

COMMITTEE STAFF PROCUREMENT BACKUP BOOK

FY2000/2001 BUDGET SUBMISSION

February 1999

CHEMICAL BIOLOGICAL DEFENSE

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For
Chemical and Biological Defense Program

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Department of Defense Chemical/Biological Defense Program
FY 2000/2001 President's Budget Program Overview

The DoD Chemical/Biological Defense (CBD) Program provides development and procurement of systems to enhance the ability of U.S. forces to deter and defend against CB agents during regional contingencies. The probability of U.S. forces encountering CB agents during worldwide conflicts remains high. An effective defense will reduce the probability of a CB attack and enable U.S. forces to survive, continue operations, and win. This program supports U.S. counterproliferation policy.

The program continues to implement congressional direction to improve jointness and reflects an integrated DoD jointly developed program. This year's program continues funding to support counterproliferation initiatives within the passive defense area. This funding enhances and accelerates high-payoff technologies for advanced CB defense systems. This budget submission also includes \$380 million in increased research and development funding for biological warfare defense and vaccines over the FY 2000-05 Future Years Defense Program (FYDP), as well as additional FY 1999 Emergency Supplemental funding to procure CB defense equipment for the Guard and Reserves to support the Consequence Management mission. Moreover, the Department continues to procure new CB defense equipment for our forces, due in large measure to the May 1997 *Report of the Quadrennial Defense Review* (QDR) recommendation to increase planned spending on counterproliferation by \$ 1 billion over the FY 1999-2003 program period, of which \$732 million was allocated to the DoD CBD program.

The DoD CBD program invests in technologies to provide improved capabilities that have minimal adverse impact on our warfighting potential. Joint and Service unique programs support the framework of the three mission areas of CB defense: Contamination Avoidance (detection, identification, warning/reporting, reconnaissance), Force Protection (individual, collective, medical support), and Decontamination.

Within the area of *Contamination Avoidance*, sensors for joint task forces, mobile CB reconnaissance and systems capable of detecting multiple agents and characterizing new agents are being developed. Technological advances are being pursued in remote detection, miniaturization, lower detection limits, logistics supportability and biological detection capability. Within the area of *Force Protection*, technology is funded to pursue improved mask systems that provide fully compatible vision capabilities, laser/ballistic protection as well as further reduction in logistic burdens. Protective clothing is being developed under a joint program, which will reduce the weight and heat stress burden of current equipment for all services. Medical research will provide improved prophylaxes, antidotes, treatments, vaccines and medical casualty management systems. Lightweight CB protective shelters and collective protection technology advances are funded. Within the area of *Decontamination*, modular decontamination systems are being developed. Technology is funded to address advances in improved decontamination approaches.

All of these capabilities integrated together as a system-of-systems are essential to avoid contamination and to sustain operational tempo on an asymmetric battlefield. Moreover, sound Joint doctrine and realistic training remain fundamental to our defense against chemical and biological weapons. In summary, the DoD CBD program is focusing on a jointly integrated, balanced approach to obtaining needed capabilities for our forces within affordability constraints.

PROCUREMENT, DEFENSE-WIDE

Chemical/Biological Defense Program Summary

	(\$ in Millions)
FY 1998 Actual	233.943
FY 1999 Estimate	303.656
FY 2000 Estimate	377.396
FY 2001 Estimate	399.673

Purpose and Scope of Work

- These funds provide for a fully integrated and coordinated Nuclear, Biological and Chemical (NBC) Defense procurement program within the Department of Defense (DoD) that meets the intent of Congress and provides the best NBC defense for our service members and our nation.

Justification of Funds

- Funding for this program was transferred from individual Service NBC defense procurement programs pursuant to Public Law 103-160, Title XVII.
- NBC Contamination Avoidance - Procurement of equipment to enhance U.S. capability to detect and identify threat agents on the battlefield.
 - FY00/01: Continues procurement of the Pocket RADIAC system, the Joint Warning and Reporting Network (JWARN), Chemical and Biological (CB) defense equipment to support the Reserve Component unit requirements for domestic preparedness response against weapons of mass destruction (WMD), contamination avoidance system fielding support/spares, the Automatic Chemical Agent Alarm (ACADA), Block 1 Modifications of the FOX NBC Reconnaissance System (NBCRS), and the Improved Chemical Agent Monitor.
 - FY00: Completes installation of the Improved Point Detection System (IPDS) and begins installation of the Shipboard Automatic Liquid Agent Detector (SALAD) on amphibious, combat and select combat support ships.
 - FY01: Initiates procurement of the Joint Service Lightweight NBC Reconnaissance System (LNBCRS).
- NBC Protection/Decontamination Systems - Procurement of Individual/Collective protection and Decontamination equipment to protect the soldier, sailor, airman or marine allowing the personnel to operate in a contaminated CB environment.
 - FY00/01: Continues procurement of the Aircrew Eye/Respiratory Protection (AERP) modifications, individual protective gear for naval construction forces and naval shore activities, individual protection system fielding support/spares, M40-series Protective Masks, protective clothing to include the Joint Service Lightweight Integrated Suit Technology (JSLIST) protective ensembles, the CB respiratory system, the Chemical Biological Protective Shelter (CBPS) for Army medical units, the Modular Decontamination System (MDS), and decontamination system fielding support/spares.

- FY00: Completes procurement of the Protection Assessment Test System (PATS), the M28 Transportable Collective Protection System (TCPS) to assist the Air Force in sustaining air operations in a CB environment, and the M17 Lightweight Decontamination System (LDS). Initiates the procurement of the Collectively Protected Deployable Medical System (CP DEPMEDS), the Collective Protection System backfit installation on three Navy amphibious ship classes (LHA, LHD, and LSD), the Joint Transportable Collective Protection Shelter (JTCOPS), and Joint Collective Protection Equipment (JCPE) improvements to currently fielded systems.
 - FY01: Procures Collective Protection Shelter Systems for naval construction forces and naval overseas shore activities.
- Biological Detection Systems - Procurement of equipment that provides for (1) detection, identification, warning and sample collection for verification that a biological attack has occurred, and (2) protection of U.S. forces with FDA approved vaccines to protect against biological threats which could be deployed against maneuver units or stationary facilities in the theater of operations.
 - FY00/01: Continues the Critical Reagents Program (CRP) to ensure the quality and availability of reagents critical to the successful development, test and operation of biological warfare detection systems and medical biological products, the DoD Biological Vaccine Program and the procurement of equipment for the Air/Base Port (Portal Shield) Advanced Concept Technology Demonstration (ACTD) program for biological detection of high-value CINC fixed sites (airbases, ports).
 - FY00: Initiates procurement of the Joint Biological Point Detection System (JBPDS) and the Counterproliferation Long Range Biological Standoff Detection System (CP-LRBSDS) and completes procurement of the Biological Integrated Detector System (BIDS).

**DEFENSEWIDE
FY 2000/2001 PROCUREMENT PROGRAM**

**APPROPRIATION: 0300D PROCUREMENT, DEFENSE-WIDE
BUDGET ACTIVITY 03: CHEMICAL/BIOLOGICAL DEFENSE**

**EXHIBIT P-1
DATE: FEBRUARY 1999**

LINE NO.	ITEM NOMENCLATURE	IDENT CODE	FY 1998		FY1999		FY 2000		FY 2001	
			QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
			CBDP							
66	INDIVIDUAL PROTECTION (GP1000)			85.0	127.5		124.6		97.9	
67	DECONTAMINATION (PA1500)			2.6	10.9		10.9		9.5	
68	JOINT BIO DEFENSE PROGRAM (MA0800)			63.1	41.6		99.6		99.4	
69	COLLECTIVE PROTECTION (PA1600)			24.3	20.3		36.7		38.5	
70	CONTAMINATION AVOIDANCE (GP2000)			59.0	103.4		105.6		154.4	
	TOTAL CHEMICAL/BIOLOGICAL DEFENSE			233.9	303.7		377.4		399.7	

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	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY00-05
=====									
GPI000 INDIVIDUAL PROTECTION									
JT SVC AVIATION MASK (JSAM)									
Dollars	0	0	0	0	0	7888	15804	14322	38014
Quantities	0	0	0	0	0	2400	5800	5200	13400
JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)									
Dollars	0	0	0	0	0	0	0	15277	15277
Quantities	0	0	0	0	0	0	0	170000	170000
AERP AIRCRAFT MODS									
Dollars	1362	4086	1895	893	1263	956	0	0	5007
INDIVIDUAL PROTECTIVE GEAR									
Dollars	246	579	3415	5431	1566	1520	0	0	11932
JOINT PROTECTIVE AIRCREW ENSEMBLE									
Dollars	0	0	0	0	0	21333	21116	21292	63741
Quantities	0	0	0	0	0	47950	47500	47950	143400
IP SYSTEM FIELDING SUPPORT/SPARES									
Dollars	303	684	649	91	93	320	1633	1875	4661
PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41									
Dollars	5246	5335	5328	0	0	0	0	0	5328
Quantities	912	896	908	0	0	0	0	0	908
MASK, AIRCRAFT M45									
Dollars	6192	2194	0	0	0	0	0	0	0
Quantities	9768	3500	0	0	0	0	0	0	0
MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A									
Dollars	6439	15925	10281	1375	0	0	0	0	11656
Quantities	38095	104785	80684	0	0	0	0	0	80684
PROTECTIVE CLOTHING									
Dollars	57873	91315	95646	86086	90144	87574	86157	86877	532484
Quantities	217626	366604	359166	330871	351340	341323	335800	338607	2057107

	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY00-05
=====									
CB RESPIRATORY SYSTEM - AIRCREW									
Dollars	7324	7334	7398	4054	0	0	0	0	11452
Quantities	1206	1180	1234	692	0	0	0	0	1926
[T] INDIVIDUAL PROTECTION									
Dollars	84985	127452	124612	97930	93066	119591	124710	139643	699552
GP2000 CONTAMINATION AVOIDANCE									
RADIAC - POCKET AN/UDR - 13									
Dollars	3164	3263	2898	2846	3762	7564	0	0	17070
Quantities	4253	3768	3151	3069	4514	10511	0	0	21245
JOINT WARNING & REPORTING NETWORK (JWARN)									
Dollars	0	10174	9012	8923	11641	10527	12067	12168	64338
Quantities	0	128	0	100	0	0	0	0	100
GUARD & RESERVE EQUIPMENT									
Dollars	0	14652	6096	1171	0	1167	0	1165	9599
JOINT CHEM AGENT DETECTOR (JCAD)									
Dollars	0	0	0	0	27142	27743	25566	25779	106230
Quantities	0	0	0	0	13866	14194	13092	13214	54366
IN-LINE WATER CHEM/BIO DETECTOR									
Dollars	0	0	0	0	0	0	1989	2006	3995
Quantities	0	0	0	0	0	0	27	27	54
CA SYSTEM FIELDING SUPPORT/SPARES									
Dollars	885	1067	1108	1987	2330	2379	3309	3092	14205
AUTO CHEMICAL AGENT ALARM (ACADA), M22									
Dollars	15722	29633	37224	48744	0	0	0	0	85968
Quantities	1845	3380	4759	6825	0	0	0	0	11584
RECON SYSTEM, FOX NBC (NBCRS) MODS									
Dollars	25335	26044	24918	31752	6362	5486	33907	35138	137563
Quantities	12	12	11	14	1	2	16	16	60
=====									

	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY00-05
=====									
JT SVC LTWT NBC RECON SYS (LNBCRS)									
Dollars	0	0	0	39478	80887	66478	59854	69084	315781
Quantities	0	0	0	21	46	40	48	58	213
SHIPBOARD DETECTOR MODIFICATIONS									
Dollars	4647	9138	11515	6953	8762	8664	5795	1528	43217
Quantities	36	54	90	51	63	64	69	14	351
IMPROVED CHEMICAL AGENT MONITOR (ICAM)									
Dollars	9247	9465	12788	12551	0	0	0	0	25339
Quantities	1933	1927	2984	3003	0	0	0	0	5987
JS LTWT STANDOFF CW AGT DETECTOR (LSCAD)									
Dollars	0	0	0	0	3109	8935	18936	28640	59620
Quantities	0	0	0	0	30	53	150	250	483
[T] CONTAMINATION AVOIDANCE									
Dollars	59000	103436	105559	154405	143995	138943	161423	178600	882925
MA0800 JOINT BIO DEFENSE PROGRAM									
JOINT BIO POINT DETECTION SYSTEM (JBPDS)									
Dollars	0	0	48406	53935	62138	62302	44302	45951	317034
Quantities	0	0	104	140	169	167	120	130	830
JT BIO REM EARLY WARNING SYS (JBREWS)									
Dollars	0	0	0	0	0	0	34575	36398	70973
Quantities	0	0	0	0	0	0	1433	1512	2945
CRITICAL REAGENTS PROGRAM (CRP)									
Dollars	0	1746	2432	1923	1928	2024	1866	1923	12096
Quantities	0	78	78	45	16	16	16	16	190
LONG RANGE BIO STANDOFF DET SYS (LRBSDS)									
Dollars	0	0	1923	11807	11885	0	0	0	25615
Quantities	0	0	0	3	3	0	0	0	6

	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY00-05
Portal Shield Equipment Dollars	0	13936	3909	3903	3896	0	0	0	11708
DoD Biological Vaccine Procurement Dollars	25685	10990	23424	27810	40724	46033	61410	64697	264098
JPO System Fielding Support/Spares Dollars	0	0	0	0	0	0	675	697	1372
BIO INTEGRATED DETECTOR SYSTEM (BIDS) Dollars	37371	14900	19479	0	0	0	0	0	19479
Quantities	28	21	20	0	0	0	0	0	20
[T] JOINT BIO DEFENSE PROGRAM Dollars	63056	41572	99573	99378	120571	110359	142828	149666	722375
PA1500 DECONTAMINATION									
MODULAR DECON SYSTEM Dollars	0	5989	6117	9296	9702	9472	0	0	34587
Quantities	0	64	75	124	131	128	0	0	458
JOINT SERVICE FIXED SITE DECON (JSFXD) Dollars	0	0	0	0	5027	5015	7576	6684	24302
Quantities	0	0	0	0	68	68	87	87	310
JOINT SERVICE SENSITIVE EQUIPMENT DECON Dollars	0	0	0	0	0	0	3139	4775	7914
SORBENT DECON Dollars	0	0	0	0	4754	4784	0	0	9538
Quantities	0	0	0	0	18065	18200	0	0	36265
DE SYSTEM FIELDING SUPPORT/SPARES Dollars	24	63	127	194	200	195	96	97	909

	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY00-05
=====									
M17 LTWT Decon System (LDS)									
Dollars	2598	4847	4676	0	0	0	0	0	4676
Quantities	115	100	100	0	0	0	0	0	100
[T] DECONTAMINATION									
Dollars	2622	10899	10920	9490	19683	19466	10811	11556	81926
PA1600 COLLECTIVE PROTECTION									
COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTE									
Dollars	0	0	2768	2902	2001	0	0	0	7671
Quantities	0	0	4	5	3	0	0	0	12
TRANSPORTABLE COLLECTIVE PROTECTION SYSTEM									
Dollars	4730	3878	6581	0	0	0	0	0	6581
NAVY SHORE EQUIPMENT									
Dollars	334	0	0	1562	2305	3762	0	0	7629
COLLECTIVE PROT SYS AMPHIB BACKFIT									
Dollars	0	0	12157	18305	18351	17469	19600	19096	104978
JOINT COLLECTIVE PROT SYSTEMS & IMPROVEMENTS									
Dollars	0	0	1202	1059	685	690	4546	4584	12766
CO SYSTEM FIELDING SUPPORT/SPARES									
Dollars	24	0	0	0	0	0	340	344	684
CB PROTECTIVE SHELTER (CBPS)									
Dollars	19192	16419	14024	14642	16513	16547	20594	20678	102998
Quantities	47	37	32	34	38	37	45	44	230
[T] COLLECTIVE PROTECTION									
Dollars	24280	20297	36732	38470	39855	38468	45080	44702	243307
[GT]									
Dollars	233943	303656	377396	399673	417170	426827	484852	524167	2630085
=====									

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Budget Line Item #66

Individual Protection

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Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (GP1000) INDIVIDUAL PROTECTION

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	107.1	85.0	127.5	124.6	97.9	93.1	119.6	124.7	139.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	107.1	85.0	127.5	124.6	97.9	93.1	119.6	124.7	139.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	107.1	85.0	127.5	124.6	97.9	93.1	119.6	124.7	139.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Program provides for protective masks, respiratory systems and protective clothing. The M40A1/M42A2 masks, currently in production, are replacements for the aging masks in the field. The new masks accommodate a greater portion of the current Service population, thus reducing or eliminating the need for specially-fitted masks. Other significant improvements have been made in field of view, communication, drinking capability and compatibility with other equipment. The Protective Assessment Test System (PATS) is used to assess the fit of a mask to the individual. Interim service unique procurements required for protection to Aircrews include: the Army's Aircrew Protective Mask (ACPM), which provides protection against chemical and biological (CB) agents and is more compatible with emerging optical and weapon sighting equipment; the Navy's CB Respiratory System, which fills an existing need for protection of Naval and Marine aircrews against CB agents. In the area of protective clothing, the emphasis is on the Joint Service Lightweight Integrated Suit Technology (JSLIST) program, a Four-Service effort to procure and field a common chemical protective ensemble.

JUSTIFICATION: Operational forces across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions have an immediate need to survive and sustain operations in a CB threat environment. Individual protection is provided by means of masks, protective clothing, aircrew respiratory systems and firefighters' and explosive ordnance disposal ensembles. The Joint NBC Defense program includes individual protection equipment that both improves current protection levels and reduces the physiological and logistical burden on the individual soldier, sailor, airman or marine. The goal is to procure equipment which will allow for the individual to operate in a contaminated CB environment with minimal degradation in his/her performance.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (GP1000) INDIVIDUAL PROTECTION			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
AERP Aircraft Mods		A	1362			4086			1895			893		
Individual Protective Gear		A	246			579			3415			5431		
IP system Fielding Support/Spares		A	303			684			649			91		
Protection Assessment Test System M41		A	5246			5335			5328					
Mask, Acft M45		A	6192			2194								
M40 Protective Mask		A	6439			15925			10281			1375		
Protective Clothing		A	57873			91315			95646			86086		
CB Respiratory System -Aircrew		A	7324			7334			7398			4054		
TOTAL			84985			127452			124612			97930		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JN0011) AERP AIRCRAFT MODS

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	2.6	0	1.4	4.1	1.9	0.9	1.3	1.0	0	0	0	13.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2.6	0	1.4	4.1	1.9	0.9	1.3	1.0	0	0	0	13.1
Initial Spares												
Total Proc Cost	2.6	0	1.4	4.1	1.9	0.9	1.3	1.0	0	0	0	13.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Aircrew Eye/Respiratory Protection (AERP): AERP is a second generation chemical/biological oxygen mask designed to replace the current MBU-13 mask. The new mask will provide improved chemical/biological agent protection to all Air Force air crews. The AERP is designed to improve visibility, fit, protection, and comfort. AERP is designed to provide all Air Force aircraft with chemical/biological protection in all combat theaters.

The AERP System is a combination of the Individual Protective Equipment worn by the aircrew member and the aircraft interfaces for oxygen, communications and electrical to which the aircrew member connects the AERP for chemical/biological protection. This program modifies the aircraft's oxygen, communications and electrical connections which interface with the aircrew member to accept the AERP system.

JUSTIFICATION: PMD 4026 (14) 3. USAF SON 004-85, Sustained Operations in a Chemical/Biological Environment, 19 Sep 86. Aircrew Eye/Respiratory Protection (AERP) is required for an aircrew member to operate in a chemical/biological warfare environment. FY00/01 continues the AERP Mod program.

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Aircrew Eye/Respiratory Protection

MODELS OF SYSTEM AFFECTED: Multi-Aircraft

DESCRIPTION/JUSTIFICATION:

Aircrew Eye/Respiratory Protection (AERP) is required for an aircrew member to operate in a chemical/biological warfare environment. The AERP System is a combination of the Individual Protective Equipment worn by the aircrew member and the aircraft interfaces for oxygen, communications and electrical to which the aircrew member connects the AERP for chemical/biological protection. This program modifies the aircraft's oxygen, communications and electrical connections which interface with the aircrew member to accept the AERP system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The AERP system is already fielded in the majority of Air Force aircraft. Procurement of mainside equipment and design of aircraft modifications is on-going.

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs				73				46				17				1				2
Outputs				73				46				17				1				2

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs				21													Complete	160
Outputs				21													Complete	160

METHOD OF IMPLEMENTATION:	ADMINISTRATIVE LEADTIME: 5 Months				PRODUCTION LEADTIME: 17 Months				
Contract Dates:	FY 1999	3/99	FY 2000	3/00	FY 2001	3/01			
Delivery Date:	FY 1999	7/00	FY 2000	7/01	FY 2001	7/02			

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Aircrew Eye/Respiratory Protection

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E		1.4		0.2		0.8		0.1		0.1		0.1		0.1						
PROCUREMENT																					
Kit Quantity			73	1.4	46	4.1	17	1.9	1	0.9	2	1.3	21	1						160	10.6
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other		12.8																			12.8
Interim Contractor Support																					
Installation of Hardware																					
FY 1997 & Prior Eqpt -- Kits			73																		73
FY 1998 Eqpt -- Kits					46																46
FY 1999 Eqpt -- Kits							17														17
FY 2000 Eqpt -- Kits									1												1
FY 2001 Eqpt -- Kits											2										2
FY 2002 Eqpt -- Kits													21								21
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
TC Equip-Kits																					
Total Equip-Kits			73		46		17		1		2		21								160
Total Procurement Cost		12.8		1.4		4.1		1.9		0.9		1.3		1							23.4

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JN0013) INDIVIDUAL PROTECTIVE GEAR

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0.2	0.6	3.4	5.4	1.6	1.5	0	0	0	12.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0.2	0.6	3.4	5.4	1.6	1.5	0	0	0	12.8
Initial Spares												
Total Proc Cost	0	0	0.2	0.6	3.4	5.4	1.6	1.5	0	0	0	12.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program provides for the initial outfitting of protective equipment for Naval Construction Forces and Naval Shore Activities to counter the effects of Chemical/Biological warfare during deployments to worldwide tactical contingencies. Items to be procured include protective clothing, detectors, decontamination equipment and medical supplies for the Naval Support Element, Naval Construction Force, Maritime Pre-positioned Forces and Naval Overseas Shore Activities.

JUSTIFICATION: Consistent with changing global defense priorities and strategies, OPNAVINST S3400.10F requires that U.S. Navy units maintain the ability to sustain operations in areas threatened or contaminated with CB agents. Without adequate equipment, personnel will not be able to maintain the capability to survive a tactical CB attack or execute approved OPLANs. FY00 procures 98 M17A3 systems, 622 M295 Decon kits, and additional Individual Protective Equipment. FY01 procures 150 M17A3 systems and 2441 M295 Decon kits.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JN0013) INDIVIDUAL PROTECTIVE GEAR			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Individual Protective Equipment			66			198			325			617		
2. Detection			6			5			320			21		
3. Decontamination			3			49			2158			4120		
4. Medical			95			49			306			461		
5. Support			76			278			306			212		
TOTAL			246			579			3415			5431		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JX0001) IP SYSTEM FIELDING SUPPORT/SPARES

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty											Continuing	
Gross Cost	0	1.1	0.3	0.7	0.6	0.1	0.1	0.3	1.6	1.9	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	1.1	0.3	0.7	0.6	0.1	0.1	0.3	1.6	1.9	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	1.1	0.3	0.7	0.6	0.1	0.1	0.3	1.6	1.9	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: System Fielding Support/Spares program provides for the Total Package Fielding (TPF), First Destination Transportation (FDT), and New Equipment Training (NET) for Individual Protection Equipment funded within Chemical/Biological Defense Program (CBDP). TPF is the standard method of fielding new equipment developed under the CBDP Modernization program. The materiel developer plans, develops, acquires and deploys the Individual Protection equipment/systems, including Associated Support Items of Equipment (ASIOE) and Support List Allowance (SLAC) items through a physical handoff to the user. TPF costs include SLAC items, ASIOE, deprocessing, temporary duty (TDY), salaries and Stock Fund Managed equipment. FDT funds for transportation required to support shipment of new equipment/systems from manufacturing plants and assembly points to the first point of acceptance or storage point by the Government. (NOTE: Excludes transportation costs paid by vendor as prescribed in procurement contract). The NET process begins very early in the life cycle of a new equipment/system and provides for the development of the Qualitative Quantitative Personnel Requirement Information (QQPRI), the NET plan, and training courses to assure the proper and safe use of new equipment/systems.

JUSTIFICATION: Funding will ensure continued uninterrupted fielding of new equipment/systems to users in support of readiness and training, provide transfer of knowledge of newly procured items to the users in the field. FY00/01 funding will support the fielding of M40-series protective mask and M41 Protection Assessment Test System (PATS).

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (M95801) PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1097	1351	912	896	908							2716
Gross Cost	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Initial Spares												
Total Proc Cost	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M41 Protection Assessment Test System (PATS) is a non-developmental item which consists of a small portable instrument designed to provide the soldier with a simple and accurate means of validating the facepiece fit of their protective mask. The PATS, approximately 200 cubic inches in size and 4 pounds in weight, is based on a miniature condensation nucleus counter (CNC). The CNC operates by continuously sampling and counting individual particles that occur naturally in the surrounding air. The PATS measures the concentration of these particles both inside and outside the mask and from these values calculates a fit factor (FF). The FF is a measure of the quality of the face seal. The PATS will ensure that the soldier's assigned mask is properly sized and operational.

JUSTIFICATION: US Forces currently do not have enough M41 PATS to meet its total needs. The PATS will ensure that a soldier is issued a protective mask that is of a proper size and operational, in turn boosting the soldier's confidence in his/her mask. The PATS will be used to verify the mask fit whenever a soldier is assigned a new mask and periodically throughout the year. FY00 funds will provide 908 systems and complete this program.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M95801) PROT ASSESSMENT TEST SYS (PATS) M41			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. PATS		A	4879	912	5.35	4883	900	5.43	5039	908	5.55			
2. Battery (BA-5847/U)														
3. Isopropyl Alcohol (99.5 grade)			114			116			118					
4. Engineering Support (Gov't) (In-house)			253			336			171					
TOTAL			5246			5335			5328					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M95801) PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
PATS										
FY 98	TSI Inc., St. Paul, MN	SS	ACALA	Jan-98	Apr-98	912	5350	Yes		
FY 99	TSI Inc., St. Paul, MN	Option **	ACALA	Jan-99	Apr-99	900	5430	Yes		
FY 00	TSI Inc., St. Paul, MN	Option**	ACALA	Jan-00	Apr-00	908	5550	Yes		

REMARKS: **Option to FY98 Contract

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (M99501) MASK, AIRCRAFT M45

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty		13043	9768	3500								13268
Gross Cost	0	7.4	6.2	2.2	0	0	0	0	0	0	0	15.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.4	6.2	2.2	0	0	0	0	0	0	0	15.7
Initial Spares												
Total Proc Cost	0	7.4	6.2	2.2	0	0	0	0	0	0	0	15.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M45 Aircrew Protective Mask (ACPM) replaces the currently fielded M49 Aircraft Mask (formerly designated the M43A1 Type II) and the M24 masks for all Army aviation applications, except the AH-64 (Apache). The ACPM consists of a facepiece, hose assembly, second skin (removable overcover), filter canister, laser and ballistic eye lens covers, vision corrective eye lens, and carrier. The M45 addresses identified limitations of previous Aircraft Masks such as a high unit cost and requirements for a separate air motor/blower system. Improvements over previous Aircraft Masks include protection and defogging of lenses without the use of an air motor/blower, reduced weight and bulk, reduced logistics and support costs, and improved sizing and fitting. The ACPM will be the principal CB protective equipment for both pilots and aircrew.

JUSTIFICATION: The FY99 procurement continues the Army purchase of a completely new aircrew mask, The Army aviation community does not have a CB protective mask which provides easy compatibility with existing and emerging aviation weapon sighting and optical equipment. Currently fielded masks require the use of a separate, battery operated motor and blower and are not fully compatible with helicopter systems. The M45 mask radically improves safety of flight and provides compatibility with night vision goggles and weapon sighting systems, thereby increasing the comfort of the aircrew. (ORD, CARDS #1273, Approved 13 Sep 93)

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M99501) MASK, AIRCRAFT M45			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	Mask M45	A	3807	9768	0.39	1383	3500	0.40						
	TPLs		630											
	Canister		88			32								
	Carriers		117			42								
2. First Article Test														
a. Government														
b. Contract														
3. Engineering Changes			225			50								
4. Leak Test - 100 of Production														
a. Government			325			127								
b. Contract			180			84								
5. Quality Control (Gov't)			411			215								
6. Engineering Support (Gov't)			409			261								
TOTAL			6192			2194								

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M99501) MASK, AIRCRAFT M45					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Mask M45 FY 98	Campbell Plastics, Corona, CA	SS/FPM-3(2)	ACALA	Jan-98	Feb-99	9768	390	Yes		
FY 99	Campbell Plastics, Corona, CA	SS/FPM-3(3)	ACALA	Nov-98	Jun-99	3500	400	Yes		

REMARKS: This program was procured through an 8(a) set-aside.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (M99601) MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A1

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	122993	47205	38095	104785	80684							223564
Gross Cost	17.9	6.0	6.4	15.9	10.3	1.4	0	0	0	0	0	57.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	17.9	6.0	6.4	15.9	10.3	1.4	0	0	0	0	0	57.9
Initial Spares												
Total Proc Cost	17.9	6.0	6.4	15.9	10.3	1.4	0	0	0	0	0	57.9
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M40A1 mask consists of a form-fitting facepiece with rigid binocular lenses attached to the facepiece. The canister is the air-filtering medium for the mask and is mounted on the facepiece either on the left or right side, as desired by the wearer. A front voicemitter is used for face-to-face communication and a side voicemitter used for communications with telephone and radio handsets. The M40A1 mask replaces the M17 and M9A1 series masks. This mask is designed to protect the face, eyes and respiratory tract against field concentration of chemical and biological agents. The M40A1 mask is issued to the individual soldier. A Pre-planned Product Improvement was incorporated in FY93 to upgrade the M40 mask to the M40A1 configuration. The M40A1 mask incorporates a quick-doff hood that allows doffing the hood without removing the mask. The M40 and M40A1 masks were designed to be compatible with and use NATO canisters. Remanufacture efforts conducted in a Government facility will upgrade all unissued M42 and M42A1 masks to the M42A2 configuration, at a significant cost savings. Program also supports initial issue of the Universal Second Skin (USS) for the Army and USMC. The USS provides optimum liquid agent protection for the mask.

JUSTIFICATION: The masks procured with FY00/FY01 funding will allow continued replacement of the aging masks currently in the field. FY00 includes additional funds received in support of the Services' modernization effort. The M40A1 mask provides a very significant improvement over the M17 and M9 series currently deployed; the M40A1 mask provides improved fit characteristics and a higher level of protection than the 26-year-old M17 and M9 masks which are being replaced. The new design accommodates a greater portion of the current soldier population, thus reducing or eliminating the need for specially-fitted masks. Significant improvements in field of view, ability to communicate, drinking capability and compatability with other Army equipment are salient features of the new design. The externally mounted NATO interchangeable canister reduces time required to change filtration systems and allows the use of other countries' canisters, improving battlefield availability. The expedited replacement of aging masks is a necessity to maintain and improve the required state of combat readiness. The M40A1 mask is issued to the individual soldier. The M40A1 mask allows for faster, more efficient decontamination operations, resulting in higher soldier survivability.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M99601) MASK, CB PROTECTIVE FIELD: M40/M40A1			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. M40A1 Protective Field Mask Hardware (ILC Dover)		A	3309	38095	0.09	9114	104785	0.09	7018	80684	0.09			
Canister (includes 2 extra canisters for Navy in FY98 and FY99)			307			1117			726					
Production - Special Tooling														
Engineering Support			418			800			337					
Cost Bearing ECPs			150			300			700					
2. Second Skin (USMC)		A	853			2918								
3. M42A2 Upgrade (Pine Bluff Arsenal)			402			440								
4. MWO (Durability Improvement Program)			1000											
5. Universal Second Skin (Army)						1236			1500			1375		
TOTAL			6439			15925			10281			1375		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M99601) MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A1					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
M40A1 Protective Field Mask										
FY 98	ILC Dover, DE	C/FFP-4(3)	ACALA	Jun-98	Mar-99	38095	87	Yes		
FY 99	ILC Dover, DE	C/FFP-4(4)	ACALA	Jan-99	Sep-99	104785	87	Yes		
FY 00	ILC Dover, DE	Option	ACALA	Jan-00	Sep-00	80684	87	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (MA0400) PROTECTIVE CLOTHING

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			217626	366604	359166	330871	351340	341323	335800	338607	Continuing	Continuing
Gross Cost	0.0	58.8	57.9	91.3	95.6	86.1	90.1	87.6	86.2	86.9	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	58.8	57.9	91.3	95.6	86.1	90.1	87.6	86.2	86.9	Continuing	Continuing
Initial Spares												
Total Proc Cost	0.0	58.8	57.9	91.3	95.6	86.1	90.1	87.6	86.2	86.9	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Joint Service Protective Clothing program provides production of the following protective clothing ensembles:

- (1) The Joint Service Lightweight Integrated Suit Technology (JSLIST) program, currently in production, to field a common chemical protective ensemble (suits, boots, and gloves) to US Forces. The program provides adequate chemical protection, reduced heat stress, full compatibility with all interfacing equipment, longer wear (30 days) and launderability, a single technical data package and technical data manual, a standard tariff, split issue to improve fit and reduce inventory, and flame retardancy. JSLIST promotes commonality and standardization to maximize resources and eliminate redundancy among the Services. Procurement will also include the Fire Fighters' Ensemble components, Proximity Glove Liners and Modification Kits, for use with JSLIST.
- (2) The Explosive Ordnance Disposal (EOD) Ensemble: The EOD Ensemble is a replacement for the existing EOD Butyl rubber ensemble. The goal is to develop or identify a lightweight, decontaminable CB protective suit that allows the wearer full use of ground support equipment. In addition to the ensemble, Personal Individual Cooling System (PICS), Self Contained Breathing Apparatus (SCBA) Spare SCBA Bottles, and Test Repair Kits will be procured.
- (3) The Fire Fighting Ensemble (FFE) system provides modification to the JSLIST suit -- necessary for wear with the fire fighter proximity suit and fire fighter Chemical/Biological mask (NSN 4240-02-35905641).

JUSTIFICATION: Protective Clothing is a Joint Service chemical protective ensemble development, testing and production program based on a 24 November 1993 Memorandum of Agreement (MOA) among the Services. The MOA defines the responsibilities and working relationships among the participants for program management, development, and logistics support. As the designated lead service, the Marine Corps will provide milestone decision approval following service approval of materials, designs, and final garments. Protective Clothing Program (PCP) integrates technological improvements in protective military garments. These improvements provide Service members chemical/biological protection in all combat theaters. The PCPs provide more flexibility, comfort, durability and maintainability. In addition, the program provides commonality, standardization and full compatibility of all interfacing equipment. FY00 is continuing procurement of JSLIST Ensemble, which includes 359,166 overgarments and 359,166 boots. FY01 is continuing procurement of JSLIST Ensemble, which includes 330,871 overgarments and 253,225 boots.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
JSLIST														
1. Overgarment	A	43525	217626	0.20	73320	366604	0.20	71833	359166	0.20	66174	330871	0.20	
2. Boots	A				12831	366604	0.03	12570	359166	0.03	9792	253255	0.04	
3. NET/TAD/FDT/DPSC Support Cost					2659			1660			1422			
4. Industries Non-Recurring		9495												
5. Engineering Support (Gov't)		280			836			1200			1200			
6. Quality Control (Gov't)		500			350			600			600			
7. Contract Support		519			450			750			568			
EOD Ensemble	A	990	3690	0.27										
Firefighter's Ensemble														
1. Firefighter Modification Kit	A	1443	7039	0.21	658	3133	0.21							
2. Firefighter NBC Proximity Glove	A	1121	7039	0.16										
3. Engineering Support (Contract)					211									
JSLIST - Gloves	B							7033	281346	0.02	6330	253225	0.02	
TOTAL			57873		91315			95646			86086			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
EOD Ensemble FY 98	Geomet Tech, Germantown, MD	C/FFP	AFMC	Jan-98	May-98	3690	270	Yes		
Firefighter Modification Kits FY 98	Interspiro, Brandford, CT	C/FFP	AFMC	Feb-98	May-98	7039	210	Yes		
Firefighter NBC Proximinty Glove FY 98	Interspiro, Brandford, CT	C/FFP	AFMC	Jun-98	Aug-98	7039	150	Yes		
Firfighter Modification Kits FY 99	Interspiro, Brandford, CT	C/FFP	AFMC	Mar-99	May-99	3133	210	Yes		
JSLIST-Boots FY 99	Tingley, NJ	C/FFP	MARCORSYSCOM	Feb-99	Apr-99	180000	35	Yes		
	TBS	C/FFP	MARCORSYSCOM	Jun-99	Sep-99	171682	35	Yes		Feb-99
FY 00	TBS	C/FFP	DSCP	Apr-00	Sep-00	175841	35	Yes		
	TBS	C/FFP	DSCP	Apr-00	Sep-00	174842	35	Yes		
FY 01	TBS	Option	DSCP	Apr-01	Sep-01	139906	35	Yes		
	TBS	Option	DSCP	Apr-01	Sep-01	139907	35	Yes		
JSLIST-Gloves FY 00	TBS	C/FFP	MARCORSYSCOM	Apr-00	May-98	351683	25	No		
FY 01	TBS	C/FFP	MARCORSYSCOM	Feb-01	May-01	253225	25	No		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
JSLIST-Overgarment FY 98	NISH (TX/IN/ME)	C/FFP	DSCP	Aug-98	Jan-99	113626	200	Yes		
	Creative Apparel, Belfast, ME	C/FFP	DSCP	Aug-98	Feb-99	104000	200	Yes		
FY 99	NISH, (TX/IN/ME)	C/FFP	DSCP	Apr-99	Sep-98	129236	200	Yes		
	Creative Apparel	Option	DSCP	Mar-99	May-99	129302	200	Yes		
	TBS	C/FFP	DSCP	Mar-99	Sep-99	108066	200	Yes		
FY 00	Creative Apparel	Option	DSCP	Mar-00	Sep-00	143166	200	Yes		
	NISH, (TX/IN/ME)	C/FFP	DSCP	Apr-00	Sep-00	110495	200	Yes		
	TBS	Option	DSCP	Mar-01	Sep-01	105505	200	Yes		
FY 01	Creative Apparel	Option	DSCP	Mar-01	Sep-01	114871	200	Yes		
	NISH, (TX/IN/ME)	C/FFP	DSCP	Apr-01	Sep-01	121040	200	Yes		
	TBS	Option	DSCP	Mar-01	Sep-01	94960	200	Yes		

REMARKS: *El Paso, TX, Gary, IN & Belfast, ME

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(N00020) CB RESPIRATORY SYSTEM - AIRCREW

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty		1188	1206	1180	1234	692						4312
Gross Cost	0	7.2	7.3	7.3	7.4	4.1	0	0	0	0	0	33.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.2	7.3	7.3	7.4	4.1	0	0	0	0	0	33.4
Initial Spares												
Total Proc Cost	0	7.2	7.3	7.3	7.4	4.1	0	0	0	0	0	33.4
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Chemical Biological (CB) Respiratory System is an aircrew CB respiratory system for use by the aircrews in Navy and Marine Corps tactical, rotary-wing (Helo), and land-based fixed-wing aircraft.

JUSTIFICATION: Navy and Marine Corps tactical and Navy rotary-wing aircrews currently have no respiratory protection against CB warfare agents. This program procures Non-Developmental Items (NDI) respiratory systems to correct this deficiency. FY00/01 procures 1234/692 systems for Navy and Marines, respectively.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (N00020) CB RESPIRATORY SYSTEM - AIRCREW			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
C/B Respiratory System Hardware		A	5772	1206	4.79	5659	1180	4.80	5923	1234	4.80	3321	692	4.80
Engineering Support			300			350			300			104		
In-House Support (NAWCAD)			1252			1325			1175			629		
TOTAL			7324			7334			7398			4054		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (N00020) CB RESPIRATORY SYSTEM - AIRCREW					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CB Respiratory System Hardware										
FY 98	Camlock LTD, UK	Option	NAVAIR, Patuxent, MD	Jun-98	Oct-98	1206	4786	Yes		
FY 99	Camlock LTD, UK	Option	NAVAIR, Patuxent, MD	Mar-99	Jul-99	1180	4800	Yes		
FY 00	Camlock LTD, UK	Option	NAVAIR, Patuxent, MD	Jan-00	May-00	1234	4800	Yes		
FY 01	Camlock LTD, UK	Option	NAVAIR, Patuxent, MD	Jan-01	Apr-01	692	4799	Yes		

REMARKS: Options are to FY97 contract awarded in Mar97

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Budget Line Item #67

Decontamination

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Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (PA1500) DECONTAMINATION

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	4.2	0.3	2.6	10.9	10.9	9.5	19.7	19.5	10.8	11.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.2	0.3	2.6	10.9	10.9	9.5	19.7	19.5	10.8	11.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	4.2	0.3	2.6	10.9	10.9	9.5	19.7	19.5	10.8	11.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The goals of decontamination are to provide equipment to facilitate the removal and detoxification of contaminants from materials without inflicting injury to personnel or damage to equipment or environment. This Joint Service program facilitates the procurement of a more transportable, less labor intensive and more effective system for applying decontaminating solutions and removing gross contamination from vehicle and equipment surfaces. Contamination control techniques have been developed which minimize the extent of contamination pickup and transfer and maximize the ability of units to remove contamination both on-the-move and during dedicated decontamination operations. The Modular Decontamination System and Lightweight Decontamination System will provide this capability. Lessons learned from Desert Storm validated the need for a deployable and efficient decontamination system.

JUSTIFICATION: Operational forces, facilities and equipment must be decontaminated to safely operate, survive and sustain operations in a nuclear, biological and chemical agent threat environment. Key factors are reduced weight, increased transportability, decreased labor intensity, reduced water usage and a more effective system for applying decontaminating solutions to vehicle and equipment surfaces. Decontamination of facilities frequently requires a large area to be covered, but weight, water usage and labor intensity factors may not be as important as mobility and the ability to decontaminate large areas rapidly.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (PA1500) DECONTAMINATION			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Modular Decon System		B				5989			6117			9296		
DE System Fielding Support/Spares			24			63			127			194		
M17 Lightweight Decon System			2598			4847			4676					
TOTAL			2622			10899			10920			9490		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (G47001) MODULAR DECON SYSTEM

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				64	75	124	131	128				522
Gross Cost	0	0	0	6.0	6.1	9.3	9.7	9.5	0	0	0	40.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	6.0	6.1	9.3	9.7	9.5	0	0	0	40.6
Initial Spares												
Total Proc Cost	0	0	0	6.0	6.1	9.3	9.7	9.5	0	0	0	40.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: A Modular Decon System (MDS) includes one XM21 Decontaminant Pumper (DP) module, and two XM22 High Pressure Washer (HPW) modules. The XM21 DP is capable of delivering DS2 or liquid field expedient decontaminants, i.e., formalin, household bleach, and diesel fuel. The XM21 DP may be operated from the ground; when trailer mounted it is capable of drawing the decontaminant directly from a container on the ground. Its accessories include hoses and hose reels, two trigger controlled spray wands, and two electrical powered scrub brush assemblies. The XM22 HPW will provide ambient or heated water at pressures up to 3,000 psi at a rate of 5 gpm with the capability of injecting detergents and providing a high volume flow of (20 gpm) water. Its accessories include hoses and hose reels, trigger controlled spray wands, a shower bar, nozzles and hydrant adapters. The XM22 HPW will be capable of drawing water from natural water sources and delivering it at variable adjustable pressures, temperatures and flow rates. The hydrant adapters will provide connections for using urban water supplies. Associated Support Items of Equipment (ASIOE) includes: 3,000 gallon flexible water tank - 2 each system; a 125 gpm diesel pump - 1 each system; special purpose web - 14 each system and 3/4 ton trailer for each module - 3 each system.

JUSTIFICATION: There are no current systems which provide powered pumping and scrubbing capability for application of decontamination agents such as DS2, formalin, bleach and diesel fuel. The XM21 DP provides first time capability in this area. The XM22 HPW will provide, for the first time, a high pressure hot water capability to chemical companies and may also be used by naval port/air facility decon units. The MDS will be fielded to the dual purpose smoke/chemical companies for the purpose of conducting detailed equipment decontamination, replacing both the M12A1 Skid Mounted Decon Apparatus and, for hasty decontamination, the M17 Lightweight Decontamination System (LDS). Displaced M17 LDS will be cascaded to other non-chemical units to fill unit requirements. Chemical companies can use the MDS to fulfill the decontamination requirements of the initial wash, decontaminant application, and rinse steps of detailed equipment decontamination as described in NBC Decontamination field manuals. Non-chemical units may be provided the XM22 HPW and its components to be used in hasty decontamination operations. The MDS will be supported by the standard logistics system, maintenance system and standard tools. Earliest possible production is required so that an improved field equipment decontamination capability can be procured and fielded to realize operational benefits to the Army military decontamination mission. FY00 funds production of 75 MDS; FY01 funds production of 124 MDS.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(G47001) MODULAR DECON SYSTEM

Program Elements for Code B Items:

0603384BP, Project DE4

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The MDS provides a first time capability to mechanically apply decontaminants and provide high pressure hot water washing.

FY97 and prior - \$6.8 million (RDT&E), FY98 - \$3.9 million (RDT&E).

The current development and test status is as follows:

Actual Engineering Design Test (EDT) - May 98; Production Qualification Test (PQT) - Jul 98; Initial Operational Test and Evalutaion (IOT&E) - May 98; and TDP will be available - Feb 99. The date for Service approval was Dec 98.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (G47001) MODULAR DECON SYSTEM			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware		A												
Decontamination Pumper - 1 per system						1184	64	18.50	1388	75	18.51	2294	124	18.50
High Pressure Washer - 2 per system						1920	128	15.00	2250	150	15.00	3720	248	15.00
2. Engineering Support						707			695			675		
3. Quality Assurance Support						486			386			298		
4. PVT						500								
5. ASIOE														
Water Tank Assembly - 2 per system						307	128	2.40	360	150	2.40	595	248	2.40
Pump, 125 GPM - 1 per system						109	64	1.70	128	75	1.71	211	124	1.70
Trailer, 3/4 ton - 3 per system						749	192	3.90	878	225	3.90	1451	372	3.90
Special Purpose, Web - 14 per system						27	896	0.03	32	1050	0.03	52	1736	0.03
TOTAL						5989			6117			9296		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (G47001) MODULAR DECON SYSTEM					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Decontamination Pumper - 1 per system FY 99	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Feb-99	Nov-99	64	18500	No	Feb-99	
FY 00	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Dec-99	Aug-00	75	18500	No	Feb-99	
FY 01	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Dec-00	Apr-01	124	18500	No	Feb-99	
High Pressure Washer - 2 per system FY 99	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Feb-99	Nov-99	128	15000	No	Feb-99	
FY 00	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Dec-99	Aug-00	150	15000	No	Feb-99	
FY 01	The Centech Gp Inc., Alexandria, VA	Option	SBCCOM	Dec-00	Apr-01	248	15000	No	Feb-99	

REMARKS: *Development contract included production options.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE						P-1 Item Nomenclature (JX0003) DE SYSTEM FIELDING SUPPORT/SPARES						
Program Elements for Code B Items:				Code:	Other Related Program Elements:							
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty											Continuing	
Gross Cost	0	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: System Fielding Support funds Total Package Fielding (TPF), First Destination Transportation (FDT) and New Equipment Training (NET) for Decontamination Systems. TPF is the standard method of fielding new equipment developed under the CDBP Modernization program. The materiel developer plans, develops, acquires and deploys the materiel systems, including Associated Support Items of Equipment (ASIOE) and Support List Allowance Cards (SLAC) items through a physical handoff to the user. TPF costs include SLAC items, deprocessing, temporary duty (TDY), salaries and managed equipment. FDT funds for transportation required to support shipment of chemical equipment from manufacturing plants and assembly points to the first point of acceptance receipt or storage point by the Government (depot), customer or port. (NOTE: Excludes transportation costs paid by a vendor as prescribed in a procurement contract). The NET process begins very early in the life cycle of a system and provides for the development of the Qualitative and Quantitative Personnel Requirement Information (QQPRI), the NET Plan, and the training courses for trainers to conduct these courses for the proper and safe use of the new equipment.

JUSTIFICATION: Funds will ensure (1) continued uninterrupted shipment of newly procured items to users in support of readiness and training, (2) continued and orderly fielding of Force Modernization Systems, and (3) transfer of knowledge from the materiel developer to the trainer, user, and other support personnel. FY00/01 provides support to the Decon App: Pwr Dr Lt Wt M17A2 and MDS.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M67401) M17 LTWT Decon System (LDS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	167		115	100	100							315
Gross Cost	4.2	0	2.6	4.8	4.7	0	0	0	0	0	0	16.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.2	0	2.6	4.8	4.7	0	0	0	0	0	0	16.3
Initial Spares												
Total Proc Cost	4.2	0	2.6	4.8	4.7	0	0	0	0	0	0	16.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M17 Lightweight Decontamination Systems are compact, engine-driven pump and water-heating units designed to decontaminate equipment. An accessory kit containing hoses, cleaning jets and personnel shower hardware supplements the basic unit. A rubberized fabric, self-supporting, collapsible tank with a capacity of 3,000 gallons is included with the system. During FY00 the Marine Corps will continue to modify M17A1s and M17A3s to M17A4s that use diesel engines.

JUSTIFICATION: The original Decontaminating Apparatus System (A/E 32U-8) was procured as a Non-developmental Item from Karl H. Hoie and Co., Norway. The M17 and M17A1 are improved versions of the A/E 32U-8. These models utilize a sole-source engine that is no longer in production or supportable from the engine manufacturer. The replacement engine has been tested and incorporated into new models, M17A2 and M17A3. Without replacement engines, older systems will need to be scrapped. The Service's ability to perform hasty decontamination will be significantly reduced. In order to meet the one fuel (diesel) forward on the battlefield by 2001, the Marine Corps will procure 100 M17A4's and modify 644 M17A1's and A3's in FY 00.

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: M17 Ltwt Decon System

MODELS OF SYSTEM AFFECTED: M17 Ltwt Decon System

DESCRIPTION/JUSTIFICATION:

The Modification Kit includes a two-cycle engine manufactured by Cuyuna, Inc. and mounting hardware. These engine modification kits will be used to upgrade older model M17 Decontaminating Apparatus Systems. The M17 utilizes a sole-source engine that is no longer in production or supportable from the engine manufacturer. The replacement engine has been tested and incorporated into new models, M17A2 and M17A3. Without replacement engines, older systems will need to be scrapped. The AF/Army's ability to perform hasty decontamination will be significantly reduced, as this system is currently the only fielded system that fills this requirement.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs						150	150	80	120	180	180	180	180	180	180	44				
Outputs							150	150	80	120	180	180	180	180	180	180	44			

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	Complete	1624
Outputs																		1624

METHOD OF IMPLEMENTATION:	ADMINISTRATIVE LEADTIME: 5 Months				PRODUCTION LEADTIME: 5 Months			
Contract Dates:	FY 1999	03/99	FY 2000	12/99	FY 2001			
Delivery Date:	FY 1999	07/99	FY 2000	03/00	FY 2001			

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): M17 Ltwt Decon System

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
PROCUREMENT																				
Kit Quantity			380	0.9	600	2.8	644	2.8											1624	6.5
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1997 & Prior Eqpt -- Kits																				
FY 1998 Eqpt -- Kits					300		80												380	
FY 1999 Eqpt -- Kits							480		120										600	
FY 2000 Eqpt -- Kits									600		44								644	
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- Kits																				
FY 2003 Eqpt -- Kits																				
FY 2004 Eqpt -- Kits																				
TC Equip-Kits																				
Total Equip-Kits					300		560		720		44								1624	
Total Procurement Cost				0.9		2.8		2.8												6.5

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M67401) M17 LTWT Decon System (LDS)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware (M17A3)			1697	115	14.76									
2. Hardware (M17A4, Marine Corps)						1850	100	18.50	1850	100	18.50			
3. PQT						80								
4. Engineering Support/Quality Assurance			32			80								
5. M17 Mod Kit (to M17A3)			832	380	2.19									
6. M17 Mod Kit (to M17A4, Marine Corps)						2663	600	4.44	2789	644	4.33			
7. Mod Kit Eng Support/Quality Assurance			37			44								
8. Technical Manuals						80								
9. FDT Costs						50			37					
TOTAL			2598			4847			4676					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M67401) M17 LTWT Decon System (LDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
M17 Mod Kit FY 98	AMW CUYUNA ENGINE CO, Beaufort, SC	LP/FP	ACALA, Rock Island, IL	Jun-98	Jan-99	380	2190	No	Jan-98	Mar-98
FY 99	TBS	C/FP	MARCORSYSCOM, Quantico, VA	Mar-99	Jul-99	600	4500	Yes		
FY 00	TBS	Option	MARCORSYSCOM, Quantico, VA	Dec-99	Mar-00	644	4500	Yes		
M17A3 Lightweight Decon FY 98	RIA, Rock Island, IL	LP/FP	ACALA, Rock Island, IL	Jan-98	Jan-99	115	14760	Yes		
M17A4 Lightweight Decon FY 99	TBS	C/FP	MARCORSYSCOM, Quantico, VA	Apr-99	Jul-99	100	18500	Yes		
FY 00	TBS	Option	MARCORSYSCOM, Quantico, VA	Jan-00	Apr-00	100	18500	Yes		

REMARKS:

Budget Line Item #68

Joint Biological Defense Program

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Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (MA0800) JOINT BIO DEFENSE PROGRAM

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	22.0	32.8	63.1	41.6	99.6	99.4	120.6	110.4	142.8	149.7	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.0	32.8	63.1	41.6	99.6	99.4	120.6	110.4	142.8	149.7	Continuing	Continuing
Initial Spares												
Total Proc Cost	22.0	32.8	63.1	41.6	99.6	99.4	120.6	110.4	142.8	149.7	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The detection component of the Joint Biological Defense Program consists of the following: (1) the land-based Biological Integrated Detection System (BIDS), (2) the airborne Long Range Biological Stand-off Detection System (LR-BSDS), (3) the sea-based Interim Biological Agent Detector (IBAD), (4) the land-based Joint Biological Point Detection System (JBPDS), (5) the Critical Reagent Program (CRP), and (6) the Air/Base Port (Portal Shield) ACTD system. BIDS is a biological detection suite employing complementary technologies to detect a limited number of agents used in large area Biological Warfare (BW) attacks, installed in a S-788 Lightweight Multipurpose Shelter mounted on a dedicated vehicle (Heavy HMMWV). The LR-BSDS NDI is a helicopter mounted, long range, large area, stand-off aerosol detector, tracker and mapper system which employs Light Detection and Ranging (LIDAR) technology to detect aerosol clouds at ranges up to 30 km. The IBAD is a shipboard-mounted point detection system consisting of a sampler, particle counter, and antibody/antigen tickets. The JBPDS is a detection suite consisting of complementary trigger, sampler, detector and identification technologies to detect and identify the full range of biological agents in real-time. The JBPDS will provide a common point detection capability for all Services and meet the Service requirements as outlined in the Joint Operational Requirements Document (JORD). The JBPDS is programmed to replace the BIDS and the IBAD and to provide the Marines and Air Force an initial detection capability. The CRP integrates and consolidates all DoD reagents/antibodies/DNA biological detection requirements (Program Definition and Risk Reduction (PDRR) through production). The CRP will ensure the availability of high quality reagents throughout the life cycle of all systems to include BIDS, JBPDS, Airbase/Port ACTD, Joint Biological Remote Early Warning System (JBREWS) and medical diagnostic kits. The Air/Base Port (Portal Shield) ACTD system is comprised of a suite of detection sensors that are networked via land line or RF communications to a computer which resides within the installation Command Post/Emergency Operations Center. The vaccine acquisition component of the Joint Biological Defense Program is focused on a prime (systems) contract approach in which the prime contractor, DynPort LLC, will manage biological defense medical products to include: program definition and risk reduction, advanced development, licensure by the Food and Drug Administration (FDA), production, stockpiling, testing, distribution and maintenance of a comprehensive database. Vaccines and defense medical products to be produced under this program include: botulinum vaccines, ricin vaccine, staphylococcal enterotoxin B (SEB) vaccine, Venezuelan Eastern Encephalitis (VEE) vaccine, combined VEE/Eastern Equine Encephalitis (EEE) /Western Equine Encephalitis (WEE) vaccine, plague vaccine, brucellosis vaccine, vaccinia vaccine, tularemia vaccine, and Q-fever vaccine. The currently licensed Anthrax vaccine will be procured through the manufacture, MBPI. Current direction is to provide 2.4M Troop Equivalent Doses (TED) against the two highest biological warfare (BW) threat agents and 0.3M TED against the other BW agents.

JUSTIFICATION: During Operation Desert Storm (ODS), a major deficiency identified was the inability of U.S. forces to effectively detect and identify Biological Warfare (BW) agents. Current national military strategy specifies a worldwide force projection capability that requires BW detection in order to protect the force against potential threats. Operational forces, across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics and other high risk missions, have the immediate need to survive and sustain operations in a biological agent threat environment. Operating forces have a critical need for defense from worldwide proliferation of BW capabilities and medical treatment of BW related casualties. The Joint Biological Defense Program will provide a tiered strategy for detection and warning comprised of complementary detection/identification systems to provide theater protection against a large area and point attacks. The other biological defense mission requirement is to provide U.S. forces with enhanced survivability and force protection through the introduction of FDA approved vaccines to protect against current and emerging threats which could be deployed against maneuver units or stationary facilities in the theater of operations.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MA0800) JOINT BIO DEFENSE PROGRAM			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Joint Bio Point Detection System									48406			53935		
Critical Reagent Program						1746			2432			1923		
Long Range Bio Standoff Det Sys									1923			11807		
Portal Shield Equipment						13936			3909			3903		
DoD Biological Vaccine Program			25685			10990			23424			27810		
Bio Integrated Detector System (BIDS)			37371			14900			19479					
TOTAL			63056			41572			99573			99378		

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					104	140	169	167	120	130	Continuing	Continuing
Gross Cost	0	0	0	0	48.4	53.9	62.1	62.3	44.3	46.0	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	48.4	53.9	62.1	62.3	44.3	46.0	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	48.4	53.9	62.1	62.3	44.3	46.0	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Joint Biological Point Detection System (JBPDS) provides continuous, rapid and fully automated collection, detection and identification of biological warfare agents (BWA). The system can be controlled and monitored locally and remotely, and automatically interfaces with global positioning, meteorological and communication systems. It is fully hardened and configured for a variety of service designated mobile platforms and battle spaces, including surface ships, wheel vehicles, fixed-sites and man portable applications. The JBPDS's four configuration specific nomenclatures are XM95 Fixed Site, XM96 Man Portable, XM97 Shelter Vehicle, and XM98 Ship. Biological Integrated Detection System (BIDS) platform, XM31E2, will be fitted to accept the XM97 JBPDS. The JBPDS provides both: (1) a means to limit the effects of BWA attacks and the potential for catastrophic effects to U.S. forces and (2) assistance to medical personnel in determining effective preventive measures, prophylaxis, and the appropriate treatment if exposure occurs. It is a first time defense capability for the US Marine Corps and US Air Force and replaces interim capabilities for the US Navy (IBADS) and US Army (BIDS NDI and BIDS P3I). Current national military strategy specifies a worldwide force projection capability that requires detection, identification, and vaccination in order to protect U.S. forces against potential BWA threats. JBPDS meets the Joint Chief's urgent need to enhance the survivability of U.S. forces and support the Office of the Undersecretary of Defense (Acquisition) mission areas #220; #225; and #276. Complete fielding of 2044 JBPDSs (113 US Marine Corps, 997 US Air Force, 320 US Navy, and 614 US Army), by FY05 is needed to satisfy Joint Operational Requirement Document, Serial Number 445-86-96. The JBPDS replaces interim systems that are dependent upon accurate intelligence, suspicious munitions or events, time consuming laboratory analysis, or the onset of illness among U.S. forces before a biological attack can be detected, and do not always provide operational commands a reliable means to effectively mitigate the possible effects of a BWA attack. The Engineering and Manufacturing Development (EMD) JBPDS prototype fully integrates a wetted wall cyclone collector (WWC), aerosol particle size (APS) counter, flow cytometer (FCM), fluid transfer system (FTS) and automated hand held assay (AHHA) reader into a biological sensor suite. The sensor suite, which is operated by two on-board controllers and a touch-pad screen display, also includes commercial telemetry, global positioning, meteorological and network modem devices. The basic suite weighs 321 lbs. and measures 38"Wx42"Hx22"D, while the portable suite weighs 211 lbs. and measures 33"Wx31"Hx32"D. The EMD JBPDS prototype also integrates a power conditioner, uninterruptable power supply, air cooler and heater into an external control unit (ECU) for stand-alone use on fixed-site and man portable platforms. The basic unit's ECU weighs 467 lbs. and measures 30"Wx30"Hx22"D, while the portable unit's ECU weighs 306 lbs. and measures 27"Wx27"Hx30"D.

JUSTIFICATION: FY00 will procure JBPDS as follows: 29 Fixed Site configured JBPDS, 12 each for Navy and 17each for Air Force; 51 Man Portable configured JBPDS, 10 each for Air Force, 10 each for Army Special Operations Force and 31 each for Marine Corps; 17 Sheltered Vehicle configured JBPDS for Army; and 7 Ship Board configured JBPDS for Navy. FY01 continues procurement of the aforementioned systems as follows: 48 Fixed Site configured JBPDS for Air Force; 32 Man Portable configured JBPDS, 19 each for Air Force, 5 each for Army Special Operations Force and 8 each for Marine Corps; 48 Sheltered Vehicle configured JBPDS, 40 each for Army, and 8 each for Marine Corps; and 12 Ship Board configured JBPDS for Navy. A total of 830 systems will be procured.

Exhibit P-40C, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	P-1 Item Nomenclature (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)
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Program Elements for Code B Items: 0604384BP, Project BJ5	Code: B	Other Related Program Elements:
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RDT&E Code B Item

The JBPDS provides a first time capability to automatically collect, detect and identify the presence of all Category A Biological Warfare Agents, as listed by the International Task Force-6 report, dated Feb 90.

FY97 and prior - \$11.8 million; FY98 - \$25.6 million; FY99 - \$29.8 million, FY00 - \$7.0, FY01 - \$6.3, FY02 - \$22.5, FY03 - \$29.7, FY04 - \$14.3

The current development and test status is as follows:

Engineering Design Test (EDT) - Mar - May 99; Production Qualification Test (PQT) - Jun - Oct 99; Initial Operational Test and Evaluation (IOT&E) - Feb - Apr 00; and Performance Based Technical Data Package (TDP) will be available - Nov 99. The projected date for Quad-Service acceptance and Milestone Decision Authority approval is Jun 00.

Remarks: Formal government testing will be performed concurrently on the XM95, XM96, XM97 and XM98.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)			Weapon System Type:			Date: February 1999		
Weapon System Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware (Integrated Suite of Components)													
XM95 Fixed Site	B							11822	29	407.66	18305	48	381.35
XM96 Man Portable	B							17154	51	336.35	10069	32	314.66
XM97 Shelter Vehicle	B							6745	17	396.76	17816	48	371.17
XM98 Ship	B							2925	7	417.86	4691	12	390.92
2. Platform - On-Site Installation & Check-out (I&C)													
XM95 Fixed Site - Mech/ Elect & Data Hook-up								170	17	10.00	432	48	9.00
XM96 Man Portable - Elect & Data Hook-up								102	51	2.00	58	32	1.81
XM97 Shelter Vehicle - Mech/Elect & Data Hook-up								170	17	10.00	432	48	9.00
XM98 Ship - Mech/Elect & Data Hook-up								420	7	60.00	648	12	54.00
3. Additional Support Items of Equipment (ASIOE)													
2 KW Generator 1 per Man Portable JBPDS								204	51	4.00	128	32	4.00
M42 Alarm								192	80	2.40	196	80	2.45
NATO Slave Cable, 1 per Man Portable & Shelter Vehicle JBPDS								72	48	1.50	130	80	1.63
4. First Article Tests								949					
5. Non-Recurring Engineering								5190					
6. Technical Manuals								847					
7. Quality Control/Eng Support								1444			1030		
TOTAL								48406			53935		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
XM95 Fixed Site (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Jun-00	Jun-01	29	420060	No	Nov-99	Nov-99
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Dec-00	Oct-01	48	392800	No	Nov-99	Nov-99
XM96 Man Portable (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Jun-00	Jun-01	51	346250	No	Nov-99	Nov-99
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Dec-00	Oct-01	32	324550	No	Nov-99	Nov-99
XM97 Shelter Vehicle (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Jun-00	Mar-01	17	409160	No	Nov-99	Nov-99
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Dec-00	Oct-01	48	384250	No	Nov-99	Nov-99
XM98 Ship (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Jun-00	Mar-01	7	480260	No	Nov-99	Nov-99
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Dec-00	Oct-01	12	449000	No	Nov-99	Nov-99

REMARKS: Components of End Item (COEI) for each configuration includes:

Identifier*	Fluid Transfer System*	Controllers*	Mini Enclosure*	Collector**	Flow Cytometer**	Trigger**	Operator Displays#	Transit Case#	Shock Isolators#	Power Conditioner#	Environmental Control Unit#	Telemetry/MET/GPS
XM95	x	x	2x	2x	x	no	x	x	no	x	x	x
XM96	x	x	2x	2x	x	x	x	no	no	x	x	x
XM97	x	x	2x	x	x	x	2x	no	x	x	x	x
XM98	x	x	2x	x	x	x	3x	no	x	x	x	x

Key: * = Developmental Item ** = Modified Commercial Off the Shelf(COTS) # = COTS

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JPO210) CRITICAL REAGENTS PROGRAM (CRP)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				78	78	45	16	16	16	16	Continuing	Continuing
Gross Cost	0	0	0	1.7	2.4	1.9	1.9	2.0	1.9	1.9	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	1.7	2.4	1.9	1.9	2.0	1.9	1.9	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	1.7	2.4	1.9	1.9	2.0	1.9	1.9	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Critical reagents are required for the detection and identification of biological warfare (BW) agents. Multiple medical and non-medical platforms require a continuous, quality supply of critical reagents for effective warning which significantly enhances force survivability. They are also required for rapid medical diagnosis and treatment of exposed personnel. The Services must avoid the Gulf War Dilemma of multiple sensors giving multiple results on the same incident. A common set of reagents for all platforms is required. The Critical Reagent Program (CRP) will ensure the quality and availability of reagents that are critical to the successful development, test and operation of biological warfare detection systems and medical biological products. The CRP integrates and consolidates all DoD reagents/antibodies/DNA biological detection requirements (PDRR through production).The CRP will ensure the availability of high quality reagents, Hand Held Immunochromatographic Assays (HHA), throughout the life cycle of all systems managed by the Joint Program Office for Biological Defense to include BIDS, IBADS, JBPDS, Airbase/Port Advanced Concepts Technology Demonstration (ACTD), and the Joint Biological Remote Early Warning System (JBREWS). The CRP also supports the Navy Forward deployed Lab, the Theater Army Medical Lab (TAML), the Army Technical Escort Unit (TEU), the Marine Corps Chemical-Biological Incident Response Force (CBIRF), other counter-terrorist and special reconnaissance teams, and foreign countries. The CRP is also responsible for the production of Hand Held Immunochromatographic Assays (HHA).

JUSTIFICATION: FY 00 procurement will be 78 grams of antibody per threat agent for six agents; this is enough to support the 10 million assay requirement for FY 00; produce 32,000 gene probe/primer assays to meet operational requirements; and produce 1080 mg of antigen for the production of 6 new antibody based assays. FY 01 funds procure 45 grams antibody, 20000 gene probe/primer assays, and 1080mg of antigen for the production of antibody assays.

Exhibit P-40C, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	P-1 Item Nomenclature (JPO210) CRITICAL REAGENTS PROGRAM (CRP)
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Program Elements for Code B Items: 0604384BP, Project BJ5	Code: B	Other Related Program Elements:
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RDT&E Code B Item

The Critical Reagent Program (CRP) will ensure the quality and availability of reagents that are critical to the successful development, test and operation of biological warfare detection systems and medical biological products.

FY98-\$2.6; FY99-\$3.9M; FY00-\$3.0M; FY01-\$1.1M; FY02-\$1.1M; FY03-\$1.2M; FY04-\$1.1M; FY05-\$1.2M

FY98-Produced reagents in support of testing and development of the Portal Shield, the BIDS P3I, and the JBPDS. Established a limited prototype production line for HHAs. Provided HHAs in support of Operation Desert Thunder, to support the Army's BIDS, the Navy's IBAD and 2 foreign militaries. Began planning and budgeting for an antibodygene probe and primer repository at ERDEC and an agent/interferent repository at DPG.

FY99-Develop 4-5 new antibody based reagents to support the development of the Airbase/Port (Portal Shield) and Joint Biological Point Detection System (JBPDS) Block I.

FY00-Develop traditional antibodies against 4-5 threat agents, recombinant antibodies against 1 agent and gene/probes/primers against 3 agents in support of JPO-BD managed Bio defense systems.

FY01-Develop antibodies against 4 agents, recombinant antibodies against 1 agent, and gene probe/primers for 3 agents in support of JPO-BD managed programs.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO210) CRITICAL REAGENTS PROGRAM (CRP)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Antibodies (grams)						1120	78	14.36	1167	78	14.96	720	45	16.00
Gene Probes and Primers (per thousand assays)									471	32000	0.01	320	20000	0.02
Target Agents (milligrams)						308	1080	0.29	263	890	0.30	333	1080	0.31
Production Support						37			50			50		
Repository Costs						281	1	281.00	481	2	240.50	500	2	250.00
TOTAL						1746			2432			1923		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (IPO210) CRITICAL REAGENTS PROGRAM (CRP)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Anti-bodies* FY 99	National Micrographics Systems, Silver Spring, MD	C/FFP	Fort Detrick, MD	Jan-99	Jun-99	78	14360	Yes		
FY 00		TBD	Fort Detrick, MD	Oct-99	Jan-00	78	14960	Yes		
FY 01		TBD	Fort Detrick, MD	Oct-00	Jan-01	45	16000	Yes		
Gene Probe/Primers** FY 00	TBS	C/FFP	JPO-BD	Oct-99	Jan-00	32000	10	No		
FY 01		C/FFP	Fort Detrick, MD	Oct-00	Jan-01	20000	20	No		
Target Agents*** FY 99	US Army Dugway Proving Ground (DPG) UT	C/FFP	Fort Detrick, MD	Oct-98	Dec-98	1080	290	Yes		
FY 00		C/FFP	Fort Detrick, MD	Oct-99	Dec-99	890	300	Yes		
FY 01		C/FFP	Fort Detrick, MD	Oct-00	Dec-01	1080	310	Yes		

REMARKS: *Anti-body quantities are in grams.
**Gene probe/primers quantities are in thousands-assays.
*** Target Agent quantities are in milligrams

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBSDS)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty						3	3					6
Gross Cost	0	0	0	0	1.9	11.8	11.9	0	0	0	0	25.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	1.9	11.8	11.9	0	0	0	0	25.6
Initial Spares												
Total Proc Cost	0	0	0	0	1.9	11.8	11.9	0	0	0	0	25.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Counterproliferation (CP) Long Range Biological Standoff Detection System (LRBSDS), XM94E1, is a helicopter-mounted, long-range, large-area standoff aerosol detector, tracker and mapper system. The system employs Light Detection and Ranging (LIDAR) technology which detects aerosol clouds at ranges up to 50 km or more. The detector has three major components: a pulsed-infrared laser transmitter, a receiving telescope and an information processor integrated into a frame.

JUSTIFICATION: The CP-LRBSDS, XM94E1, provides commanders with an effective system to detect the presence of a BW aerosol at a standoff distance and provide advanced warning to U.S. forces. Advanced warning will provide commanders with adequate decision time to mitigate the potential effects of a BW attack. The primary purpose of the CP-LRBSDS is to limit the effects of large area coverage biological agent attacks which have the potential for catastrophic effects to U.S. forces at the operational level of war. The XM94 was fielded in FY97 to meet the interim requirements for LRBSDS. The XM94E1 will replace the XM94 and will improve performance and meet the CP-LRBSDS objective requirements with longer detection range, an eye-safe transmitter, automatic discrimination of aerosol clouds, stabilized platform and a reduction from two operators to one. FY00 will procure diodes for laser to be used in FY01 and FY02 CP-LRBSDS. FY 01 funding procures 3 CP-LRBSDSs, equipment for training, additional support items and spare parts.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBSDS)

Program Elements for Code B Items:

063884BP, ProjCP4/0604384BP, ProjCP5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The Counterproliferation (CP) Long Range Biological Standoff Detection System (LRBSDS), XM94E1, is a helicopter-mounted, long-range, large-area standoff aerosol detector, tracker and mapper system. The system employs Light Detection and Ranging (LIDAR) technology which detects aerosol clouds at ranges up to 50 km or more.

FYs: 1998 - \$12.8; 1999 - \$11.1; 2000 - \$2.7

EDT: Nov 98 - Aug 99

Developmental Testing: Jul 99

Operational Testing: Mar 00 - Jun 00

FUE: 1st Quarter FY01 (RDTE prototypes)

TC: 4th Quarter FY00

FUE: 3rd Quarter FY02 (Production units)

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO220) LONG RANGE BIO S/OFF DET SYS (LRBSDS)			Weapon System Type:			Date: February 1999		
Weapon System Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
CP LRBSDS SYSTEMS													
1. Hardware													
ASIOE								360			360		
CP LRBSDS System											7650	3	2550.00
Diodes for Lasers								1350	1920	0.70			
Initial Spare Parts											900		
2. Institutional Training													
Institutional Trainer											500	1	500.00
Instructor Station											500	1	500.00
New Equipment Training											200		
3. Engineering Support													
In-House								193			1047		
Other Government Agencies								20			100		
Quality Assurance*											550		
*NOTE: Quality Assurance in FY01 is for Physical Configuration Audit/Functional Configuration Audit													
TOTAL								1923			11807		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CP LRBSDS Laser Diodes FY 00	Spectral Diode Labs, San Jose, CA	SS/FP	SBCCOM, APG, MD	Dec-99	Mar-00	1920	703	Yes		
CP LRBSDS Systems FY 01	Schwartz Electro Optics, Orlando, FL	SS/FP	SBCCOM, APG, MD	Oct-00	Jan-02	3	2550000	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JPO230) Portal Shield Equipment

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				70								70
Gross Cost	0	0	0	13.9	3.9	3.9	3.9	0	0	0	0	25.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	13.9	3.9	3.9	3.9	0	0	0	0	25.6
Initial Spares												
Total Proc Cost	0	0	0	13.9	3.9	3.9	3.9	0	0	0	0	25.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Air/Base Port (Portal Shield) ACTD system is comprised of a suite of detection sensors that are networked via land line or RF communications to a computer which resides within the installation Command Post (CP)/Emergency Operations Center (EOC). The system uses algorithms and decision logic to minimize false alarms and to provide installation commanders with automated detection and warning of Biological Warfare (BW) attacks. The Portal Shield ACTD prototypes provide a new capability to installation commanders. There are no other systems capable of providing reliable point detection of BW attack in the US inventory. The Portal Shield ACTD has successfully demonstrated the ability to provide critical force protection of CINC designated high-value, fixed-site assets.

JUSTIFICATION: In response to Operational Needs Statements from each of the sponsoring CINCs the JPO-BD has been directed to fabricate, install, and support additional Portal Shield systems to protect military sites in CENTCOM and PACOM areas of responsibility.

NOTE: The Portal Shield program was initiated in FY96 as an Advance Concept Technology Demonstration (ACTD) program for Biological Detection of high-value CINC fixed sites (airbases, ports). The Mark II prototype systems was successfully tested for operational utility in September 1997 at Dugway Proving Ground, Utah. The Mark II prototype system was successfully deployed to Kuwait in February 1998 in support of Operational Desert Thunder. The Quadrennial Defense Review (QDR) provided \$26 million for additional systems that would begin production in FY99.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO230) Portal Shield Equipment			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Fabrication		B				10850	70	155.00						
Management/Engineering Support						2382			1336			1372		
System Fielding						221			157			12		
Initial Spares						196								
Technical/Program Documentation						108			116			119		
Contractor Logistics Support (CLS)						179			2300			2400		
TOTAL						13936			3909			3903		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JPO230) Portal Shield Equipment					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Sensors FY 99	Camber Corp. Inc.	SS/FFP	JPO-BD, Washington, DC	Jan-99	Jul-99	70	155000	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JX0005) DoD Biological Vaccine Procurement

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	11.8	25.7	11.0	23.4	27.8	40.7	46.0	61.4	64.7	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	11.8	25.7	11.0	23.4	27.8	40.7	46.0	61.4	64.7	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	11.8	25.7	11.0	23.4	27.8	40.7	46.0	61.4	64.7	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The vaccine acquisition component of the Joint Biological Defense Program is focused on a prime (systems) contract approach in which the prime contractor will manage biological defense medical products to include: program definition and risk reduction, advanced development, licensure by the Food and Drug Administration (FDA), production, stockpiling, testing, distribution and maintenance of a comprehensive database. Vaccines and defense medical products to be produced under this program include: botulinum vaccines, ricin vaccine, staphylococcal enterotoxin B (SEB) vaccine, Venezuelan Eastern Encephalitis (VEE) vaccine, combined VEE/Eastern Equine Encephalitis (EEE)/Western Equine Encephalitis (WEE) vaccine, plague vaccine, brucellosis vaccine, vaccinia vaccine, tularemia vaccine, and Q-fever vaccine. The currently licensed Anthrax vaccine will be procured through the manufacturer, BioPort (formally Michigan Biologic Products Institute (MBPI)). The current direction is to provide 2.4M Troop Equivalent Doses (TED) of licensed anthrax vaccine. All other requirements are based on 1.2M TEDs for high biological warfare (BW) threats, and 0.3 TEDs for lower BW threats.

JUSTIFICATION: Operating forces have a critical need for defense from worldwide proliferation of biological warfare capabilities. The medical portion of the Joint Biological Defense Program provides U.S. forces with FDA approved vaccines to protect against current and emerging threats which could be deployed against maneuver units or stationary facilities in the theater of operations. FY00 funding will procure 26 lots (200K to 250K doses per lot) of anthrax vaccine and 1 lot (6000 doses) of Vaccinia Immune Globulin (VIG). FY01 funding will procure 13 lots of anthrax vaccine and 1 lot (200K doses) of Q-Fever vaccine.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JX0005) DoD Biological Vaccine Procurement			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Vaccinia Immune Globulin (VIG) Production (1 lot - 6000 doses)									2000	1	2000.00			
Q-Fever Vaccine Production (1 lot - 200K TED)												4290	1	4290.00
Vaccine Production Lots of Anthrax Vaccine (1 lot~200K to 250K doses)			6004	3	2001.33	10900	12	908.33	12204	26	469.38	13018	13	1001.38
Vaccine and Anti-Sera Storage and Testing			4242			90			2924			5820		
Anthrax Vaccine Production Facility Improvement and FDA Compliance Issues			15439						6296			4682		
TOTAL			25685			10990			23424			27810		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JX0005) DoD Biological Vaccine Procurement					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Anthrax Vaccine Production FY 98	(MBPI) Bioport, Lansing, MI	SS/FFP	USAMRAA, Fort Detrick, MD	Jan-98	Aug-98	3	2001333	Yes		
FY 99	Bioport, Lansing, MI	Option	USAMRAA, Fort Detrick, MD	Oct-98	Feb-99	12	908333	Yes		
FY 00	Bioport, Lansing, MI	Option	USAMRAA, Fort Detrick, MD	Oct-99	Jan-00	26	469385	Yes		
FY 01	Bioport, Lansing, MI	SS/FFP	USAMRAA, Fort Detrick, MD	Oct-00	Jan-01	13	1001385	Yes		
Q-Fever Vaccine Production FY 01	DynPort LLC, Reston, VA	C/FFP	USAMRAA, Fort Detrick, MD	Apr-01	Apr-02	1	4290000	Yes		
Vaccine Immune Globulin (VIG) Manufacture FY 00	Baxter, Los Angeles, CA	C/FFP	USAMRAA, Fort Detrick, MD	Sep-00	Sep-01	1	2000000	Yes		

REMARKS: FY 01 - New contract to be negotiated with BioPort, LLC for Anthrax production beginning FY 01. The sale of MBPI and FDA compliance efforts at MBPI have influenced production capabilities and are estimated to increase significantly the costs per lot for Anthrax vaccine.

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	17	14	28	21	20							69
Gross Cost	22.0	20.9	37.4	14.9	19.5	0	0	0	0	0	0	114.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.0	20.9	37.4	14.9	19.5	0	0	0	0	0	0	114.7
Initial Spares												
Total Proc Cost	22.0	20.9	37.4	14.9	19.5	0	0	0	0	0	0	114.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Biological Integrated Detection System (BIDS) is an early warning and identification capability in response to a large area (theater) Biological Warfare (BW) attack. The system is a detection suite installed in a shelter which is mounted on a dedicated vehicle with generator and trailer power supply. Other BIDS elements include collective protection, environmental control, and storage for supplies, mission equipment, and materials. The BIDS pre-planned product improvement (P3I) system will be equipped with a detection suite to include a particle sampler, particle counter/sizer, biological detector and chemical-biological mass spectrometer. The shelter may be removed from the vehicle for fixed site application. The BIDS program is conducted in two phases. Phase I was the non developmental item (NDI) BIDS. Phase II is the P3I which will provide technology insertion to upgrade from concurrent developmental efforts for the NDI (four agent detection capability) core configuration to an eight agent detection capability. The acquisition plan to procure the BIDS is phased as follows: (1) 41 NDI BIDS and (2) 42 P3I BIDS. The JBPDS is a detection suite consisting of complementary trigger, sampler, detector and identification technologies to detect and identify the full range of biological agents in real-time. The JBPDS will provide a common point detection capability for all Services and meet the Service requirements as outlined in the Joint Operational Requirements Document (JORD). The JBPDS is programmed to replace the BIDS and the IBAD and to provide the Marines and Air Force an initial detection capability. JBPDS Army platform production will begin in FY99 to ensure availability for integration of the JBPDS beginning in FY01.

JUSTIFICATION: BIDS P3I is phase II of the two phased BIDS acquisition strategy. Phase II fields a core of BIDS P3I with an eight agent detection capability. The FY00 quantity is 20 Army platforms for the JBPDS.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)			Weapon System Type:			Date: February 1999		
Weapon System Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Mil Std Equipment													
S788 LW Multipurpose Shelter		518	21	24.67	700	28	25.00	331	13	25.46			
2. Commercial Equipment													
HF Radio		2172	30	72.40	2055	28	73.39	971	13	74.69			
UV Aerosol Particle Sizer		4783	37	129.27									
Mini Flow Cytometer		2847	37	76.95									
CB Mass Spectrometer		7386	30	246.20									
Bio Detector		3990	30	133.00									
Biological Samplers		2315	111	20.86									
3. Auxiliary Equipment		1333	28	47.61	1830	21	87.14	1471	20	73.55			
4. In-house Assembly of P3I BIDS		6246	28	223.07									
5. In-House Assembly of JBPDS Platforms					4749	21	226.14						
6. Contractor Assembly of JBPDS Platforms								5451	20	272.55			
7. Eng/QA/Sys Fielding Support		4581			5566			8829					
8. Testing		1200											
9. War Stock								2426					
Note: There will be a total of 42 BIDS P3I Systems. For each system, 13 extra items have been purchased (5 for training, 8 for spares)													
TOTAL		37371			14900			19479					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
BIDS P3I Assembly FY 98	SBCCOM, APG, MD	In-house	SBCCOM, APG, MD	Jan-98	Nov-98	28	305000	Yes		
JBPDS Platforms Assembly FY 99	SBCCOM, APG, MD	In-House	SBCCOM, APG, MD	Sep-99	Feb-00	21	226200	No		
FY 00	TBS	C/FFP	SBCCOM, APG, MD	Dec-99	Dec-00	20	272500	No		Dec-99

REMARKS: The JBPDS Platform design will include items common to the P3I BIDS. Fabrication of these items can begin prior to final approval of the complete JBPDS Platform design.

Budget Line Item #69

Collective Protection

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Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(PA1600) COLLECTIVE PROTECTION

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	11.1	5.3	24.3	20.3	36.7	38.5	39.9	38.5	45.1	44.7	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	11.1	5.3	24.3	20.3	36.7	38.5	39.9	38.5	45.1	44.7	Continuing	Continuing
Initial Spares												
Total Proc Cost	11.1	5.3	24.3	20.3	36.7	38.5	39.9	38.5	45.1	44.7	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of the Chemical/Biological (CB) Collective Protection program is to provide CB Collective Protection systems. The CB Collective Protection systems will be smaller, lighter, less costly and more easily supported logistically at the crew, unit, ship and aircraft level. Collective protection platforms include shelters, vehicles, ships, aircraft, buildings and hospitals.

JUSTIFICATION: Operational forces across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions have an immediate need to safely operate, survive and sustain operations in a nuclear, biological and chemical agent threat environment. Operating forces have a critical need for defense against worldwide proliferation of NBC warfare capabilities and for medical treatment facilities.

Exhibit P-40M, Budget Item Justification Sheet						Date: February 1999					
Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE				P-1 Item Nomenclature (PA1600) COLLECTIVE PROTECTION							
Program Elements for Code B Items:			Code:	Other Related Program Elements:							
Description		Fiscal Years									
OSIP NO.	Classification		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	TC	Total
Collective Protection Amphib Backfit (LHD)			0.0	0.0	11.7	11.6	10.9	8.8	8.6	10.0	61.6
Collective Protection Amphib Backfit (LSD)			0.0	0.0	0.4	6.3	3.5	3.6	3.5	1.0	18.3
Collective Protection Amphib Backfit (LHA)			0.0	0.0	0.0	0.4	4.0	5.1	7.5	21.0	38.0
JCPE			0.0	0.0	1.2	1.1	0.7	0.7	2.7	0.0	6.4
Totals			0.0	0.0	13.3	19.4	19.1	18.2	22.3	32.0	124.3

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (PA1600) COLLECTIVE PROTECTION			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Collectively Protected Deployable Medical System									2768			2902		
Transportable Coll. Prot. Sys.			4730			3878			6581					
Navy Shore Equipment			334									1562		
Collective Prot Amphibious Backfit									12157			18305		
Joint Coll Prot System & Improvements									1202			1059		
CO System Fielding Support/Spares			24											
CB Protective Shelter (CBPS)			19192			16419			14024			14642		
TOTAL			24280			20297			36732			38470		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JCP001) COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					4	5	3					12
Gross Cost	0	0	0	0	2.8	2.9	2.0	0	0	0	0	7.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	2.8	2.9	2.0	0	0	0	0	7.7
Initial Spares												
Total Proc Cost	0	0	0	0	2.8	2.9	2.0	0	0	0	0	7.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Collectively Protected Deployable Medical System (CP DEPMEDS) is a kit that will be fielded with selected fielded DEPMEDS hospitals to convert the hospital into a fully operational environmentally controlled, collectively protected medical treatment facility. The requirement is to be able to sustain medical operations in a CB environment for 72 hours. The following components are required to be added to existing DEPMEDS hospitals to provide a fully operational collectively protected field hospital: M28 Simplified Collective Protection Equipment, CB hardened ISO Shelter Seals, CB Protected Water Distribution System, CB Protected Latrines, Low Pressure Alarms and CB Protected Environmental Control Units and Heaters.

JUSTIFICATION: Currently fielded DEPMEDS hospitals do not have the ability to sustain medical operations in a CB environment. There is a critical need for medical functions requiring the need for removal of individual protective clothing and masks. This is a critical capability required. FY00/01 funds are to be used to complete procurement of components required to provide a fully operational collectively protected field hospital.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JCP001) COLLECTIVELY PROT DEPLOYABLE MED SYS			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. CPDEPMEDS														
M28 SCPE								350	4	87.50	438	5	87.60	
CB Water Distribution								104	4	26.00	130	5	26.00	
CB Latrines								760	4	190.00	950	5	190.00	
CB ISO Shelters								304	4	76.00	380	5	76.00	
Low Pressure Alarms								116	4	29.00	145	5	29.00	
Overpack/Accessory Kit								320	4	80.00	400	5	80.00	
Assemblage								20	4	5.00	25	5	5.00	
2. Engineering														
Government								655			434			
Contractor														
3. Data								139						
TOTAL								2768			2902			

Exhibit P-5a, Budget Procurement History and Planning

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JCP001) COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CPDEPMEDS FY 00	TBS	C/FFP	SBCCOM	Jan-00	Sep-00	4	493500	No	Nov-99	
FY 01	TBS	OPTION	SBCCOM	Dec-00	Jun-01	5	493600	No	Nov-99	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JF0102) TRANSPORTABLE COLLECTIVE PROT SYS

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	4.7	3.9	6.6	0	0	0	0	0	0	15.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	4.7	3.9	6.6	0	0	0	0	0	0	15.2
Initial Spares												
Total Proc Cost	0	0	4.7	3.9	6.6	0	0	0	0	0	0	15.2
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Transportable Collective Protective System program supports HQ PACAF/CE by procuring components and assembling them into transportable kits that will provide Chemical Biological (CB) collective protection facilities when deployed in high threat CB theaters. Each kit uses the M28 CPE liner system (TEMPER tent liner/suspension systems, and if necessary, tent material) that is designed to provide CB protection for the Army Deployable Medical Systems. In addition, each kit contains the necessary CB filtration; air distribution, conditioning, and pressurization (Chem-Bio Hardened Air Mgt Plant); and the chemical air processing systems (for personnel decontamination). The components will be assembled into three kit types. One configuration uses a 64-foot TEMPER tent (with M28 CB liners) for stand-alone protection and will be used primarily for training. The second configuration allows a larger personnel capacity and provides operational stand-alone protection with a 96-foot TEMPER tent (with M28 CB liners). The third configuration furnishes components for collective protection in existing non-CB protected facilities and it renders the largest personnel protection capacity.

JUSTIFICATION: USAF currently has a requirement for both fixed and transportable collective protection facilities to assist in sustaining air operations in a chemical or biological environment. Collective protection (fixed and transportable) is required to support all AF mission functions in a CB environment and/or to provide toxic-free areas for rest and relief for the general airbase population. Collective protection is essential to ensure the AF can execute its core capabilities. FY00 supports this effort with the procurement of an additional 23 systems.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JF0102) TRANSPORTABLE COLLECTIVE PROT SYS			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware														
Chem-Bio Hardened Air Mgt Plant			1890	21	90.00	1649	17	97.00	2622	23	114.00			
Collective Protection Equipment			2002			1519			2791					
Misc Shelter Equipment			446			247			478					
2. Engineering Support			331			340			506					
3. Assembly			61			123			184					
TOTAL			4730			3878			6581					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JF0102) TRANSPORTABLE COLLECTIVE PROT SYS					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware-CB Hardened Air MGT Plant FY 98	Engineered Air Systems, St. Louis, MO	C/FP	Brooks AFB, TX	Apr-98	Jan-99	21	90000	Yes	Jan-98	Feb-98
FY 99	Engineered Air Systems, St. Louis, MO	Option	Brooks AFB, TX	Feb-99	Oct-99	17	97000	Yes		
FY 00	Engineered Air Systems, St. Louis, MO	Option	Brooks AFB, TX	Dec-99	Jun-00	23	114000	Yes		

REMARKS: Besides the CB defense program, the contractor is providing the same system for the CHATH program. CHATH is procuring 107 systems in FY98, 11 systems in FY99 and 0 systems in FY00. Thus, the unit cost growth shown is due to the fact the contractor is manufacturing 82 less systems from FY98 to FY00.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JN0012) NAVY SHORE EQUIPMENT

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0.3	0	0	1.6	2.3	3.8	0	0	0	8.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0.3	0	0	1.6	2.3	3.8	0	0	0	8.0
Initial Spares												
Total Proc Cost	0	0	0.3	0	0	1.6	2.3	3.8	0	0	0	8.0
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Naval Shore Equipment provides for initial outfitting of collective protection shelters/structures for Naval Construction Force and Naval Overseas Shore Activities as required by the Naval Facilities Engineering Command's Table of Allowance (TOA).

JUSTIFICATION: FY01 funding procures Collective Protection Shelters Systems for Naval Support Element, Naval Construction Force, Maritime Pre-positioned Force, and Naval Overseas Shore activities.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JN0012) NAVY SHORE EQUIPMENT			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
M20A1 Shelter			334	40	8.35									
Collective Protection Shelter System												1512	88	17.18
Support Costs												50		
Note: FY98 support costs shown in JN0013 (Individual Protective Gear) line														
TOTAL			334									1562		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JN0012) NAVY SHORE EQUIPMENT					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Collective Protection Shelters FY 01	TBS	C/FP	TBS	Jan-01	Apr-01	88	1700	Yes		
M20A1 Shelter FY 98	TBS	C/FP	TACOM-ACALA Rock Island IL	Jul-99	Oct-99	40	8350	Yes		

REMARKS: The decision as to which CBR shelter system to procure in FY01 is pending.

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JN0014) COLLECTIVE PROT SYS AMPHIB BACKFIT

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	0	12.2	18.3	18.4	17.5	19.6	19.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	12.2	18.3	18.4	17.5	19.6	19.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	12.2	18.3	18.4	17.5	19.6	19.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The anticipated threat of weapons of mass destruction (WMD) has reinforced the need to provide better defensive measures to protect personnel and vital ship spaces from toxic chemical, biological agents and radioloical fallout. The Collective Protection System (CPS) Backfit Program was funded as a result of the Quadrennial Defense Review (QDR) for installation of CPS in mission critical medical and command and control spaces on three Navy amphibious ship classes: LHA, LHD, and LSD. CPS is integrated with the ship's Heating Ventilation and Air-conditioning (HVAC) systems and provides filtered supply air for over-pressurization of specified shipboard zones to keep contamination from entering protected spaces. CPS eliminates the need for the ship's crew to wear protective gear (ie. suits, masks). CPS will be backfitted on high priority ships and is adaptable to any ship air flow requirements.

JUSTIFICATION: The primary objective of the CPS Backfit Program is to provide collective protection to mission critical operational spaces and crew sustainability spaces on selected amphibious ship classes. Naval ships that operate in high threat areas will receive backfit priority.

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Collective Protection System Amphibious Backfit (LHD), Medical Space, CIC installation

MODELS OF SYSTEM AFFECTED: Landing Dock Helicopter (LHD) class ship, Medical Space, Combat Information Center (CIC) Backfit

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (CPS) will be installed on the Landing Dock Helicopter (LHD) ship class (LHD 1-6) in high priority medical space, and Combat Information Center (CIC). CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availabilities.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

- 1992 - SACPS accomplished milestone III
- 1993 - CPS accomplished milestone IIIB
- 1994-1998 - CPS design improvements
- 1996 - SACPS installed on LHA-2, LHA-4 Combat Information Center (CIC), and Radar room
- 1997 - Quadrennial Defense Review cites need for additional ship backfits

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs											3				2		1			
Outputs															1			1		

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	Complete	6
Outputs		1					1			1				1				6

METHOD OF IMPLEMENTATION:	In House / Contractor	ADMINISTRATIVE LEADTIME:	3 months	PRODUCTION LEADTIME:	6 months
Contract Dates:	FY 1999 N/A	FY 2000	01/00	FY 2001	01/01
Delivery Date:	FY 1999 N/A	FY 2000	06/00	FY 2001	06/01

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Collective Protection System Amphibious Backfit (LHD), Medical Space, CIC installation

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment							3	5.2	2	2.3	1	1.4							6	8.9
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data								5.4		1.3		1.3		1		1				10
Training Equipment																				
Support Equipment																				
Other								1.1		2.1		2.3		2		2				9.5
Interim Contractor Support																				
Installation of Hardware																				
FY 1997 & Prior Eqpt -- Kits																				
FY 1998 Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits									1	5.9	1	5.9	1	5.8					3	17.6
FY 2001 Eqpt -- Kits															1	5.6	1	5	2	10.6
FY 2002 Eqpt -- Kits																	1	5	1	5
FY 2003 Eqpt -- Kits																				
FY 2004 Eqpt -- Kits																				
TC Equip-Kits																				
Total Equip-Kits									1	5.9	1	5.9	1	5.8	1	5.6	2	10	6	33.2
Total Procurement Cost								11.7		11.6		10.9		8.8		8.6		10		61.6

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Collective Protection System Amphibious Backfit (LSD) class (CIC), Berthing, Installation

MODELS OF SYSTEM AFFECTED: Landing Dock Ship (LSD) Class, Combat Information Center (CIC), Berthing, Backfit

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (CPS) will be installed on the Landing Ship Dock (LSD) ship class (LSD -41, -42, -43) in mission critical Combat Information Center (CIC) and Berthing spaces. CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availabilities.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

- 1992 - SACPS accomplished milestone III
- 1993 - CPS accomplished milestone IIIB
- 1994-1998 - CPS design improvements
- 1996 - SACPS installed on LHA-2, LHA-4 Combat Information Center (CIC), and Radar room
- 1997 - Quadrennial Defense Review cites need for additional ship backfits

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals															3					
Inputs																				
Outputs																				

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	Complete	3
Outputs		1				1				1								3

METHOD OF IMPLEMENTATION:	In-House / Contractor	ADMINISTRATIVE LEADTIME:	3 months	PRODUCTION LEADTIME:	6 months
Contract Dates:	FY 1999 N/A	FY 2000	N/A	FY 2001	01/01
Delivery Date:	FY 1999 N/A	FY 2000	N/A	FY 2001	06/01

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Collective Protection System Amphibious Backfit (LSD) class (CIC), Berthing, Installation

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment									3	2.3									3	2.3
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data										2.9	2.1		1.4		1.4					7.8
Training Equipment																				
Support Equipment																				
Other							0.4		1.1		1.4		1		1					4.9
Interim Contractor Support																				
Installation of Hardware																				
FY 1997 & Prior Eqpt -- Kits																				
FY 1998 Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits													1	1.2	1	1.1	1	1	3	3.3
FY 2002 Eqpt -- Kits																				
FY 2003 Eqpt -- Kits																				
FY 2004 Eqpt -- Kits																				
TC Equip-Kits																				
Total Equip-Kits													1	1.2	1	1.1	1	1	3	3.3
Total Procurement Cost							0.4		6.3		3.5		3.6		3.5		1			18.3

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Collective Protection System Amphibious Backfit (LHA) class (CIC), Berthing, Medical, Installation

MODELS OF SYSTEM AFFECTED: Landing Assault Helicopter (LHA) Class, Combat Information Center (CIC), Berthing, Medical space backfit

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (CPS) will be installed on the Landing Helicopter Assault (LHA) ship class (LHA 1-5) in mission critical Combat Information Center (CIC), Berthing, and Medical Spaces. CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availabilities.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

- 1992 - SACPS accomplished milestone III
- 1993 - CPS accomplished milestone IIIB
- 1994-1998 - CPS design improvements
- 1996 - SACPS installed on LHA-2, LHA-4 Combat Information Center (CIC), and Radar room
- 1997 - Quadrennial Defense Review cites need for additional ship backfits

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs																				
Outputs																			1	

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs			1			3														
Outputs									1			1		1		1			1	

METHOD OF IMPLEMENTATION:	In-House / Contractor	ADMINISTRATIVE LEADTIME:	3 months	PRODUCTION LEADTIME:	6 months
Contract Dates:	FY 1999	FY 2000		FY 2001	
Delivery Date:	FY 1999	FY 2000		FY 2001	

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Collective Protection System Amphibious Backfit (LHA) class (CIC), Berthing, Medical, Installation

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment											1	1.8	1	1.8	3	3.4			5	7
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data												1.1		1.8		2.1				5
Training Equipment																				
Support Equipment																				
Other									0.4		1.1		1.5		2					5
Interim Contractor Support																				
Installation of Hardware																				
FY 1997 & Prior Eqpt -- Kits																				
FY 1998 Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- Kits																				
FY 2003 Eqpt -- Kits																	2	8.5	2	8.5
FY 2004 Eqpt -- Kits																3	12.5	3	12.5	
TC Equip-Kits																				
Total Equip-Kits																5	21	5	21	
Total Procurement Cost									0.4		4		5.1		7.5		21		38	

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JN0017) JOINT COLLECTIVE PROT SYSTEMS & IMPROVEMENTS

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	0	1.2	1.1	0.7	0.7	4.5	4.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	1.2	1.1	0.7	0.7	4.5	4.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	1.2	1.1	0.7	0.7	4.5	4.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of this program is to procure equipment to support the requirement for Chemical/Biological (CB) Collective Protection systems. Systems to be fielded include:

- (1) Joint Collective Protection Equipment (JCPE) provides needed improvements and cost saving standardization to currently fielded systems. JCPE will use the latest technologies in filtration, shelter materials, and environmental controls to provide affordable, lightweight, easy to operate and maintain equipment.
- (2) Joint Transportable Collective Protection Shelter (JTCOPS) is a lightweight, modular, self-supporting collective protection shelter system that will provide relief from psychological and physiological stresses during sustained operations in a contaminated environment. It will be used as stand-alone billeting, medical, and operational facilities, or within fixed facilities to take advantage of existing structures. It will be equipped with environmental control, NBC filters and blowers, and power generation systems.

JUSTIFICATION: FY00 - FY01 JCPE funds will be used to initiate procurement of improved filters, motor blowers, environmental control units, and auxiliary power units for existing fielded equipment (M20A1, M28, fixed sites, etc.).

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JN0017) JOINT COLLECTIVE PROT SYSTEMS & IMPROVEMENTS

Program Elements for Code B Items:

0604384BP, Project C05

Code:

B

Other Related Program Elements:

RDT&E Code B Item

Joint Collective Protection Equipment (JCPE) provides needed improvements and cost saving standardization to currently fielded systems. Joint Transportable Collective Protection Shelter (JTCOPS) is a lightweight, modular, self-supporting collective protection shelter system that will provide relief from psychological and physiological stresses during sustained operations in a contaminated environment.

JCPE: FY00 - \$2.4; FY01 - \$2.6; FY02 - \$2.5; FY03 - \$2.3; FY04 - \$2.4; FY05 - \$2.5
 FY01 - Complete development of motor blower, HEPA filter, and APU/ECU improvements.

JTCOPS: FY00 - \$2.6; FY01 - \$3.1; FY02 - \$3.0; FY03 - \$2.6; FY04 - \$2.2; FY05 - \$2.8
 FY01 - Select and acquire components
 FY01/02 - Test components
 FY02/03 - PPT/Log Demo
 FY03 - Conduct IOT&E

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Joint Collective Protection Equipment

MODELS OF SYSTEM AFFECTED: Multiple Collective Protection Systems

DESCRIPTION/JUSTIFICATION:

DESCRIPTION: The objective of this program is to procure equipment to support the requirement for Chemical/Biological (CB) Collective Protection Systems. Systems to be fielded include:

(1)Joint Collective Protection Equipment & Improvements (JCPE) provides needed improvements and cost saving standardization to currently fielded systems. JCPE will use the latest technologies in filtration, shelter materials, and environmental controls to provide affordable, lightweight, easy to operate and maintain equipment.

JUSTIFICATION: FY00 - FY01 JCPE funds will be used to initiate procurement of improved filters, motor blowers, environmental control units, and auxiliary power units for existing fielded equipment (M20A1, M28, fixed sites, etc.).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

JCPE will employ multiple procurement of various individual items to support improvements and standardization to current Collective Protection systems.

For the Installation Schedule Below:

Procure Environmental Control Units for Portable Collective Protection System FY00-FY04

Procure Improved HEPA Filters FY02-FY04

Procure Improved Motors/Blowers FY02-FY04

Procure Lightweight Auxiliary Power Units FY04

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs												50	10	10	10	10	32	32	31	30
Outputs												25	15	15	14	14	10	10	9	9

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			Complete	
Inputs	32	32	31	30	88	87	85	75												675
Outputs	10	10	9	9	118	118	118	118									44			675

METHOD OF IMPLEMENTATION:	Stock Item	ADMINISTRATIVE LEADTIME:	2 Months	PRODUCTION LEADTIME:	10 Months
Contract Dates:	FY 1999	FY 2000	12/99	FY 2001	12/00
Delivery Date:	FY 1999	FY 2000	9/00	FY 2001	9/01

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Joint Collective Protection Equipment

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E								2.4		2.6		2.5		2.4		2.4				
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment							50	1	40	0.8	125	0.5	125	0.5	335	1.6			675	4.4	
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other								0.1		0.1		0.1		0.1		0.3					0.7
Interim Contractor Support																					
Installation of Hardware																					
FY 1997 & Prior Eqpt -- Kits																					
FY 1998 Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits							25	0.1	25	0.1										50	0.2
FY 2001 Eqpt -- Kits									33	0.1	7									40	0.1
FY 2002 Eqpt -- Kits											31	0.1	38	0.1	56	0.1				125	0.3
FY 2003 Eqpt -- Kits															125	0.2				125	0.2
FY 2004 Eqpt -- Kits															291	0.5	44			335	0.5
TC Equip-Kits																					
Total Equip-Kits							25	0.1	58	0.2	38	0.1	38	0.1	472	0.8	44			675	1.3
Total Procurement Cost								1.2		1.1		0.7		0.7		2.7					6.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JX0004) CO SYSTEM FIELDING SUPPORT/SPARES

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0.1	0.2	0	0	0	0	0	0.3	0.3	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0.1	0.2	0	0	0	0	0	0.3	0.3	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0.1	0.2	0	0	0	0	0	0.3	0.3	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: System Fielding Support funds provide for Total Package Fielding (TPF), First Destination Transportation (FDT) and New Equipment Training (NET) for Collective Protection Systems funded within the Chemical/Biological Defense Program (CBDP). TPF is the standard method of fielding new equipment developed under the CBDP Modernization program. The materiel developer plans, develops, acquires and deploys the materiel systems, including Associated Support Items of Equipment (ASIOE) and Support List Allowance Cards (SLAC) items through a physical handoff to the user. TPF costs include SLAC items, deprocessing, temporary duty (TDY), salaries and Stock Fund managed equipment. FDT funds for transportation required to support shipment of chemical equipment from manufacturing plants and assembly points to the first point of acceptance receipt or storage point by the Government (depot), customer or port. (NOTE: Excludes transportation costs paid by a vendor as prescribed in a procurement contract). The NET process begins very early in the life cycle of a system and provides for the development of the Qualitative and Quantitative Personnel Requirement Information (QQPRI), the NET Plan, and training courses for trainers to conduct these courses for the proper and safe use of the new equipment.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (R12301) CB PROTECTIVE SHELTER (CBPS)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	29	12	47	37	32	34	38	37	45	44	Continuing	Continuing
Gross Cost	16.3	5.2	19.2	16.4	14.0	14.6	16.5	16.5	20.6	20.7	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	16.3	5.2	19.2	16.4	14.0	14.6	16.5	16.5	20.6	20.7	Continuing	Continuing
Initial Spares												
Total Proc Cost	16.3	5.2	19.2	16.4	14.0	14.6	16.5	16.5	20.6	20.7	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Chemical Biological Protective Shelter (CBPS) is a new system designed to replace the M51 Chemical Protective Shelter. It consists of a Lightweight Multipurpose Shelter (LMS) mounted on an Expanded Capacity High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) variant and a 300 square foot soft shelter. The CBPS provides a contamination free, environmentally controlled working area for medical, combat service, and combat service support personnel to obtain relief from the continuous need to wear chemical-biological protective clothing for greater than 72 hours of operation. All ancillary equipment required to provide protection, except the generator, is mounted within the shelter.

JUSTIFICATION: The M-51 Shelter System currently in use is overage, lacks sufficient usable floor space, degrades mobility, and requires excessive time for set up and teardown. There is a critical need for medical functions requiring the removal of individual protective clothing and masks. The Army needs a highly mobile, self-contained collective protection system which can provide a contamination free working area for Echelon I and II medical treatment facilities and other selected units. The CBPS will satisfy this need. FY 00 will procure 32 CBPS systems; FY01 will procure 34 systems. Total procurement will support fielding of 343 of 792 required to support two MRC scenarios.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(R12301) CB PROTECTIVE SHELTER (CBPS)

Program Elements for Code B Items:

PE 0604384BP, Project MC5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The CB Protective Shelter replaces the M51 CB Shelter and provides increased mobility, reduced system weight and increased floor space. FY96 and prior RDTE \$19.9M; FY98 - \$2.0M. PE 604384BP, project MC5. The current development and test status is as follows: Actual DTE - Sep 94, IOT&E-Phase I conducted Feb - Apr 98. IOT&E-Phase II scheduled for Jan 00 which will validate issues identified at IOT&E-Phase I required to support Type Classification (TC) standard. Logistics Demonstration conducted Aug 97. TDP was available Sep 94. A type classification (TC) limited procurement urgent was approved for Service use in Dec 94. The projected date for TC-standard Service use is 4QFY00.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (R12301) CB PROTECTIVE SHELTER (CBPS)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. CB Protective Shelter (less GFE/CFE)		B	13043	47	277.51	10268	37	277.51	9280	32	290.00	10078	34	296.41
2. GFE/CFE														
HMMWV (GFE)			2914	47	62.00	2294	37	62.00	1984	32	62.00	2108	34	62.00
High Mobility Trailer (CFE)			376	47	8.00	296	37	8.00	256	32	8.00	272	34	8.00
LMS (CFE)			1081	47	23.00	851	37	23.00	736	32	23.00	782	34	23.00
10KW TQG (GFE)			517	47	11.00	407	37	11.00	384	32	12.00	408	34	12.00
NBC Filters (GFE)			273	47	5.81	215	37	5.81	192	32	6.00	204	34	6.00
3. Engineering														
Government			803			730			818			790		
Contractor			78			588			284					
4. Data						252			90					
5. First Article Test			107											
6. Refurbishment of Test Vehicles														
7. Initial Spares						518								
TOTAL			19192			16419			14024			14642		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (R12301) CB PROTECTIVE SHELTER (CBPS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CB Protective Shelter FY 98	Engineered Air Systems, St. Louis, MO	Option	SBCCOM, APG, MD	Jan-99	Mar-00	47	387334	Yes		
FY 99	Engineered Air Systems, St. Louis, MO	Option	SBCCOM, APG, MD	Jan-99	Nov-00	37	387334	Yes		
FY 00	Engineered Air Systems, St. Louis, MO	Option	SBCCOM, APG, MD	Aug-00	Jun-01	32	400834	Yes		
FY 01	Engineered Air Systems, St. Louis, MO	Option	SBCCOM, APG, MD	Apr-01	Feb-02	34	407434	Yes		

REMARKS: Unit costs include GFE/CFE. Options are FFP.

Budget Line Item #70

Contamination Avoidance

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Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (GP2000) CONTAMINATION AVOIDANCE

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	71.4	87.6	59.0	103.4	105.6	154.4	144.0	138.9	161.4	178.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	71.4	87.6	59.0	103.4	105.6	154.4	144.0	138.9	161.4	178.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	71.4	87.6	59.0	103.4	105.6	154.4	144.0	138.9	161.4	178.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Contamination Avoidance provides detection, warning and reporting, and reconnaissance systems. In the area of chemical and radiological detection, program provides for procurement of point and remote (stand-off) detection systems. The Joint Service Point Detection Program consolidates numerous individual service projects including: the M22 Automatic Chemical Agent Alarm (ACADA) which is more sensitive and responsive than current detectors and is capable of concurrent nerve and blister agent detection; the shipboard Improved (Chemical Agent) Point Detection System (IPDS), providing an upgrade to current capability by automatically detecting low concentrations of both blister and nerve agents; the AN/UDR-13 (Pocket Radiac), a tactical radiation dosimeter and ratemeter which provides a first time capability to both detect and indicate an immediate event and residual radiation doses received by troops; the Improved Chemical Agent Monitor (ICAM), a hand-held, soldier operated device for monitoring chemical agent contamination on personnel and equipment, which provides a first time, mission essential capability for monitoring nerve and blister agents contamination; and the Shipboard Automatic Liquid Agent Detector (SALAD), an externally mounted point detector that will detect liquid forms of blister and nerve agents. In the warning and reporting area, the Joint Warning and Reporting Network (JWARN) provides a first time capability to the warfighter and battlefield commanders to fully automate the NBC detection and warning process throughout the battlefield.

JUSTIFICATION: Contamination Avoidance is the primary objective of the Joint NBC Defense program. Operational forces have an immediate need to safely operate, survive and sustain operations in a NBC agent threat environment. Contamination Avoidance is highly desirable to maintain operational efficiency and minimize the need to decontaminate vehicles, equipment and areas. Advanced chemical defensive equipment is required to enhance U.S. capability to detect and identify threat agents on the battlefield. FY00 provides increased funding to support Marine Corps requirements; the NBC Reconnaissance System Block I Modification provides an upgrade to the current Army and Marine Corps M93E1 system to meet all Operational Requirements, permit logistical support by the soldier rather than by contractors, and reduces crew size to three and the Joint Service Lightweight NBCRS (FY01) to support the Marine Corps, Army, and Air Force future Joint field reconnaissance on the battlefield.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (GP2000) CONTAMINATION AVOIDANCE

Program Elements for Code B Items: Code: Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	TC	Total
NBCRS Block I Maintainability											
NA	Mission Capability		25.3	26.0	24.9	31.8	6.4	0.0	0.0	0.0	114.4
NBCRS Block II											
NA	Mission Capability		0.0	0.0	0.0	0.0	0.0	5.6	34.9	71.2	111.7
Improved Point Detection System											
NA	Mission Capability		4.6	7.0	10.0	2.5	2.7	2.6	4.2	0.0	33.6
Shipboard Automatic Liquid Agent Detector											
NA	Mission Capability		0.0	2.1	1.5	4.5	6.1	6.1	5.8	14.4	40.5
Totals			29.9	35.1	36.4	38.8	15.2	14.3	44.9	85.6	300.2

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (GP2000) CONTAMINATION AVOIDANCE			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
RADIAC - Pocket AN/UDR - 13			3164			3263			2898			2846		
Joint Warning and Reporting Network (JWARN)						10174			9012			8923		
Guard and Reserve Equipment						14652			6096			1171		
System Fielding Support/Spares			885			1067			1108			1987		
Auto Chemical Agent Alarm (ACADA), M22			15722			29633			37224			48744		
RECON System, FOX NBC (NBCRS) MODS			25335			26044			24918			31752		
Joint Service Ltwt NBC Recon												39478		
Shipboard Detector Modifications			4647			9138			11515			6953		
Improved Chemical Agent Monitor			9247			9465			12788			12551		
TOTAL			59000			103436			105559			154405		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(B96801) RADIAC - POCKET AN/UDR - 13

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	4117	4995	4253	3768	3151	3069	4514	10511				29266
Gross Cost	3.6	3.4	3.2	3.3	2.9	2.8	3.8	7.6	0	0	0	30.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	3.6	3.4	3.2	3.3	2.9	2.8	3.8	7.6	0	0	0	30.6
Initial Spares												
Total Proc Cost	3.6	3.4	3.2	3.3	2.9	2.8	3.8	7.6	0	0	0	30.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The AN/UDR-13 (Pocket Radiac) is a tactical radiation dosimeter and ratemeter. The Pocket Radiac provides a first time capability to measure and directly read cumulative dose from both prompt (neutron and gamma) and fallout (residual gamma) radiation. The Pocket Radiac continuously accumulates dose data and can independently display either total dose or dose rate when activated. Its pocket size (less than 2.54 cm by 12.7 cm) and weight (approximately 9.5 oz.) permits convenient use by troops on foot. Programmable warning alarms are provided for both the total dose and dose rate functions.

JUSTIFICATION: When fielded, the AN/UDR-13 will replace 40 year old and obsolete fielded equipment (IM-93) which can not measure prompt radiation and has significantly less accuracy than the AN/UDR-13. (ROC, CARDS #1206P, Approved Jul 91). FY00/01 funds will continue a new multi-year procurement effort.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (B96801) RADIAC - POCKET AN/UDR - 13			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Item Hardware (Multi-year)		A	2621	4253	0.62	1762	2859	0.62						
2. Item Hardware (New Contract)		A				576	909	0.63	1998	3151	0.63	1946	3069	0.63
3. Acceptance Test														
4. Engineering Change Test						100			50			50		
5. Special Tooling						100								
6. Engineering Support (Gov't)			296			363			450			450		
7. Quality Assurance			247			362			400			400		
TOTAL			3164			3263			2898			2846		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (B96801) RADIAC - POCKET AN/UDR - 13					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Item Hardware FY 98	Nuclear Research Corp., Dover, NJ.	C/FP-4(3)	CECOM	Apr-98	Jan-99	4253	616	Yes		
FY 99	Nuclear Research Corp., Dover, NJ	C/FP-4(4)	CECOM	Nov-98	May-99	2859	616	Yes		
	Nuclear Research Corp., Dover, NJ	C/FP-5(1)	CECOM	Dec-98	Dec-99	909	634	Yes		Aug-98
FY 00	Nuclear Research Corp., Dover, NJ	C/FP-5(2)	CECOM	Nov-99	May-00	3151	634	Yes		
FY 01	Nuclear Research Corp., Dover, NJ	C/FP-5(3)	CECOM	Nov-00	May-01	3069	634	Yes		

REMARKS: FY99 was originally an option year to the original 3 yr MY. It was re-negotiated to a lower unit cost and a fourth year which increased the quantities by 254 units. The new MY contract unit cost is \$634.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (G47101) JOINT WARNING & REPORTING NETWORK (JWARN)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				128		100					Continuing	Continuing
Gross Cost	0	7.0	0	10.2	9.0	8.9	11.6	10.5	12.1	12.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.0	0	10.2	9.0	8.9	11.6	10.5	12.1	12.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	7.0	0	10.2	9.0	8.9	11.6	10.5	12.1	12.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The JWARN will provide uniform integration and analysis of NBC detection information with Command, Control, Communications and Computers Information and Intelligence (C4I2) on the battlefield to automate the NBC warning and reporting process currently performed manually by the Services. The JWARN will collectively consist of: Version 1 (V1) - JWARN Commercial Off the Shelf (COTS) materiel and JWARN software for C4I2; Version 2 (V2) - JWARN ruggedized materiel; and, Version 3 (V3) - fully hardened and survivable JWARN materiel. The JWARN is being developed for deployment with NBC detectors in the following battlefield applications: combat and armored vehicles; tactical vehicles, vans and shelters; area warning; semi-fixed sites, and fixed sites. The V3 JWARN materiel consists of: a Display/Control (D/C) for operator and subsystem interfaces; interfaces (known as universal and communications interface units) which link together to form an "Interface Architecture;" a Sample Transfer System (STS) designed to function with existing chemical detectors, e.g. the Telemetry Link Radio (TLR) for area warning and fixed site NBC detector operations; Personnel Alarms (PA); and, installation kits to mount components and tailor the V3 JWARN for specific hosts. The V3 JWARN interfaces with the ACADA/NDI, the AN/VDR-2 RADIAC Set, the M21 Remote Standoff Chemical Agent Alarm (RSCAAL), the Lightweight Standoff Chemical Agent Detector (LSCAD), NBCRS sensors, JBPDS, meteorological and communications equipment; other existing and developmental NBC detectors, existing and future command and control (C2) radios, appliques, vehicle navigation systems, collective protection equipment (CPE), and NBC analysis software. The JWARN will monitor and display NBC information received from the NBC detectors or via C4I2 and will automatically format and transmit compatible NBC reports within C4I2.

JUSTIFICATION: The JWARN provides a first-time capability to the warfighter and battlefield commanders to fully automate the NBC detection and warning process throughout the battlefield. The present operational doctrine requires soldiers to stop performing their current task, manually prepare an NBC report, and verbally transmit the report up the chain of command. This process is extremely slow, prone to data errors, and does not provide adequate early warning throughout the battlefield, resulting in high casualties. The JWARN will automatically format digital NBC reports, employ C4I2 and feed the NBC contamination information into the digitized battlefield. In addition, the JWARN V3 will provide a first-time capability to employ chemical detectors within combat and armored vehicles and tactical vans and shelters to allow an inside and outside sampling capability. JWARN will reduce warfighter casualties and eliminate a large NBC data gap existing in the Army's efforts to automate the processing of battlefield data for commanders. FY00 will procure MICAD components and FY01 will procure software/hardware components for JWARN.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(G47101) JOINT WARNING & REPORTING NETWORK (JWARN)

Program Elements for Code B Items:

0604384BP, Project CA5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The JWARN will facilitate uniform integration and analysis of NBC detection with C4I2. JWARN will provide new capability for the digital battlefield.

FY96 and prior - \$29.8M; FY97 - \$14.2M, FY98 - \$12.1M, FY99 - \$5.8M, FY00 - \$11.4, FY01 - \$7.5, FY02 - \$7.5, FY03 - \$5.6. PE: 0604384BP, Project CA5. The current development and test status for the JWARN (MICAD component) is as follows: Actual DTE - OCT 96, Actual IOT&E -Sep 97 thru Mar 98; projected availability of TDP -1998. Service approval occurred in Dec 98.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (G47101) JT WARN & REPORTING NETWORK (JWARN)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
JWARN (MICAD) Component		A				6744	128	52.69						
JWARN V3		B										8223	100	82.23
First Article Test (FAT)						507						500		
Production Vertification Test (PVT)						1002								
Tooling						131								
Quality Assurance						154						200		
Packaging						160								
JWARN (Component)														
Interface Software									3000					
Hard Wire Interface									1512					
RF Interface									4500					
New Equipment Training (NET) Phase II						1476								
Note: program in two phases: Phase I -software procure: Phase II - Procurement of interfaces for various detectors/systems.														
TOTAL						10174			9012			8923		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (G47101) JOINT WARNING & REPORTING NETWORK (JWARN)						
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
Hardwire Interface FY 00	TBS	Option	MARCORSYSCOM, Quantico, VA	Jan-00	Jun-00	0		Yes			
JWARN (MICAD) Component FY 99	TBS	C/FFP	SBCCOM, APG, MD	May-99	Sep-99	0		Yes		Jan-98	
JWARN V3 FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	May-01	Sep-01	100	82.230	Yes			
RF Interface FY 00	TBS	Option	MARCORSYSCOM, Quantico, VA	Jan-00	Jun-00	0		Yes			
Software Interface FY 00	TBS	Option	MARCORSYSCOM, Quantico, VA	Jan-00	Jun-00	0		Yes			

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JA0004) GUARD & RESERVE EQUIPMENT

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	14.7	6.1	1.2	0	1.2	0	1.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	14.7	6.1	1.2	0	1.2	0	1.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	14.7	6.1	1.2	0	1.2	0	1.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program provides for the acquisition of Chemical and Biological Defense equipment to support the Reserve Component (RC) unit requirements as outlined in the RC Weapons of Mass Destruction (WMD) Plan. Initiates equipping (1)WMD Rapid Response Assessment Teams to provide an on-site rapid response elements at the state level, (2) RC chemical companies and medical patient decontamination teams to augment hospital patient decontamination capabilities, and (3) ARNG and Army Reserve chemical elements with initial-complement equipment required for RC deployment for WMD Reconnaissance.

JUSTIFICATION: DOD currently deploys the Marine Corps Chem/Bio Incident Response Force (CBIRF), the Army's Technical Escort Unit, and other Chem/bio and medical assets to assist civil authorities respond to WMD incidents. In order to respond to the emerging terrorist threat of "hit and run" Chem/bio attacks on American cities, this effort allows for the equipping of Reserve Component units to provide enhanced response capabilities and to provide for additional support to communities in emergency and disaster situations. This effort will allow for selected National Guard and other reserve component units to respond to and contain the effects of CB incidents in this country. FY00 procures 149 M40 Masks, 218 ICAMs, 91 ICAM simulators, 284 ACADAs, 628 Pocket RADIACs, 202 Alpha RADIACs, & 266 Beta RADIACs.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JA0004) GUARD & RESERVE EQUIPMENT			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. M40 Chemical Protective Mask *						20	231	0.09	13	149	0.09			
2. ICAM*						2785	505	5.51	1200	218	5.50	497	90	5.52
3. CAM Simulator						2110	211	10.00	938	91	10.31	450	45	10.00
4. ACADA*						6640	762	8.71	2273	284	8.00			
5. Pocket RADIAC*						700	1102	0.64	387	628	0.62	121	180	0.67
6. Alpha RADIAC						1189	236	5.04	980	202	4.85			
7. Beta RADIAC						474	246	1.93	305	266	1.15			
8. Chemical Protective Bag						12	990	0.01				3	225	0.01
9. JSLIST Overgarment*						594	2970	0.20						
10. BVO						36	1980	0.02				18	990	0.02
11. Protective Glove						20	1980	0.01				19	1980	0.01
12. DECON Kit						49	90	0.54				49	90	0.54
13. Chemical Agent Detector						9	225	0.04						
14. M8 Detection Paper						2	2970					2	1980	0.00
15. M9 Detection Paper						4	990	0.00				8	1980	0.00
16. Helmet Cover						8	1980	0.00				4	980	0.00
*Program Deliveries are displayed on schedules for appropriate items.														
Note: Unit cost includes hardware and support costs.														
TOTAL						14652			6096			1171		

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (JX0002) CA SYSTEM FIELDING SUPPORT/SPARES

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	1.0	0.9	1.1	1.1	2.0	2.3	2.4	3.3	3.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	1.0	0.9	1.1	1.1	2.0	2.3	2.4	3.3	3.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	1.0	0.9	1.1	1.1	2.0	2.3	2.4	3.3	3.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: System Fielding Support program provides for Total Package Fielding (TPF), First Destination Transportation (FDT) and New Equipment Training (NET) for Contamination Avoidance Systems funded within the Chemical/Biological Defense Program (CBDP). TPF is the standard method of fielding new equipment developed under the CBDP Modernization program. The materiel developer plans, develops, acquires and deploys the materiel systems, including Associated Support Items of Equipment (ASIOE) and Support List Allowance (SLAC) items through a physical handoff to the user. TPF costs include SLAC items, deprocessing, temporary duty (TDY), salaries and Stock Fund managed equipment. FDT funds for transportation required to support shipment of chemical equipment from manufacturing plants and assembly points to the first point of acceptance receipt or storage point by the Government (depot), customer or port. (NOTE: Excludes transportation costs paid by a vendor as prescribed in a procurement contract). The NET process begins very early in the life cycle of a system and provides for the development of the Qualitative and Quantitative Personnel Requirement Information (QQPRI), the NET Plan, and training courses for trainers to conduct these courses for the proper and safe use of the new equipment.

JUSTIFICATION: Funds will ensure (1) continued uninterrupted shipment of newly procured items to users in support of readiness and training, (2) continued and orderly fielding of Force Modernization Systems, and (3) transfer of knowledge from the materiel developer to the trainer, user, and other support personnel. FY00/01 provides support to the Auto Chemical Agent Alarm (ACADA) M22, the Radiac-Pocket AN/UDR-13, and the Improved Chemical Agent Monitor (ICAM).

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			1845	3380	4759	6825						16809
Gross Cost	9.5	9.7	15.7	29.6	37.2	48.7	0	0	0	0	0	150.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	9.5	9.7	15.7	29.6	37.2	48.7	0	0	0	0	0	150.6
Initial Spares												
Total Proc Cost	9.5	9.7	15.7	29.6	37.2	48.7	0	0	0	0	0	150.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Automatic Chemical Agent Alarm/Non-Developmental Item (ACADA/NDI) is a man-portable automatic alarm system capable of detecting blister and nerve agents/vapors. The ACADA/NDI has improved agent sensitivity, response time, and interference rejection. The ACADA/NDI detects all known agent threats. The ACADA/NDI operates with no human interference after system start-up, detects automatically for a minimum of 24 hours, provides audio and visual alarms, and has a communication interface to support battlefield automation systems. The ACADA/NDI meets the critical needs of the US Forces for an automatic point sampling chemical agent alarm.

JUSTIFICATION: FY00/01 funding will procure 4759/6825 ACADA/NDI units for Army, Air Force, Navy and Marines and supports Services modernization program. The ACADA/NDI buy provides a first time point detection capability to automatically detect blister agents. The ACADA/NDI will also allow battlefield commanders to use information obtained to make rapid and effective decisions concerning adjustment of the protective posture of their soldiers. Likewise, the ACADA/NDI will allow air base commanders to issue guidance on protective posture for air base facilities and personnel.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22

Program Elements for Code B Items:

0604384BP, Project CA5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

Preplanned Product Improvement (P3I) to M22 Automatic Chemical Agent Alarm (ACADA) for Surface Sampler which provides first time capability to detect agents/vapor on surface at cold temperatures.

FY97: \$1.9M

FY98: \$.02M

The current development and test status is as follows: Projected DT&E and OT&E - Oct 98-Mar 99; TDP will be available Jan 99.

A type classification (TC) generic is projected for May 99. TC standard is projected for May 00.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M98801) AUTO CHEM AGENT ALARM (ACADA), M22			Weapon System Type:			Date: February 1999		
Weapon System Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware - M22	A	13965	1845	7.57	27867	3380	8.24	35932	4759	7.55	47665	6825	6.98
Engineering Support		380			500			580			600		
Quality Assurance Support		150			62			350			350		
XM279 Surface Sampler Production Verification Test		327			1000								
Technical Data Package, ECPs					100			140			100		
M42 Vehicle Mount Brackets					4			22			29		
Hardware - XM279 Surface Samplers	B				100	100	1.00	200	200	1.00			
Shipboard Detector Mods		900											
TOTAL		15722			29633			37224			48744		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware - M22 FY 98	Graseby Dynamics, LTD, Watford, UK	Option	CBDCOM	Apr-98	Oct-98	1845	7570	Yes		
FY 99	Graseby Dynamics, LTD, Watford, UK	Option	SBCCOM	Dec-98	Apr-99	3380	8240	Yes		
FY 00	Graseby Dynamics, LTD, Watford, UK	Option	SBCCOM	Dec-99	Apr-00	4759	7550	Yes		
FY 01	TBS	C/FFP	SBCCOM	Nov-00	Mar-01	6825	6980	Yes		
Hardware - XM279 Surface Sampler FY 99	TBS	C/FFP	SBCCOM	Jul-99	Oct-99	100	1000	Yes		
FY 00	TBS	C/FFP	SBCCOM	Jul-00	Oct-00	200	1000	Yes		

REMARKS: FY96 through FY00 programs are priced options to the Graseby Dynamics, LTD contract awarded Dec 95. FY01 new contract. First production of XM279 Surface Sampler in FY99.

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (MA0601) RECON SYSTEM, FOX NBC (NBCRS) MODS

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			12	12	11	14	1	2	16	16	Continuing	Continuing
Gross Cost	46.8	56.3	25.3	26.0	24.9	31.8	6.4	5.5	33.9	35.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	46.8	56.3	25.3	26.0	24.9	31.8	6.4	5.5	33.9	35.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	46.8	56.3	25.3	26.0	24.9	31.8	6.4	5.5	33.9	35.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: NBC Reconnaissance Systems (NBCRS) provides nuclear and chemical sampling, detection, and warning equipment and biological sampling equipment integrated into a high speed, high mobility, armored carrier capable of performing reconnaissance on primary, secondary, and cross country routes wherever combat forces are deployed. The system contains a vehicle-mounted surface sampler, chemical mass spectrometer, chemical agent monitor, chemical agent detector alarm, radiation detection device, navigation system, secure communications, area marking and collective protection. In addition to the already fielded capabilities, the Block I modification will be capable of remote chemical vapor detection at a distance up to 5 km, will add a communications link to the digitized battlefield thus increasing warning times and improving soldier survivability, and will reduce crew size from four to three.

JUSTIFICATION: FY00/01 Fox NBCRS procurement continues legacy M93 system modernization and modification program to update and field M93A1 systems to the US Army and US Marine Corps. The M93A1 fully integrates for the first time the stand-off M21 chemical vapor detector into the mobility platform, and thus enables the crew to remotely deploy and operate the sensor from the fully protected crew compartment. The M93A1 also for the first time digitally integrates the on board NBC detection sensors, communications and navigation systems. This enhancement provides the crew commander full real time visibility into the operational status of system sensors and communications and provides the linkage to the digitized battlefield C4I architecture. The M93A1 modification also reduces the operational cost of the system by reducing the crew size to three soldiers/marines. The internal crew level human factors engineering changes improve crew workload distribution and reduces task complexity. M93A1 is being fielded under the unit level total package fielding concept, US Army FOX equipped unit fielding is in six or eight system increments and USMC equipped unit fielding is in two or four system increments.

COOPERATIVE AGREEMENT: A Cooperative Agreement between the U.S. and German Governments to provide supply support and configuration management of common hardware on the NBCRS was signed on 18 Apr 95. This agreement formalizes and optimizes US Non-Developmental Item NBCRS fleet supply support and enhances system life cycle Contractor Logistic Support.

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: NBCRS Block I

MODELS OF SYSTEM AFFECTED: M93 Fox NBC Reconnaissance System

DESCRIPTION/JUSTIFICATION:

The M93 will be upgraded to the M93A1 Fox NBCRS to meet Operational Requirements and reduce operations and support costs by reducing crew size to three. The M93A1 will have the capability to detect chemical contamination at a distance up to five kilometers, automatically integrate contamination information from sensors with input from on-board navigation and meteorological systems and transmit digital warning messages through the Maneuver Control System, thus increasing warning times and improving soldier survivability. A U.S. Army Chemical School study shows that the M93A1 FOX provides a significant force multiplier. Specifically, FOX equipped divisions gain the equivalent of an additional 3.8 Maneuver Companies firepower, per day, when the FOX is employed in a chemical war.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Planned Month/Year (BLOCK I MOD) Accomplished

IPR Production Decision	Jun 95	Jun 95
Production Contract Award	May 96	May 96
First Modification Delivery (FUE)	Oct 98	
Last Modification Complete	Apr 03	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	19	6	6	6	5	5	3	2	6	6	2	4	4	4		4	4	2		
Outputs	3	3	2	6	6	6	6	6	4	4	5	6	4	1	4	4	3	3	3	3

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	Complete	88
Outputs	3	3																88

METHOD OF IMPLEMENTATION:	Contractor/Depot	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 1999 1/99	FY 2000 1/00		FY 2001 1/01	
Delivery Date:	FY 1999 6/00	FY 2000 6/01		FY 2001 6/02	

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): NBCRS Block I

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	RDT&E		168																			168
PROCUREMENT																						
Kit Quantity																						
Installation Kits	38	43.5	12	14	12	16.6	11	15.7	14	21.4	1	2.2								88	113.4	
Installation Kits, Nonrecurring Equipment																						
Equipment, Nonrecurring		3.8																			3.8	
Engineering Change Orders		2.1		0.7		0.5		0.5		0.8											4.6	
Data		9.7																			9.7	
Training Equipment																						
Support Equipment		9																			9	
Other		30		4.2		5.1		5.1		5.6											50	
Interim Contractor Support																						
Installation of Hardware																						
FY 1997 & Prior Eqpt -- Kits	19	5	19	5.3																	38	10.3
FY 1998 Eqpt -- Kits			4	1.1	8	2.4															12	3.5
FY 1999 Eqpt -- Kits					5	1.4	7	2.2													12	3.6
FY 2000 Eqpt -- Kits							5	1.4	6	2.4											11	3.8
FY 2001 Eqpt -- Kits									5	1.6	9	4									14	5.6
FY 2002 Eqpt -- Kits											1	0.2									1	0.2
FY 2003 Eqpt -- Kits																						
FY 2004 Eqpt -- Kits																						
TC Equip-Kits																						
Total Equip-Kits	19	5	23	6.4	13	3.8	12	3.6	11	4	10	4.2									88	27
Total Procurement Cost		103.1		25.3		26		24.9		31.8		6.4										217.5

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (MC0100) JT SVC LTWT NBC RECON SYS (LNBCRS)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty						21	46	40	48	58	Continuing	Continuing
Gross Cost	0	0	0	0	0	39.5	80.9	66.5	59.9	69.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	0	39.5	80.9	66.5	59.9	69.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	0	39.5	80.9	66.5	59.9	69.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This is a Joint Service program effort between the U.S. Marine Corps, U.S. Army and U.S. Air Force. The Joint Service Lightweight Nuclear Biological and Chemical Reconnaissance System (JSLNBCRS) provides field commanders with real-time point and standoff intelligence for real-time field assessment of NBC hazards. The system will be a vehicle-mounted suite of NBC equipment/software to detect, collect, analyze, mark and disseminate NBC data. Two variants of the JSLNBCRS will be produced, a Light Armored Vehicle (LAV) and High Mobility Multipurpose Wheeled Vehicle (HMMWV), both variants will house the same equipment suite. An interim JSLNBCRS variant will also be procured to support the CINC's against the near-term Chem/Bio threat.

JUSTIFICATION: FY01 funding procures 15 interim systems and 6 LAV systems.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(MC0100) JT SVC LTWT NBC RECON SYS (LNBCRS)

Program Elements for Code B Items:

0604384BP

Code:

B

Other Related Program Elements:

RDT&E Code B Item

RDT&E:

CA5: FY98 - \$4.3M, FY99 - \$7.3M, FY00 - \$6.6M

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MC0100) JT SVC LTWT NBC RECON SYS (LNBCRS)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
JSLNBCRS LAV Variant	B										14548	6	2424.67	
Interim LNBCRS Variant	B										24820	15	1654.67	
Engineering Support (Cont)											110			
TOTAL											39478			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (MC0100) JT SVC LTWT NBC RECON SYS (LNBCRS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
JSLNBCRS LAV variant FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	Apr-01	Sep-01	6	2424667	No		
JSLNBCRS Interim variant FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	Apr-01	Dec-01	15	1654667	No		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (N00041) SHIPBOARD DETECTOR MODIFICATIONS

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	3.8	7.1	4.6	9.1	11.5	7.0	8.8	8.7	5.8	1.5	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	3.8	7.1	4.6	9.1	11.5	7.0	8.8	8.7	5.8	1.5	Continuing	Continuing
Initial Spares												
Total Proc Cost	3.8	7.1	4.6	9.1	11.5	7.0	8.8	8.7	5.8	1.5	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of this program is to procure and install Chemical and Biological (CB) defensive systems for surface ships and Naval facilities to support the requirement to sustain operations in a CB threat environment. Systems to be fielded include:

The Improved Point Detection System (IPDS) which replaces the Chemical Agent Point Detection System MK 21 Mod 1 and provides expandable point detection of Chemical Warfare vapor agents. Milestone III occurred in 3QFY95. The program provides for the installation of IPDS on amphibious, combat, and select combat support ships by Alteration Installation Teams headed by Naval Surface Warfare Center, Crane. The inventory objective is 269 systems.

The Shipboard Automatic Liquid Agent Detector (SALAD) which provides point detection of liquid Chemical Warfare agents. Low rate initial production approved in 4QFY98. Milestone III is planned for 2QFY01. The program provides for the procurement of SALAD for amphibious, combat and select combat support ships and selected Naval facilities. The current program under this line item covers limited installations by Alteration Installation Teams headed by Naval Surface Warfare Center, Crane. Current plans call for maximizing the concurrent installation with IPDS to minimize installation costs and schedule. Inventory objective is 269 systems with one system per ship.

JUSTIFICATION: The FY00-01 funds will be used to complete the procurement of the Improved Point Detection System hardware, by exercising the last contract option, and continue installation of units in the fleet. The FY00-01 funds will be used to support the Shipboard Automatic Liquid Agent Contract, exercise the first full rate production option and begin installation of delivered systems.

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Improved Point Detection System

MODELS OF SYSTEM AFFECTED: To be installed on amphibious, combat, and selected combat support ships.

DESCRIPTION/JUSTIFICATION:

IPDS replaces the Chemical Agent Point Detection System (CAPDS) MK 21, Mod 1 and provides greater sensitivity, faster response time, increased agent detection (nerve and blister) and is expandable for new and novel CW agent vapors. The program provides for the installation of IPDS on amphibious, combat, and selected combat support ships by Alteration Installation Teams headed by NSWC, Crane. The inventory objective is 269.

Notes:

1. Installation costs per unit varies with selected type of ship.
2. First Article Test Units will be used as trainers.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	Planned	Accomplished
MS III	Jun 95	Jun 95
Contract Award	Sep 96	Oct 96
First Delivery	Feb 99	
2nd Contract Award	Jan 99	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs						29	36	36	32	3	24	24	24	24	24	13				
Outputs						16	16	16	16	16	16	16	9	9	9	9	9	9	9	9

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	Complete	269
Outputs	9	9	8	8													51	269

METHOD OF IMPLEMENTATION:	Alteration/Installation TM	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	10 Months
Contract Dates:	FY 1999 1/99	FY 2000	12/99	FY 2001	
Delivery Date:	FY 1999 10/99	FY 2000	6/00	FY 2001	

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Improved Point Detection System

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	RDT&E		22.8																			22.8
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kits, Nonrecurring																						
Equipment	94	7.5	36	2.1	43	2.6	90	5.6												263	17.8	
Equipment, Nonrecurring	3	0.5			3	0.6														6	1.1	
Engineering Change Orders		0.3		0.1		0.1		0.1													0.6	
Data						0.1		0.1													0.2	
Training Equipment																						
Support Equipment																						
Other		2.1		0.8		0.7		0.8		0.1		0.1									4.6	
Interim Contractor Support																						
Installation of Hardware																						
FY 1997 & Prior Eqpt -- Kits		0.5	24	1.6	43	2.9	30	2.3													97	7.3
FY 1998 Eqpt -- Kits							15	1.1	21	1.4											36	2.5
FY 1999 Eqpt -- Kits									15	1	31	2.2									46	3.2
FY 2000 Eqpt -- Kits											5	0.4	34	2.6			51	4.2			90	7.2
FY 2001 Eqpt -- Kits																						
FY 2002 Eqpt -- Kits																						
FY 2003 Eqpt -- Kits																						
FY 2004 Eqpt -- Kits																						
TC Equip-Kits																						
Total Equip-Kits		0.5	24	1.6	43	2.9	45	3.4	36	2.4	36	2.6	34	2.6			51	4.2		269	20.2	
Total Procurement Cost		10.9		4.6		7		10		2.5		2.7		2.6				4.2			44.5	

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE: Shipboard Automatic Liquid Agent Detector (SALAD)

MODELS OF SYSTEM AFFECTED: To be installed on amphibious, combat, and selected combat support ships and at selected Naval facilities.

DESCRIPTION/JUSTIFICATION:

SALAD provides automatic point detection of liquid chemical warfare agents in a marine environment. SALAD replaces the manual MK8/MK9 paper detectors. The plan is to install the SALAD on amphibious, combat, and selected combat support ships and at selected Naval facilities, maximizing concurrent installation with the IPDS to minimize installation costs and schedule. Inventory objective is 269 with 1 system per ship.

Notes:

1. Installation costs vary with type of ship and facility.
2. First Article Test Units will be used as trainers.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PLANNED	ACCOMPLISHED
MS I/II		May 93
Low Rate Initial Production Approval		Sep 98
RFP Available		Oct 98
Contract Award	3QFY99	
Full Rate Production Decision	2QFY01	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs										2	2			4			4	12	12	12
Outputs										1	1							4	6	6

	FY 2003				FY 2004				FY 2005				FY 2006				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	16	18	18	18	18	18	18	18	18	18	18	16	9				Complete	269
Outputs	4	4	3	3													237	269

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 1999	4/99	FY 2000	FY 2001	4/01
Delivery Date:	FY 1999	2/00	FY 2000	FY 2001	2/02

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 10 Months

INDIVIDUAL MODIFICATION

Date: February 1999

MODIFICATION TITLE (Cont): Shipboard Automatic Liquid Agent Detector (SALAD)

FINANCIAL PLAN: (\$ in Millions)

	FY 1997 and Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E		5.6		0.2																
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment					4	0.4			51	3.6	63	4.6	64	4.7	69	5.3	14	1.1	265	19.7	
Equipment, Nonrecurring					4	0.7													4	0.7	
Engineering Change Orders								0.1	0.1		0.1		0.1		0.1					0.5	
Data						0.2		0.1	0.3												0.6
Training Equipment																					
Support Equipment																					
Other						0.8		0.6	0.5		0.5		0.5		0.4			0.5		3.8	
Interim Contractor Support																					
Installation of Hardware																					
FY 1997 & Prior Eqpt -- Kits																					
FY 1998 Eqpt -- Kits																					
FY 1999 Eqpt -- Kits							2	0.7			6	0.3							8	1	
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits										10	0.6	14	0.8				27	1.4	51	2.8	
FY 2002 Eqpt -- Kits																63	3.3	63	3.3		
FY 2003 Eqpt -- Kits																64	3.5	64	3.5		
FY 2004 Eqpt -- Kits																69	3.8	69	3.8		
TC Equip-Kits																14	0.8	14	0.8		
Total Equip-Kits							2	0.7			16	0.9	14	0.8			237	12.8	269	15.2	
Total Procurement Cost						2.1		1.5		4.5		6.1		6.1		5.8		14.4		40.5	

Exhibit P-40, Budget Item Justification Sheet

Date:

February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE P-1 Item Nomenclature (S02201) IMPROVED CHEMICAL AGENT MONITOR (ICAM)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	2984	435	1933	1927	2984	3003						9847
Gross Cost	4.2	3.1	9.2	9.5	12.8	12.6	0	0	0	0	0	51.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.2	3.1	9.2	9.5	12.8	12.6	0	0	0	0	0	51.4
Initial Spares												
Total Proc Cost	4.2	3.1	9.2	9.5	12.8	12.6	0	0	0	0	0	51.4
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Improved Chemical Agent Monitor (ICAM) is a hand-held, soldier operated device for monitoring chemical agent contamination on personnel and equipment. The ICAM detects vapors from chemical agents on the surface by sensing the molecular ions of specific mobilities (time-of-flight) . It uses special timing and microprocessor techniques to reject interference and false alarms. The ICAM can detect and discriminate between vapors of nerve and blister agents. The ICAM consists of a drift tube, electronics board, molecular sieve, vacuum pump, and buzzer. It includes expendables such as batteries, a battery pack, test simulant, and dust filters. The ICAM weighs five (5) pounds and measures 4" x 7" x 15".

JUSTIFICATION: FY00 funds continue production under the FY 96 multi-year contract. It includes increased funding in support of the Services modernization program. The ICAM is an improved version of the already-fielded Chemical Agent Monitor (CAM). The CAM provided a first time, mission essential, capability for monitoring nerve and blister agent contamination. It identifies and provides a positive indication of specific areas and relative levels of contamination hazard. The ICAM upgrades the CAM by significantly reducing maintenance burdens and improving reliability and maintainability. FY00 procures 2984 ICAMs; FY01 funding procures 3003 ICAMs.

COOPERATIVE AGREEMENT: The CAM was developed by Graseby Ionics Ltd., Watford, England for the United Kingdom (UK) Ministry of Defense (MOD). The improvements leading to the ICAM were developed by Graseby for the U.S. The U.S. Government has a license agreement with Graseby, which requires payment of a \$208 royalty for each of the first 30,000 units (CAM and ICAM combined). The FY96 procurement was the first competitive procurement permitted under this agreement.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (S02201) IMPROVED CHEM AGENT MONITOR (ICAM)			Weapon System Type:			Date: February 1999			
Weapon System Cost Elements		ID CD	FY 98			FY 99			FY 00			FY 01		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware		A	6771	1933	3.50	5976	1927	3.10	8182	2984	2.74	8269	3003	2.75
2. Royalty Payment (Graseby)			402			401			621			625		
3. VE share to Intellitec			540			1054			1587			817		
4. Batteries			86			87			137			141		
5. Battery packs			94			100			159			164		
6. Replacement Assemblies		A				226	88	2.57						
7. CAM Training Simulator		A	459	51	9.00	900	100	9.00	1395	151	9.24	1204	129	9.33
8. Engineering Support			895			721			707			1331		
TOTAL			9247			9465			12788			12551		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 1999

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (S02201) IMPROVED CHEMICAL AGENT MONITOR (ICAM)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
ICAM										
FY 98	Intellitec, Deland, FL	C/FPM/3(2)	SBCCOM, APG, MD	Dec-97	Mar-99	1933	3502	Yes		
FY 99	Intellitec, Deland, FL	C/FPM-3(3)	SBCCOM, APG, MD	Dec-98	Oct-99	1927	3101	Yes		
FY 00	Intellitec, Deland, FL	C/FPM-(OP)	SBCCOM, APG, MD	Dec-99	Jul-00	2984	2742	Yes		
FY 01	Intellitec, Deland, FL	C/FPM-(OP)	SBCCOM, APG, MD	Dec-00	Jul-01	3003	2754	Yes		
Royalties										
FY 98	Graseby, UK	SS/FP	SBCCOM, APG, MD	Feb-98		1933	208	Yes		
FY 99	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-98		1927	208	Yes		
FY 00	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-99		2984	208	Yes		
FY 01	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-00		3003	208	Yes		
VE Shared Savings										
FY 98	Intellitec, DeLand, FL	C/FPM	SBCCOM, APG, MD	Feb-99		1933	279	Yes		
FY 99	Intellitec, DeLand, FL	C/FPM	SBCCOM, APG, MD	Feb-99		1927	547	Yes		
FY 00	Intellitec, DeLand, FL	C/FPM	SBCCOM, APG, MD	Dec-99		2984	532	Yes		
FY 01	Intellitec, DeLand, FL	C/FPM	SBCCOM, APG, MD	Dec-00		3003	279	Yes		

REMARKS: Royalties - See Cooperative Agreement information on P-40.

