

UNCLASSIFIED

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev

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

COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	98836	161383	169018	95335	53366	45409	42189	Continuing	Continuing
BJ5 BIOLOGICAL DEFENSE (EMD)	7575	12803	14660	17977	17315	37632	35708	Continuing	Continuing
CA5 CONTAMINATION AVOIDANCE (EMD)	59268	71421	58341	17756	0	0	0	0	206786
CM5 WMD - CIVIL SUPPORT TEAM (EMD)	0	0	1000	1000	14500	400	0	0	16900
CO5 COLLECTIVE PROTECTION (EMD)	3137	3987	4301	4143	4207	4239	4718	Continuing	Continuing
DE5 DECONTAMINATION SYSTEMS (EMD)	3746	2498	4981	4925	897	0	0	0	17047
IP5 INDIVIDUAL PROTECTION (EMD)	8288	20711	39044	36195	12735	1411	0	0	118384
MB5 MEDICAL BIOLOGICAL DEFENSE (EMD)	15772	48500	44718	11853	2264	0	0	0	123107
MC5 MEDICAL CHEMICAL DEFENSE (EMD)	1050	1463	1973	1486	1448	1727	1763	Continuing	Continuing

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)

A. Mission Description and Budget Item Justification: Operational forces have an immediate need to survive, safely operate, and sustain operations in a chemical and biological 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 Engineering and Manufacturing Development (EMD) 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.

Contamination avoidance efforts under this engineering and manufacturing 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.

Weapons of Mass Destruction Civil Support Team (WMD CST) efforts provide for development and testing of a Unified Command Suite (UCS) and a Mobile Analytical Laboratory Platform (MALS) for these teams.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)DATE
February 2002

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)

The medical chemical defense engineering and manufacturing 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 full-scale development of prophylactic and therapeutic drugs and rapid identification and diagnostic systems.

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

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

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE
February 2002

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)**B. Program Change Summary:**

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
Previous President's Budget (FY 2002 PB)	102707	159943	142243
Appropriated Value	104015	162443	0
Adjustments to Appropriated Value	0	0	0
a. Congressional General Reductions	-728	-1060	0
b. SBIR/STTR	-1738	0	0
c. Omnibus or Other Above Threshold Reductions	0	0	0
d. Below Threshold Reprogramming	-2486	0	0
e. Rescissions	-227	0	0
Adjustments to Budget Years Since FY 2002 PB	0	0	26775
Current Budget Submission (FY 2003 PB)	98836	161383	169018

Change Summary Explanation:

Funding: FY03 - Realignment of funding within the CBDP to allow for the continuation and completion of significant EMD efforts (+\$26,579K); increase to the EMD program for WMD Civil Support Teams (CSTs) in a new project CM5 (+\$1,000K); adjustment for inflation assumptions (-\$804K).

Schedule:**Technical:****C. Other Program Funding Summary:** See section B in the R2A's

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
---	---	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
BJ5 BIOLOGICAL DEFENSE (EMD)	7575	12803	14660	17977	17315	37632	35708	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project BJ5 BIOLOGICAL DEFENSE (EMD): 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. The 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. This suite will be integrated onto Service-specific platforms (e.g., Joint Service Lightweight NBC Reconnaissance System (JSLNBCRS), Army IAV NBC Reconnaissance System, ships, etc.), employed at fixed sites (e.g., airbases, 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 (JPBDS Block II 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.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
<p>This project includes IBADS continued operational support. IBADS gives the Navy an interim point detection capability aboard ships at sea, which will be part of the theater protection strategy. The JBPDS Block I will replace the IBADS beginning in FY03.</p> <p>The Critical Reagent Program (CRP) integrates and consolidates all Department of Defense (DoD) reagents/antibodies/DNA biological detection requirements from demonstration/validation through production. The CRP ensures the availability of high-quality reagents throughout the life-cycle of all Biological Warfare (BW) detection/identification systems. This project supports all aspects of manufacturing "SCALE-UP" of developmental protocols for Critical Reagent Program-developed products, including maintenance of repositories and validation laboratories.</p> <p>The Joint Biological Standoff Detection System (JBSDS) will be employed to provide detection of biological hazards and will provide early warning via the Joint Warning and Reporting System (JWARN). JBSDS will augment and integrate with existing biological detection systems to provide a biological detection network capable of near real time detection and warning theater-wide, to limit the effects of biological agent hazards against U.S. forces at the tactical and operational level. It will be employed in support of various areas of interest (e.g. fixed sites, air/sea ports of debarkation, amphibious landing sites, etc.). JBSDS will be capable of operating remotely or on platforms to include vehicles, aircraft, and ships.</p> <p>FY 2001 Accomplishments:</p> <ul style="list-style-type: none"> • 1097 CRP - Initiated transition of newly developed protocols to full scale production. Maintained reagent repositories and validation processes. • 298 IBADS - Continued engineering and material support of rapid prototype systems. 		
Project BJ5	Page 6 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
FY 2001 Accomplishments (Cont):		
<ul style="list-style-type: none"> • 3179 JBPDS - Block I effort - Conducted Operational Assessment II and supported Block I IOT&E planning required for a Milestone III decision. • 1764 JBPDS - Block I effort - Conducted Risk Reduction and initiated Product Improvements on system suite and the Biological Aerosol Warning System (BAWS) detector design. • 1237 JBPDSBLK2 - Initiated Block II design studies to define performance specifications, identify potential design concepts, and reduce risk to the EMD program. Initiated preparations of the request for proposal for Block II EMD contract. 		
Total	7575	
FY 2002 Planned Program:		
<ul style="list-style-type: none"> • 1122 CRP - Continue transition of newly developed ITF-6B Protocols. Maintain reagent repositories and validation processes. • 328 IBADS - Continue engineering and material support of rapid prototype systems. • 4650 JPBDS - Block I effort - Conduct Initial Army Operational Test and Evaluation (IOT&E) at the Dugway Proving Ground, Utah. • 2236 JPBDS - Block I effort - Initiate planning for USAF, USMC, and Navy IOT&E. • 49 JBPDSBLK2 - Initiate Biological Aerosol Warning System (BAWS) laser reliability test planning. • 4201 JBSDS - Continue system development and integration initiated in the TT BIO program of a lightweight, short range, biological standoff detection system as a future candidate to the JBSDS Block I program. 		
Project BJ5	Page 7 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	BJ5
FY 2002 Planned Program (Cont):		
<ul style="list-style-type: none"> • 217 SBIR - Small Business Innovative Research. 		
Total	12803	
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 2087 CRP - Continue transition of ITF-6B protocols. Initiate insertion of ITF-6B reagents into assay formats. Maintain reagent repositories and validation processes. • 403 IBADS - Continue engineering and material support of rapid prototype systems. • 2488 JBPDS - Block I effort - Complete Army IOT&E and report. Conduct USAF, USMC, and Navy IOT&E. • 5728 JBSDS - Transition early warning standoff systems developed in the TT-Bio program into the Systems Integration phase of the JBSDS program. • 1954 JBSDS - Conduct developmental testing (DT) of JBSDS competing candidate systems. • 2000 JBSDS - Initiate limited operational testing (OT) and assessment of JBSDS competing candidate systems. 		
Total	14660	
Project BJ5	Page 8 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	---	-----------------------

<u>B. Other Program Funding Summary:</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	9018	0	0	0	12194	15956	31916	Cont	Cont
HS9000 HOMELAND SECURITY PRODUCTION	0	0	30000	0	0	0	0	0	30000
JP0100 JOINT BIO POINT DETECTION SYSTEM (JBPDS)	27260	36324	67528	75245	73514	56735	50879	Cont	Cont
JPO210 CRITICAL REAGENTS PROGRAM (CRP)	4284	1913	2010	1850	1894	2251	2301	Cont	Cont
JPO230 PORTAL SHIELD EQUIPMENT	26192	3865	0	0	0	0	0	0	30057
M93001 BIO INTEGRATED DETECTOR SYSTEM (BIDS)	33319	55060	0	0	0	0	0	0	88379
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	0	0	28345	50623	66594	74019	81867	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	BJ5
C. <u>Acquisition Strategy:</u>		
CRP	Contract development of reagents to detect threat agents and procurement of more effective reagents to replace older stocks. The BJ5 program transitions these reagent protocols into production following the testing of these reagents in fielded platforms. ITF-6A Priority List completed in FY01. Continue to focus efforts on developing and transitioning reagents against the ITF-6B Priority List in order to meet JBPDS Block II requirement.	
JBPDS Block I	Contractor design, fabrication, platform integration, and testing of JBPDS prototypes. A Low Rate Initial Production (LRIP) decision in FY00 provided production representative systems for Operational Assessment II and Initial Operational Test and Evaluation (IOT&E) in FY01, FY02, and FY03.	
JBPDS Block II	Spiral development effort initiated with government run concept analysis in FY00. MS B/Development Contract Award, FY04, and MS C, Low Rate Initial Production in FY07, and Full Rate Production in FY08. Concept analysis consists of modeling and simulation results given to one or more contractors for brassboard development and testing. A preferred design will be carried through System Development by a prime systems contractor. Throughout System Development, the program will advance biological point detection capabilities (smaller, lighter, lower power, dry detection technologies, etc.) for operational level systems, and spiral incremental improvements into the Block I production program as they become available.	
IBADS	In-house support and sustainment of rapid prototypes.	
JBSDS	This program will transition leading technologies from the Technology Transition (TT) Bio program and the Bio Standoff Defense Technology Objective (DTO) into the system development and demonstration phase of the JBSDS program. The program will conduct a rapid system integration phase to effect the earliest possible system fielding.	
Project BJ5	Page 10 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	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	
JBPDSBLK2																																	
Initial Overarching Integrated Process Team (IT) Convened: February 18, 1999													1Q	2Q																			
Solicitation for EMD Contract													1Q	2Q																			
Milestone B															1Q																		
Brassboard Build															1Q	3Q																	
Preliminary Design Review (PDR)																3Q	4Q																
Critical Design Review (CDR)																				3Q													
Engineering, Design, and Test (EDT)																				3Q	2Q												
Pre-Production Qualification Test (PPQT)																								3Q									
Operational Assessment																									4Q								
Milestone C																																1Q	
Low Rate Initial Production (LRIP) Contract Award																																1Q	
Initial Operational Test and Evaluation (IOT&E)																																	4Q
JBSDS																																	
BLK I Tech Readiness Review												4Q																					
BLK I Milestone B													1Q																				
BLK I Competitive Test Fly-off														2Q																			

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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)																																
Developmental Testing													3Q	4Q																		
Operational Testing													3Q	4Q																		
BLK I Milestone C																	3Q															
Refurbish Prototypes																	3Q															
Production																	3Q	-----	3Q													
First Unit Equipped (FUE)																					4Q											
BLK II Concept Exploration													1Q	-----	4Q																	
Component Advanced Development																	1Q	-----	4Q													
BLK II Milestone B																					1Q											
System Development and Demo																					3Q	-----	2Q									
Critical Design Review (CDR)																									2Q							
BLK II Developmental Test/Operational Test (DT/OT)																									4Q	-----	3Q					
Milestone C																													3Q			
Low Rate Initial Production (LRIP)																													3Q	4Q		

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	--	------------------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
HW C - Purchase of Critical Reagent Products	MIPR	Naval Medical Research Institute, Bethesda, MD	C	513	200	Jan-01	208	Jan-02	309	Jan-03	0	1230	0
HW S - New HHA Development	C/CPFF	TBS	C	0	0	NONE	0	NONE	300	1Q FY03	0	300	0
JBPDS													
HW C - Initiate Improvements on Suite and Detector Design	MIPR	Hanscom AFB/MIT-Lexington, MA	F	0	1764	2Q FY01	0	NONE	0	NONE	0	1764	0
JBPDSBLK2													
HW C - Laser reliability	MIPR	Hanscom AFB/MIT-Lexington, MA	F	0	0	NONE	49	1Q FY02	0	NONE	0	49	0
JBSDS													
SW SB - System Integration	MIPR	TBS	U	0	0	NONE	0	NONE	3128	2Q FY03	0	3128	0
HW S - JBSDS LIDAR	C/CPFF	Fibertek, Inc., Herndon, VA	C	0	0	NONE	3868	2Q FY02	0	NONE	0	3868	0
Subtotal I. Product Development:				513	1964		4125		3737		0	10339	

Remarks:

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	--	------------------------------

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CRP													
OTHT C - Maintain Critical Reagent Repositories	MIPR	SBCCOM, APG, MD	U	0	300	Jan-01	300	Jan-02	400	Jan-03	0	1000	0
OTHT C - Antigen Development	MIPR	Dugway Proving Ground, UT	U	108	163	Jan-01	190	Jan-02	338	Jan-03	0	799	0
JBPDS													
OTE C - Initiate and Complete IOT&E	MIPR	ATEC/AFOTEC, Washington, D.C.	U	0	0	NONE	6886	2Q FY02	2488	1Q FY03	0	9374	0
OTE S - Conduct Operational Assessment II	MIPR	AFOTEC, ATEC, and DPG, UT	U	0	3179	3Q FY01	0	NONE	0	NONE	0	3179	0
JBSDS													
DTE S - Developmental Testing I	MIPR	Dugway Proving Ground, UT	U	0	0	NONE	0	NONE	1454	2Q FY03	0	1454	0
DTE S - Developmental Testing I	MIPR	SBCCOM, APG, MD	U	0	0	NONE	0	NONE	500	2Q FY03	0	500	0
OTE S - Operational Testing I	MIPR	Dugway Proving Ground, UT		0	0	NONE	0	NONE	2000	3Q FY03	0	2000	0
Subtotal III. Test and Evaluation:				108	3642		7376		7180		0	18306	

Remarks: JBPDS - FY02 initiate Army IOT&E and planning for AF, Navy, and MC IOT&E. FY03 Complete Army, AF, Navy, and MC IOT&E.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT BJ5
--	---	-----------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ABPDS													
PM/MS C - Program Manager Training	MIPR	USAMRIID, Fort Detrick, MD	U	3	0	NONE	0	NONE	0	NONE	0	3	0
CRP													
PM/MS S - Program Management/Program Manager Support	SS/CPFF	Camber Corporation, Huntsville, AL	C	192	334	Jan-01	324	Jan-02	440	Jan-03	0	1290	0
IBADS													
PM/MS S - Program Management/Program Manager Support	Various	JPO-BD, Falls Church, VA	U	17	17	1Q FY01	19	1Q FY01	18	1Q FY01	0	71	0
JBPDSBLK2													
PM/MS S - PM Support	PO		U	0	150	1Q FY01	0	NONE	0	NONE	0	150	0
JBSDS													
PM/MS S - Program Management/Management Support	Allot	JPO-BD, Falls Church, VA	U	0	0	NONE	333	2Q FY02	1800	1Q FY03	0	2133	0
PM/MS S - Program Management/Management Support	MIPR	SBCCOM, APG, MD	U	0	0	NONE	0	NONE	200	3Q FY01	0	200	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria VA	U	0	0	NONE	217	2Q FY02	0	NONE	0	217	0
Subtotal IV. Management Services:				212	501		893		2458		0	4064	

Remarks:

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

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

PROJECT
BJ5

TOTAL PROJECT COST:	1544	7575		12803		14660		3123	39705
---------------------	------	------	--	-------	--	-------	--	------	-------

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
---	---	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
CA5 CONTAMINATION AVOIDANCE (EMD)	59268	71421	58341	17756	0	0	0	0	206786

A. Mission Description and Budget Item Justification:

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

Efforts funded in this project are: (1) Joint Contaminated Surface Detector (JCSD), (2) Nuclear, Biological and Chemical Reconnaissance System (NBCRS) Block II, (3) Joint Chemical Agent Detector (JCAD), (4) Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), (5) Joint Service Lightweight Nuclear, Biological and Chemical Reconnaissance System (JSLNBCRS), and (6) Joint Warning and Reporting Network (JWARN).

The JCSD will operate from host platforms and will detect chemical agents remotely on contaminated surfaces.

The JCAD program is developing a miniaturized, ruggedized, and portable point chemical agent detector that automatically and simultaneously detects, identifies, quantifies, and alerts in the presence of nerve, blister, and blood 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.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CA5
<p>The JCSD is a standoff system that will provide near-term instantaneous detection and identification of chemical agents at maximum vehicle speeds. The JCSD will replace the Double Wheel Sample System in the NBCRS Block II (IAV-NBCRS) and the JSLNBCRS.</p> <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 utilizing passive infrared technology, provides a first-time on-the-move automatic scanner and chemical stand-off detection capability to the Services. The JSLSCAD will replace the M21 Remote Standoff Chemical Agent Alarm (RSCAAL).</p> <p>The JWARN will provide standard integration and analysis of NBC detection information with Command, Control, Communication, Computers, Information and Intelligence (C4I2) 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 C4I2. JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. Block I was the initial acquisition and fielding of COTS and Government Off the Shelf (GOTS) software to standardize NBC warning and reporting throughout the Armed Forces. Block II will integrate NBC legacy and future detector systems, NBC Warning and Reporting Software Modules, and NBC battlespace Management Modules in the Joint Services C4I systems. Block III will investigate new NBC warning and reporting software technologies and developmental NBC detector/sensors. Block III will also investigate software changes to Service C4I systems.</p>		
Project CA5	Page 20 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CA5
<p>The NBCRS is a dedicated system of nuclear and chemical detection and warning equipment, and biological sampling equipment integrated into a high speed, high mobility armored carrier capable of performing NBC reconnaissance on primary, secondary, or cross country routes throughout the battlefield. The NBCRS Block II improvement of the NBCRS will meet all of the requirements contained in the approved requirements document.</p> <p>FY 2001 Accomplishments:</p> <ul style="list-style-type: none"> • 5930 JCAD - Continued hardware and software development of 110 breadboard prototype units at an average unit cost of \$40,667. • 3891 JCAD - Continued systems engineering and manufacturing development (EMD) for prototype units, and logistics planning. • 4314 JCAD - Continued integration of systems components. • 1085 JCAD - Initiated contractor engineering test and evaluation of breadboard prototype units. Continued planning for Government development tests, and began to modify test plans for operational testing to include Director, Operational Test & Evaluation (DOT&E) considerations. • 3767 JSLNBCRS - Built/integrated two M1113 HMMWV variants (average unit cost of \$1.5M each). • 7287 JSLNBCRS - Completed Developmental Test (DT) I for two M1113 HMMWV variants. • 1515 JSLSCAD - Initiated the integration for the Joint Service Lightweight Nuclear, Biological, Chemical Reconnaissance System (JSLNBCRS), CH-53 helicopter, and C-130 fixed wing test platforms. 		
Project CA5	Page 21 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CA5
FY 2001 Accomplishments (Cont):		
<ul style="list-style-type: none"> • 3800 JSLSCAD - Completed Engineering Design Test (EDT). Reviewed and modified system design to incorporate test review results. • 5900 JSLSCAD - Initiated the fabrication of 35 Production Qualification Testing/Initial Operational Test & Evaluation (PQT/IOT&E) test articles (\$100K each). • 9613 JSLSCAD - Initiated PQT/ IOT&E which includes environmental extremes, shock and vibration, Electromagnetic Interference (EMI), Electromagnetic Pulse (EMP), agent, and shipboard, helicopter, airplane, and ground vehicle field testing. • 799 JSLSCAD - Initiated the preparation and review of technical data package and acquisition documentation. • 763 JWARN - Prepared documentation for start of System Development and Demonstration (SDD) effort. Finalized Block II Software Development Plan. • 8144 NBCRS Block II - Continued sensor suite engineering development and acquisition of detectors. • 100 NBCRS Block II - Initiated plans for Developmental Test and Evaluation (DTE). • 515 NBCRS Block II - Continued software development. • 1845 NBCRS Block II - Initiated design for assembly and integration of developmental detectors into vehicles. 		
Total	59268	
Project CA5	Page 22 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
<p>FY 2002 Planned Program:</p> <ul style="list-style-type: none"> • 3605 JCAD - Complete hardware and software development on 296 contractor EMD prototype units at an average unit cost of \$6,405. • 4161 JCAD - Continue systems engineering and logistics planning. • 3433 JCAD - Begin system integration of JCAD system components and user platforms. • 5677 JCAD - Complete contractor validation test and evaluation. Begin government development tests (DT) on 1,196 EMD units at an average unit cost of \$4,484. Continue to plan for government operational testing. • 1742 JCSD - Conduct initial systems engineering, software and hardware development, acquisition of sensor components, and logistics planning. • 700 JCSD - Conduct initial test planning for surface contamination analyses. • 4348 JSLNBCRS - Continue software and hardware engineering development and integration of commercial off the shelf, government off the shelf software/hardware, and non-developmental item software/hardware products to the maximum extent possible for HMMWV variant. • 3300 JSLNBCRS - Conduct system test and evaluation (HMMWV DT II/Limited User Team) at Dugway and Yuma Proving Grounds. • 3048 JSLNBCRS - Conduct LAV variant design/fabrication. • 2012 JSLNBCRS - Initiate Toxic Industrial Chemicals (TICs) and Toxic Industrial Materials (TIMs) software development for CBMS Block II transition to JSLNBCRS procurement. • 4334 JSLSCAD - Continue Production Qualification Testing and Initial Operational Test & Evaluation (PQT/IOT&E). 		
Project CA5	Page 23 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
<p>FY 2002 Planned Program (Cont):</p> <ul style="list-style-type: none"> • 1000 JSLSCAD - Continue technical data package and acquisition documentation for Milestone III. All program documentation will be reviewed and updated to support MS III. This includes: Acquisition Strategy, Acquisition Baseline, Performance Specifications, and Environment Assessment. In Process Review (IPR) package preparation and coordination is also included. • 1035 JSLSCAD - Initiate the review and preparation of technical manuals, logistics support, and training materials. All logistics documentation to include: Technical Manuals; Integrated System Support Plans; and Logistics Support Plans will be updated based on test results. In addition, Materiel Fielding Plans, fielding schedules, and platform integration guides will be prepared and approved. • 2400 JSLSCAD - Complete the fabrication of 35 Production Qualification Testing/Initial Operational Test & Evaluation (PQT/IOT&E) test articles (\$100K each). NOTE - Defense Emergency Response Fund (DERF), Initial Crisis Response - \$616K received for procurement of 4 JSLSCAD prototype systems and testing for utilization in the National Capital Region. • 12767 JWARN - Start Block II integration of NBC legacy and future detector systems. Develop NBC warning and reporting modules and battlespace management modules for use by Joint Services C4I2 systems. • 1422 JWARN - Conduct Block II Modeling and Simulation for compatibility with the Joint Effect Model (JEM). • 2124 JWARN - Conduct Block II system DT II for Key Performance Parameters/Operational Assessment. • 693 JWARN - Prepare integrated logistic support technical data. • 1875 NBCRS Block II - Conduct Modeling and Simulation (M&S) of human factors. 		
Project CA5	Page 24 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CA5
FY 2002 Planned Program (Cont):		
<ul style="list-style-type: none"> • 5503 NBCRS Block II - Continue sensor suite engineering development and refurbish prototypes (four prototypes, estimated cost \$1.1M each). • 2624 NBCRS Block II - Continue integration of developmental detectors into vehicles. • 2411 NBCRS Block II - Begin warfighter operational capability assessment. • 1207 SBIR - Small Business Innovative Research. 		
Total	71421	
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 2015 JCAD - Update developmental hardware and software based on contractor and government developmental testing. • 5921 JCAD - Continue JCAD systems engineering and logistics planning. • 4224 JCAD - Continue system integration supporting government developmental tests. • 11328 JCAD - Continue government developmental test and evaluation. Continue government operational test planning and preparation. • 1000 JSLNBCRS - Start DT I for LAV variant. • 1780 JSLNBCRS - Complete development of TICs and TIMs software for CBMS Block II transition to JSLNBCRS procurement. • 1200 JSLNBCRS - Conduct DT III for LRIP HMMWV variants. • 4030 JSLNBCRS - Start IOT&E for LAVs and HMMWVs for full rate production/Milestone C . 		
Project CA5	Page 25 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CA5
FY 2003 Planned Program (Cont):		
<ul style="list-style-type: none"> • 10239 JSLSCAD - Complete Production Qualification Testing and Initial Operational Test & Evaluation. • 2200 JSLSCAD - Complete technical data package and acquisition documentation for Milestone III. All program documentation will be reviewed and updated to support MS III. This includes: Acquisition Strategy, Acquisition Baseline, Performance Specifications, and Environment Assessment. In Process Review (IPR) package preparation and coordination is also included. • 2091 JSLSCAD - Continue the review and preparation of technical manuals, logistics support, and training materials. All logistics documentation to include: Technical Manuals, Integrated System Support Plans, and Logistics Support Plans will be updated based on test results. In addition, Materiel Fielding Plans, fielding schedules, and platform integration guides will be prepared and approved. • 7668 JWARN - Continue Block II integration of NBC legacy and future detector systems and conduct DT I/Operational Assessment for full system requirements. • 1000 JWARN - Start to prepare documentation for Block II MS C. • 2343 NBCRS Block II - Complete NBCRS sensor suite engineering development and conduct Interim Progress Review to begin Low Rate Initial Production phase. • 1302 NBCRS Block II - Complete Production Qualification Test (PQT) and Early User Test (EUT). 		
Total	58341	
Project CA5	Page 26 of 113 Pages	Exhibit R-2 (PE 0604384BP)

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

DATE
February 2002

BUDGET ACTIVITY

**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)

PROJECT

CA5

B. Other Program Funding Summary:

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
B96801 RADIAC - POCKET AN/UDR - 13	3035	1999	0	0	0	0	0	0	5034
G47101 JOINT WARNING & REPORTING NETWORK (JWARN)	9018	0	0	0	12194	15956	31916	Cont	Cont
JF0100 JOINT CHEM AGENT DETECTOR (JCAD)	0	0	6031	19411	20437	26991	30273	Cont	Cont
JX0002 CA SYSTEM FIELDING SUPPORT/SPARES	0	0	0	0	0	0	0	0	0
M98801 AUTO CHEMICAL AGENT ALARM (ACADA), M22	68877	591	1035	0	0	0	0	0	70503
MA0601 RECON SYSTEM, FOX NBC (NBCRS) MODS	57651	6312	16474	24295	25268	24931	997	Cont	Cont
MC0100 JT SVC LTWT NBC RECON SYS (JSLNBCRS)	0	0	28345	50623	66594	74019	81867	Cont	Cont
N00041 SHIPBOARD DETECTOR MODIFICATIONS	4696	4670	4673	0	0	0	0	0	14039
S02201 IMPROVED CHEMICAL AGENT MONITOR (ICAM)	18746	262	381	0	0	0	0	0	19389

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	---	-----------------------

B. <u>Other Program Funding Summary (Cont):</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
	S10801 JS LTWT STANDOFF CW AGT DETECTOR (JSLSCAD)	0	10327	0	15386	23230	39891	44881	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
C. <u>Acquisition Strategy:</u>		
CBMS	Contract development and fabrication of prototype test hardware, contractor testing, integration by host platforms, and contract fabrication of production units. The CBMS Block I (PDRR phase) was developed under a task order contract with Bruker Industries. The system was type-classified as part of the P3I BIDS system. The CBMS Block II (EMD phase) was developed under an interagency agreement with Oak Ridge National Lab, with Orbital Sciences Corp as the main subcontractor. The system will be type classified as a component of the NBCRS Block II system (IAV-NBCRV) and the Joint Service Lightweight NBCRS system. A PDRR effort is being initiated to configure the system as a stand-alone system.	
JCAD	Program has a competitive engineering and manufacturing development (EMD) contract, with contractor validation testing on a specified set of EMD prototype units, and government developmental testing (DT) on an additional set of EMD prototype units. The contractor will conduct DT on EMD prototypes. MS C (LRIP) will follow DT. The Government will conduct OT using LRIP units. The Program Manager plans a sole source initial procurement contract award to the development contractor.	
JCSD	The JCSD program will award a sole source contract to ITT Industries, Albuquerque, NM for development, fabrication of prototype hardware, and system integration into host platforms.	
JSLSCAD	The JSLSCAD is a five year contract development effort with Intellitec of Deland, FL. Development includes ground, air, and sea based platforms. Three production follow-on options are planned. The first option is to refurbish the EMD test units. The second and third options are for initial and full scale production, respectively.	
JSLNBCRS	Competitive development and fabrication of prototypes. Continue System Development and Demonstration (SDD) phase and initiate LRIP for HMMWV platform integration.	
Project CA5	Page 29 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
JWARN	Competitive contract for SDD development and integration of software for Block II. Conduct development and fabrication of hardware/interfaces; test prototypes; contractor/in-house testing; competitive contract fabrication of production units.	
NBCRS Blk II	The Nuclear Biological Chemical Reconnaissance System (NBCRS) Block II program consists of a sensor suite developmental effort, and a separate integration effort to improve the NBCRS detection and reporting capability. The design and development of the sensor suites is under contract to CACI Technologies, Inc. Contract is a single year with four option years, cost plus fixed fee (CPFF) contract. Integration of the sensor suite and vehicle production following an Initial Production In-Process Review (IPR) is under contract to General Motors (GM) General Dynamics Land System (GDLS) LLC, Inc.	
Project CA5	Page 30 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	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)												4Q																					
Low Rate Initial Production (LRIP) for High Mobility Multipurpose Wheeled Vehicle (HMMWV)												1Q	—————				2Q																
Engineering Developmental Test (EDT) (LAV)												4Q																					
Initial Operational Test and Evaluation (IOT&E) for High Mobility Multipurpose Wheeled Vehicle (HMMWV) and the LAV																4Q	———				2Q												
Milestone C Full Rate Production (FRP)																				3Q 4Q													
JSLSCAD																																	
Fabricate Engineering, Design, and Test (EDT) Units				>> 2Q																													
Conduct Engineering Test				2Q	—————				3Q																								
Production Qualification Test (PQT)/Initial Operational Test and Evaluation (IOT&E)												3Q	—————				4Q																
Complete test and operational documentation																4Q																	

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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
NBCRSBLKII (Cont)																																
Block II Initial Production IPR - Milestone C																	1Q															
Block II Production Verification Test																					1Q				4Q							

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	--	------------------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCAD													
HW/SW Development	C/CPAF	BAE SYSTEMS Inc, Austin, TX	C	14237	12406	Nov-00	10346	Nov-01	9697	Nov-02	0	46686	0
JCSD													
HW S - Systems engineering and hardware development	SS/CPFF	ITT Industries, Albuquerque, NM	C	0	0	NONE	1642	3Q FY02	0	NONE	0	1642	0
JSLNBCRS													
HW C - COTS/GOTS Hardware/Software Integration	C/FP	TRW, Sierra Vista, AZ	C	0	0	NONE	3696	Nov-01	0	NONE	0	3696	0
JLSCAD													
SW S - Develop Software	C/CPFF	Intellitec, DeLand, FL	C	10500	3975	Nov-00	500	Nov-01	1351	Nov-02	0	16326	11095
JWARN													
SW S - JWARN SSD Contract	C/FPI	TBS	C	0	0	NONE	12100	Mar-02	6668	Mar-03	0	18768	0
NBCRSBLKII													
HW S - NBCRS Sensor Suite Engineering Development; Fabricate Prototypes; Complete Development	C/CPFF	CACI Technologies Inc, Manassas, VA	C	1357	3240	Dec-00	4667	Dec-01	1303	Dec-02	0	10567	16401
SW SB - Provide Sensor Suite Hardware	MIPR	PM NBCDS, APG, MD	U	2000	5553	Dec-00	2234	Dec-01	0	NONE	0	9787	5865
Subtotal I. Product Development:				28094	25174		35185		19019		0	107472	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5

I. Product Development - Cont.

Remarks: JSLSCAD - HW S - FY02 complete PQT articles. SW S - FY00 develop software: 15 EDT articles; 35 PQT/IOTE articles (\$100,000 each). FY03 complete software. FY02 information changed due to contract schedule extension and Acquisition Program Baseline (APB) update. Significant delays in hardware delivery, test cost growth, and the resultant schedule extension have resulted in the need to realign FY02 JSLSCAD production funds.

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

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
---	---	-----------------------

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCAD													
DTE S - JCAD Developmental Testing (DT)	MIPR	Various Govt	U	3176	1473	Mar-01	5678	Jan-02	11329	1Q FY03	0	21656	0
JCSD													
Initial Test Design and Planning	PO	SBCCOM, APG, MD	U	0	0	NONE	700	2Q FY02	0	NONE	0	700	0
JSLNBCRS													
OTHT SB - Conduct Limited User Test of HMMWV	MIPR	Various	U	0	0	NONE	2400	Nov-01	900	Nov-02	0	3300	0
DTE S - HMMWV Variant DT- II	MIPR	Various	U	0	0	NONE	3600	Dec-01	0	NONE	0	3600	0
DTE S - HMMWV Variant DT- III	MIPR	Various	U	0	0	NONE	0	NONE	1000	Nov-02	0	1000	0
OTE C - LAV and HMMWV IOT&E	MIPR	Various	U	0	0	NONE	0	NONE	3330	Jun-03	0	3330	0
JSLSCAD													
OTHT C - 100/200 CFM Gas Filter - Live Agent Testing	MIPR	APG, MD; DPG, UT; PNAS, Patuxent, MD	U	7200	1250	Nov-00	1000	Nov-01	0	NONE	0	9450	8268
OTHT SB - JSLSCAD PQT/IOTE and Integration Test	MIPR	APG, MD; DPG, UT; PNAS, Patuxent, MD	U	1100	4237	Nov-00	3539	Nov-01	5980	Nov-02	0	14856	9767
OTHT SB - Engineering Design Test, and PQT and IOT&E Support	MIPR	APG, MD; DPG, UT; PNAS, Patuxent, MD	C	1500	2300	Nov-00	300	Nov-01	1000	Nov-02	0	5100	3464
OTE S - Design and Build Test Hardware	C/CPFF	Intellitec, DeLand, FL	C	28000	8000	1Q FY01	1500	1Q FY02	3594	1Q FY03	0	41094	0
JWARN													
DTE C - DT I /Operational Assessment Core Requirements.	MIPR	MCSC, Quantico, VA	U	0	0	NONE	1392	Apr-02	0	NONE	0	1392	0

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	---	-----------------------

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
DTE C - DT I /Operational Assessment Core Requirements.	MIPR	Various	U	0	0	NONE	324	Jul-02	0	NONE	0	324	0
OTHT SB - DT II /Operational Assessment Full requirements.	MIPR	Various	U	0	0	NONE	0	NONE	600	Jun-03	0	600	0
NBCRSBLKII													
OTE S - Support PQT/Early User Test	Various	PM NBCDS, APG, MD	U	0	0	NONE	2160	Dec-01	492	Dec-02	0	2652	3244
OTE SB - Modeling and Simulation (M&S)	PO	CACI Technologies Inc., Manassas, VA	C	0	0	NONE	1632	Dec-01	0	NONE	0	1632	1632
Subtotal III. Test and Evaluation:				40976	17260		24225		28225		0	110686	

Remarks: NBCRS Blk II - OTE S - FY02 includes assembly of four sensor suites (\$800K per suite). Components purchased over several years.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CA5
--	--	------------------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JCAD													
PM/MS SB - Joint Service Support	MIPR	Various - Government/Contractor Support	U	2861	1191	Nov-00	654	Nov-01	2260	1Q FY03	0	6966	0
JCSD													
PM/MS C - Core team support	PO	PM NBCDS, APG, MD	U	0	0	NONE	100	Mar-02	0	NONE	0	100	0
JSLNBCRS													
PM/MS C - Joint Service IPT Support	MIPR	Various	U	0	875	Mar-01	600	Nov-01	600	Nov-02	0	2075	0
JSLSCAD													
PM/MS S - JSLSCAD - Core Team Salaries and Other Government Agencies Support Through Milestone III IPR.	PO	APG, MD; DPG, UT; PNAS, Patuxent, MD	U	2000	1290	Nov-00	380	Nov-01	1300	Nov-02	0	4970	2580
JWARN													
PM/MS C - Joint IPT Support	MIPR	Various	U	826	763	1Q FY01	1075	Nov-02	1400	Nov-03	0	4064	0
NBCRSBLKII													
PM/MS S - Engineering Management	Various	PM NBCDS, APG, MD	U	809	1811	Dec-00	1720	Dec-01	1850	Dec-02	0	6190	4197
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	1207	2Q FY02	0	NONE	0	1207	0
Subtotal IV. Management Services:													
				6496	5930		5736		7410		0	25572	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

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

IV. Management Services - Cont.
Remarks: NBCRS Blk II - Salaries and Other Government Agencies (OGAs).

TOTAL PROJECT COST:	86156	59268		71421		58341		0	275186
---------------------	-------	-------	--	-------	--	-------	--	---	--------

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CM5
---	---	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
CM5 WMD - CIVIL SUPPORT TEAM (EMD)	0	0	1000	1000	14500	400	0	0	16900

A. Mission Description and Budget Item Justification:

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

FY 2001 Accomplishments: None

FY 2002 Planned Program: No planned program

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CM5
--	---	-----------------------

FY 2003 Planned Program:

- 500 WMD CST- Initiate Development of Unified Command Suite (UCS) and Mobile Analytical Laboratory (MALS) Block upgrades.
- 500 WMD CST - Support and planning for upgrade program.

Total 1000

B. <u>Other Program Funding Summary:</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
CM6 WMD - CIVIL SUPPORT TEAM (MANAGEMENT SUPPORT)	0	0	1600	1600	1600	1600	1600	Cont	Cont
JA0004 WMD - CIVIL SUPPORT TEAM EQUIPMENT	2046	0	18959	8000	3047	44300	1600	Cont	Cont

Project CM5

Page 43 of 113 Pages

Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CM5
<p>C. <u>Acquisition Strategy:</u> This program utilizes multiple acquisition vehicles: 1) Funds the acquisition of chemical, nuclear, and biological defense equipment as outlined in the Reserve Components (RC) Weapons of Mass Destruction (WMD) Plan. Equipment purchased through existing contract vehicles; 2) Uses existing contract vehicles to design and develop new mobility platform for MALS that displaces interim DAP and legacy MALS, field, and produce them; 3) Conduct OT&E of entire WMD CST in FY03; 4) Initiate Block I upgrades in FY03 of UCS and MALS to incorporate technology insertion via contracts, conduct Development Testing (DT) & Initial Operational Test and Evaluation (IOTE) of prototype systems, and produce block upgrades; 5) Continue evaluation of existing and new COTS equipment to incorporate into the Table of Distribution and Allowances (TDA) to meet increasing requests; and, 6) Refurbish Reserve Component (RC) type-classified CB equipment.</p>		
Project CM5	Page 44 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CM5
--	---	-----------------------

D. <u>Schedule Profile:</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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																																
Development Block I upgrades of Universal Command Suite (UCS) & Mobile Analytical Lab System (MALS)													2Q - 4Q																			

Project CM5	Page 45 of 113 Pages	Exhibit R-2 (PE 0604384BP)
-------------	----------------------	----------------------------

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CM5
--	---	-----------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
HW S - Development Blk I Upgrades UCS and MALS	C/CPFF	TBS	C	0	0	NONE	0	NONE	950	2Q FY03	0	950	0
Subtotal I. Product Development:				0	0		0		950		0	950	

Remarks:

II. Support Costs: Not applicable

III. Test and Evaluation: Not applicable

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CM5
--	---	-----------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
WMD CST													
PM/MS S - Management Services	PO	PM NBCDS, SBCCOM, APG, MD	U	0	0	NONE	0	NONE	50	1Q FY03	0	50	0
Subtotal IV. Management Services:				0	0		0		50		0	50	

Remarks:

TOTAL PROJECT COST:	0	0	0	1000	0	1000
---------------------	---	---	---	------	---	------

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
CO5 COLLECTIVE PROTECTION (EMD)	3137	3987	4301	4143	4207	4239	4718	Continuing	Continuing

A. Mission Description and Budget Item Justification:

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

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

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

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
<p>The JCPE program will provide needed improvements and cost saving standardization to currently fielded systems. Standardization of individual system components (specifically filter systems) across Joint Service mission areas will reduce logistics burden while maintaining the industrial base. JCPE will focus on fixing specific problems and deficiencies with currently fielded CPS equipment designated high priority by each service. JCPE provides improvements to current fixed site, building, shipboard, and vehicle collective protection systems. JCPE's efforts on portable shelters are limited to providing an interim capability. 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.</p> <p>The CBPS-P3I will improve the operational suitability and reliability of the CBPS for light divisions that is currently in production. This phase of the P3I will develop a self-sustained Environmental Support System (ESS) that does not require the HMMWV engine for power resulting in reduced fuel consumption, vehicle maintenance and sustainment costs. To improve operational capability, the resulting weight reductions will be implemented to allow more medical equipment to be transported inside the CBPS. Improvements will be made to the CB tent using lightweight, low cost CB materials being developed in R&D. All these improvements will be available for incorporation into the CBPS production line in FY05 following a Production Verification Test. It will also provide a capability to address the critical need for collective protection within Level 1 and 2 Heavy and Airborne units. Currently, no capability exists to provide medical treatment in a CB contaminated environment for these types of units. The self-sustained ESS and CB tent of CBPS-light will be used to maximize commonality of components. These components will be integrated onto platforms suitable for Airborne and Heavy divisions. The CBPS P3I will have three phases: Phase 1: Develop design concepts and fabricate prototype ESS; Phase 2: Fabricate two ESS prototypes for integration onto each of three CBPS platforms; and Phase 3: Integrate ESS modules onto platforms for use in Light, Heavy and Airborne prototype systems.</p>		
Project CO5	Page 49 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	CO5
FY 2001 Accomplishments:		
<ul style="list-style-type: none"> • 1234 JCPE - Completed development and testing of 20 improved 200 Cubic Feet per Minute (CFM) particulate filters to reduce logistics costs. Performed development and testing of Fixed Installation Filter (FIF) packaging and housing improvements to reduce costs, production time, and waste. Completed development of 100/200 CFM gas filter improvements to extend filter life and reduce manufacturing and logistics costs. Initiated development and testing of a pleatable charcoal/HEPA bonded filter to replace two chemical/biological (CB) filters used in collective protection systems to reduce installation time, logistics, and cost. • 1221 JCPE - Initiated development and testing of the Filter Fan Assembly (FFA) 400-100 and M93 Modular Collective Protection Equipment (MCPE) candidate motorblowers for CB shelter systems to improve efficiency, reliability, size, and weight. Continued development and testing of a modified Environmental Control Unit (ECU) for Expeditionary Medical Support (EMEDS) to allow rapid deployment of a reduced weight and size unit. Prepared technical drawings for Integrated Logistics Support (ILS) for the Bump Through Door (BTD) airlock modification to the transportable collective protection systems and Medical Systems. Performed development and testing of a prototype one-piece 32-foot liner, 8-foot extension and vestibules for use in the Small Shelter System to provide the Air Force EMEDS system with collective protection capability. Completed market surveys and evaluated systems capable of meeting the Operational Requirements Document (ORD) for a Chemically/biologically Hardened Air Transportable Hospital (CHATH) transportable latrine system for use with EMEDS. 		
Project CO5	Page 50 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
---	---	-----------------------

FY 2001 Accomplishments (Cont):

- 682 SCPE - Completed land-based and initiated shipboard testing of two improved CPS fan rotors. Based on test results, continued to define CPS fan rotor performance specification. Shipboard testing was required to verify actual noise reduction in a fan room and adjacent manned spaces on board a ship. Improved CPS fan rotor increased efficiency and reduced noise levels by 12 to 17 decibels. Completed second year of verification testing to validate the four-year performance of improved prefilters and High Efficiency Particulate, Air (HEPA) filters. Completed testing of nine V-cell (mini-pleat) Limited Protection (LP) HEPA filters. Initiated shock and vibration testing on four commercial off the shelf (COTS) LP HEPA filters. Transitioned COTS LP HEPA filter to JCPE for further development. Performed literature search and developed a table listing the performance of shipboard CPS HEPA filters versus high threat Toxic Industrial Chemicals/Toxic Industrial Materials (TICs/TIMs), leveraging data from techbase non-medical efforts. Initiated development and testing of two electronic differential pressure gauges for remote reading to improve shipboard CPS maintenance by accurately measuring the pressure differential.

Total 3137

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
<p>FY 2002 Planned Program:</p> <ul style="list-style-type: none"> • 227 CBPS P3I - Initiate design concept for CBPS airborne and heavy versions. Coordinate with user and field representatives on requirements and logistics supportability. Develop Scope of Work for design and fabrication of Environmental Support System (ESS). Initiate and manage CBPS P3I program. • 559 CBPS P3I - Award Delivery Order on existing services contract for design and fabrication of a self-powered ESS that will meet the requirements for CBPS-light, heavy, and airborne versions. Fabricate one ESS prototype and develop a limited Technical Data Package. (Estimated cost \$250K.) • 1134 JCPE - Initiate development and testing of 2000 CFM particulate filters to reduce logistics costs. Initiate testing of ten improved 100/200 CFM gas filters with live agents to complete qualification of filter design. Complete development and testing of a pleatable charcoal/HEPA bonded filter to replace two CB filters used in collective protection systems to reduce installation time, logistics, and cost. • 678 JCPE - Perform market studies to investigate improving efficiency of shipboard CPS supply fan motors to allow the CPS system to operate at peak performance over the entire range of filter loading. Complete development and testing of FFA 400-100 and M93 MCPE candidate motorblowers for CB shelter systems to improve efficiency, reliability, size, and weight. • 618 JCPE - Complete development and testing of a modified ECU for EMEDS to allow rapid deployment of a reduced weight and size unit. Initiate development of a modified M28 liner for large capacity shelters. 		
Project CO5	Page 52 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5

FY 2002 Planned Program (Cont):

- 703 SCPE - Continue shipboard testing of improved CPS fan rotor. Shipboard testing is required to verify actual noise reduction in a fan room and adjacent manned spaces on board ship. Use test data to revise CPS fan rotor performance specification. Improved CPS fan rotors will increase efficiency and reduce noise levels by 12 to 17 decibels. Complete third year of verification testing to validate the four-year performance of improved prefilters and HEPA filters. Begin testing and evaluation of HEPA filter performance degradation after TIC/TIM exposure. Continue development and testing of two electronic differential pressure gauges for remote reading to improve shipboard CPS maintenance.
- 68 SBIR - Small Business Innovative Research.

Total 3987

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 829 CBPS P3I - Fabricate two ESS prototypes at unit cost of \$250K and finalize design and limited Technical Data Package. • 200 CBPS P3I - Conduct performance testing on one ESS prototype. • 400 CBPS P3I - Finalize design concepts for CBPS light, heavy and airborne applications. Obtain and initiate modification of heavy and airborne platforms for integration. Manage CBPS P3I. • 1164 JCPE - Complete development of 2000 CFM particulate filters to reduce logistics costs. Initiate development of a modified impingement filter for ships to reduce cost of filter, maintenance, and logistics. Complete live agent testing of improved 100/200 CFM gas filters. Complete development and testing of ten improved 100/200 CFM gas filters to provide TIC protection. Initiate development and testing of 10 modified 100/200 CFM gas filters to provide TIC protection. • 562 JCPE - Based on market study, perform development and testing to increase efficiency of CPS supply fan motors to operate at peak performance over the entire range of filter loading. • 462 JCPE - Initiate development and testing of an integrated collective protection (CP) power transfer kit for Transportable Collective Protection System (TCPS). Complete development of a modified M28 liner for large capacity shelters. • 684 SCPE - Complete shipboard testing of improved CPS fan rotors. Test data will be used to revise CPS fan rotor performance specification. Complete final year of verification testing to validate the four-year performance of improved prefilters and HEPA filters. Complete testing and evaluation of HEPA filter performance degradation after TIC/TIM exposure. Complete development and testing of two electronic differential pressure gauges for remote reading to improve shipboard CPS maintenance. 		
Total	4301	
Project CO5		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

<u>B. Other Program Funding Summary:</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
JCP001 COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM	5879	2996	1094	0	0	0	0	0	9969
JF0102 TRANSPORTABLE COLLECTIVE PROT SYS	3588	0	0	0	0	0	0	0	3588
JN0013 NAVY INDIVIDUAL PROTECTIVE GEAR	5379	2312	3186	0	0	0	0	0	10877
JN0014 COLLECTIVE PROT SYS AMPHIB BACKFIT	17627	17710	17347	19425	18796	11369	7580	Cont	Cont
JN0017 JOINT COLLECTIVE PROTECTION EQUIPMENT	1038	2378	1377	1927	2235	2095	1846	Cont	Cont
R12301 CB PROTECTIVE SHELTER (CBPS)	11308	24522	14931	15524	14135	16669	30517	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
C. <u>Acquisition Strategy:</u>		
CBPS/P3I	<p>An up-front analysis will be performed to develop design concepts for Heavy and Airborne versions of CBPS. This development will support the P3I requirement in the ORD for a capability to provide medical treatment in a CB environment in these Divisions. The CBPS ORD also addresses the need for a P3I to develop a self-sustained Environmental Support System (ESS) for the current version of CBPS that does not require the High Mobility Multi-Purpose Wheeled Vehicle (HMMVW) engine for primary power. The Government will serve as the prime contractor for integration to reduce total program costs. Existing Service Support Contract will be used to develop and fabricate ESS prototypes suitable for CBPS light, heavy and airborne versions. The ESS prototype will be subjected to performance and reliability testing and the design finalized. Other weight and durability improvements will be investigated and evaluated on the current CBPS. Three ESS prototypes will be fabricated. One ESS will be integrated with the current version of CBPS and validated for use through a Production Verification Test. The ESS and other improvements will be integrated into the existing CBPS production line in FY05. The other two ESS prototypes will be integrated onto platforms determined to be suitable for Heavy and Airborne applications and required operational tests conducted.</p>	
JCPE	<p>This program will utilize the modification clause under DOD 5000 to provide solutions to current deficiencies in fielded collective protection equipment. The various efforts under JCPE will leverage techbase efforts, market analysis, and trade-off studies to determine the optimum configuration for any modifications or improvements. All modified components will be contractor fabricated and in-house/contractor tested to ensure performance compatibility. Performance and/or procurement specifications will be updated to ensure that modifications are included in future acquisitions. Modified components will be integrated into existing systems via field modification or replacement spares.</p>	
SCPE	<p>In-house/contract design, fabrication, and testing of prototype components. Performance specifications of initial fans, motors, and filters will be updated to ensure that modifications are included in future acquisitions.</p>	
Project CO5	Page 56 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

D. <u>Schedule Profile:</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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																																
BLK I Milestone A Decision									3Q	—	3Q																					
CBPS P3I- Award Contract Option to Fabricate Two ESS													1Q	—	4Q																	
CBPS P3I- Conduct Performance Testing													3Q																			
CBPS P3I- Integrate and Fabricate Light, Heavy and Airborne CBPS Prototypes																	1Q	2Q														
CBPS P3I- Develop Technical Data Package and ILS for all Versions																	1Q	—	4Q													
CBPS P3I- Conduct Developmental and Production Verification Testing (Light Version only)																					2Q	3Q										
CBPS P3I- Integrate into Production (Light Version only)																					2Q											
CBPS P3I- Fabricate/Integrate Heavy/Airborne Versions (one each)																					1Q	2Q										
CBPS P3I- Perform Operational Test of Heavy/Airborne Versions																									4Q							

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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 (Cont)																																
CBPS P31- Conduct Developmental and Production Verification Testing (Light Version only)																																
JCPE																																
Develop Modified M28 Liner for MGPTS				1Q — 4Q																												
Develop & Test FIF Packaging and Housing Improvements				1Q —————				1Q																								
Develop & Test Improved 200 CFM Particulate Filter				1Q ————— 4Q																												
Develop & Test Modified Environmental Control Unit for EMEDS				1Q —————				2Q																								
Develop Improved 100/200 CFM Gas Filters				1Q ————— 4Q																												
Prepare Technical Drawings for Bump Through Doors (BTDs)								1Q — 4Q																								
Develop & Test Modified M28 Liner for EMEDS								1Q — 4Q																								
Market Survey & Testing of CP Latrine for EMEDS								1Q — 4Q																								

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JCPE (Cont)																																
Develop & Test Pleatable Charcoal/High Efficiency Particulate Arresting (HEPA) Bonded Filter					1Q	-----		4Q																								
Develop & Test FFA400-100 and M93 MCPE					1Q	-----		4Q																								
Market Study to Increase Efficiency of Shipboard CPS Supply Fan motors									1Q	-----		4Q																				
Agent Testing of 100/200 CFM Gas Filters									1Q	-----		4Q																				
Develop Modified M28 Liner for Large Capacity Shelters									1Q	-----		4Q																				
Develop & Test 2000 CFM Particulate Filters									1Q	-----		4Q																				
Develop & Test Efficiency Improvement to Shipboard CPS Supply Fan Motors													1Q	-----		4Q																
Develop & Test Integrated CP Power Transfer Kit for TCPS													1Q	-----		4Q																
Develop & Test Modified 100/200 CFM Gas Filters for TIC's.													1Q	-----		4Q																

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JCPE (Cont)																																
Develop & Test Modified Impingement Filter for Ships													1Q				4Q															
SCPE																																
Fan Testing & Evaluation (Land-based)																																
Define CPS Fan Performance Specification																																
Fan Testing & Evaluation (Shipboard)																																
Develop and Test Electronic Differential Pressure Gauge																																
CPS Filter TICs/TIMs Evaluation																																

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
HW SB - Contractor Hardware Development	C/CPFF	TBS	C	0	0	NONE	559	May-02	829	Dec-02	0	1388	0
JCPE													
HW SB - 200 CFM Particulate Filter - Market Survey of Media	WR	NSWCDD, Dahlgren, VA	U	305	185	Dec-00	0	NONE	0	NONE	0	490	490
HW SB - FIF - Engineering & Prototype Development	MIPR	SBCCOM, Edgewood, MD	U	163	122	Dec-00	0	NONE	0	NONE	0	285	285
HW SB - 100/200 CFM Gas Filter - Market Survey & Prototype Development	MIPR	SBCCOM, Edgewood, MD	U	484	460	Dec-00	0	NONE	0	NONE	0	944	944
HW SB - Pleatable Charcoal/HEPA Bonded Filter - Development	MIPR	SBCCOM, Edgewood, MD	U	0	192	Dec-00	50	Dec-01	0	NONE	0	242	242
HW SB - Improved FFA 400-100 & M93 MCPE Motorblower - Market Survey & Prototype Development	MIPR	SBCCOM, Edgewood, MD	U	338	192	Dec-00	200	Dec-01	0	NONE	0	730	730
HW SB - Modified ECU for EMEDS Development and Engineering	MIPR	Various	U	213	68	Dec-00	0	NONE	0	NONE	0	281	281
HW SB - EMEDS Development Modified M28 Liner	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	243	Dec-00	0	NONE	0	NONE	0	243	243
HW SB - CP Latrine for EMEDS - Market Survey	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	113	Dec-00	0	NONE	0	NONE	0	113	113

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY

RDT&E DEFENSE-WIDE/**BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)

PROJECT

CO5

I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
HW C - 2000 CFM Particulate Filter - Market Survey and Improvements	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	226	Dec-01	100	Dec-02	0	326	326
HW C - Modified Impingement Filter for ships - Market Survey and Improvements	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	50	Dec-02	50	100	100
HWSB - Modified 100/200 CFM Filter for TIC - Development & Engineering	MIPR	ECBC, Edgewood, MD	U	0	0	NONE	0	NONE	150	Dec-02	23	173	173
HW C - Shipboard CPS Supply Fans - Market Survey	WR	NSWCDD, Dahlgren, Va	U	0	0	NONE	110	Dec-01	0	NONE	0	110	110
HW C - Integrated Collective Protection Power Transfer Kit for TCPS - Market Survey and Development	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	0	NONE	0	NONE	100	Dec-02	0	100	100
HW C - Development of Modified M28 Liner for Large Capacity Shelter	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	0	NONE	400	Dec-01	100	Dec-02	0	500	500
HW C - Shipboard CPS Supply fans - Development	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	165	Dec-02	0	165	165
SCPE													
SW SB - CPS Fan, Electronic Differential Pressure Gauge, Filter Performance - Development	WR	NSWCDD, Dahlgren, VA	U	0	75	Dec-00	100	Dec-01	100	Dec-02	0	275	275

Project CO5

Page 62 of 113 Pages

Exhibit R-3 (PE 0604384BP)

UNCLASSIFIED

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	--	------------------------------

I. Product Development - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal I. Product Development:				1503	1650		1645		1594		73	6465	

Remarks:

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
ES S - Shelter Government Engineering Support	MIPR	SBCCOM - Natick, MA	U	0	0	NONE	100	Oct-01	205	Oct-02	0	305	0
ILS S - Shelter - Contractor ILS/Engineering Support	C/CPFF	TBS	C	0	0	NONE	103	Oct-01	145	Oct-02	0	248	0
TD/D S - Shelter - Technical Data and Documentation	Various	TBS	C	0	0	NONE	0	NONE	25	Dec-02	0	25	0
JCPE													
TD/D SB - BTM Airlock TDP - Development	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	144	Dec-00	0	NONE	0	NONE	0	144	144
TD/D SB - 200 CFM Particulate Filter - Engineering Support for Market Survey	C/CPFF	Synetics, Dahlgren, VA	C	49	50	Dec-00	0	NONE	0	NONE	0	99	99
SCPE													
TD/D SB - Update/Develop TDPs, Perf Specs, Drawings, and Reports	WR	NSWCDD, Dahlgren, VA	U	786	98	Dec-00	144	Dec-01	100	Dec-02	0	1128	1128
Subtotal II. Support Costs:				835	292		347		475		0	1949	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

II. Support Costs - Cont.
 Remarks:

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
DTE S - Shelter - Development Test and Evaluation	MIPR	DTC, APG, MD	U	0	0	NONE	0	NONE	200	Apr-03	0	200	0
JCPE													
OTHT C - 100/200CFM Gas Filter - Live Agent Testing	MIPR	SBCCOM, APG, MD	U	0	0	NONE	388	Dec-01	400	Dec-02	0	788	788
OTHT SB - 200 CFM Particulate Filter - Testing Media and Assemblies	C/CPFF	Battelle, Columbus, OH	N	129	150	Dec-00	0	NONE	0	NONE	0	279	279
OTHT SB - FIF - Prototype Testing	MIPR	SBCCOM, APG, MD	U	30	70	Dec-00	0	NONE	0	NONE	0	100	100
OTHT C - FFA 400-100 & M93 MCPE - Acceptance Testing	MIPR	SBCCOM, APG, MD	U	0	0	NONE	200	Dec-01	0	NONE	0	200	200
OTHT C - Modified ECU for EMEDS - Prototype Testing	MIPR	Eglin AFB, Valparaiso, FL	U	0	125	Dec-00	50	Jan-02	0	NONE	0	175	175
OTHT C - Shipboard CPS Supply Fans - Testing Prototype System	WR	NSWCDD, Dahlgren, VA	U	0	0	NONE	0	NONE	285	Dec-02	0	285	285
OTHT SB - Integrated CP Power Transfer Kit for TCPS - Prototype Testing	MIPR	Eglin AFB, Valparaiso, FL	U	0	0	NONE	0	NONE	50	Dec-02	0	50	50

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
--	---	-----------------------

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTHT SB - Modified M28 Liner for Large Capacity Shelters - Prototype Testing	MIPR	HSW/YACN, Brooks AFB, San Antonio, TX	U	0	0	NONE	0	NONE	100	Dec-02	0	100	100
OTHT SB - Modified 100/200 CFM Filters for TICS - Prototype Testing	MIPR	SBCCOM, APG, MD	U	0	0	NONE	0	NONE	50	Dec-02	150	200	200
OTHT SB - Pleatable Charcoal/HEPA Bonded Filter - Testing	MIPR	SBCCOM, Edgewood, MD	U	0	0	NONE	150	Dec-01	0	NONE	0	150	150
OTHT SB - 2000 CFM Particulate Filter - Test	MIPR	SBCCOM, Edgewood, MD	U	0	0	NONE	150	Dec-01	250	Dec-02	0	400	400
OTHT SB - Modified Impingement Filter for Ships - Testing	MIPR	SBCCOM, Edgewood, MD	U	0	0	NONE	0	NONE	50	Dec-02	0	50	50
SCPE													
OTHT SB - Improved CPS Fan - Shipboard Testing	WR	NSWCDD, Dahlgren, VA	U	0	99	Dec-00	130	Dec-01	142	Dec-02	0	371	371
OTHT SB - Improved CPS Fan - Landbased Testing	WR	NSWCCD, Philadelphia, PA	U	110	99	Dec-00	0	NONE	0	NONE	0	209	209
OTHT SB - Improved CPS Fan - Additional Landbased Testing	C/FP	New World Associates, Fredericksburg, VA	C	60	100	Jun-01	0	NONE	0	NONE	0	160	160
OTHT SB - Filters - Various Component Testing and Testing Electronic Differential Pressure Gauge	WR	NSWCDD, Dahlgren, VA	U	770	70	Dec-00	95	Dec-01	95	Dec-02	0	1030	1030

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT CO5
---	---	-----------------------

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
OTHT C - HEPA Filter TIC/TIM Evaluation	WR	NSWCDD, Dahlgren, VA	U	0	50	Dec-00	150	Dec-01	150	Dec-02	0	350	350
Subtotal III. Test and Evaluation:				1099	763		1313		1772		150	5097	

Remarks:

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CBPS													
PM/MS S - Management Support	PO	SBCCOM-Natick, MA	U	0	0	NONE	24	Oct-01	25	Oct-02	0	49	0
JCPE													
PM/MS S - Overall Program Management and IPT Oversight	WR	NSWCDD, Dahlgren, VA	U	192	195	Oct-00	342	Oct-01	174	Oct-02	0	903	787
PM/MS S - IPT Support	MIPR	Various	U	146	146	Dec-00	164	Dec-01	164	Dec-02	0	620	632
SCPE													
PM/MS S - Overall Program Management	WR	NSWCDD, Dahlgren, VA	U	220	91	Dec-00	84	Dec-01	97	Dec-02	0	492	511
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	68	2Q FY02	0	NONE	0	68	0
Subtotal IV. Management Services:				558	432		682		460		0	2132	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

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

IV. Management Services - Cont.
Remarks:

TOTAL PROJECT COST:	3995	3137		3987		4301		223	15643	
---------------------	------	------	--	------	--	------	--	-----	-------	--

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT DE5
--	---	-----------------------

COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
DE5 DECONTAMINATION SYSTEMS (EMD)	3746	2498	4981	4925	897	0	0	0	17047

A. Mission Description and Budget Item Justification:

Project DE5 DECONTAMINATION SYSTEMS (EMD): This project funds System Development and Demonstration (SDD) of decontamination equipment for the Joint Service Fixed Site Decontamination (JSFXD) Program aimed at developing a family of decontaminants and a family of applicators. The program will provide soldiers, sailors, marines, and airmen the equipment necessary to fully decontaminate their vital areas to sustain critical cargo flow into theater. The program has been divided into three blocks. Block I will field decontaminants that will be used with integral or existing applicators. Block II will field any additional applicators and containment systems required to provide the full fixed site decontamination capability (excluding Block III). Block III will provide the capability to decontaminate skin/casualties with open wounds.

FY 2001 Accomplishments:

- 2314 JSFXD - Completed MS B and initiated MS C program documentation for Block I.
- 1432 JSFXD - Start of Block I Development Test (DT)/Operational Test (OT) slipped to FY02.

Total 3746

FY 2002 Planned Program:

- 1522 JSFXD - Complete DT/OT on family of decontaminants for Block I. Complete MS C documentation for Block I.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT DE5
--	---	-----------------------

FY 2002 Planned Program (Cont):

- 142 JSFXD - Incorporate lessons learned from OT into logistics support documentation for Block I family of decontaminants.
- 792 JSFXD - Prepare documentation and test reports, conduct downselect of medical/skin decontaminant in support of Block III SDD contract award.
- 42 SBIR - Small Business Innovative Research.

Total 2498

FY 2003 Planned Program:

- 1831 JSFXD - Initiate DT/OT of family of applicators for Block II using GFE and engineering models applicators.
- 2150 JSFXD - Initiate clinical testing for FDA approval for skin decontaminants Block III.
- 1000 JSFXD - Award and execute SDD contract for FDA approved medical skin decontaminants Block III.

Total 4981

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT DE5
--	---	-----------------------

<u>B. Other Program Funding Summary:</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
G47001 MODULAR DECON SYSTEM	2450	4997	5007	5098	4973	4987	0	0	27512
JN0010 JOINT SERVICE FIXED SITE DECON (JSFXD)	0	1515	2001	7508	6579	0	0	0	17603
JN0018 SORBENT DECON	2726	8578	8553	266	0	0	0	0	20123

C. Acquisition Strategy: JSFXD Block I will competitively procure COTS/NDI decontaminants and where required, integral applicators for government/contractor testing with options for production. Block II will be a competitive contract to evaluate GFE applicators and containment systems for government/contractor testing with options for production of associated components for GFE applicators. Block III will be a competitive procurement of COTS/NDI decontaminants with potential to meet FDA requirements for government/contractor testing with options for production.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT DE5
--	---	-----------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFXD													
SW SB - SDD Contract for Block II	C/FFP	TBS	C	0	2500	Nov-00	0	NONE	0	NONE	0	2500	0
SW SB - SDD Contract for Medical and Skin Decon for Block III	C/CPFF	TBS	C	0	0	NONE	0	NONE	976	Nov-02	0	976	0
Subtotal I. Product Development:													
				0	2500		0		976		0	3476	

Remarks:

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFXD													
ES S - Contract Support for SSD Phase	C/CPFF	SVERDRUP, Dumfries, VA	C	0	600	Feb-01	300	Feb-02	100	Nov-02	0	1000	0
Subtotal II. Support Costs:													
				0	600		300		100		0	1000	

Remarks:

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT DE5
--	--	------------------------------

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFXD													
OTHT SB - Block I Family of Decontaminants	MIPR	Dugway Proving Ground, UT	U	0	0	NONE	1556	Feb-02	0	NONE	0	1556	0
OTHT SB - DT/OT Family of Applicators Block II	MIPR	Dugway Proving Ground, UT	U	0	0	NONE	0	NONE	1700	Nov-02	0	1700	0
OTHT S - FDA Testing of Skin Decon	MIPR	TBS	C	0	0	NONE	0	NONE	1700	Feb-02	2900	4600	0
Subtotal III. Test and Evaluation:				0	0		1556		3400		2900	7856	

Remarks:

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSFXD													
PM/MS S - Joint IPT Support	MIPR	Various	U	0	646	Jan-01	600	Jan-02	505	Nov-02	0	1751	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	42	2Q FY02	0	NONE	0	42	0
Subtotal IV. Management Services:				0	646		642		505		0	1793	

Remarks:

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

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

TOTAL PROJECT COST:	0	3746	2498	4981	2900	14125
---------------------	---	------	------	------	------	-------

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev				PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)				PROJECT IP5
---	--	--	--	---	--	--	--	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
IP5 INDIVIDUAL PROTECTION (EMD)	8288	20711	39044	36195	12735	1411	0	0	118384

A. Mission Description and Budget Item Justification:

Project IP5 INDIVIDUAL PROTECTION (EMD): This project funds Engineering and Manufacturing Development (EMD) 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 the Joint Service Aircrew Mask (JSAM), to replace multiple Service-specific aircrew chemical protective masks; (3) development of a JSLIST Block I glove upgrade to meet special operations forces and other Services hand protection requirements; (4) development of a JSLIST Block II glove upgrade to meet joint aircrew and ground hand protection requirements; (5) development of a JSLIST Multi-Purpose Sock (MPS); (6) development of a Joint Protective Aircrew Ensemble (JPACE) to standardize aircrew ensembles across the services and reduce user fatigue; and (7) development of a Joint Service General Purpose Mask (JSGPM) to replace and improve upon the multiple masks currently used by U.S. ground forces.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)DATE
February 2002

BUDGET ACTIVITY

**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

PE NUMBER AND TITLE

0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)

PROJECT

IP5**FY 2001 Accomplishments:**

- 88 AERP Mods - Continued non-recurring engineering design and development for the B-2 aircraft modification installation kits.
- 2287 JPACE - Developed prototype ensemble for testing under phase DT IIA. Performed DT IIA material swatch testing to downselect to no more than six candidates.
- 1273 JPACE - Continued development of patterns for use in fabrication of JPACE. Initiated development of program, logistics, and technical documentation to support the development and fielding of JPACE.
- 650 JSGPM - Initiated testing and evaluation of two, commercially available, escape masks. (1000 prototypes at \$125)
- 289 JSLIST Second Source - Conducted research and evaluation of second source material for JSLIST production.
- 570 JSLIST Second Source - Initiated screening and testing on selected second source materials candidates.
- 2230 JSLIST Second Source - Evaluated and tested final selected material for second source for technology insertion to JSLIST.
- 901 JSLIST Block I Glove Upgrade - Started Operational Test (OT) and documentation transition to Block II glove program.

Total 8288**FY 2002 Planned Program:**

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

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
FY 2002 Planned Program (Cont):		
<ul style="list-style-type: none"> • 2642 JPACE - Downselect and conduct Milestone B. Award contracts to no more than two candidate materials based on DT IIA material swatch test results. Fabricate 125 prototype ensembles of each of the selected candidates for use in DT IIB (250 total at \$525 each). Initiate DT IIB testing on the candidates to verify system level performance requirements have been met. • 1090 JPACE - Complete development of patterns for use in fabrication of JPACE. Continue developing and updating program, logistics, and technical documentation required to support the development and fielding of JPACE. • 1846 JSAM - Conduct System Demonstration (SD) source selection, MS B Interim Progress Review and award SD contract. • 8004 JSGPM - Conduct System Demonstration phase. This phase includes award of the System Demonstration contract option which will deliver 5,000 prototypes at an estimated cost of \$500 each. Also included is the design and assembly of the System Support Packages for Production Qualification Testing, and Operational Testing and Evaluation. • 1374 JSGPM - Prepare program/project documentation to achieve Milestone C. Documentation includes: Single Acquisition Management Plan (SAMP), the Manpower and Personnel Integration (MANPRINT) Plan, ORD Update, and performance specifications. • 770 JSGPM - Execute Logistics Support Plan. This effort includes development of manuals and finalization of supportability plans. • 880 JSGPM - Initiate the documentation and planning for Developmental and Operational Testing (DT/OT). Test redesigned prototypes to assess shortcomings exposed during System Integration Phase. • 2200 JSGPM - Initiate development of a JSGPM variant as a lightweight compliment to the JSGPM against limited threats. 		
Project IP5	Page 77 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	IP5
FY 2002 Planned Program (Cont):		
<ul style="list-style-type: none"> • 1009 JSLIST Block II Glove Upgrade - Start analysis to integrate Joint Service aviation and ground usage requirements and update acquisition strategy. • 300 JSLIST Block II Glove Upgrade - Prepare RFP for acquisition of competitive materiel for source selection. • 165 JSLIST Block II Glove Upgrade - Prepare program documentation for Interim Process Review (IPR). • 350 SBIR - Small Business Innovative Research. 		
Total	20711	
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 82 AERP Mods - Maintain configuration control on B-2 Aircraft modification design. • 5906 JPACE - Complete DT IIB testing and downselect to two candidates. Fabricate 350 prototype ensembles of each candidate for combined DT/OT (700 total at \$525 each). Initiate combined DT/OT system level testing and initial Operational Assessment (OA) to verify system level performance and assess operational suitability and durability. Testing includes aircraft integration testing (crashworthiness, early flight, and aircraft compatibility) on six aircraft and system level chemical simulant testing (Man In Simulant Test). • 812 JPACE - Continue developing and updating program, logistics, and technical documentation required to ensure that JPACE will be fully supported when fielded. Initiate finalization of suit/fabric patterns. • 4676 JSAM - Finalize system design and complete development. Begin logistics activities and sustainment planning to include tech order preparation, provisioning, and fielding plan. • 1360 JSAM - Continue program management activities and government test planning in preparation for DT and OT. 		
Project IP5	Page 78 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
<p>FY 2003 Planned Program (Cont):</p> <ul style="list-style-type: none"> • 3793 JSAM - Complete system validation, develop production processes and hard tooling to fabricate DT and OT units. • 2412 JSAM - Initiate material buy and begin assembly of 466 DT units at an average unit cost of \$5175. • 840 JSGPM - Continue preparation of program/project documentation to achieve Milestone C. Documentation includes Single Acquisition Management Plan (SAMP), the Manpower and Personnel Integration (MANPRINT) Plan and Performance Specifications. • 512 JSGPM - Continue execution of Logistics Support Plan. This effort includes development of manuals and finalization of supportability plans. • 8000 JSGPM - Continue System Demonstration. System Demonstration includes system support packages for Production Qualification Testing, and Initial Operational Testing and Evaluation. The contract includes delivery of 5,000 prototypes (\$500 each) in 2QFY04. • 3000 JSGPM - Continue documentation and planning for Developmental and Operational Testing (DT/OT). Test redesigned prototypes to assess shortcomings exposed during System Integration Phase. • 2250 JSGPM - Continue development of a JSGPM variant as a lightweight complement to the JSGPM against limited threats. • 474 JSLIST Block II Glove Upgrade - Award multiple competitive contracts for system development and demonstration. • 2600 JSLIST Block II Glove Upgrade - Conduct durability and chemical validation testing for ground and aviation missions. • 401 JSLIST Block II Glove Upgrade - Conduct project management and plan test readiness reviews. 		
Project IP5	Page 79 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	---	-----------------------

FY 2003 Planned Program (Cont):

- 300 JSLIST Block II Glove Upgrade - Complete acquisition of Block II Glove Upgrade candidates. Conduct air/ground Operational Test (OT) and complete Milestone C .
- 250 JSLIST MPS - Conduct field durability trials for air/ground missions.
- 850 JSLIST MPS - Conduct chemical validation test trials.
- 526 JSLIST MPS - Conduct air/ground Operational Test (OT) and complete Milestone C documentation.

Total 39044

B. <u>Other Program Funding Summary:</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
JA0002 JT SVC AVIATION MASK (JSAM)	0	0	0	0	0	10970	10971	Cont	Cont
JN0011 AERP AIRCRAFT MODS	1574	2941	896	0	0	0	0	0	5411
JN0013 NAVY INDIVIDUAL PROTECTIVE GEAR	5379	2312	3186	0	0	0	0	0	10877
JN0015 JOINT PROTECTIVE AIRCREW ENSEMBLE	0	0	0	0	21450	21850	24466	Cont	Cont
JSM001 JOINT SERVICE MASK LEAKAGE TESTER (JSMLT)	0	0	11859	4963	4931	4938	4933	Cont	Cont

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	---	-----------------------

<u>B. Other Program Funding Summary (Cont):</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
JX0055 INDIVIDUAL PROTECTION (IP) ITEMS LESS THAN \$5M	4124	993	0	0	0	0	0	0	5117
M99501 MASK, AIRCRAFT M45	998	454	0	0	0	0	0	0	1452
M99601 MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD: M40/M40A	1485	142	0	0	0	0	0	0	1627
MA0400 PROTECTIVE CLOTHING	96991	98531	91202	79913	89460	99584	92179	Cont	Cont
N00020 CB RESPIRATORY SYSTEM - AIRCREW	3971	3897	3136	0	0	0	0	0	11004

Project IP5	Page 81 of 113 Pages	Exhibit R-2 (PE 0604384BP)
-------------	----------------------	----------------------------

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	IP5
C. <u>Acquisition Strategy:</u>		
AERP Mods	Various methods will be utilized, to include both government project order and commercial contracts for development, fabrication of prototype test hardware, and maintenance of configuration control of AERP aircraft modifications.	
JSAM	The acquisition strategy for System Demonstration is to award one Cost Plus Award Fee contract using Full and Open competition. The contract will include Fixed Price Production options. During the System Demonstration effort, JSAM will provide DT assets (certified safe-to-fly during JSAM DT ground test) to the JPACE program to support their OT and the JSAM OT will utilize JPACE assets. These latter efforts are to ensure JSAM - JPACE integration.	
JPACE	The acquisition strategy employs a time-phased approach, commonly referred to as "Blocking". Block I will address 90% of the JPACE requirements. 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 will include a competitive material search for advanced material technologies addressing aviation material performance requirements from the JPACE Joint ORD. Multiple Firm Fixed Price delivery order type contracts will be awarded to finalize design and verify system level requirements. These contract vehicles will include quantities for System Development and Demonstration (SDD), Low Rate Initial Production (LRIP), and Full Rate Production (FRP).	
JSLIST Block I	Conduct market research and operational assessment of commercial CB protective glove to satisfy SOCOM requirement and the four services urgent requirement for an improved CB protective glove to replace the current butyl rubber glove.	
JSLIST Block II	Conduct market research, development and operational assessment of CB protective glove materials, concentrating on selectively permeable solutions to satisfy the current 45 day requirement in JSLIST, JPACE, and SOCOM ORD.	
JSLIST MPS	Full and open commercial acquisition of the best candidate from foreign or domestic sources, tested through gated durability and chemical testing to meet SOCOM requirements.	
Project IP5	Page 82 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
JPACE (Cont)																																
Fabricate Prototypes for Developmental Test - DT IIB & Combined DT/OT									2Q							3Q																
Developmental Testing - DT IIB									3Q				1Q																			
Pattern Finalization													1Q																			
Developmental Testing - Combined DT/OT Operational Assessment																3Q																
Milestone C - Low Rate Initial Production (LRIP)																				3Q												
Award Low Rate Initial Production Delivery Order Contract																								4Q								
JSAM																																
Milestone B In Process Review (IPR) (IP5)												3Q																				
System Demonstration												4Q																				4Q
Development Test																	2Q							3Q								
Operational Test (Rotary Wing)																								3Q								3Q
Operational Test (Fixed Wing)																												1Q				4Q
Milestone C (Full Rate Production Decision - Rotary Wing)																												3Q				

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	---	-----------------------

D. <u>Schedule Profile (cont):</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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 I Glove Operational Test (OT)								4Q	1Q																							
JSLIST Block I Glove Milestone C									1Q																							
JSLIST Block II Glove Prototype Build											3Q																					
JSLIST Block II Glove Conduct DT/Operational Test (OT)															3Q																	
JSLIST Block II Glove Milestone C															4Q																	
JSLIST MPS FCT Data Transfer to System Design and Demonstration Phase.												1Q																				
JSLIST MPS Milestone B												1Q																				
JSLIST MPS Developmental Test/Operational Test (DT/OT)												1Q	-----	4Q																		
JSLIST MPS Milestone C															4Q																	
JSLIST MPS Production Contract Award																				1Q												

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	--	------------------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AERPMODS													
HW C - Engineering Modification Design of B-2 Aircraft to Support AERP Equipment	SS/FPI	OC-ALC, Tinker AFB OK	C	406	88	2Q FY01	0	NONE	0	NONE	0	494	675
HW C - Engineering Configuration Control Maintenance	PO	Various	U	82	0	NONE	81	1Q FY02	82	1Q FY03	0	245	0
JPACE													
HW C - Prototype Pattern Design	MIPR	NCTRF/PMESS, Natick, MA	U	399	253	Dec-00	176	Dec-01	50	Dec-02	50	928	932
HW S - Prototype Procurement	C/FFP	TBS	C	0	0	NONE	176	Mar-02	537	Mar-03	600	1313	1320
JSAM													
HW S - Contractor Development	C/CPAF	TBS	C	0	0	NONE	0	NONE	2412	1Q FY03	0	2412	0
JSGPM													
PM/MS S - Vaccine Development - Program Management and Program Manager support.	C/CPIF	Avon, Inc., Cadillac, MI	C	0	0	NONE	7221	Mar-02	8000	1Q FY03	5768	20989	22738
HW S - Development of a Lightweight JSGPM Variant by the Contractor	C/CPIF	TBS	C	0	0	NONE	0	NONE	1850	1Q FY03	1200	3050	0
PROT CLTH													
SW SB - Block II Glove Prototypes	C/FFP	TBS	U	0	0	NONE	0	NONE	500	Mar-03	0	500	0
Subtotal I. Product Development:													
				887	341		7654		13431		7618	29931	

Remarks: JSGPM - FY03 continues System Demonstration. System Demonstration includes delivery of 5,000 prototypes (\$500 each) in 2QFY04.

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	--	------------------------------

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
ES S - Systems Engineering	WR	NAWCAD, Patuxent River, MD	U	221	234	Nov-00	249	Nov-01	159	Dec-02	320	1183	1190
ILS S - Systems Logistics	WR	NAWCAD, Patuxent River, MD	U	96	104	Nov-00	102	Nov-01	85	Nov-02	150	537	540
TD/D S - Technical Report	C/CPFF	Battelle, Columbus, OH	N	0	180	Dec-00	101	Dec-01	34	Dec-02	34	349	352
ILS S - Logistics Support	C/CPFF	Battelle, Columbus, OH	N	344	52	Dec-00	146	Dec-01	199	Dec-02	350	1091	1096
JSAM													
ES S - JSAM - Design Engineering	C/CPAF	TBS	C	0	0	NONE	1846	Sep-02	3793	1Q FY03	0	5639	0
TD/D SB - System Engineering, ILS, TM Prep	PO	TBS	U	0	0	NONE	0	NONE	3462	1Q FY03	0	3462	0
JSGPM													
ES S - Engineering Support	MIPR	PM NBCDS, APG, MD	U	0	0	NONE	757	1Q FY02	936	1Q FY03	889	2582	2852
TD/D S - Tech Data and Documentation of JSGPM System	MIPR	PM NBCDS, APG, MD	U	0	0	NONE	500	1Q FY02	400	1Q FY03	250	1150	1000
ILS S - Logistics Support of JSGPM System	PO	PM NBCDS, APG, MD	U	0	0	NONE	700	1Q FY02	422	1Q FY03	420	1542	1700
ES S - Systems Engineering for Lightweight Mask Variant	MIPR	PM NBCDS, APG, MD - VARIOUS	U	0	0	NONE	1100	2Q FY02	300	1Q FY03	200	1600	0
PROT CLTH													
TD/D SB - Research and Evaluation of Second Source Material	MIPR	Various	U	0	556	Mar-01	0	NONE	0	NONE	0	556	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	--	------------------------------

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
DTE S - Aircraft Integration Testing	WR	NAWCAD, Patuxent River, MD	U	333	77	Jan-01	200	Nov-01	1214	Nov-02	300	2124	2135
DTE S - Material Testing	WR	NCTRF, Natick, MA	U	35	0	NONE	274	Dec-01	149	Dec-02	300	758	766
DTE C - Material Testing	MIPR	PMESS, Natick, MA	U	162	30	Dec-00	175	Dec-01	95	Dec-02	30	492	496
DTE C - Chemical Testing	MIPR	USA DTC, Dugway, UT	U	200	792	Dec-00	385	Dec-01	818	Dec-02	450	2645	2659
DTE S - Don/Doff Testing	WR	LANL, Los Alamos, NM	U	40	0	NONE	380	Dec-01	299	Dec-02	600	1319	1329
DTE S - Fit Testing	SS/FFP	Anthrotech, Yellow Springs, OH	C	57	0	NONE	49	Dec-01	57	Dec-02	130	293	294
DTE C - Prototype Test Support	SS/FFP	Research Triangle Institute, Research Triangle, NC	C	0	0	NONE	0	NONE	378	Mar-03	380	758	760
DTE S - Chemical Tests	MIPR	USA DTC, Dugway, UT	U	0	0	NONE	226	Dec-01	373	Dec-02	740	1339	1347
DTE S - Prototype Test	WR	NAWCAD, Patuxent River, MD	U	0	0	NONE	0	NONE	600	Dec-02	895	1495	1498
DTE C - Chemical Testing	C/CPFF	Battelle, Columbus, OH	N	0	960	Mar-01	146	Mar-02	818	Mar-03	450	2374	2382
JSAM													
DTE S - Govt DT Activities	MIPR	NAVAIR, Patuxent River, MD	U	0	0	NONE	0	NONE	700	Jan-03	0	700	0
OTE S - Govt OT activities	PO	AFOTEC, Alamogordo, NM	U	0	0	NONE	0	NONE	514	Jan-03	0	514	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	--	------------------------------

III. Test and Evaluation - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JSGPM													
DTE S - Developmental Testing of JSGPM System	MIPR	ATEC Falls Church VA; DTC; HRED, APG, MD	U	0	550	3Q FY01	270	1Q FY02	400	1Q FY02	847	2067	1250
OTE S - Operational Testing of JSGPM System	MIPR	OTC PAT/IOT&E various locations	U	0	0	NONE	570	1Q FY02	956	1Q FY03	4000	5526	8050
PROT CLTH													
OTE S - Block II Glove Test	MIPR	Various	U	685	0	NONE	0	NONE	2240	Jul-03	0	2925	0
OTHT SB - Second Source Material Candidate Testing	MIPR	MCSC, Quantico, VA	U	0	450	Mar-01	0	NONE	0	NONE	0	450	0
OTE S - Complete Testing for Block I Glove	MIPR	Various	U	0	475	1Q FY01	0	NONE	0	NONE	0	475	0
DTE S - JSLIST MPS Durability Trials	MIPR	Various	U	0	0	NONE	0	NONE	200	2Q FY03	0	200	0
DTE C - JSLIST MPS Chemical Validation	MIPR	Various	U	0	0	NONE	0	NONE	710	3Q FY03	0	710	0
OTE C - JSLIST MPS Air/Ground OT	C/FPI	Various	C	0	0	NONE	0	NONE	430	1Q FY03	0	430	0
OTHT SB - Second Source Material Testing	MIPR	Various	U	0	2000	2Q FY01	0	NONE	0	NONE	0	2000	0
Subtotal III. Test and Evaluation:				1512	5334		2675		10951		9122	29594	

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

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT IP5
--	--	------------------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JPACE													
PM/MS S - Overall Program Coordination	WR	NAWCAD, Patuxent River, MD	U	186	334	Nov-00	320	Nov-01	326	Nov-02	200	1366	1385
PM/MS S - Air Force, Army, Marine Corps Program Coordination	MIPR	Various	U	318	144	Dec-00	301	Dec-01	229	Dec-02	420	1412	1421
PM/MS C - Management Support	C/CPFF	Battelle, Columbus, OH	N	0	400	Dec-00	326	Dec-01	298	Dec-02	320	1344	1352
JSAM													
PM/MS C - Program Management/Management Support	MIPR	Various	U	0	0	NONE	0	NONE	1360	1Q FY03	0	1360	0
JSGPM													
PM/MS S - Program Management by Army (Lead Service)	PO	PM NBCDS, SBCCOM, APG, MD	U	0	100	3Q FY01	410	1Q FY02	688	1Q FY03	519	1717	1400
PM/MS S - Program Management by Joint Services other than Army	MIPR	USN, USAF, USMC various locations	U	0	0	NONE	600	1Q FY02	550	1Q FY03	500	1650	1900
PM/MS S - Program Management for Lightweight Variant Mask	PO	PM NBCDS, SBCCOM, APG, MD	U	0	0	NONE	1100	2Q FY02	100	1Q FY03	100	1300	0
PROT CLTH													
PM/MS C - IPT Support	MIPR	Various	U	386	509	Feb-01	165	Nov-01	961	Nov-02	0	2021	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	350	2Q FY02	0	NONE	0	350	0
Subtotal IV. Management Services:													
				890	1487		3572		4512		2059	12520	

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)

DATE
February 2002

BUDGET ACTIVITY
**RDT&E DEFENSE-WIDE/
BA5 - Engineering and Manufacturing Dev**

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

PROJECT
IP5

IV. Management Services - Cont.
Remarks:

TOTAL PROJECT COST:	3950	8288		20711		39044		21412	93405	
---------------------	------	------	--	-------	--	-------	--	-------	-------	--

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
---	---	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
MB5 MEDICAL BIOLOGICAL DEFENSE (EMD)	15772	48500	44718	11853	2264	0	0	0	123107

A. Mission Description and Budget Item Justification:

Project MB5 MEDICAL BIOLOGICAL DEFENSE (EMD): This project funds the Production and Deployment 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 System Development and Demonstration phase, will be used to submit a Biologic License Application (BLA) to the Food and Drug Administration (FDA) for product licensure. Upon FDA licensure the product will transition to full-scale licensed production. Products to be developed under this program include: Recombinant Botulinum, Next Generation Anthrax, Plague, Smallpox, Tularemia, Staphylococcal Enterotoxins, and Equine Encephalitis vaccines.

The Joint Biological Agent Identification and Diagnostic System (JBAIDS) is a reusable, portable, modifiable biological agent identification and diagnostic system. JBAIDS will enhance force protection by providing commanders and medical personnel with the capability to determine appropriate treatment, effective preventive measures, and prophylaxis, in response to the presence of biological agents. JBAIDS will be configured to support reliable, fast and specific identification of biological agents from a variety of clinical sources and preventive medicine samples. Technologies will be selected based on their reliability, technological maturity, and supportability. In addition to mobile and fixed site facilities, the JBAIDS will be used on ground vehicles, aircraft (fixed and rotary wing), and ships.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	MB5
FY 2001 Accomplishments:		
<ul style="list-style-type: none"> • 6304 JVAP - Smallpox Vaccine (Vaccinia Immune Globulin-VIG component) - Began manufacture of consistency lots and revalidation of Plaque Reduction Neutralization (PRN) assay for VIG. • 980 JVAP - Pentavalent Botulinum Toxoid - Continued serologies and data analysis of the Pentavalent Botulinum Toxoid booster study to validate surrogate marker concept. • 4088 JVAP - Prime Systems Contract - Conducted Systems Integration, Earned Value Management System (EVMS), special studies, regulatory compliance, and quality assurance for all vaccine efforts. • 2600 JVAP - Investigational New Drug (IND) Stockpile Assessment - Conducted safety and efficacy testing and maintenance of the IND inventory produced by The Salk Institute-Government Services Division. Conducted an in-depth analysis of the character and history of this material that identified numerous regulatory and testing deficiencies when viewed from a contingency use perspective. • 1800 JVAP - Integrated Digital Environment (IDE) - Conducted extensive independent test and evaluation of numerous electronic data management software applications. Testing was conducted to ensure selection of electronic data management system that meets both DoD 5000 requirements for an IDE and FDA (21 Code of Federal Regulations) requirements for data integrity and security that will result in validated electronic filing of INDs and BLAs. 		
Total	15772	
Project MB5	Page 95 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	MB5
FY 2002 Planned Program:		
<ul style="list-style-type: none"> • 6848 JBAIDS - Initiate design improvements of units transitioning from Defense Technology Objective (DTO) and begin fabrication of Engineering Development Test (EDT) units. Conduct Engineering Development Test. • 815 JBAIDS - Initiate submission of Identification Assays to the Food and Drug Administration (FDA) for regulatory approval. • 2650 JBAIDS - Design and produce four (4) JBAIDS biological organism Identification Assays. Initiate Integrated Logistics Support (ILS) analysis development and technical drawings package requirements. Initiate development of technical manuals. • 2345 VP-GOCO - Evaluate options for establishment of a government owned contractor operated vaccine production facility. • 19463 JVAP - Smallpox Vaccine - Continue consistency lot manufacture and conduct stability testing for Smallpox vaccine. Initiate Phase 2b clinical trial for Smallpox vaccine. • 7884 JVAP - Smallpox Vaccine (VIG component) - Develop manufacturing capability for VIG and initiate BLA process. • 3778 JVAP - Pentavalent Botulinum Toxoid - Complete serologies and data analysis of the Pentavalent Botulinum Toxoid booster study and prepare final report for submission to the FDA. • 3897 JVAP - Prime Systems Contract activities - Conduct systems integration, EVMS, IDE initiatives, special studies, regulatory compliance, and quality assurance for all vaccine efforts. • 820 SBIR - Small Business Innovative Research. 		
Total	48500	
Project MB5	Page 96 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 2850 JBAIDS - Continue design and production of six (6) additional JBAIDS biological organism Identification Assays. Continue FDA regulatory approval process of system equipment. • 1264 JBAIDS - Complete requirements for FDA regulatory approval of ten (10) assays. Complete Integrated Logistics Support (ILS) analysis and technical drawings package requirements. Complete technical manual development. • 6171 JBAIDS - Initiate Low Rate of Initial Production (LRIP) of thirty (30) JBAIDS units. Perform Production Qualification Testing (PQT) and Initial Operational Test and Evaluation (IOT&E). Modify and fabricate test systems and software. • 30549 JVAP - Smallpox Vaccine - Complete reproductive toxicology studies for Smallpox vaccine. Continue Smallpox and Vaccinia Immune Globulin (VIG) stability studies. Initiate 2nd and 3rd stages of a three-part Phase 2b large-scale clinical trial (safety and immunogenicity study for >3000 subjects) for Smallpox vaccine to satisfy FDA requirement for licensure. • 969 JVAP - Smallpox Vaccine - Achieve baseline stockpile quantities and begin warm base lot manufacturing (assuring a continuous manufacturing capability) for both Smallpox vaccine and VIG. • 2915 JVAP - Smallpox Vaccine - Begin BLA preparation and compilation. Continue IND annual reports and manufacturing amendments for Smallpox vaccine and VIG. 		
Total	44718	
<div style="display: flex; justify-content: space-between; margin-top: 20px;"> Project MB5 Page 97 of 113 Pages Exhibit R-2 (PE 0604384BP) </div>		

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
---	---	-----------------------

B. <u>Other Program Funding Summary:</u>								<u>To Compl</u>	<u>Total Cost</u>
JX0005 DOD BIOLOGICAL VACCINE PROCUREMENT	50629	55684	43695	57626	62250	58108	58841	Cont	Cont

C. Acquisition Strategy: JVAP: The Prime Systems Contract (PSC) serves as the integrator for the advanced development, licensure, production, storage, testing, and distribution of medical biological defense vaccines and antisera. The PSC serves as the "responsible head" to the Food and Drug Administration for each product during the licensure process and becomes the license holder for the product. The JVAP oversees the PSC.

JBAIDS is an evolutionary development program. Block I development effort will focus on militarizing and hardening of critical identification technologies selected from the Common Diagnostics Defense Technology Objective (CB.26.J00). This will be a rapid development and fielding effort to deliver to the field a critical capability to identify bacteria and viral agents. FDA approval for the initial set of gene probes, primers, and hardware will be coordinated and obtained. Block II will focus on the automation of the sample preparation process, inclusion of new technologies for toxin development, reductions in size, weight and reliability. FDA approval for all remaining gene probe and primer sets will be obtained.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	---	-----------------------

D. <u>Schedule Profile:</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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																																
Block I RFP Release									2Q																							
Block I Flyoff									3Q																							
Procure Systems for EDT/DT													1Q	2Q																		
Engineering Design Test (EDT)/Developmental Testing (DT)													2Q	4Q																		
Low Rate Initial Production													4Q	1Q																		
Initial Operational Test and Evaluation (IOT&E)																	1Q	3Q														
VAC BOT																																
Consistency Lot Production																													1Q	4Q		
Baseline Stockpile Quantities Obtained																																4Q
VAC NGA																																
Consistency Lot Production																	4Q	4Q														
Phase 2b Clinical Trials																													2Q	4Q		
Baseline Stockpile Quantities																													4Q			
VAC PLG																																
Consistency Lot Production																													1Q	4Q		
VAC SPX																																

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	---	-----------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBAIDS													
HW C - Design/Fabricate EDT Units	PO	TBS	U	0	0	NONE	4754	Jan-02	0	NONE	0	4754	0
SW SB - Design/fabricate Identification Assays	PO	TBS	U	0	0	NONE	2000	Jan-02	2350	Nov-02	0	4350	0
SW SB - FDA Submission and Regulatory Approval of Assays	Various	TBS	U	0	0	NONE	754	Jan-02	1000	Nov-02	0	1754	0
SW SB - Modify and Fabricate Test Systems	PO	TBS	U	0	0	NONE	0	NONE	2420	Nov-02	0	2420	0
HW SB - FDA Submission and Regulatory Approval of Equipment	Various	TBS	U	0	0	NONE	0	NONE	500	Nov-02	0	500	0
VACCINES													
HW S - Vaccine Development - Includes Consistency Lot, Pilot Lot, and Scale-up Production	SS/CPAF	DynPort Vaccine Company, Frederick, MD	C	3023	3078	Nov-00	9310	Nov-01	0	NONE	0	15411	0
Subtotal I. Product Development:				3023	3078		16818		6270		0	29189	

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

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	--	------------------------------

II. Support Costs	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBAIDS													
TD/D SB - Update/Develop TDPs, Performance Specs, Drawings, and Reports	Various	TBS	U	0	0	NONE	300	Jan-02	150	Nov-02	0	450	0
TD/D SB - LSA Development/Technical Drawing Package	Various	TBS	U	0	0	NONE	350	Jan-02	114	Nov-02	0	464	0
VAC SPX													
TD/D S - Vaccine Development - Includes Regulatory Integration (Environmental and FDA Documentation) and Delivery System.	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	0	NONE	625	Nov-02	0	625	0
VACCINES													
TD/D S - Vaccine Development - Includes Process Definition, Environmental and FDA Documentation	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	1468	2805	Nov-00	4735	Nov-01	0	NONE	0	9008	0
Subtotal II. Support Costs:				1468	2805		5385		889		0	10547	

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

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	--	------------------------------

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBAIDS													
DTE C - Conduct EDT	Various	TBS	U	0	0	NONE	2005	Jan-02	0	NONE	0	2005	0
OTHT SB - PQT/IOT&E	PO	TBS	U	0	0	NONE	0	NONE	2000	Nov-02	0	2000	0
OTE S - JBAIDS Block I LRIP	C/FFP	TBS	C	0	0	NONE	0	NONE	1601	Jan-03	0	1601	0
VAC SPX													
DTE S - Vaccine Development - Testing, Evaluation, and Clinical Trials.	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	0	NONE	21547	Nov-02	0	21547	0
VACCINES													
OTHT SB - Vaccine Development - Includes Phase I/II Clinical and Non-clinical Trials, Tox Studies, Surrogate and Assay Testing	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	3541	3112	Nov-00	11019	Nov-01	0	NONE	0	17672	0
OTHT SB - Pentavalent Botulinum Toxoid - Booster Study	C/CPFF	Battelle Memorial Inst., Columbus, OH	C	1343	770	Mar-01	576	Mar-02	0	NONE	0	2689	0
OTHT S - Vaccine Development - Includes Stability and Efficacy Testing	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	605	1155	Nov-00	1950	Nov-01	0	NONE	0	3710	0
Subtotal III. Test and Evaluation:				5489	5037		15550		25148		0	51224	

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

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	--	------------------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JBAIDS													
PM/MS S - Program Management and Program Manager Support	Various	Joint Program Office for Biological Defense, Falls Church, VA	U	0	0	NONE	150	1Q FY02	150	1Q FY03	0	300	0
VAC PRD FA													
PM/MS S - Program Management and Program Manager Support	Allot	TBS	U	0	0	NONE	2345	2Q FY02	0	NONE	0	2345	0
VAC SPX													
PM/MS S - Vaccine Development - Program Management/Program Manager Support.	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	0	NONE	3871	Nov-02	0	3871	0
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program Management Office	Allot	JVAP, Frederick, MD	U	0	0	NONE	0	NONE	1432	Oct-02	0	1432	0
PM/MS S - Vaccine Development - Program Management/Program Manager Support	Allot	PEOCBD, Falls Church, VA	U	0	0	NONE	0	NONE	2422	Oct-02	0	2422	0
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	Camber Corporation, Frederick, MD	C	0	0	NONE	0	NONE	731	Feb-03	0	731	0
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/CPFF	SAIC, Frederick, MD	C	0	0	NONE	0	NONE	479	Feb-03	0	479	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MB5
--	--	------------------------------

IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PM/MS S - Award Fee (12.5%)	C/CPAF	DynPort Vaccine Company, Frederick, MD	C	0	0	NONE	0	NONE	3326	Jan-03	0	3326	0
VACCINES													
PM/MS S - Contractor Systems Engineering/Program Management Support.	C/FP	Camber Corporation, Frederick, MD	C	1062	984	Feb-01	1535	Feb-02	0	NONE	0	3581	0
PM/MS S - Vaccine Development - Joint Vaccine Acquisition Program - Program Management Office	Various	JVAP, Fort Detrick, MD	U	1513	973	1Q FY01	1612	1Q FY02	0	NONE	0	4098	0
PM/MS S - Contractor systems engineering/program management support.	C/FP	SAIC, Frederick, MD	C	330	375	1Q FY01	394	1Q FY02	0	NONE	0	1099	0
PM/MS S - Program Management and Program Manager Support	Various	Joint Program Office for Biological Defense, Falls Church, VA	U	1061	1505	Oct-00	2860	Oct-01	0	NONE	0	5426	0
PM/MS S - Contractor Systems Engineering/Program Management Support.	Various	Camber Corporation, Falls Church, VA	C	1000	1015	Oct-00	1031	Oct-01	0	NONE	0	3046	0
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	820	2Q FY02	0	NONE	0	820	0

UNCLASSIFIED

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)										DATE February 2002			
---	--	--	--	--	--	--	--	--	--	------------------------------	--	--	--

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev					PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)						PROJECT MB5		
---	--	--	--	--	---	--	--	--	--	--	-----------------------	--	--

IV. Management Services - Cont.	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal IV. Management Services:				4966	4852		10747		12411		0	32976	

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

TOTAL PROJECT COST:	14946	15772		48500		44718		0	123936	
----------------------------	-------	-------	--	-------	--	-------	--	---	--------	--

--	--	--	--	--	--	--	--	--	--	--	--	--

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002
--	--	--	--	--	--	--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MC5
---	---	-----------------------

COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
MC5 MEDICAL CHEMICAL DEFENSE (EMD)	1050	1463	1973	1486	1448	1727	1763	Continuing	Continuing

A. Mission Description and Budget Item Justification:

Project MC5 MEDICAL CHEMICAL DEFENSE (EMD): 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 research efforts in the Production and Deployment phases of the acquisition strategy for pretreatment 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 FDA drug licensure application(s).

FY 2001 Accomplishments:

- 141 Pyridostigmine Bromide - Continued a 2-year study to validate surrogate markers in small animal ex vivo muscle for human efficacy.
- 74 Pyridostigmine Bromide - Conducted storage and stability testing, and submitted support documentation for FDA licensure.
- 352 Pyridostigmine Bromide - Started three 2-year studies to validate surrogate markers for human efficacy. (Human ex vivo muscle study, human ex vivo blood study, and higher animal species ex vivo study) .

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	MC5
FY 2001 Accomplishments (Cont):		
<ul style="list-style-type: none"> • 418 Skin Exposure Reduction Paste Against Chemical Warfare Agent (SERPACWA) - Validated manufacturing process. • 65 Multichambered Autoinjector - Submitted support documentation for FDA licensure. 		
Total	1050	
FY 2002 Planned Program:		
<ul style="list-style-type: none"> • 65 Pyridostigmine Bromide - Continue storage and stability testing. • 382 Pyridostigmine Bromide - Continue three 2-year studies to validate surrogate markers for human efficacy. (Human ex vivo muscle study, human ex vivo blood study, and higher animal species ex vivo study) . • 50 Pyridostigmine Bromide - Complete a 2-year study to validate surrogate markers in small animal ex vivo muscle for human efficacy. • 703 SERPACWA - Complete FDA manufacturing requirements. • 238 Multichambered Autoinjector - Conduct a Milestone III in-process review. • 25 SBIR - Small Business Innovative Research. 		
Total	1463	
FY 2003 Planned Program:		
<ul style="list-style-type: none"> • 588 Pyridostigmine Bromide - Complete storage and stability testing and complete FDA required additional studies. 		
Project MC5	Page 108 of 113 Pages	Exhibit R-2 (PE 0604384BP)

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MC5
--	---	-----------------------

FY 2003 Planned Program (Cont):

- 50 Pyridostigmine Bromide - Complete three 2-year studies to validate surrogate markers for human efficacy. (Human ex vivo muscle study, human ex vivo blood study, and higher animal species ex vivo study).
- 1335 Advanced Anticonvulsant - Initiate 2-year clinical study to evaluate the advanced anticonvulsant for the treatment of seizures.

Total 1973

B. Other Program Funding Summary: N/A

C. Acquisition Strategy:

Multi Autoinjector	In-house/contractor development to FDA licensure, followed by sole source procurement.
Pyrido Bromide	In-house/contractor development to FDA licensure, followed by sole source procurement.
Adv Anticonvuls	In-house/contractor development to FDA licensure, followed by sole source procurement.
SERPACWA	In-house/contractor development to FDA licensure, followed by sole source procurement.

CBDP BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
--	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MC5
--	---	-----------------------

D. <u>Schedule Profile:</u>	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	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																																
Advanced Anticonvulsant - Milestone II													3Q																			
Multichambered Autoinjector - Milestone III												4Q																				
SERPACWA - Milestone III				4Q																												

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MC5
--	---	-----------------------

I. Product Development	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEDCHEM													
HW S - Sample Packaging and Manufacturing Validation of SERPACWA	C/CPFF	McKesson BioServices, Rockville, MD	C	0	418	1Q FY01	704	1Q FY02	0	NONE	0	1122	0
HW S - Support Documentation for FDA Licensure of Multichambered Autoinjector	C/CPFF	EER, Inc, Chantilly, VA	C	0	65	1Q FY01	0	NONE	0	NONE	0	65	0
Subtotal I. Product Development:				0	483		704		0		0	1187	

Remarks:

II. Support Costs: Not applicable

CBDP PROJECT COST ANALYSIS (R-3 Exhibit)	DATE February 2002
---	------------------------------

BUDGET ACTIVITY RDT&E DEFENSE-WIDE/ BA5 - Engineering and Manufacturing Dev	PE NUMBER AND TITLE 0604384BP CHEMICAL/BIOLOGICAL DEFENSE (EMD)	PROJECT MC5
--	---	-----------------------

IV. Management Services	Contract Method & Type	Performing Activity & Location	US NF CC	Total PYs Cost	FY2001 Cost	FY2001 Award Date	FY2002 Cost	FY2002 Award Date	FY2003 Cost	FY2003 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ZSBIR													
SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	PO	HQ AMC, Alexandria, VA	U	0	0	NONE	25	2Q FY02	0	NONE	0	25	0
Subtotal IV. Management Services:				0	0		25		0		0	25	

Remarks:

TOTAL PROJECT COST:	0	1050		1463		1973		0	4486
---------------------	---	------	--	------	--	------	--	---	------