic Industrial Chemical (TIC) Testing	MIPR	Nevada Test site, Mercury, NV	U	0	0	NONE	178	3Q FY04	0	NONE	0	178	0
OTHT S - Contractor Support TIC Testing	SS/FFP	Northrup Grumman Security Systems LLC, Linthicum, MD	C	0	0	NONE	60	3Q FY04	0	NONE	0	60	0
<b>NBCRV</b>													
OTHT SB - Support Production Qualification Test/Early User Test	MIPR	JPM NBC CA, APG, MD	U	2160	492	Dec-02	0	NONE	0	NONE	0	2652	3244
OTE SB - Support Production Qualification Test/Early User Test	C/CPFF	Battelle, APG, MD	C	0	240	Nov-03	0	NONE	0	NONE	0	240	0
<b>Subtotal III. Test and Evaluation:</b>				<b>27863</b>	<b>29148</b>		<b>28028</b>		<b>31767</b>		<b>8000</b>	<b>124806</b>	

Remarks: JBSDS - JBSDS - Developmental and Operational Testing

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>IBADS</b>													
PM/MS S - Program Management/Program Manager Support	PO	JPEO-CBD, Falls Church, VA	U	0	0	NONE	15	1Q FY04	15	1Q FY05	0	30	0
<b>JBPDS</b>													
PM/MS S - Project Management	MIPR	JPM NBC CA, APG, MD	U	0	0	NONE	500	1Q FY04	950	1Q FY05	0	1450	0
<b>JBSDS</b>													
PM/MS S - Program Management/Management Support	MIPR	JPM NBC CA, APG, MD	U	0	0	NONE	2081	1Q FY04	1600	1Q FY05	0	3681	0
PM/MS S - Other Services (Army, Navy, and Air Force)	MIPR	Various	U	0	0	NONE	984	1Q FY04	1300	1Q FY05	0	2284	0
PM/MS S - Modeling and simulation analysis, market research and CAIV	MIPR	Various	U	0	0	NONE	1480	2Q FY04	0	NONE	0	1480	0
<b>JCAD</b>													
PM/MS SB - Joint Service Support	MIPR	Various	U	4706	1017	1Q FY03	2753	1Q FY04	1021	1Q FY05	0	9497	0
<b>JCSD</b>													
PM/MS S - Project Management	MIPR	JPM NBC CA, APG, MD	U	79	142	1Q FY03	100	1Q FY04	0	NONE	0	321	0
<b>JEM</b>													
PM/MS S - Program Office - Planning and Programming	MIPR	SPAWARSYSCOM, San Diego, CA	U	0	0	NONE	457	Jan-04	0	NONE	0	457	895

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CA5</b>
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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
<b>JSLNBCRS</b>													
PM/MS SB - Joint Service Integrated Product Team Support	MIPR	Various	U	1475	331	1Q FY03	300	1Q FY04	2726	1Q FY05	0	4832	0
PM/MS SB - Project/Program Management	PO	JPM NBC CA, APG, MD	U	0	1050	1Q FY03	915	1Q FY04	363	1Q FY05	0	2328	0
<b>JLSLSCAD</b>													
PM/MS S - JLSLSCAD - Core Team Salaries and Other Government Agencies Support Through Milestone III IPR.	MIPR	JPM NBC CA, APG, MD and Other Service Support	U	3670	986	Nov-02	352	Jan-04	0	NONE	0	5008	2580
<b>JWARN</b>													
PM/MS SB - Joint Integrated Product Team Support	MIPR	Various	U	0	2675	1Q FY03	5688	1Q FY04	0	NONE	0	8363	0
<b>MCAD</b>													
PM/MS S - Planned Project Support	MIPR	JPM NBC CA, APG, MD	U	0	100	2Q FY03	71	2Q FY04	0	NONE	0	171	0
<b>NBCRV</b>													
PM/MS SB - Engineering Management	MIPR	JPM NBC CA, APG, MD	U	4340	1711	Dec-02	0	NONE	0	NONE	0	6051	4197
PM/MS SB - Engineering Management	MIPR	JPM NBC CA, APG, MD	U	0	260	Dec-03	0	NONE	0	NONE	0	260	0
<b>ZSBIR</b>													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	0	NONE	1492	NONE	0	NONE	0	1492	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>										DATE <b>February 2004</b>		
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>					PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>					PROJECT <b>CA5</b>		
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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
Subtotal IV. Management Services:				14270	8272		17188		7975		0	47705	

Remarks:

TOTAL PROJECT COST:				149466	69977		112432		70136		8000	410011	
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Project CA5

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

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

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

<b>D. <u>Schedule Profile:</u></b>	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																															
Low Rate Initial Production (LRIP) Phase 2 Start	1Q	—		4Q																												
Block I Army Initial Operational Test and Evaluation (IOT&E) (Multiservice Operational Test and Evaluation (MOT&E) Phase I)				4Q	1Q																											
Multiservice Initial Operational Test and Evaluation (IOT&E) (Phase II thru VI)									1Q	—————			2Q																			
Block I First Unit Equipped (FUE)							3Q	—	1Q																							
JBSDS																																
Initial JBSDS Technology Readiness Review				4Q																												
Initial JBSDS Milestone B								4Q																								
Initial JBSDS Competitive Test Fly-off							3Q	4Q																								
Initial JBSDS Developmental Testing							3Q	4Q																								

**Exhibit R-4a, Schedule Profile**

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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**

**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
JBSDS (Cont)																																
Initial JBSDS Milestone C Low Rate Initial Production (LRIP)									2Q																							
Initial JBSDS Low Rate Initial Production (LRIP)									3Q	1Q																						
Initial JBSDS Multi-Service Operational Test & Evaluation (MOT&E)											2Q	3Q																				
Initial JBSDS Production													1Q	1Q																		
Initial JBSDS First Unit Equipped (FUE)													1Q																			
Next Generation JBSDS Concept Expl							3Q	4Q																								
Next Generation JBSDS Component Advanced Development											1Q	4Q																				
Next Generation JBSDS Advanced Development Contract											1Q																					
Next Generation JBSDS Milestone B													1Q																			
Next Generation JBSDS System Development and Demonstration (SDD)															2Q	2Q																
Next Generation JBSDS Developmental Testing (DT)																			3Q	2Q												



## Exhibit R-4a, Schedule Profile

DATE  
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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**

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
JCAD (Cont)																																
Milestone C - Low Rate Initial Production (LRIP) Decision																4Q																
JCSD																																
Fabricate Eng Prototypes (Gen I)				>> 4Q																												
Research and Development Contract Award (Generation II)				4Q																												
Lab/Field Testing (Generation I)				4Q				2Q																								
Technology Development								2Q				2Q																				
CONOPS Development												2Q								1Q												
Vehicle Integration												3Q				4Q																
Operational Test																				4Q												
Milestone C																				1Q												
JEM																																
BLK I - Software Development								3Q				4Q																				
BLK I - Milestone B Decision												2Q																				
BLK I - Award System Development and Demonstration (SDD) Contract												2Q																				

**Exhibit R-4a, Schedule Profile**

DATE  
**February 2004**

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
JEM (Cont)																																
BLK I - In Process Review (IPR)									2Q																							
BLK I - Developmental Testing (DT) (Contractor)												4Q																				
BLK I DT (Government)												4Q	3Q																			
BLK I Software Maintenance												4Q	1Q																			
BLK I - Establish, Train, Stand Up Software Support Activity												1Q	3Q																			
BLK I - Operational Testing (OT)													4Q	2Q																		
BLK I - Milestone C (Limited Deployment) and Full Rate Production (FRP)														2Q																		
BLK I - Production and Deployment														2Q	2Q																	
BLK I - Initial Operational Capability (IOC)														3Q																		
BLK I - Post Deployment Software Support														3Q	2Q																	
JSLNBCRS																																
Development Testing II (HMMWV)														3Q	1Q																	
Chemical Test CBMS II														3Q	1Q																	

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**February 2004**

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
JSLNBCRS (Cont)																																
Milestone C Low Rate Initial Production (LRIP)									2Q																							
Engineering Developmental Test (EDT) (LAV)									2Q 3Q																							
Development and Testing									1Q	—————			4Q																			
Developmental Test I (DT I) LAV variant									3Q	—————			3Q																			
Developmental Testing CBMS II									3Q	—————			3Q																			
First Article Test													1Q																			
Multi-service Operational Test and Evaluation (MOT&E) for HMMWV and the LAV																	4Q	1Q														
Milestone C Full Rate Production (FRP)																	2Q															
JSLSCAD																																
Increment 2 - Government Test of Commercial Items									1Q	—————			4Q																			
Complete Test and Operational Documentation for Stryker NBCRV Test									2Q																							

**Exhibit R-4a, Schedule Profile**

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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**

**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
JSLSCAD (Cont)																																
Support Stryker NBCRV Pre Qualification Test (PQT) Testing							3Q					4Q																				
Joint Service Milestone C Low Rate Initial Production (LRIP)																				3Q												
Increment - 1 Pre Qualification Test (PQT)/Initial Operations Test and Evaluation (IOT&E) for Initial Developmental Items							3Q					1Q																				
Increment - 2 Evaluation of Commercial Systems												1Q																				4Q
Increment 2 - Initial Operational Test and Evaluation (IOT&E) of Commercial Systems																																4Q
Increment 2 - Full Rate Production Milestone C																																3Q
JWARN																																
System Design and Development (SDD) Contract Award												4Q																				2Q



## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

**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
MCAD (Cont)																																
Procure Six Commercial MCADs											3Q				2Q																	
MMS																																
Program Preparation and Data Analysis (SDT)				4Q				2Q																								
CONOPS Development					1Q							2Q																				
Test Location Surveys				4Q				4Q																								
Statistical Radar Test Planning					1Q							2Q																				
Statistical Radar Test Execution							2Q									3Q																
Data Analysis							2Q									3Q																
Down Select Support							3Q	4Q																								
Algorithm/Software Development							3Q					2Q																				
Training and Logistics Development							3Q					2Q																				
Information Technology							2Q					2Q																				
Deliverable Systems											2Q				4Q																	
NBCRV																																
Fabricate Engineering Prototypes				>>				2Q																								
Production Qualification Test (PQT)							3Q					2Q																				

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RD&amp;E DEFENSE-WIDE/          BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CA5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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
NBCRV (Cont)																																
NBCRV In Process Review (IPR) - Milestone C									2Q																							

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<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
CM5 HOMELAND DEFENSE (SDD)	956	5974	24274	389	0	0	0	0	31593

**A. Mission Description and Budget Item Justification:**

**Project CM5 HOMELAND DEFENSE (SDD):** The Force Protection - CB Installation Protection Program (CBIPP) consists of a highly effective and integrated CBRN installation protection and response capability. This capability includes detection, identification, warning, information management, individual and collective protection, restoration, and medical surveillance, protection and response. The communications network will leverage existing capabilities and be integrated into the base operational command and control infrastructure. The program will develop and procure the CBRN systems, Emergency Responder Equipment Sets, New Equipment Training (NET), Contractor Logistics Support, spares, and associated initial consumable items required to field an integrated installation protection capability at 200 DoD installations (185 CONUS and 15 OCONUS).

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CB INSTALLATION/FORCE PROTECTION PROGRAM	0	5000	10030
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>

**FY 2004 Planned Program:**

- 500 Force Protection - Initiate test and evaluation of emerging governmental and commercial CBRN detection, identification warning, individual and collective protection, decontamination, medical surveillance and protection technologies.
- 1850 Force Protection - Initiate independent installation evaluation assessments.
- 1250 Force Protection - Initiate software development of a CBRN knowledge base to support decision tools needed to determine installation critical CBRN requirements.
- 776 Force Protection - Initiate an improved and lower cost biological aerosol warning system to support Dry Filter Units. System will provide improved warning of a potential biological release, supporting more rapid analysis.
- 500 Force Protection - Initiate development and improvement of NBC warning system to support unique installation warning and reporting requirements.
- 124 Force Protection - Engineering and technical support.

**Total** 5000

**FY 2005 Planned Program:**

- 1300 Force Protection - Complete test and evaluation of emerging governmental and commercial CBRN detection, identification warning, individual and collective protection, decontamination, medical surveillance and protection technologies.
- 500 Force Protection - Complete independent installation evaluation assessments.
- 2130 Force Protection - Complete software development of a CBRN knowledge base to support decision tools needed to determine installation critical CBRN requirements.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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**FY 2005 Planned Program (Cont):**

- 1500 Force Protection - Develop an improved, lower cost biological aerosol warning system to support Dry Filter Units. This system will provide improved warning of a potential biological release, supporting more rapid analysis.
- 1400 Force Protection - Develop an improved NBC warning system to support unique, installation warning and reporting requirements.
- 2000 Force Protection - Develop improved biological identification technologies (electro-chemiluminescence) to support laboratory operations. Improvements will support the development of a multiplex immunoassay capability thereby reducing processing time and costs.
- 1000 Force Protection - Initiate and complete development of improved TIC detection and identification. Focus on improved automation to reduce costs.
- 200 Force Protection - Engineering and technical support.

**Total 10030**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
WMD - CIVIL SUPPORT TEAMS	956	958	14244
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
<p><b>FY 2003 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 840 WMD CST- Initiated developmental upgrade of Analytical Laboratory Systems (ALS).</li> <li>• 116 WMD CST - Provided government engineering and planning support.</li> </ul> <p><b>Total 956</b></p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 848 WMD CST- Continue development of Unified Command Suite (UCS) and Analytical Laboratory System (ALS) upgrades.</li> <li>• 110 WMD CST - Provide government engineering and planning support.</li> </ul> <p><b>Total 958</b></p> <p><b>FY 2005 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 1800 WMD CST- Initiate Developmental Test for UCS and ALS.</li> <li>• 7424 WMD CST- Initiate Initial Operational Test and Evaluation (IOT&amp;E) of the UCS/ALS.</li> <li>• 4900 WMD CST- Continue development of UCS and ALS upgrades.</li> <li>• 120 WMD CST - Provide government engineering and planning support.</li> </ul> <p><b>Total 14244</b></p>		
Project CM5/Line No: 082	Page 74 of 180 Pages	Exhibit R-2a (PE 0604384BP)

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	16	0
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 16 SBIR - Small Business Innovative Research

**Total**      16

**C. Other Program Funding Summary:**

	<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 HOMELAND DEFENSE (RDT&E MGT SUPPORT)	1520	1558	1568	1555	1552	0	0	0	7753
JA0004 WMD - CIVIL SUPPORT TEAM EQUIPMENT	14055	8793	0	0	0	0	0	0	22848

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>

**D. Acquisition Strategy:**

**FORCE PROT**

Installation Protection Program will compete alternative RDT&E efforts to exploit innovation in the commercial world and take advantage of emerging techniques for CBRN protection, particularly in the areas of biological and aerosol warning systems. Focus of the efforts is to provide more rapid detection and meet unique installation requirements.

Installation Protection Program will augment the efforts of the Production LSI contractor with a competitively awarded contract for independent assessments and evaluations of installation requirements. This effort will provide the feedback necessary to plan future improvements.

Installation Protection Program will competitively award a contract to establish a knowledge base which will contain all the data from site surveys, testing exercises and will also be the baseline on which new techniques and technologies can build additional capabilities.

Installation Protection Program will competitively award a contract to develop software tools to assist in timely detection and analysis of CBRN threats.

Installation Protection Program will competitively award a contract to develop a biological identification process and automate TIC detection/identification capabilities.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>

WMD CST

This program utilizes multiple acquisition vehicles: 1) This program funds the acquisition of Chemical and Biological Defense equipment as outlined in the Defense Reform Directive #25 (DRID #25); 2) 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 Initial Operational Test and Evaluation (IOT&E) of ALS SEP in FY04; 4) Initiate Block I upgrades program in FY03/FY04 of Unified Command Suite (UCS) and ALS systems to incorporate technology insertion via To Be Selected (TBS) contracts; 5) In FY05 conduct Developmental Test (DT) and IOT&E of prototype systems and produce system improvement/enhancement upgrades; 6) 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; and 7) Continue US Army Reserve (USAR) type-classified CB equipment refurbishment.

**UNCLASSIFIED**

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CM5</b>
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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
<b>FORCE PROT</b>													
Develop CBRN Knowledge Base	C/CPAF	TBS	C	0	0	NONE	1250	Jun-04	2130	Nov-05	0	3380	0
Develop Biological Aerosol Warning System	C/CPAF	TBS	C	0	0	NONE	776	Jul-04	1500	Nov-05	0	2276	0
Develop NBC Warning System	C/CPAF	TBS	C	0	0	NONE	500	May-04	1400	Nov-05	0	1900	0
Develop Biological Identification Process	C/CPAF	TBS	C	0	0	NONE	0	NONE	2000	Nov-05	0	2000	0
Automate TIC Detection/Identification	C/CPAF	TBS	C	0	0	NONE	0	NONE	1000	Nov-05	0	1000	0
<b>WMD CST</b>													
SW SB - Development Upgrades Unified Command Suite and Analytical Lab Sys	MIPR	RDECOM, Aberdeen Proving Ground, MD	U	0	440	2Q FY03	324	2Q FY04	2900	2Q FY05	0	3664	0
HW S - Development Upgrades Unified Command Suite	MIPR	NAWCAD, St. Inigoes, MD	U	0	0	NONE	224	3Q FY04	2000	2Q FY05	0	2224	0
HW S - Development Upgrades Analytical Lab System	C/CPFF	Battelle, Columbus, OH	C	0	400	4Q FY03	300	3Q FY04	0	NONE	0	700	0
<b>Subtotal I. Product Development:</b>				<b>0</b>	<b>840</b>		<b>3374</b>		<b>12930</b>		<b>0</b>	<b>17144</b>	

Remarks:

Project CM5

UNCLASSIFIED

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/          BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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II. Support Costs: Not applicable

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
FORCE PROT													
Test Emerging CBRN Technologies	C/CPAF	TBS	C	0	0	NONE	500	May-04	1300	Nov-05	0	1800	0
Installation Evaluation Assessments	C/CPAF	TBS	C	0	0	NONE	1850	May-04	500	1 Nov 2005	0	2350	0
WMD CST													
DTE S - Developmental Test II Unified Command Suite and Analytical Lab Sys	MIPR	RDECOM, APG, MD	U	0	0	NONE	0	NONE	1800	2Q FY05	0	1800	0
OTHT SB - Initial Operational Test and Evaluation Unified Command Suite and Analytical Lab System	MIPR	RDECOM, APG, MD	U	0	0	NONE	0	NONE	7424	2Q FY05	0	7424	0
Subtotal III. Test and Evaluation:				0	0		2350		11024		0	13374	

Remarks:

**UNCLASSIFIED**

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CM5</b>
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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
<b>FORCE PROT</b>													
Management Support and Planning	Allot	JPM Installation Protection, Falls Church, VA	U	0	0	NONE	124	Oct-04	200	Oct-04	0	324	0
<b>WMD CST</b>													
PM/MS S - Management Services	MIPR	PM WMD CSS, APG, MD	U	0	116	1Q FY03	110	2Q FY04	120	1Q FY05	0	346	0
<b>ZSBIR</b>													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria, VA	U	0	0	NONE	16	1Q FY04	0	NONE	0	16	0
Subtotal IV. Management Services:				0	116		250		320		0	686	

Remarks:

TOTAL PROJECT COST:	0	956		5974		24274		0	31204
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Project CM5

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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<b>D. <u>Schedule Profile:</u></b>	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
FORCE PROT																																
Program Initiation In Process Review (IPR)									1Q																							
Evaluate Potential Technologies for Installation Protection Suite									1Q	—————			4Q																			
Develop and Integrate Improved Information Management Software													1Q	—————			4Q															
Develop and Revise CONOPS													1Q	—————			4Q															
Conduct Studies and Analysis for Potential Critical CBRN Equipment and Processes													1Q	—————			4Q															
Conduct Installation Site Preparation									1Q	—————																2Q						
Site Installation													3Q	—————																4Q		
Operational Assessment (OA)													4Q	1Q																		
WMD CST																																
ALS SEP Prototype Fabrication																																
Analytical Laboratory System (ALS) Upgrade Market Survey																																
Analytical Laboratory System (ALS) Upgrade Technology Screening													4Q	—————			4Q															

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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 (Cont)																																
Analytical Laboratory System (ALS) In Progress Review (IPR)									1Q																							
Analytical Laboratory System (ALS) Component Testing/Integrated Component Testing									3Q	-----	3Q																					
Analytical Laboratory System (ALS) In Progress Review (IPR)													2Q																			
ALS Prototyping Vehicle Installation Options													2Q	3Q																		
ALS Developmental Testing (DT)													3Q	4Q																		
Analytical Lab System (ALS) In Process Review (IPR)																	4Q															
ALS Limited User Testing (LUT)													4Q	1Q																		
ALS Pre-Production Evaluation													4Q	1Q																		
ALS Initial Operational Testing (IOT)													4Q	1Q																		
UCS Design Engineering and Documentation									2Q																							

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CM5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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 (Cont)																																
UCS Prototyping-Vehicle Installation Options											3Q				2Q																	
Unified Command Suite (UCS) Developmental Testing (DT)															2Q	3Q																
UCS Initial Operational Test (IOT)															3Q	4Q																
UCS In Process Review (IPR)																	1Q															

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>							DATE <b>February 2004</b>		
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>				PROJECT <b>CO5</b>	
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
CO5 COLLECTIVE PROTECTION (SDD)	4106	2923	2590	4118	4576	2668	2724	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 and 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.

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

The CBPS-P3I improved the operational suitability and reliability of the CBPS currently in production for Army light divisions. The P3I initiated development of a Self-Powered Environmental Support System (SP-ESS) with reduced fuel consumption, noise, weight, maintenance, and provided space for additional medical equipment. The SP-ESS does not require power take-off from the transport vehicle's engine.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>
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The JCPE program provides 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. In addition, the program focuses on fixing specific problems and deficiencies with currently fielded collective protection system 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 provides improvements in the form of CBR-D capability sets for 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.

The SCPE program developed a high efficiency, quiet collective protection system fan rotor, and extended service life of shipboard High Efficiency Particulate Air (HEPA) filters from three years to four years. The program developed and tested other collective protection system components that decreased total ownership costs (TOC), reduced shipboard maintenance requirements, and provided energy-efficient equipment.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CB PROTECTIVE SHELTER/P3I	1365	0	0
RDT&E Articles (Quantity)	2	0	0

**FY 2003 Accomplishments:**

- 786 CBPS P3I - Awarded contract to fabricate two SP-ESS prototypes at a unit cost of \$393K.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>
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**FY 2003 Accomplishments (Cont):**

- 88 CBPS P3I - Conducted preliminary testing on two SP-ESS prototypes.
- 80 CBPS P3I - Finalized design concept for SP-ESS.
- 411 CBPS P3I - Purchased materials and integrated systems.

**Total** 1365

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT COLLECTIVE PROTECTION EQUIPMENT	2086	2874	2590
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>

**FY 2003 Accomplishments:**

- 763 JCPE - Completed development and testing of 2000 cubic feet per minute (CFM) particulate filters to reduce logistics costs. Completed live agent testing of improved 200 CFM gas filter. Completed development and testing of one improved recirculation filter unit to reduce logistics costs. Completed development and testing of sound barriers for noise reduction and abatement within Chemical and Biological (CB) shelter systems. Completed testing of 30 in-service 100/200 CFM gas filters to determine service life. Completed design and testing of the thermal efficiency of CB protected shelter systems. Completed development and testing of Fan Filter Assembly (FFA) 400-100 and M93 Modular Collective Protection Equipment (MCPE) candidate motor/blowers for CB shelter systems to improve efficiency, reliability, size, and weight. Completed study to determine the contamination control area requirements that meet NATO standards. Completed development of logistical support plan for prior JCPE items. Completed the system engineering of capability sets with improved components. Completed development and testing of an automatic power transfer switch for Collectively Protected Expeditionary Medical Support (CPMEMDS). Completed design and testing of a Collective Protection (CP) modification kit for fielded heater systems. Completed design and testing to reduce the CB filter blower heat load. Completed study to investigate environmental control unit (ECU) and power applications to CP shelters. Completed performance testing of CB liners for long term storage in temperature extremes and alternate seam configurations. Completed development and testing of a CB liner seam tester. Completed development and testing of an improved repair process for CB liners.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>

**FY 2003 Accomplishments (Cont):**

- 1180 JCPE - Continued program management and IPT support. Continued integration and testing of a Tunnel Airlock Litter Patient (TALP) with a Modular General Purpose Tent System (MGPTS). Continued development of a suite of improved airlocks to reduce purge times and provide simultaneous entry/exits for all existing CB shelter systems. Continued development and testing of a modified M28 liner for large capacity shelters. Continued design and testing of improvements to liner material, construction, and enclosures. Continued development and testing of a CP latrine for CPEMEDS. Continued development and testing of a CP latrine for CPEMEDS.
- 143 JCPE - Initiated development and testing to increase efficiency of collective protection system supply fan motors to operate at peak performance over the entire range of filter loading.

**Total** 2086

**FY 2004 Planned Program:**

- 562 JCPE - Complete development and testing of a CP latrine for CPEMEDS. Complete development and testing of a modified M28 liner for large capacity shelters. Complete development and testing to increase efficiency of collective protection system supply fan motors to operate at peak performance over the entire range of filter loading. Complete live agent testing of improved 100/200 CFM gas filters. Complete testing of developmental prototypes of a suite of improved airlocks to reduce purge times and provide simultaneous entry/exits for all existing CB shelter systems. Complete integration and testing of a Tunnel Airlock Litter Patient (TALP) with a Modular General Purpose Tent System (MGPTS).
- 1076 JCPE - Continue program management and IPT support. Continue design and testing of improvements to liner material, construction, and enclosures.

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>

**FY 2004 Planned Program (Cont):**

- 1236 JCPE - Initiate testing to determine effectiveness of CB shelters while subjected to extreme environmental conditions. Complete development and testing of an individual distribution breathing air hose. Complete development and testing of a filter moisture indicator. Initiate development and testing of a small shelter system (SSS) contamination control area (CCA) and airlock integration. Complete development of shipboard CP automation. Initiate development and testing of a collective protection blast operational analysis.

**Total** 2874

**FY 2005 Planned Program:**

- 1226 JCPE - Complete design and testing of improvements to liner material, construction, and enclosures. Complete testing of CB shelters subjected to extreme environmental conditions. Complete development and testing of a SSS CCA/airlock integration. Complete development and testing of a collective protection blast operational analysis. Complete development and testing of 100/200 CFM gas filters to provide protection against selected toxic industrial chemicals (TICs).
- 764 JCPE - Continue program management and IPT support.
- 600 JCPE - Initiate and complete 28 Volt Direct Current modified M93 gas particulate filter unit. Initiate filter capacity service life study for land-based facilities by testing samples of used filters to determine a more accurate filter change out schedule.

**Total** 2590

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SHIPBOARD COLL PROTECTION EQUIP	655	0	0
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

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

**Total**      655

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	49	0
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>
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**FY 2004 Planned Program:**

- 49 SBIR - Small Business Innovative Research

**Total      49**

<b>C. <u>Other Program Funding Summary:</u></b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	<b><u>FY 2008</u></b>	<b><u>FY 2009</u></b>	<b><u>To Compl</u></b>	<b><u>Total Cost</u></b>
JCP001 COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM	1073	0	0	0	0	0	0	0	1073
JN0014 COLLECTIVE PROT SYS AMPHIB BACKFIT (CPS BACKFIT)	16989	14623	16211	11080	7378	0	0	0	66281
JN0017 JOINT COLLECTIVE PROTECTION EQUIPMENT (JCPE)	6548	19414	2183	2043	1798	2917	0	0	34903

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>

**D. Acquisition Strategy:**

CBPS	The CBPS P3I program was initiated to integrate a Self-Powered Environmental Support System (SP-ESS) that will replace the hydraulic components and eliminate the need to use power from the High Mobility Multi-Purpose Wheeled Vehicle's (HMMWV) engine. An Integrated Product Team is investigating the best method for incorporating this change. The next CBPS procurement contract option, currently planned for award in 2Q FY04, will include the SP-ESS. The new SP-ESS design will be incorporated into the CBPS production line by a Engineering Change Proposal (ECP) modification to the existing CBPS production contract.
JCPE	The JCPE acquisition strategy is to consolidate planned improvements to fielded collective protection systems into one Joint product improvement program for addressing deficiencies, improvements, and cost saving initiatives. System improvements, after successful prototype development and testing, are delivered via a performance specification that can then be implemented by respective Services through an engineering change proposal (ECP) process. All modified components will be fabricated and tested to ensure Service compatibility. Fielding will be accomplished through phased replacement or attrition through the supply system. Existing procurement contracts are leveraged to expedite fielding improvement upgrades.
SCPE	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. Design and component enhancements developed by SCPE are also applied to the CPS Backfit Program.

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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
CBPS													
HW SB - Contractor Hardware Development	C/CPFF	Radian, Inc., Alexandria, VA	C	300	0	NONE	0	NONE	0	NONE	0	300	0
HW SB - Hardware Development	MIPR	Red River Army Depot, Texarkana, TX ; CECOM, Ft Monmouth, NJ	U	259	228	1Q FY03	0	NONE	0	NONE	0	487	0
HW SB - Contractor Hardware Development	C/CPFF	Solectria Corp., Woburn, MA	C	0	786	2Q FY03	0	NONE	0	NONE	0	786	0
JCPE													
HW C - Modified 100/200 CFM Filter for TICs - Development and Engineering	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	0	NONE	408	1Q FY05	0	408	400
HW C - 2000 CFM Particulate Filter - Improvements	WR	NSWCDD, Dahlgren, VA	U	226	59	1Q FY03	0	NONE	0	NONE	0	285	285
HW C - Improved Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	400	32	1Q FY03	0	NONE	0	NONE	0	432	450
HW C - Development of Modified M28 Liner System for Large Capacity Shelter	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	400	100	1Q FY03	0	NONE	0	NONE	0	500	490
HW C - Shipboard CPS Supply Fans - Development	WR	NSWCDD, Dahlgren, VA	U	0	43	1Q FY03	50	1Q FY04	0	NONE	0	93	153

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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 - Improved Liner - Materials/Construction/Closures	MIPR	RDECOM, Natick, MA	U	600	115	1Q FY03	0	NONE	0	NONE	0	715	951
HW C - Shipboard CP Automation	WR	NSWCDD Dahlgren, VA	U	0	0	NONE	25	1Q FY04	0	NONE	0	25	25
HW C - Filter Moisture Indicator	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	7	1Q FY04	0	NONE	0	7	7
HW C - SSS CCA/Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	320	1Q FY04	0	NONE	0	320	320
HW C - CP Protection Blast Operational Analysis	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	330	1Q FY04	0	NONE	0	330	330
SW SB - Automatic Power Transfer Switch for CPEMEDS	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	150	25	1Q FY03	0	NONE	0	NONE	0	175	0
HW C - 28VDC M93 Gas Particulate Filter Unit	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	0	NONE	200	1Q FY05	0	200	0
HW C - Land-based Aged Filter Capacity	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	400	1Q FY05	0	400	0
HW C - Individual Distribution Breathing Air Hose	MIPR	NSWCDD, Dahlgren, VA	U	0	0	NONE	200	1Q FY04	0	NONE	0	200	0
SCPE													
SW SB - CPS Fan, Electronic Differential Pressure Gauge, Filter Performance - Development	WR	NSWCDD, Dahlgren, VA	U	175	86	1Q FY03	0	NONE	0	NONE	0	261	266
Subtotal I. Product Development:				2510	1474		932		1008		0	5924	

Remarks:



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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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
CBPS													
DTE S - Shelter - Development Test and Evaluation	MIPR	RDECOM, Natick, MA	U	0	88	2Q FY03	0	NONE	0	NONE	0	88	0
JCPE													
OTHT C - 200 CFM Gas Filter - Live Agent Testing	MIPR	RDECOM, APG, MD	U	388	194	1Q FY03	0	NONE	0	NONE	0	582	582
OTHT C - 100 CFM Gas Filter - Live Agent Testing	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	200	1Q FY04	0	NONE	0	200	200
OTHT C - Shipboard CPS Supply Fans	WR	NSWCDD, Dahlgren, VA	U	0	80	1Q FY03	100	1Q FY04	0	NONE	0	180	200
OTHT SB - Modified M28 Liner System for Large Capacity Shelters	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	91	1Q FY03	100	1Q FY04	0	NONE	0	191	191
OTHT SB - Capability Sets System Engineering	MIPR	Various	U	675	214	1Q FY03	0	NONE	0	NONE	0	889	914
OTHT C - 2000 CFM Particulate Filter	MIPR	RDECOM, Edgewood, MD	U	150	275	1Q FY03	0	NONE	0	NONE	0	425	425
OTHT C - Improved Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	305	1Q FY03	25	1Q FY04	0	NONE	0	330	350
OTHT C - Improved Liner Materials/Construction/Closures	MIPR	RDECOM, Natick, MA	U	0	160	1Q FY03	403	1Q FY04	153	1Q FY05	0	716	1331
OTHT C - Shipboard CP Automation	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	50	1Q FY04	0	NONE	0	50	50

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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
OTHT C - CB Shelter System Extreme Enviroments	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	285	1Q FY04	135	1Q FY05	0	420	420
DTE C - Filter Moisture Indicator	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	6	1Q FY04	0	NONE	0	6	6
OTHT C - SSS CCA/Airlock	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	0	NONE	250	1Q FY05	0	250	250
OTHT C - TALP Testing for MGPTS	MIPR	Various	U	175	25	1Q FY03	75	1Q FY04	0	NONE	0	275	0
OTHT C - Automatic Power Transfer Switch For CPEMEDS	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	25	1Q FY03	0	NONE	0	NONE	0	25	0
OTHT C - Testing of CP Latrine for CPEMEDS	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	20	1Q FY03	37	1Q FY04	0	NONE	0	57	0
OTHT C - FFA 400-100 and M93 Motor/Blower	MIPR	ECBC, Edgewood, MD	U	0	20	1Q FY03	0	NONE	0	NONE	0	20	0
DTE S - CP Protection Blast Operational Analysis	MIPR	HSW/YACN Brooks AFB, San Antonio, TX	U	0	0	NONE	0	NONE	280	1Q FY05	0	280	0
<b>SCPE</b>													
OTHT SB - Improved CPS Fan - Shipboard Testing	WR	NSWCDD, Dahlgren, VA	U	229	138	1Q FY03	0	NONE	0	NONE	0	367	367
OTHT SB - Filters - Various Component Testing and Testing Electronic Differential Pressure Gauge	WR	NSWCDD, Dahlgren, VA	U	935	93	1Q FY03	0	NONE	0	NONE	0	1028	1028

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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
OTHT C - HEPA Filter TICs/TIMs Evaluation	WR	NSWCDD, Dahlgren, VA	U	200	146	1Q FY03	0	NONE	0	NONE	0	346	346
Subtotal III. Test and Evaluation:				2752	1874		1281		818		0	6725	

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
<b>CBPS</b>													
PM/MS S - Management Support	MIPR	PM NBCDS, Natick, MA	U	24	25	1Q FY03	0	NONE	0	NONE	0	49	0
<b>JCPE</b>													
PM/MS S - Overall Program Management and Integrated Product Team Oversight	WR	NSWCDD, Dahlgren, VA	U	729	203	1Q FY03	461	1Q FY04	564	1Q FY05	0	1957	1403
PM/MS S - Integrated Product Team Support	MIPR	Various	U	456	100	1Q FY03	200	1Q FY04	200	1Q FY05	0	956	820
<b>JTCOPS</b>													
PM/MS S - Preparation of Acquisition Documentation	MIPR	PM NBCDS, APG, MD		420	0	NONE	0	NONE	0	NONE	0	420	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>CO5</b>
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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
SCPE													
PM/MS S - Overall Program Management	WR	NSWCDD, Dahlgren, VA	U	395	95	1Q FY03	0	NONE	0	NONE	0	490	490
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	0	NONE	49	NONE	0	NONE	0	49	0
Subtotal IV. Management Services:				2024	423		710		764		0	3921	

Remarks:

<b>TOTAL PROJECT COST:</b>	8517	4106		2923		2590		0	18136
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Project CO5

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

**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:**

	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- Initiate Program					1Q	—————			4Q																									
CBPS P3I- Develop Statement of Work (SOW) for Contract		2Q	3Q																															
CBPS P3I- Develop Design Concept		2Q	—————		4Q																													
CBPS P3I- Contract for Design and Virtual Prototyping			3Q	—————		2Q																												
CBPS P3I- Contract to Fabricate Two Prototypes						3Q	—————		2Q																									
Full Materiel Release						3Q	—————		1Q																									
JCPE																																		
Develop and Test FFA400-100 and M93 MCPE		>>	—————		4Q																													
Develop and Test Improved Ship CPS Motors					1Q	—————			4Q																									
Agent Testing 100/200 CFM Gas Filters		1Q	—————		4Q																													
Market Survey and Test Latrine CPEMEDS		>>	—————		1Q																													

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

**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 and Test 2K CFM Particulate Filters		1Q																														
Develop Modified M28 Liner-Lg Cap Shelters																																
Develop and Test Automatic Power Transfer Switch for CPEMEDS																																
Improved Recirculation Filter Unit																																
Noise Abatement for CB Shelter Systems																																
100/200 CFM Gas Filter Service Life Testing																																
Develop Thermal Efficiency of CB Protected Shelter Systems																																
CCA Requirements for NATO																																
Logistical Support for Prior Tasks																																
CP Modification Kit for Heater Systems																																
CB Filter Blower Heat Load																																
CB Liners for Long Term Storage																																

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

**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)																																
CB Liner Seam Tester			3Q					4Q																								
Improved Repair Process for CB Liners			3Q					4Q																								
Develop and Test TALP for MGPTS							2Q					2Q																				
Capability Sets System Engineering			3Q					4Q																								
Develop Improved Airlock			3Q									4Q																				
Develop Improved Liner-Mat/Constr/Closures			3Q													4Q																
Develop and Test Ship CP Automation											1Q					4Q																
Develop and Test Filter Moisture Indicator											1Q					4Q																
Develop and Test SSS CCA/Airlock											1Q					2Q																
Develop and Test CB Shelter Extreme Environments											1Q					3Q																
Develop and Test 100/200 CFM Gas Filters-TICs															1Q					4Q												
Develop and Test CP Blast Operations Analysis											1Q													4Q								
28VDC M93 Gas Particulate Filter Unit															1Q					4Q												

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/          BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>CO5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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)																																	
Land-based Aged Filter Capacity													1Q	—————			4Q																
SCPE																																	
Define CPS Fan Performance Specification	>>	—————			1Q																												
Fan Testing and Evaluation (Shipboard)	>>	—————			4Q																												
Develop and Test Electronic Differential Pressure Gauge	>>	—————			4Q																												
CPS Filter TICs/TIMs Evaluation	>>	—————			4Q																												

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<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
DE5 DECONTAMINATION SYSTEMS (SDD)	4415	8586	3337	5710	5412	9910	4782	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 JSFDS program was subdivided into four blocks until the program was restructured in FY03 to support an evolutionary acquisition strategy. The JSFDS will consist of a Joint Service Man-Portable Decontamination System (JSM-PDS), a small-scale and large-scale Joint Service Transportable Systems (JSTDS), a Joint Service Stationary Decontamination System (JSSDS) and a Joint Service Personnel/Skin Decontamination System (JSPDS). The initial increment for these systems will provide the warfighter with an enhanced fixed site, equipment and personnel decontamination capability. Follow-on increments will increase fielded capability through technology insertion.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS FAMILY OF DECON SYSTEMS (JSFDS)	4415	8441	3337
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>

**FY 2003 Accomplishments:**

- 288 JSFDS - Completed Operational Test (OT) report for decontaminant to satisfy CENTCOM UNS. Conducted follow-on testing on CENTCOM UNS decontaminant to resolve issues identified during Development Testing (DT) and OT.
- 77 JSFDS - Completed foreign comparative testing of Reactive Skin Decontamination Lotion (RSDL) to support submission of to the Food and Drug Administration.
- 300 JSFDS - Completed downselection testing, evaluated test results and down-selected skin decontaminant for JSPDS contract award.
- 600 JSFDS - Awarded contract for JSPDS skin decontaminant and initiated development testing (DTIII) to address outstanding safety, wound compatibility and packaging issues.
- 1615 JSFDS - Restructured program to reflect an evolutionary acquisition strategy that will expedite fielding of an increased capability to the warfighter. Continued development of program documentation.
- 1535 JSFDS - Performed test methodology and laboratory capability improvements to support testing of the JSM-PDS, JSTDS and JSSDS to include ability to perform larger scale decontamination operations with simulants. Developed and validated new live agent and simulant test methodologies to aide bridging the gap between development and operational testing. Revised the Test and Evaluation Master Plan (TEMP).

**Total** 4415

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>
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**FY 2004 Planned Program:**

- 794 JSFDS - Continue development testing (DT III) to address outstanding safety, wound compatibility and packaging issues.
- 6040 JSFDS - Initiate JSM-PDS and JSTDS, small-scale and large-scale, DT I downselection testing to include live agent system level testing.
- 907 JSFDS - Continue development of program documentation, such as the Request for Proposal, Logistics Support Plan and System Acquisition Management Plan. Manage contracting effort and downselection process.
- 700 JSFDS - Perform engineering and logistics trade off studies for the JSM-PDS and JSTDS.

**Total** 8441

**FY 2005 Planned Program:**

- 327 JSFDS - Complete packaging testing and continue long-term safety and wound compatibility tests for JSPDS (DT III).
- 2810 JSFDS - Complete DTI operational assessment (OA)/DT II and initiate DT III for JSM-PDS and JSTDS.
- 200 JSFDS - Continue development of program documentation, such as the Request of Proposal, Logistics Support Plan and System Acquisition Management Plan. Manage contracting effort and downselection process.

**Total** 3337

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	145	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>
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**FY 2004 Planned Program:**

- 145 SBIR - Small Business Innovative Research

**Total 145**

<b>C. <u>Other Program Funding Summary:</u></b>								<u>To Compl</u>	<u>Total Cost</u>
JN0010 JOINT SERVICE FAMILY OF DECON SYSTEMS (JSFDS)	<u>FY 2003</u> 10959	<u>FY 2004</u> 7319	<u>FY 2005</u> 6426	<u>FY 2006</u> 0	<u>FY 2007</u> 11680	<u>FY 2008</u> 19446	<u>FY 2009</u> 30618	Cont	Cont

Project DE5/Line No: 082

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Exhibit R-2a (PE 0604384BP)

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
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**D. Acquisition Strategy:**

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

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

1. JSSSED/XM25: Sensitive Equipment/Items Decontamination
2. Aircraft/Vehicle Interior/Cargo Decontamination
3. On the Move Aircraft/Vehicle Interior/Cargo Decontamination

Investigate all technologies to determine their utility for all three decontamination increments. Mitigation of technical risk associated with less mature technologies will take longer with the aircraft/vehicle interior/cargo decontamination and on the move aircraft/vehicle interior/cargo decontamination systems.

Competitive award for JSSSED/XM25 and aircraft/vehicle interior/cargo decontamination leading to type classification. Decontamination on the move may be a pre-planned product improvement (P3I) of aircraft/vehicle interior/cargo decontamination systems.

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>
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I. Product Development: Not applicable

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 S - Documentation and Analyses	MIPR	Various	U	0	400	2Q FY03	500	3Q FY04	0	NONE	0	900	0
ES S - Requirements Studies	MIPR	Various	U	0	415	2Q FY03	200	3Q FY04	0	NONE	0	615	0
ES S - Performance Specification Development	MIPR	Various	U	0	400	2Q FY03	0	NONE	0	NONE	0	400	0
Subtotal II. Support Costs:				0	1215		700		0		0	1915	

Remarks:

**UNCLASSIFIED**

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>DE5</b>
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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													
OTE S - DF200 CENTCOM UNS Operational Test	MIPR	AFOTEC, Kirtland AFB, NM	U	0	65	1Q FY03	0	NONE	0	NONE	0	65	0
DTE S - DF200 CENTCOM UNS Development Test	C/CPFF	Battelle, Stafford, VA	C	0	223	2Q FY03	0	NONE	0	NONE	2900	3123	0
OTHT SB - Foreign Comparative Test Skin Decontaminant	MIPR	USAMMDA, Frederick, MD	C	0	77	2Q FY03	0	NONE	0	NONE	0	77	0
OTHT S - JSFDS Operational Test Planning	MIPR	Various	U	0	228	2Q FY03	430	3Q FY04	0	NONE	0	658	0
OTHT S - JSFDS Test Methodology and Capability Improvements	MIPR	Various	U	0	582	3Q FY03	0	NONE	0	NONE	0	582	0
OTHT S - JSFDS Test Planning and Procedure Developemnt	MIPR	Various	U	0	300	2Q FY03	0	NONE	0	NONE	0	300	0
OTHT S - JSFDS Test and Evaluation Master Plan Development	MIPR	Various	U	0	425	2Q FY03	0	NONE	0	NONE	0	425	0
DTE S - JSPDS Testing	C/CPFF	Various	C	0	600	4Q FY03	794	2Q FY04	327	1Q FY05	0	1721	0
DTE S - JSM-PDS and JSTDS DT I Testing	MIPR	Various	U	0	0	NONE	5610	3Q FY04	0	NONE	0	5610	0
DTE S - JSM-PDS and JSTDS DT II/OA Testing	MIPR	Various	U	0	0	NONE	0	NONE	2010	2Q FY05	0	2010	0

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>DE5</b>
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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
DTE S - JSM-PDS and JSTDS DT III Testing	MIPR	Various	U	0	0	NONE	0	NONE	800	4Q FY05	0	800	0
Subtotal III. Test and Evaluation:				0	2500		6834		3137		2900	15371	

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
<b>JSFDS</b>													
PM/MS S - Programmatic Support	MIPR	Various	U	246	400	1Q FY03	232	3Q FY04	100	1Q FY05	0	978	0
PM/MS S - Programmatic Support	C/CPFF	Various	C	0	300	3Q FY03	275	3Q FY04	100	1Q FY05	0	675	0
PM/MS S - Downselection and Contracting Process Management	MIPR	Various	U	0	0	NONE	400	2Q FY04	0	NONE	0	400	0
<b>ZSBIR</b>													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	0	NONE	145	NONE	0	NONE	0	145	0
Subtotal IV. Management Services:				246	700		1052		200		0	2198	

Remarks:

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>							DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RD&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>			PROJECT <b>DE5</b>
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TOTAL PROJECT COST:	246	4415	8586	3337	2900	19484
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<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>DE5</b>
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<b>D. <u>Schedule Profile:</u></b>	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																																
Skin Decontaminant (Block III) DT I			3Q				2Q																									
Restructuring of Requirements and Acquisition Strategy											3Q				1Q																	
Joint Service Personnel/Skin Decontamination System (JSPDS) Developmental Contract Award								4Q																								
Joint Service Personnel/Skin Decontamination System (JSPDS) Milestone (MS) B											2Q																					
JSPDS Developmental Testing (DT) II											1Q									2Q												
JSPDS Shelf Life Stability/Surveillance Testing											1Q																					1Q
JSPDS Operational Test (OT)																				2Q												4Q
JSPDS Full Rate Production (FRP) Decision (Milestone C (MS C))																								1Q								
Joint Service Man-Portable and Transportable Decontamination Systems (JSM-PDS and JSTDS) MS B											2Q																					

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>DE5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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)																																	
JSM-PDS and JSTDS Developmental Testing (DT) I											4Q				3Q																		
JSM-PDS and JSTDS Operational Assessment (OA)/Developmental Test (DT) II															3Q	4Q																	
JSM-PDS and JSTDS Developmental Testing (DT) III															4Q	1Q																	
JSM-PDS and JSTDS MS C Low Rate Initial Production (LRIP)																2Q																	
JSM-PDS and JSTDS Developmental Test (DT) IV/Product Qualification Test																2Q	3Q																
JSM-PDS and JSTDS OT																	3Q			1Q													
JSM-PDS and JSTDS Full Rate Production (FRP) Decision																				1Q													

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>				PROJECT <b>IP5</b>	
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
IP5 INDIVIDUAL PROTECTION (SDD)	36487	37719	24067	5436	970	0	8677	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. JSAM will be a NATO compliant, chem/bio protection system with positive pressure breathing capabilities. JSAM will be compatible with existing life-support equipment and can be used during escape and evasion in a chemical, biological, or radiological environment. It is the only mask that will incorporate CBRN protection and anti-G protection for fighter aircrews; and will provide increased protection, field of view, and improved heat stress.

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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(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.

(5) Development of a JSLIST Block I glove upgrade and JSLIST Block II glove upgrade to meet joint aircrew and ground hand protection requirements.

(6) Development of a JSLIST Multi-Purpose Sock (MPS).

**B. Accomplishments/Planned Program**

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

**FY 2003 Accomplishments:**

- 81 AERP - Continued maintaining configuration control on B-2 Aircraft modification design.

**Total**      81

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT PROTECTIVE AIRCREW ENSEMBLE	6381	6133	3635
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 5658 JPACE - Completed DT IIB and DT IIA2 testing. Conducted Critical Design Review (CDR). Fabricated 578 prototype ensembles of one candidate for combined DT/Operational Test (OT) (578 total at \$440 each). Initiated combined DT/OT system level testing and initial Operational Assessment (OA) to verify system level performance and assess operational suitability and durability. Testing included aircraft integration testing (windblast, ejection, water egress, early flight, and aircraft compatibility in support of obtaining flight clearance of Field Durability Developmental Test (FDDT.)
- 723 JPACE - Continued development and update of program, logistics, and technical documentation required to ensure that ensembles will be fully supported when fielded. Updated garments specifications and patterns.

**Total** 6381

**FY 2004 Planned Program:**

- 4130 JPACE - Continue combined DT/OT with durability and other system level testing, including chemical Man in Simulant Test (MIST), aerosol test, and swatch test. Develop and test contaminated doffing procedures, and acquire final safe-to-fly decision from the services.

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

- 2003 JPACE - Prepare for Independent Operational Test & Evaluation (IOT&E). Conduct Milestone (MS) C decision for LRIP of ensembles. Award contract option to manufacture LRIP ensembles. Continue developing and updating program, logistics, and technical documentation required to ensure that ensembles will be fully supported when fielded. Update and finalize garment specifications and patterns based on DT/OT results.

**Total** 6133

**FY 2005 Planned Program:**

- 2485 JPACE - Complete IOT&E. Conduct MS C decision for LRIP of ensembles. Award contract options to manufacture LRIP ensembles.
- 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.

**Total** 3635

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS AIRCREW MASK (JSAM)	11661	11184	12511
RDT&E Articles (Quantity)	0	0	332

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**FY 2003 Accomplishments:**

- 2913 JSAM - Received Milestone B approval, awarded the System Demonstration and Development (SDD) contract, continued program management activities, conducted start of work meeting, and the preliminary design review.
- 4641 JSAM - Continued systems engineering, design and integration tasks. Began logistics activities and sustainment planning. Initialized program working groups.
- 681 JSAM - Initiated developmental manufacturing process planning for material, parts and peculiar support equipment. Began preliminary tooling efforts with vendors and initiated a limited set of subcomponent level tests.
- 3426 JSAM - Initiated fabrication of models and prototype assemblies for various size mask system parts for functionality evaluation by the integration control groups.

**Total** 11661

**FY 2004 Planned Program:**

- 4831 JSAM - Continue system design, engineering and fabrication activities; develop production processes and plan for adequate tooling in preparation for fabrication of units.
- 2795 JSAM - Continue contractor and government developmental test and evaluation planning activities, to include integration with selected aircraft.
- 3558 JSAM - Continue program management, logistics and sustainment planning. Prepare program and technical documentation.

**Total** 11184

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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**FY 2005 Planned Program:**

- 4387 JSAM - Complete contractor developmental testing. Continue documentation and planning in preparation for testing. Initiate Government developmental test and evaluation.
- 2029 JSAM - Complete material purchase, fabrication, and assembly of 332 DT units at an average unit cost of \$6112.
- 2841 JSAM - Continue system design, engineering and fabrication activities; develop production processes and ensure tooling is adequate to fabricate units.
- 3254 JSAM - Continue contract and government program management, logistics and sustainment planning.

**Total** 12511

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JS GENERAL PURPOSE MASK	13219	14975	3009
RDT&E Articles (Quantity)	0	0	1000

**FY 2003 Accomplishments:**

- 699 JSGPM - Continued preparation of program/project documentation. Documentation includes Single Acquisition Management Plan (SAMP), the Manpower and Personnel Integration (MANPRINT) Plan, and Performance Specifications.
- 371 JSGPM - Continued Logistics Support Planning. This effort includes development of manuals and finalization of supportability plans.

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**FY 2003 Accomplishments (Cont):**

- 7300 JSGPM - Continued System Demonstration. System Demonstration efforts included system support packages for Production Qualification Testing, and Initial Operational Testing and Evaluation.
- 2739 JSGPM - Continued documentation and planning for Developmental and Operational Testing (DT/OT). Tested redesigned prototypes to assess shortcomings identified during System Integration Phase.
- 2110 JSGPM - Continued development of the JSCESM as a lightweight complement to the JSGPM against limited threats.

**Total** 13219

**FY 2004 Planned Program:**

- 5454 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.
- 5655 JSGPM - Continue Developmental and Operational Testing. Generate test incident reports and corrective action plans to address test results during mask design and prototype production.
- 438 JSGPM - Continue Logistics Support Planning. 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).

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

**Total** 14975

**FY 2005 Planned Program:**

- 1509 JSGPM - Complete System Demonstration. System Demonstration includes system support packages for Production Qualification Testing and Multiservice Operational Testing and Evaluation.
- 500 JSGPM - Complete preparation of program/project documentation. Documentation includes the Single Acquisition Management Plan and performance specifications.
- 700 JSGPM - Complete Development (Production Qualification Testing) and Operational (Limited User Test) Testing. Complete test and evaluation reports. Purchase 1000 test articles at \$150 each, for a total of \$150,000 for Multiservice Operational Test and Evaluation.
- 300 JSGPM - Complete developmental Logistics Support Planning. This effort includes completion of manuals, and finalization of supportability plans.

**Total** 3009

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
PROTECTIVE CLOTHING (JSLIST)	5145	4781	4912
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
<p><b>FY 2003 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 300 JSLIST Block I Glove Upgrade - Completed air/ground Operational Test (OT) and completed Milestone (MS) C.</li> <li>• 474 JSLIST Block II Glove Upgrade - Awarded multiple competitive contracts for system development and demonstration.</li> <li>• 2434 JSLIST Block II Glove Upgrade - Conducted durability and chemical validation testing for air/ground missions.</li> <li>• 401 JSLIST Block II Glove Upgrade - Conducted project management and planned test readiness reviews.</li> <li>• 250 JSLIST Multi-Purpose Sock (MPS) - Conducted field durability trials for air/ground missions.</li> <li>• 786 JSLIST MPS - Conducted chemical validation test trials.</li> <li>• 500 JSLIST MPS - Conducted air/ground OT and prepared MS C documentation.</li> </ul> <p><b>Total</b> 5145</p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 2500 JSLIST Block II Glove Upgrade - Complete IOT&amp;E and initiate chemical validation testing.</li> <li>• 400 JSLIST Block II Glove Upgrade - Conduct preparations for MS C Low Rate Initial Production (LRIP).</li> <li>• 623 JSLIST MPS - Complete air/ground operational tests and complete MS C.</li> <li>• 1258 JSLIST Mulo - Form alternative footwear solutions project team, conduct market survey, form acquisition strategy, initiate durability and chemical testing.</li> </ul> <p><b>Total</b> 4781</p>		
Project IP5/Line No: 082		Exhibit R-2a (PE 0604384BP)

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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**FY 2005 Planned Program:**

- 2912 JSLIST Block II Glove Upgrade - Complete chemical agent validation testing and complete IOT&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** 4912

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	646	0
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 646 SBIR - Small Business Innovative Research

**Total** 646

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<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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**C. Other Program Funding Summary:**

	<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)	1779	0	0	0	0	0	0	0	1779
JN0013 NAVY INDIVIDUAL PROTECTIVE GEAR	3115	0	0	0	0	0	0	0	3115
JSM001 JOINT SERVICE MASK LEAKAGE TESTER (JSMLT)	9459	8582	8196	8629	0	0	0	0	34866
JX0055 INDIVIDUAL PROTECTION (IP) ITEMS LESS THAN \$5M	8815	0	0	0	0	0	0	0	8815
M99501 MASK, AIRCRAFT M45	991	0	0	0	0	0	0	0	991
M99601 MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD: M40/M40A	2486	0	0	0	0	0	0	0	2486
MA0400 PROTECTIVE CLOTHING	304611	73615	93650	92097	82902	86535	88913	Cont	Cont
MA0480 SECOND SKIN, MASK MCU-2/P	8142	0	0	0	0	0	0	0	8142
N00020 CB RESPIRATORY SYSTEM - AIRCREW	3073	0	0	0	0	0	0	0	3073

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>

**D. Acquisition Strategy:**

AERPMODS	Each aircraft in the USAF inventory that has a chemical defense requirement has been/will be modified for Aircrew Eye Respiratory Protection (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	The acquisition strategy employs a spiral development approach. Block I will address 90% of the JPACE requirements, including key performance parameters. Block II is intended to address any deficiencies found in Block I and specifically to address CB protection in a rotorwash or high velocity wind environment and to enhance the thermal burden reduction capabilities of the JPACE system. Block I includes a competitive material search for advanced material technologies addressing aviation material performance requirements from the JPACE Joint ORD. Firm Fixed Price delivery order type contracts were awarded to finalize design and verify system level requirements. These contract vehicles include quantities for System Development and Demonstration (SDD), Low Rate Initial Production (LRIP), and Full Rate Production (FRP).
JSAM	The JSAM acquisition strategy included full and open competition for the Program Definition & Risk Reduction (PDRR) and Systems Development and Demonstration (SDD)/Production efforts IAW FAR 15 (as supplemented). The purpose of awarding two contracts for PDRR followed by one for SDD (with production options) was to ensure the value of competition throughout the program. The program office issued the SDD RFP prior to the end of the PDRR effort. The SDD award was made to the offerors whose proposal, based on the established evaluation criteria as written in section M of the solicitation, provided the best value to the government.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
JSGPM	The JSGPM acquisition strategy is a combined full-scale development (System Development and Demonstration) and production with Contractor Logistics Support (CLS). The contract for development/production is based on a Joint Service performance specification with special emphasis on the lowest total ownership cost (TOL).	
PROT CLTH	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.	
Project IP5/Line No: 082		Exhibit R-2a (PE 0604384BP)

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
<b>AERPMODS</b>													
HW C - Engineering Configuration Control Maintenance	PO	Various	U	163	81	1Q FY03	0	NONE	0	NONE	0	244	0
<b>JPACE</b>													
HW C - Prototype Pattern Design	MIPR	NCTRF, Natick, MA	U	828	656	2Q FY03	527	1Q FY04	150	1Q FY05	0	2161	2161
HW S - Prototype Procurement	C/FFP	Creative Apparel Associates, Belmont, ME	C	88	224	3Q FY03	0	NONE	350	2Q FY05	0	662	570
<b>JSAM</b>													
HW S - Contractor Development	C/CPAF	Scott Aviation, Buffalo, NY	C	0	7209	2Q FY03	4831	2Q FY04	4907	2Q FY05	0	16947	1831
<b>JSGPM</b>													
HW S - Develop JSGPM Hardware	C/CPIF	Avon, Inc. Cadillac, MI	C	7157	7300	1Q FY03	5454	1Q FY04	1500	1Q FY05	0	21411	0
HW S - Develop JSCESM	C/FFP	Quick Protective Systems, Stuart, FL	C	0	1709	3Q FY03	1200	1Q FY04	0	NONE	0	2909	0
<b>PROT CLTH</b>													
HW SB - Block II Prototypes	C/FFP	TBS	U	0	500	2Q FY03	0	NONE	0	NONE	0	500	0
<b>Subtotal I. Product Development:</b>				<b>8236</b>	<b>17679</b>		<b>12012</b>		<b>6907</b>		<b>0</b>	<b>44834</b>	

Remarks:

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
<b>JPACE</b>													
OTHT S - Hazard Prediction Model - Independent Verification and Validation	WR	NAWCAD, Patuxent River, MD	U	704	101	2Q FY03	344	1Q FY04	100	1Q FY05	0	1249	1249
ILS S - Systems Logistics	WR	NAWCAD, Patuxent River, MD	U	302	55	2Q FY03	242	1Q FY04	300	1Q FY05	0	899	1012
<b>JSAM</b>													
TD/D SB - JSAM Logistics, Training, and Data	C/CPAF	Scott Aviation, Buffalo, NY	C	0	188	2Q FY03	167	2Q FY04	461	2Q FY05	0	816	0
<b>JSGPM</b>													
ES S - Engineering Support	MIPR	JPMO - IP, Quantico, VA	U	400	468	1Q FY03	438	1Q FY04	100	1Q FY05	0	1406	2852
TD/D S - Technical Data and Documentation of JSGPM System	MIPR	JPMO - IP, Quantico, VA	U	250	206	1Q FY03	125	1Q FY04	100	1Q FY05	0	681	1000
ILS S - Logistics Support of JSGPM System	MIPR	JPMO - IP, Quantico, VA	U	336	190	1Q FY03	200	1Q FY04	100	1Q FY05	0	826	1700
ES S - Systems Engineering for JSCESM	MIPR	JPMO - IP, Quantico, VA - 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	1Q FY05	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



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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
<b>JPACE</b>													
DTE S - Aircraft Integration Testing	MIPR	NAWCAD, Patuxent River, MD	U	610	687	2Q FY03	40	1Q FY04	0	NONE	0	1337	1297
DTE S - Physical Property/Fit Testing	WR	NCTRF, Natick, MA	U	309	297	2Q FY03	256	1Q FY04	0	NONE	0	862	950
DTE C - Chemical Agent Testing	C/CPFF	Battelle, Columbus, OH	N	367	598	2Q FY03	367	1Q FY04	0	NONE	0	1332	965
DTE S - Chemical Testing	MIPR	USA DTC, Dugway, UT	U	1377	578	2Q FY03	918	1Q FY04	0	NONE	0	2873	2254
DTE S - Don/Doff Testing	WR	LANL, Los Alamos, NM	U	420	55	2Q FY03	218	1Q FY04	0	NONE	0	693	475
DTE S - Fit Testing	SS/FFP	Anthrotech, Yellow Springs, OH	C	106	73	3Q FY03	0	NONE	0	NONE	0	179	327
DTE S - Human Factors Testing	MIPR	RDECOM, Natick, MA	U	226	359	2Q FY03	32	1Q FY04	0	NONE	0	617	585
DTE S - Durability	MIPR	USA ATEC, Aberdeen, MD	U	0	828	2Q FY03	84	1Q FY04	0	NONE	0	912	1472
OTE S - Initial Operational Test and Evaluation	MIPR	AFOTEC DET 1, Albuquerque, NM	U	150	350	2Q FY03	548	1Q FY04	900	1Q FY05	0	1948	2912
OTE S - Initial Operational Test and Evaluation	MIPR	USA ATEC, Aberdeen, MD	U	40	10	2Q FY03	148	1Q FY04	935	1Q FY05	0	1133	1182
OTE S - Initial Operational Test and Evaluation	WR	COMOPTEVFOR, Norfolk, VA		0	70	2Q FY03	90	1Q FY04	300	1Q FY05	0	460	1256
<b>JSAM</b>													
OTHT SB - Govt Developmental Test	MIPR	Various	U	0	92	2Q FY03	1201	3Q FY04	2803	3Q FY05	0	4096	0
OTE S - Govt Operational Test	MIPR	Various	U	0	404	2Q FY03	165	3Q FY04	165	3Q FY05	0	734	0

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
DTE S - Contractor Test and Integration	PO	TBS		0	185	2Q FY03	1428	2Q FY04	1382	2Q FY05	0	2995	0
<b>JSGPM</b>													
OTHT SB - Plan and Conduct of Developmental Testing of JSGPM System	MIPR	ATEC, Falls Church VA; DTC; HRED, APG, MD	U	788	350	1Q FY03	2658	1Q FY04	709	1Q FY05	0	4505	1250
OTE S - Plan and Conduct Operational Testing of JSGPM System	MIPR	Various	U	538	836	1Q FY03	1938	1Q FY04	0	NONE	0	3312	8050
OTE C - PQT for IPM Variant	MIPR	JPMO - IP, Quantico, VA		0	0	NONE	374	2Q FY04	0	NONE	0	374	0
<b>PROT CLTH</b>													
OTE S - Block II Glove Test	MIPR	Various	U	685	2074	3Q FY03	2281	1Q FY04	2912	1Q FY05	0	7952	0
DTE S - JSLIST MPS Durability Trials	MIPR	Various	U	0	170	2Q FY03	200	2Q FY04	1700	1Q FY05	0	2070	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
<b>Subtotal III. Test and Evaluation:</b>													
				5616	9096		14546		11806		0	41064	

Remarks:

Project IP5

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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
<b>JPACE</b>													
PM/MS S - Overall Program Coordination	WR	NAWCAD, Patuxent River, MD	U	840	626	2Q FY03	864	1Q FY04	300	1Q FY05	0	2630	2322
PM/MS SB - Air Force Program Coordination	MIPR	311 HSW Brooks AFB, TX	U	763	242	2Q FY03	90	1Q FY04	100	1Q FY05	0	1195	1203
PM/MS SB - Management Support	C/CPFF	Battelle, Columbus, OH	N	726	280	2Q FY03	1267	1Q FY04	0	NONE	0	2273	978
PM/MS SB - US Army Program Coordination	MIPR	PMSOLDIER, Ft. Belvoir, VA	U	0	146	2Q FY03	0	1Q FY04	100	1Q FY05	0	246	470
PM/MS SB - US Marine Corps Program Coordination	WR	MARCORSYSCOM, Quantico, VA	U	0	146	2Q FY03	98	1Q FY04	100	1Q FY05	0	344	344
<b>JSAM</b>													
PM/MS C - Program Management/Management Support	MIPR	Various	U	0	2420	2Q FY03	2164	2Q FY04	2332	2Q FY05	0	6916	0
PM/MS S - Contractor Program Management	C/CPAF	TBS	C	0	1163	2Q FY03	1228	2Q FY04	461	2Q FY05	0	2852	0
<b>JSGPM</b>													
PM/MS S - Program Management by Army (Lead Service)	MIPR	JPMO - IP, Quantico, VA	U	574	556	1Q FY03	1113	1Q FY04	200	1Q FY05	0	2443	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	300	1Q FY05	0	1900	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

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IP5</b>
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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
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
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	0	NONE	646	NONE	0	NONE	0	646	0
Subtotal IV. Management Services:				5663	7140		8770		4193		0	25766	

Remarks:

<b>TOTAL PROJECT COST:</b>	24523	36487		37719		24067		0	122796
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Project IP5

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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<b>D. <u>Schedule Profile:</u></b>	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																																	
Developmental Testing - DT IIB				4Q	1Q																												
Pattern Finalization						2Q	—————			4Q																							
Developmental Test - Durability Testing							3Q	—————			4Q																						
Developmental Testing - Combined Developmental Testing (DT)/Operational Testing (OT) Assessment							4Q	—————			4Q																						
System Verification Review												1Q																					
Milestone C - Low Rate Initial Production (LRIP)														2Q																			
Independent Operational Testing														3Q	—————			2Q															
Award Low Rate Initial Production (LRIP) Delivery Order Contract Option														2Q																			
Full Rate Production (FRP) Decision																		2Q															
JSAM																																	
Milestone B Systems Development and Demonstration Contract Award In Process Review (IPR) (IP5)						1Q																											
System Demonstration and Development						1Q	—————											4Q															

**Exhibit R-4a, Schedule Profile**

DATE  
**February 2004**

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

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

**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
JSAM (Cont)																																
Development Test													1Q				2Q															
Operational Test (Rotary Wing)																					3Q				2Q							
Operational Test (Fixed Wing)																					4Q				3Q							
Milestone C (Full Rate Production Decision)																									2Q							
JSGPM																																
Award Systems Demonstration Option																																
Conduct System Demonstration																					3Q								2Q			
Documentation for Developmental Testing (DT) and Operational Testing (OT) Test																					3Q								3Q			
Developmental Testing (DT) PQT (Production Qualification Testing)																													3Q			
Initial Evaluation Report																													1Q			
Prepare and Execute Log Spt Plan																					3Q								1Q			
Preparation of Milestone C Documentation																					3Q								1Q			
Limited User Test (LUT)																													4Q	1Q		
Milestone C TC In Process Review (IPR)																																

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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)																																
Final Performance Specification												4Q																				
Production Contract Award																3Q																
Production Begins																3Q																
Material Release																				3Q												
Multiservices Operational Test and Evaluation (MOT&E) with Production Representative Articles																				2Q												
First Unit Equipped (FUE)/Initial Operational Capability (IOC)																								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 Conduct Developmental Test (DT)/Operational Test (OT)												2Q				3Q																

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IP5</b>
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<b>D. <u>Schedule Profile (cont):</u></b>	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 Block II Glove Milestone C Low Rate Initial Production (LRIP)																4Q																
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												1Q																				
JSLIST MPS - Production Contract Award												1Q																				
JSLIST - Initial Operational Test and Evaluation (IOT&E) Alternative Footwear Solutions																3Q — 1Q																
JSLIST- Milestone C Alternative Footwear Solutions																				3Q												

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IS5</b>
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
IS5 INFORMATION SYSTEMS (SDD)	0	0	18742	7105	1419	982	0	0	28248

**A. Mission Description and Budget Item Justification:**

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

Efforts funded in this project are: (1) Joint Effects Model (JEM), (2) Joint Operational Effect Federation (JOEF), (3) Joint Warning and Reporting Network (JWARN). These programs were previously funded in CA4/CA5 prior to FY05.

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).

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).

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IS5</b>
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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. JWARN ID was the initial acquisition and fielding of COTS and Government Off the Shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. JWARN will provide automatic NBC message capability at the Global Command and Control System (GCCS) level. JWARN will integrate NBC legacy and future detector systems, NBC Warning and Reporting Software Modules, and NBC battlespace Management Modules in the Joint Services C4I systems. In addition to JWARN development, a JWARN Initial Capability (JIC) will be developed and provided to warfighters in order to support refinement of Service CONOPS and provide feedback to the JWARN developer. P3I will investigate new detectors/sensors and software changes to Service C4I systems.

IT Medical Surveillance will establish a biological defense information collection system that integrates available detection and diagnostic data, and provides performance verification and validation capabilities; while providing a system to decision makers that is functional and meets their needs.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT EFFECTS MODEL	0	0	5894
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IS5</b>
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**FY 2005 Planned Program:**

- 1921 JEM Block I - Continue conduct of IV&V. Prepare for and achieve Class Accreditation. Perform financial management, scheduling, planning and reporting.
- 2950 JEM Block I - Continue conduct of Government developmental testing. Conduct Field trials. Finalize operational test plans. Initiate OT.
- 1023 JEM Block I - Perform software maintenance in support of DT. Initiate establishment of the Software Support Activity (SSA).

**Total** 5894

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT OPERATIONS EFFECTS FEDERATION	0	0	2485
RDT&E Articles (Quantity)	0	0	0

**FY 2005 Planned Program:**

- 2485 JOEF Block I - Continue IV&V. Conduct Developmental and Operational Testing.

**Total** 2485

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IS5</b>
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT WARNING & REPORTING NETWORK (JWARN)	0	0	10363
RDT&E Articles (Quantity)	0	0	0

**FY 2005 Planned Program:**

- 4831 JWARN - Continue Block II Development.
- 3013 JWARN - Continue Block II DT/OA .
- 2519 JWARN - Continue Program Management and Oversight and prepare documentation for MS C and conduct MS C for Low Rate Initial Production (LRIP) decision.

**Total** 10363

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>IS5</b>
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**C. Other Program Funding Summary:**

		<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)		0	1104	5937	16703	30670	24308	0	0	78722
JC0208 JOINT EFFECTS MODEL (JEM)		0	0	998	998	999	500	0	0	3495
JC0209 JOINT OPERATIONAL EFFECTS FEDERATION (JOEF)		0	0	0	0	749	750	0	0	1499

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**D. Acquisition Strategy:**

JEM	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.
JOEF	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 Joint Warfare System (JWARS) Block I and will provide initial tools and data analysis to support CBD ORMS. Block II will further extend capabilities to include seaports of debarkation (SPODs) and 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 and 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.

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JWARN

The revised AS is based on the contract awarded on July 15, 2003 to Northrop Grumman - Information Technology and updates key program milestones and events accordingly. The revised AS accelerates the development effort to provide a JWARN Initial Capability (JIC) limited, end-to-end JWARN capability to the warfighter by 4QFY04. This acceleration will be accomplished by leveraging the technology of an extant end-to-end JIC. The JIC will be completed early in the contract cycle, will be demonstrated in 2QFY04, and will be made available to key operational users by 4QFY04 in accordance with U.S. Central Command (CENTCOM) operational needs. Usage of this initial integrated capability by the warfighter will generate operational feedback to the JWARN developer and provide a venue to validate and refine Measures of Performance (MOPs) and Measures of Effectiveness (MOEs). Further, it will provide an opportunity to refine Service Concepts of Operations (CONOPS) and Tactics, Techniques, and Procedures (TTPs) for the system. The revised strategy further accelerates the delivery of the full system by developing a single increment JWARN-Full Capability (JWARN-FC) system vice development in two separate Blocks. This acceleration is achieved through the concurrent integration of sensor connectivity initially planned for Block III. The revised strategy eliminates the Block II Milestone Decision process as well as Block II Development Testing/Operational Assessment (DT/OA). This shortens the delivery schedule for the full capability of JWARN by approximately 12 months.







**UNCLASSIFIED**

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IS5</b>
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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
JEM													
PM/MS S - Program Office - Planning & Programming	MIPR	SPAWARSYSCOM, San Diego, CA		0	0	NONE	0	NONE	521	1Q FY05	0	521	0
JOEF													
PM/MS S - Program Office - Planning and Programming	MIPR	Various		0	0	NONE	0	NONE	460	1Q FY05	0	460	0
JWARN													
PM/MS S - JWARN Management Support	MIPR	Various		0	0	NONE	0	NONE	2519	1Q FY05	0	2519	0
Subtotal IV. Management Services:				0	0		0		3500		0	3500	

Remarks:

TOTAL PROJECT COST:	0	0	0	18742	0	18742
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Project IS5

<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>IS5</b>
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<b>D. <u>Schedule Profile:</u></b>	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
JEM																																
BLK I - Software Development							3Q					4Q																				
BLK I - Milestone B Decision											2Q																					
BLK I - Award System Development and Demonstration (SDD) Contract											2Q																					
BLK I - In Process Review (IPR)											2Q																					
BLK I - Developmental Testing (DT) (Contractor)												4Q																				
BLK I DT (Government)											4Q				3Q																	
BLK I Software Maintenance											4Q					1Q																
BLK I - Establish, Train, Stand Up Software Support Activity												1Q								3Q												
BLK I - Operational Testing (OT)															4Q					2Q												
BLK I - Milestone C (Limited Deployment) and Full Rate Production (FRP)																				2Q												
BLK I - Production and Deployment																				2Q											2Q	
BLK I - Initial Operational Capability (IOC)																								3Q								

**Exhibit R-4a, Schedule Profile**

DATE  
**February 2004**

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

PE NUMBER AND TITLE  
**0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)** PROJECT  
**IS5**

<b>D. <u>Schedule Profile (cont):</u></b>	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
JEM (Cont)																																
BLK I - Post Deployment Software Support																																
JOEF																																
Concept and Technology Development Phase				4Q				4Q																								
BLK I - Milestone B											2Q																					
BLK I - Award Systems Development and Demonstration (SDD) Contract											2Q																					
BLK I - Software Development											2Q					3Q																
BLK I - Early Operational Assessment (EOA)												4Q																				
BLK I - Interim Progress Review													1Q																			
BLK I - Developmental Testing (DT)																4Q																
BLK I - Operational Testing (OT)																4Q																
BLK I - Milestone C (Limited Deployment)																				2Q												
BLK I - Full Rate Production (FRP) Decision																																

**Exhibit R-4a, Schedule Profile**

DATE  
**February 2004**

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

PE NUMBER AND TITLE  
**0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)** PROJECT  
**IS5**

**D. Schedule Profile (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
JOEF (Cont)																																
BLK I - Initial Operational Capability (IOC)																				3Q												
JWARN																																
System Design and Development (SDD) Contract Award								4Q	-----																							
Operational Assessment																				2Q	-----											
Milestone C																				3Q	-----											
Low Rate Initial Production (LRIP) Contract Award																				3Q	-----											
First Article Test																				4Q	-----											
Initial Operational Test and Evaluation (IOT&E)																					-----											
Full Rate Production Milestone Decision																								3Q								
Full Rate Production																												4Q			1Q	
Full Operational Capability																																4Q

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>				PROJECT <b>MB5</b>	
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
MB5 MEDICAL BIOLOGICAL DEFENSE (SDD)	34819	7264	7810	3643	14930	58935	71855	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, Vaccinia Immune Globulin, and Equine Encephalitis vaccines.

The Critical Reagents Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/select agent and 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. The CRP 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 in FY04.

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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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 and environmental sources. Blocks II and III technologies will be selected based on their reliability, technological maturity, and supportability. Also in Blocks II and III, in addition to mobile and fixed land site facilities, the JBAIDS will be used on aircraft (fixed and rotary wing) and ships. Only Block I is funded.

**B. Accomplishments/Planned Program**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
CRITICAL REAGENTS PROGRAM	0	3540	3096
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 780 CRP - Continue transition of International Task Force (ITF)-6B targets.
- 1560 CRP - Continue transition of Nucleic Acid Assays, validation of assays and select agent and DNA Panels.
- 700 CRP - Initiate insertion of ITF-6B agents into Polymerase Chain Reaction (PCR) and Electrochemiluminescence (ECL) formats.

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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**FY 2004 Planned Program (Cont):**

- 500 CRP - Develop and institute automation technology solutions to improve processes and operations of the clinical laboratory.

**Total 3540**

**FY 2005 Planned Program:**

- 833 CRP - Continue transition of ITF-6B targets.
- 1491 CRP - Continue transition of Nucleic Acid Assays, validation of assays, and scale-up of select agent and DNA panels.
- 772 CRP - Continue insertion of ITF-6B agents into PCR and ECL formats.

**Total 3096**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
JOINT BIOLOGICAL AGENT IDENT AND DIAG SYSTEM	14804	3626	4714
RDT&E Articles (Quantity)	15	0	0

**FY 2003 Accomplishments:**

- 10925 JBAIDS BLK I - Awarded contract to develop a reusable, portable, modifiable biological agent identification and diagnostic system; purchased 15 test articles.

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
<p><b>FY 2003 Accomplishments (Cont):</b></p> <ul style="list-style-type: none"> <li>• 2987 JBAIDS BLK I - Completed Test Evaluation Master Plan (TEMP) with Developmental and Operational Test and Evaluation (DOT&amp;E) oversight and four military services' operational test agencies; planned developmental testing (DT) efforts; and planned BW test sample preparation efforts.</li> <li>• 892 JBAIDS BLK I - Completed source selection efforts; achieved Milestone (MS) B.</li> </ul> <p><b>Total 14804</b></p> <p><b>FY 2004 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 1011 JBAIDS BLK I - Complete DT and and Operational Assessment (OA); achieve MS C.</li> <li>• 1687 JBAIDS BLK I - Develop hardware and assays; deliver test articles; conduct hardware qualification testing; and continue hardware engineering change proposal process, hardware upgrading and BW assay development.</li> <li>• 928 JBAIDS BLK I - Initiate Operational Testing (OT) planning efforts.</li> </ul> <p><b>Total 3626</b></p> <p><b>FY 2005 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 4714 JBAIDS BLOCK I - Complete BW assay development, OT and FDA 510(k) submission process.</li> </ul> <p><b>Total 4714</b></p>		
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SMALLPOX VACCINE	20015	0	0
RDT&E Articles (Quantity)	0	0	0

**FY 2003 Accomplishments:**

- 19578 JVAP - Smallpox Vaccine - Continued Smallpox and Vaccinia Immune Globulin (VIG) stability studies. Completed fourth and fifth stages of a Phase 1 clinical trial (safety and immunogenicity).
- 437 JVAP - Smallpox Vaccine - Submitted Investigational New Drug (IND) annual reports and manufacturing amendments to the FDA for Smallpox vaccine and VIG.

**Total** 20015

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	98	0
RDT&E Articles (Quantity)	0	0	0

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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**FY 2004 Planned Program:**

- 98 SBIR - Small Business Innovative Research

**Total 98**

<b>C. <u>Other Program Funding Summary:</u></b>	<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>
JX0005 DOD BIOLOGICAL VACCINE PROCUREMENT	42717	62629	80789	56623	57272	60695	59478	Cont	Cont

Project MB5/Line No: 082

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Exhibit R-2a (PE 0604384BP)

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>

**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, Joint Biological Agent and Identification System (JBAIDS), and the Joint Biological Point Detection System (JBPDS) Blocks I and II. This program also supports the development and manufacture of individual Handheld Immunochromatographic Assays (HHA), freeze-dried electrochemiluminescence (ECL) immunoassays, and the Department of Defense (DoD) Biological Sampling Kit. This program results in improved identification performance and ensures comparable results across disparate systems. The program is designed along a stepwise strategy. After successful end item scale-up, 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, JBAIDS, and JBPDS Block I requirements. Performance improvements in those reagents must be pursued. A large portion of the FY04-09 development activity will focus on antibody and immunoassay development against JBAIDS and JBPDS Block II requirements. This includes roughly tripling the inventory of agents that can be detected using antibody based methods. The antibody components of the critical reagents are Government Furnished Equipment (GFE) to the HHA manufacturer. The HHA production was awarded 2QFY03. 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 such as polymerase chain reaction (PCR) were supported as of FY03. Expansion of Gold Standard Reference Panels in support of ongoing detection reagent validation will be a major focus between FY04 and FY10.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
JBAIDS	<p>JBAIDS is an evolutionary development program. Block I development effort focuses on militarizing and hardening of critical identification technologies based on a commercial off-the-shelf (COTS) item (Idaho Technology's Light Cyclor system). This will be a rapid development and fielding effort to deliver a critical capability to identify bacteria and viral agents to the field in the shortest time. FDA clearance for the initial set of gene probes and primers and hardware will be coordinated. Blocks II and III 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.</p>	
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. Recent events modified 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. Further development of the DoD vaccine will be terminated due to lack of funding to support program cost increases. Procurement funding is planned for FY06 to procure a licensed Smallpox vaccine commercially.</p>	
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<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
<p>Vaccinia Immune Globulin, intravenous (VIGIV) is a key performance parameter of the smallpox vaccine. Whether the smallpox vaccine is manufactured by a prime systems contractor or procured from another source, a stockpile of 3000 TEDs of VIGIV is required to remediate serious complications of smallpox vaccination. The Biologics License Application for VIGIV is on track for submission by 3QFY04.</p>		
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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MB5</b>
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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 - Reagent Technology	MIPR	USAMRIID, Fort Detrick, MD	U	0	0	NONE	600	2Q FY04	546	1Q FY05	0	1146	0
HW C - Assay and Reagent Technology and Infectious Disease	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	205	2Q FY04	130	1Q FY05	0	335	0
SW SB - Large Animal Farm	MIPR	USAMRIID Vet Sci Division, Fort Detrick, MD	U	0	0	NONE	153	2Q FY04	123	1Q FY05	0	276	0
HW C - Enhance Lab Processes and Operations	C/CPFF	TBS	C	0	0	NONE	500	2Q FY04	0	NONE	0	500	0
JBAIDS													
SW SB - Hardware (HW) & Assay Development, HW Testing & Upgrades	C/FFP	Idaho Technology, Inc., Salt Lake City, UT	C	0	9252	4Q FY03	0	NONE	3273	2Q FY05	0	12525	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	9854	1Q FY03	0	NONE	0	NONE	0	9854	0
Subtotal I. Product Development:				0	19106		1458		4072		0	24636	

Remarks:

Project MB5

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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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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 C - Repository and Conformance Lab	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	0	NONE	217	3Q FY04	689	2Q FY05	0	906	0
TD/D C - Critical Antigen Repository	MIPR	Dugway Proving Ground, Dugway, UT	U	0	0	NONE	0	NONE	345	2Q FY05	0	345	0
TD/D C - CRP Proficiency Program	C/CPFF	TBS	C	0	0	NONE	0	NONE	465	2Q FY05	0	465	0
JBAIDS													
TD/D C - Joint Services Training	MIPR	AMEDD, Fort Sam Houston, TX	U	0	120	2Q FY03	200	3Q FY04	0	NONE	0	320	0
TD/D C - Government Labs Support	MIPR	Various		0	467	2Q FY03	150	2Q FY04	0	NONE	0	617	0
TD/D C - 510(k) Package, Test Plans, Technical Data/Manuals, Assay Patents	C/FFP	Idaho Technology, Inc., Salt Lake City, UT		0	1119	4Q FY03	0	NONE	0	NONE	0	1119	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:				0	2207		567		1499		0	4273	

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MB5</b>
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II. Support Costs - Cont.  
Remarks:

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
<b>CRP</b>													
DTE C - Assay and Reagent Technology	MIPR	Naval Medical Research Center, Silver Spring, MD	U	0	0	NONE	264	2Q FY04	120	1Q FY05	0	384	0
OTHT C - Large Animal Farm	MIPR	USAMRIID Vet Sci Division, Frederick, MD	U	0	0	NONE	155	2Q FY04	122	1Q FY05	0	277	0
OTHT C - BSL3 Antigen Lab	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	0	NONE	396	3Q FY04	207	1Q FY05	0	603	0
OTHT C - PCR Assay Assessments	MIPR	Armed Forces Institute of Pathology, Washington, DC	U	0	0	NONE	128	3Q FY04	0	NONE	0	128	0
<b>JBAIDS</b>													
DTE SB - DT and OT Efforts	MIPR	Various	U	0	616	2Q FY04	587	2Q FY04	0	NONE	0	1203	0
DTE SB - DT and OT Efforts	MIPR	AFOTEC, Kirtland AFB, NM	U	0	225	2Q FY03	900	2Q FY04	974	2Q FY05	0	2099	0
DTE SB - R&D of Testing Protocols to Execute Block I	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	450	3Q FY03	328	2Q FY04	0	NONE	0	778	0



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<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MB5</b>
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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
CRP													
PM/MS S - Program Management Support	C/CPFF	TBS	C	0	0	NONE	672	3Q FY04	71	1Q FY05	0	743	0
PM/MS S - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	187	3Q FY04	185	4Q FY05	0	372	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	0	NONE	63	2Q FY04	93	4Q FY05	0	156	0
JBAIDS													
PM/MS S - Program Management Support	C/CPFF	SAIC, Frederick, MD	C	0	38	2Q FY03	0	NONE	0	NONE	0	38	0
PM/MS S - Program Management Support	C/CPFF	Camber Corporation, Falls Church, VA	C	0	1348	2Q FY03	901	2Q FY04	0	NONE	0	2249	0
PM/MS SB - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	138	3Q FY03	39	4Q FY04	13	2Q FY05	0	190	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	139	2Q FY03	39	4Q FY04	104	2Q FY05	0	282	0
PM/MS S - Program Management Support	C/CPFF	TBS	C	0	0	NONE	482	3Q FY04	350	2Q FY05	0	832	0
PM/MS S - Source Selection	Allot	CBMS, Frederick, MD	U	0	892	1Q FY03	0	NONE	0	NONE	0	892	0
VAC SPX													
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	CBMS, Fort Detrick, MD	U	0	464	3Q FY03	0	NONE	0	NONE	0	464	0

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BUDGET ACTIVITY <b>RD&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MB5</b>
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TOTAL PROJECT COST:	0	34819		7264		7810		0	49893
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<b>Exhibit R-4a, Schedule Profile</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MB5</b>
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<b>D. <u>Schedule Profile:</u></b>	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																																									
International Task Force (ITF)-6A List Complete	>>			4Q																																					
DNA and Select Agent Panels for Ten Threat Agents				4Q	—————												4Q																								
DNA Efforts to ITF-6A and ITF-6B								4Q	—————												4Q																				
Upgrade Antibodies for ITF-6A												2Q	—————												1Q																
ITF-6B List Complete												2Q	—————												4Q																
ITF-6C List Complete																				1Q	—————												4Q								
JBAIDS																																									
Advanced Concept Technology Demonstration (ACTD)				3Q 4Q																																					
Request for Proposal (RFP) Release (Source Selection)								2Q	—————												4Q																				
Milestone B								4Q																																	
Procure Systems for Engineering Design Test (EDT)/Developmental Test (DT)												2Q																													
Engineering Design and Test (EDT)/Developmental Test (DT)												2Q	—————												4Q																

**Exhibit R-4a, Schedule Profile**

DATE  
**February 2004**

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

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

PROJECT  
**MB5**

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

	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
JBAIDS (Cont)																																
Milestone C/Low Rate Initial Production (LRIP) Decision												4Q																				
Initial Operational Test and Evaluation (IOT&E)												1Q																				
Full Rate Production (FRP) Decision																3Q																
VAC SPX																																
VIG-Clinical Trials							4Q	1Q																								
VIG-Biological Licensure Application (BLA) Submission											3Q	4Q																				
VIG-FDA Licensure/Full Rate Production In Process Review (IPR)																4Q																

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MC5</b>
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COST (In Thousands)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
MC5 MEDICAL CHEMICAL DEFENSE (SDD)	1778	1439	1423	7163	7199	7555	6269	Continuing	Continuing

**A. Mission Description and Budget Item Justification:**

**Project MC5 MEDICAL CHEMICAL DEFENSE (SDD):** This project funds the development of medical materiel and other medical equipment items necessary to provide an effective capability for medical defense against chemical agent threats facing U.S. forces in the field. This project supports efforts in the System Development and Demonstration (SDD) phase of the acquisition strategy for prophylactic and therapeutic drugs, diagnostic equipment, and other life support equipment for protection against and management of chemical warfare agents. Project funds research and development of safety studies, manufacturing scale up, process validation, drug interaction, performance test, and submission of the Food and Drug Administration (FDA) drug licensure application(s). This program currently funds post approval studies for Soman Nerve Agent Pyridostigmine Pretreatment (SNAPP) 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 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
MEDICAL CHEMICAL DEFENSE	1778	1407	1423
RDT&E Articles (Quantity)	0	0	0

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MC5</b>

**FY 2003 Accomplishments:**

- 350 SNAPP - Received FDA approval of New Drug Application (NDA) for use of pyridostigmine bromide against soman.
- 479 SERPACWA - Continued FDA manufacturing requirements, production line process validation, self-life monitoring, and initiated field trial.
- 434 ATNAA - Continued shelf-life extension stability studies required by the FDA.
- 515 SNAPP - Initiated ex vivo human muscle and non-human primate studies to demonstrate efficacy vs. surrogate markers.

**Total** 1778

**FY 2004 Planned Program:**

- 313 SERPACWA - Continue FDA manufacturing requirements, redesign packaging, production line process validation, shelf-life monitoring, and complete field trial.
- 382 ATNAA - Continue shelf-life extension stability studies required by the FDA.
- 712 SNAPP - Continue ex vivo human muscle and non-human primate studies to demonstrate efficacy vs. surrogate markers.

**Total** 1407

**FY 2005 Planned Program:**

- 895 SNAPP - Continue ex vivo human muscle and non-human primate studies to demonstrate efficacy vs. surrogate markers.
- 378 ATNAA - Complete shelf-life extension stability studies required by the FDA.

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>	DATE <b>February 2004</b>
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BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/                  BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MC5</b>
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**FY 2005 Planned Program (Cont):**

- 150 SERPACWA - Complete FDA manufacturing requirements, redesign packaging, production line process validation, and shelf-life monitoring.

**Total** 1423

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
SBIR/STTR	0	32	0
RDT&E Articles (Quantity)	0	0	0

**FY 2004 Planned Program:**

- 32 SBIR - Small Business Innovative Research

**Total** 32

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

<b>CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2a Exhibit)</b>		DATE <b>February 2004</b>
BUDGET ACTIVITY <b>RDT&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	PROJECT <b>MC5</b>

**D. Acquisition Strategy:**

MEDCHEM

These Advanced Component Development and Prototypes (ACD&P) and System Development and Demonstration (SDD) 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. Non-traditional medical countermeasure efforts will include a chemical agent facility, which will test and evaluate medical chemical defense products under Good Laboratory Practices (GLP). The current acquisition strategy of in-house development and the use of prime contractors will be continued for the development of the Advanced Anticonvulsant System (AAS) and Next Generation Oxime (NGO). Although Skin Exposure Reduction Paste Against Chemical Warfare Agents (SERPACWA), Antidote Treatment - Nerve Agent, Autoinjector (ATNAA), and Soman Nerve Agent Pyridostigmine Pretreatment (SNAPP) have been approved by the FDA, additional post marketing studies were imposed by the FDA and will be completed within the next several years. New indications for Pyridostigmine Bromide (PB) will be integrated with current therapeutic regimens. In FY04, SERPACWA will transition to Defense Supply Center Philadelphia for follow-on procurement.





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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MC5</b>
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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
<b>MEDCHEM</b>													
OTHT S - SERPACWA FDA Required Study	MIPR	USAMRICD, Edgewood, MD	U	0	16	2Q FY03	0	NONE	0	NONE	0	16	0
DTE C - SERPACWA Durability Study	MIPR	Aberdeen Proving Ground, Edgewood, MD	U	0	71	2Q FY03	0	NONE	0	NONE	0	71	0
DTE C - SERPACWA Stability Testing	C/FFP	McKesson BioServices, Rockville, MD	C	0	0	NONE	45	2Q FY04	0	NONE	0	45	0
OTHT C - SERPACWA Extended Wear Study	MIPR	USARIEM, Natick, MA	U	0	24	2Q FY03	0	NONE	0	NONE	0	24	0
DTE C - SERPACWA Protective Efficacy Study	MIPR	USAMRAA, Fort Detrick, MD	U	0	134	2Q FY03	0	NONE	0	NONE	0	134	0
DTE C - SERPACWA Extended Wear and Label Evaluation Studies	MIPR	USAMMDA, Fort Detrick, MD	U	0	41	2Q FY03	64	2Q FY04	0	NONE	0	105	0
DTE S - ATNAA Shelf-life Extension Stability Study	MIPR	USAMMDA, Fort Detrick, MD	U	0	350	2Q FY03	237	2Q FY04	324	1Q FY05	0	911	0
OTHT SB - SNAPP Ex Vivo Human Muscle Study	MIPR	WRAIR, Silver Spring, MD	U	0	216	2Q FY03	32	2Q FY04	102	1Q FY05	0	350	0
DTE S - SNAPP Ex Vivo Human Muscle Study	MIPR	USAMRICD, Edgewood, MD	U	0	126	2Q FY03	50	2Q FY04	225	2Q FY05	0	401	0
DTE S - SNAPP FDA Required Studies (incl. Ex Vivo)	MIPR	USAMRAA, Fort Detrick, MD	U	0	333	2Q FY03	216	2Q FY04	225	2Q FY05	0	774	0

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<b>BUDGET ACTIVITY</b> <b>RDT&amp;E DEFENSE-WIDE/</b> <b>BA5 - System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>	<b>PROJECT</b> <b>MC5</b>
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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
DTE S - SNAPP Support of Animal Studies	MIPR	USAMMDA, Fort Detrick, MD	U	0	45	2Q FY03	208	2Q FY04	209	2Q FY05	0	462	0
Subtotal III. Test and Evaluation:				0	1356		852		1085		0	3293	

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
<b>MEDCHEM</b>													
PM/MS SB - Chem Bio Medical Systems Office	Allot	CBMS, Frederick, MD	U	0	0	NONE	18	4Q FY04	17	4Q FY05	0	35	0
PM/MS S - Joint Program Executive Office	Allot	JPEO, Falls Church, VA	U	0	27	2Q FY03	29	4Q FY04	43	4Q FY05	0	99	0
PM/MS S - Program Management Support	C/CPFF	TBS	C	0	0	NONE	315	3Q FY04	32	1Q FY05	0	347	0
<b>ZSBIR</b>													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ, AMC Alexandria, VA	U	0	0	NONE	32	1Q FY04	0	NONE	0	32	0
Subtotal IV. Management Services:				0	27		394		92		0	513	

**UNCLASSIFIED**

<b>CBDP PROJECT COST ANALYSIS (R-3 Exhibit)</b>							DATE <b>February 2004</b>		
BUDGET ACTIVITY <b>RD&amp;E DEFENSE-WIDE/ BA5 - System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)</b>			PROJECT <b>MC5</b>		
IV. Management Services - Cont. Remarks:									
TOTAL PROJECT COST:				0	1778	1439	1423	0	4640
(Empty area for project details)									
Project MC5			Page 179 of 180 Pages			Exhibit R-3 (PE 0604384BP)			

## Exhibit R-4a, Schedule Profile

DATE  
**February 2004**

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

**PE NUMBER AND TITLE**  
**0604384BP CHEMICAL/BIOLOGICAL DEFENSE (SDD)**      **PROJECT**  
**MC5**

<b>D. <u>Schedule Profile:</u></b>	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																																
SNAPP - Conduct Studies to Support New Drug Application (NDA)	1Q							2Q																								
SNAPP - Approval of New Drug Application (NDA)								2Q																								
SNAPP - FDA Post Approval Studies								2Q																								
SERPACWA - Complete FDA Requirements (Milestone C 4Q FY00)				3Q																												
ATNAA - Shelf-life Extension/Stability Study				2Q																												
ATNAA - Full Rate Production Decision				4Q																												