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**Department of Defense  
Fiscal Year (FY) 2018 Budget Estimates**

May 2017



**Chemical and Biological Defense Program**

*Defense-Wide Justification Book Volume 1 of 2*

***Procurement, Defense-Wide***

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Chemical and Biological Defense Program • Budget Estimates FY 2018 • Procurement

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## Chemical Biological Defense Program Overview

Chemical, biological, radiological, and nuclear (CBRN) threats are dynamic and ever-expanding. The rapid advancement and global proliferation of chemical and biological (CB) capabilities greatly extends the spectrum of plausible actors, agents, concepts of use, and targets. These advances enable States to develop unique CB threats with the intent of circumventing our current defenses, while simultaneously permitting non-State actors to pursue less sophisticated CB threats. To ensure an effective response to these threats, the Department of Defense (DoD) Chemical and Biological Defense Program (CBDP) continuously and actively develops CBRN defensive capabilities to stay ahead of evolving threats. This 2018 budget request includes \$1.37 billion to allocate against valid capability requirements to achieve a strategy-driven balance of risk in accordance with National Defense Strategies, departmental-level objectives, and Service force development priorities.

### Strategic Overview

The CBDP strategic direction reflects current defense policy set by public law, national strategies, DoD Directives and Instructions, and senior leadership guidance. The CBDP mission is to enable the Warfighter to deter, prevent, protect, mitigate, respond, and recover from CBRN threats and effects as part of a layered, integrated defense. This mission aligns with the DoD Strategy for Countering Weapons of Mass Destruction (CWMD), which outlines the elements and enablers of the Department's approach for countering CWMD. CBDP efforts support the continuous cycle of preparing, principally through investments that: "ensure staff expertise; and sustain the Department's science and technology, research and development, and acquisition competencies." CBDP executes its responsibility in support of the Department's strategic approach and provides capabilities supporting the three CWMD strategic lines of effort. These lines of effort are:

- 1) ***Prevent Acquisition*** focuses on ensuring that those not possessing WMD do not obtain them. One of the primary methods of increasing barriers to acquisition and proliferation of WMD will be through pathway defeat—activities focusing on the specific nodes and linkages in an adversary's WMD pathway.
- 2) ***Contain and Reduce Threats*** focuses on reducing risks posed by extant WMD. DoD will remain prepared to lead or support operations to locate, characterize, secure, exploit, and destroy WMD in a range of contingency environments and under varying security and political conditions.

3) ***Respond to Crises*** focuses on activities and operations to manage and resolve complex WMD crises. DoD will assume that hostile non-state actors who acquire WMD or material of concern will plan to use them, and the Department will react accordingly. DoD will be prepared to avoid or defeat WMD attacks and mitigate their immediate effects so as to allow effective operations to continue.

The CBDP supports these lines of effort through materiel and non-materiel capabilities that are interoperable within the Joint Forces and other DoD and United States Government partners countering WMD. The CBDP budget request reflects efforts to balance the dynamic tensions of budget, threat, and scientific development to provide a program that is agile and flexible so as to rapidly adapt to the evolving strategic landscape.

### **Strategic Objectives**

This budget request supports the DoD Strategy for CWMD and advances the following CBDP strategic objectives:

- **Early Warning** - Develop advanced environmental surveillance and point-of-need diagnostic capabilities against CBRN threats, enabling the Warfighter to achieve information dominance in the CBRN domain and enabling rapid force protection decisions.
  - Biosurveillance – The CBDP is developing pre- and post-event capabilities to improve early warning and characterization of man-made and naturally occurring hazards in near real-time. Persistent surveillance will provide early indications and support effective consequence management of the emergence and re-emergence of infectious diseases, genetically engineered and synthetic biological agents, as well as chemical hazards.
  - Advanced Diagnostics – The CBDP resources a robust portfolio of CBR diagnostics that includes S&T, systems development, and procurement of point-of-need/point-of-care diagnostic equipment. Continuous assay development and procurement support fielded and developmental diagnostic and analytic platforms.
- **Avoid, Prevent and Prepare for Surprise** - Advancements in biology and chemistry as well as natural evolution can result in new CB agents and new threats the Warfighter must be prepared to counter. The CBDP identifies and studies such CB agents to scientifically characterize and validate the hazard they could pose to the Warfighter. The CBDP is committed to addressing surprise, both to avoid its occurrence and to rapidly mitigate its consequences. The enterprise aims to leverage cross-domain efforts, information, and assessments to manage surprise through scientific breakthrough, rapid fielding, and operational innovation. Focus areas include:



- Non-Traditional Agents (NTA) – The CBDP is developing technologies that address existing and emerging NTAs to address multiple capability gaps and provide multi-layered and integrated defenses. Enhanced warning, protection, and countermeasures save lives and enable more flexible consequence management.
- Synthetic Biology – Rapid advances in biotechnology open a broad range of potential new challenges from genetically engineered organisms. Rapid characterization of new threats and development of countermeasures remain hallmarks of the CBDP portfolio.
- Integrated, Layered Defense - The CBDP invests strategically in a set of distinct and complementary capabilities to defend against CBRN threats. Collectively, CBDP solutions are comprehensive and address the spectrum and time evolution of CBRN events. These solutions enable the Joint Force to maintain freedom of action in a CBRN environment and enable mission accomplishment.
  - Medical Countermeasures – Development of advanced vaccines, therapeutic drugs, and diagnostic capabilities that provide safe and effective medical defense against validated biological threat agents (bacteria, toxins, and viruses), emerging infectious disease, and traditional and non-traditional chemical agents.
  - Personal Protective Equipment and Collective Protection – Advances in materials and systems engineering will enhance the protective properties against a broader array of threats while reducing heat and logistical burdens. Modular and customizable solutions will be effective against a broad range of challenges and demonstrate applicability in varied environments.
  - Detectors and Sensors – The CBDP is developing the next generation of suitable, effective, and affordable broad-spectrum CB detection capabilities to detect current and emerging CB hazards. Development efforts focus on increasing accuracy, range, and effectiveness and ensuring that detector and sensor data integrate seamlessly with relevant information systems.
  - Hazard Mitigation – Efforts will address personnel decontamination, to include mass casualties and human remains, along with materiel decontamination, which includes sensitive electronics and aircraft. Novel decontamination approaches are focusing on broad applicability to chemicals or biologicals, while minimizing harm to individuals, sensitive equipment, and platforms.

### **FY18 Budget Request Highlights**

- The FY 2018 Research, Development, Test and Evaluation (RDT&E) budget request of \$1097 million (M) supports key efforts including:
  - \$285 million to continue support of research and development of medical countermeasures (MCMs) vaccines and therapeutics addressing high priority biological threats.
  - \$295 million supporting RDT&E efforts advancing environmental (detectors and sensors) and medical surveillance (diagnostic and analytical devices) capabilities providing enhanced situational awareness of traditional and non-traditional chemical threats as well as traditional and emerging biological threats.
  - \$104 million to continue support of research and development of medical countermeasures focused on protecting and treating against traditional and non-traditional chemical agents.
  - \$93 million to support critical chemical and biological defense research, development, and test infrastructure and operations.
  - \$91 million supporting biosurveillance, warning & reporting, decision support, and modeling and simulation capabilities.
  - \$86 million supporting RDT&E for personnel/collective protection and hazard mitigation capabilities against traditional and non-traditional chemical threats as well as traditional and emerging biological threats.
  - \$69 million supporting basic research and threat agent sciences advancing fundamental knowledge and experimental research in the life and physical sciences.
  - \$26 million supporting concepts development, technology demonstrations, and experimentation capability demonstrations to demonstrate enhanced military operational capability for technologies and equipment.
  
- The FY 2018 Procurement budget request of \$275 million supports key efforts including:
  - \$94 million to procure CBRN Dismounted Reconnaissance Sets, Kits, and Outfits (DR SKO) which allows warfighters to perform CBRN dismounted reconnaissance, surveillance, and site assessment of WMD suspect areas not accessible by traditional CBRN reconnaissance mounted platforms.
  - \$85 million to procure modernized respiratory and ocular protection for ground and air forces.
  - \$27 million to procure modernized Collective Protection capabilities (Joint Expeditionary Collective Protection and CB Protective Shelters).
  - \$16 million to procure Common Analytical Laboratory Systems providing a modular, scalable and adaptable analytical capability for a variety of operating and environmental conditions.
  - \$11 million to procure the CBRN Uniform Integrated Protection Ensemble supporting enhanced protection for special purpose units.

## **Summary**

The proliferation of WMD is among the greatest challenges facing the United States, and countering WMD is a top priority of the U.S. National Security Strategy. Accordingly, the CBDP continues to focus on developing enhanced levels of flexibility and adaptability to anticipate, identify, and quickly respond to the challenge. Current DoD efforts strengthen and expand capabilities to prevent, protect against, mitigate, respond to, and recover from CBRN threats and effects as part of an integrated, layered defense, as well as improve the Warfighter's ability to find, track, interdict, and eliminate CBRN weapons or emerging threats. These efforts ensure that currently available technologies are produced, procured, and provided swiftly and that cutting-edge technologies are harnessed to provide improved capabilities in the future. This is achieved through developing operationally relevant capabilities for the Warfighter that are complementary and holistically reduce identified risks. The CBDP continues to enhance CBRN readiness to counter known and emerging threats and collaborates with other government agencies to foster exchange of knowledge and coordination of CB defense-related activities. This budget request supports the CBDP as a Joint Force enabler fulfilling the needs of the Warfighters to ensure that they are trained, equipped, and resourced to complete missions in CBRN environments now and in the future, preserving the security and freedom of our nation.

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Defense-Wide  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

16 May 2017

Appropriation -----	FY 2016 Base + OCO -----	FY 2017 PB Request with CR Adj Base -----	FY 2017 Total PB Requests* with CR Adj Base -----
Procurement, Defense-Wide	295,710	309,316	309,316
Total Defense-Wide	295,710	309,316	309,316

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 (Dollars in Thousands)

16 May 2017

Appropriation -----	FY 2017 PB Request with CR Adj OCO -----	FY 2017 Total PB Requests* with CR Adj OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj OCO -----
Procurement, Defense-Wide				
Total Defense-Wide				

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Defense-Wide  
FY 2018 President's Budget Request  
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(Dollars in Thousands)

16 May 2017

Appropriation -----	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA -----	FY 2017 Total PB Requests* with CR Adj Base + OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj Base + OCO -----
Procurement, Defense-Wide	309,316	309,316		309,316
Total Defense-Wide	309,316	309,316		309,316

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(Dollars in Thousands)

16 May 2017

Appropriation -----	FY 2018 Base -----	FY 2018 OCO -----	FY 2018 Total -----
Procurement, Defense-Wide	276,058		276,058
Total Defense-Wide	276,058		276,058



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Defense-Wide  
FY 2018 President's Budget Request  
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Total Obligational Authority  
(Dollars in Thousands)

16 May 2017

Organization: Procurement, Defense-Wide -----	FY 2016 Base + OCO -----	FY 2017 PB Request with CR Adj Base -----	FY 2017 Total PB Requests* with CR Adj Base -----
Chemical and Biological Defense Program, CBDP	295,710	309,316	309,316
Total	295,710	309,316	309,316

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	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
	-----	-----	-----	-----
Organization: Procurement, Defense-Wide				
-----				
Chemical and Biological Defense Program, CBDP				
Total				

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 (Dollars in Thousands)

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Organization: Procurement, Defense-Wide -----	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA -----	FY 2017 Total PB Requests* with CR Adj Base + OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj Base + OCO -----
Chemical and Biological Defense Program, CBDP	309,316	309,316		309,316
Total	309,316	309,316		309,316

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16 May 2017

Organization: Procurement, Defense-Wide -----	FY 2018 Base -----	FY 2018 OCO -----	FY 2018 Total -----
Chemical and Biological Defense Program, CBDP	276,058		276,058
Total	276,058		276,058

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(Dollars in Thousands)

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Appropriation: Procurement, Defense-Wide

Budget Activity -----	FY 2016 Base + OCO -----	FY 2017 PB Request with CR Adj Base -----	FY 2017 Total PB Requests* with CR Adj Base -----
03. Chemical/Biological Defense	295,710	309,316	309,316
Total Procurement, Defense-Wide	295,710	309,316	309,316

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 (Dollars in Thousands)

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Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
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03. Chemical/Biological Defense

Total Procurement, Defense-Wide

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Appropriation: Procurement, Defense-Wide

Budget Activity -----	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA -----	FY 2017 Total PB Requests* with CR Adj Base + OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj Base + OCO -----
03. Chemical/Biological Defense	309,316	309,316		309,316
Total Procurement, Defense-Wide	309,316	309,316		309,316

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 (Dollars in Thousands)

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Appropriation: Procurement, Defense-Wide

Budget Activity -----	FY 2018 Base -----	FY 2018 OCO -----	FY 2018 Total -----
03. Chemical/Biological Defense	276,058		276,058
Total Procurement, Defense-Wide	276,058		276,058



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 (Dollars in Thousands)

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Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-
Budget Activity 03: Chemical/Biological Defense						
-----						
CDBP						
76	Chemical Biological Situational Awareness	A	170,204	148,203	148,203	U
77	CB Protection & Hazard Mitigation	A	125,506	161,113	161,113	U
			-----	-----	-----	
Total Chemical/Biological Defense			295,710	309,316	309,316	
			-----	-----	-----	
Total Procurement, Defense-Wide			295,710	309,316	309,316	

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 (Dollars in Thousands)

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Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO		FY 2017 Total PB Requests* with CR Adj OCO		FY 2017 Less Enacted Div B P.L.114-254** OCO		FY 2017 Remaining Req with CR Adj OCO		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 03: Chemical/Biological Defense											
-----											
CBDP											
76	Chemical Biological Situational Awareness	A									U
77	CB Protection & Hazard Mitigation	A									U
Total Chemical/Biological Defense											
Total Procurement, Defense-Wide											

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 Total Obligational Authority  
 (Dollars in Thousands)

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Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA		FY 2017 Total PB Requests* with CR Adj Base + OCO		FY 2017 Less Enacted Div B P.L.114-254** OCO		FY 2017 Remaining Req with CR Adj Base + OCO		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 03: Chemical/Biological Defense											
-----											
CBDP											
76	Chemical Biological Situational Awareness	A	148,203		148,203				148,203		U
77	CB Protection & Hazard Mitigation	A	161,113		161,113				161,113		U
			-----		-----			-----			
Total Chemical/Biological Defense			309,316		309,316				309,316		
			-----		-----			-----			
Total Procurement, Defense-Wide			309,316		309,316				309,316		

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Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	Cost	FY 2018 OCO Quantity	Cost	FY 2018 Total Quantity	Cost	S e c
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Budget Activity 03: Chemical/Biological Defense									
-----									
CBDP									
76	Chemical Biological Situational Awareness	A		135,031			135,031		U
77	CB Protection & Hazard Mitigation	A		141,027			141,027		U
			-----		-----		-----		
Total Chemical/Biological Defense				276,058			276,058		
			-----		-----		-----		
Total Procurement, Defense-Wide				276,058			276,058		

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77	03	01	PHM001	CB PROTECTION AND HAZARD MITIGATION.....	Volume 1 - 49

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SITUATIONAL AWARENESS	SA0001	76	03	01.....	Volume 1 - 1

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Chemical and Biological Defense Program	<b>Date:</b> May 2017
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<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS
--	--

<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> N/A
--	---	--

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	335.317	170.204	148.203	135.031	-	135.031	232.727	239.388	285.490	311.091	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	335.317	170.204	148.203	135.031	-	135.031	232.727	239.388	285.490	311.091	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	335.317	170.204	148.203	135.031	-	135.031	232.727	239.388	285.490	311.091	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

**Description:**

The Chemical Biological Situational Awareness (CB SA) Budget Line Item (BLIN) provides for situational awareness capabilities to the Joint Force through a portfolio that comprises efforts across contamination avoidance, special purpose units, homeland defense, diagnostics, and CB surveillance.

Specific situational awareness efforts provided include detection, warning and reporting, reconnaissance systems, field analytics systems, diagnostics equipment and special purpose unit equipment.

Efforts in the area of chemical, biological and radiological detection include; (1) Joint Chemical Agent Detector (JCAD) an automatic, lightweight man-portable, point-sampling, chemical warfare agent vapor detection/warning system which includes simultaneous and automatic detection by class (nerve, blister, and blood), identification and quantification of hazard levels, and data communication interface and the MK26 Mod 0 Improved (chemical agent) Point Detection System (IPDS) provides automatic point detection, classification, and warning when there are chemical warfare vapors external to the ship; and IPDS is an Ion Mobility Spectroscopy (IMS) based chemical point detection system with algorithm library and embedded data processing that automatically detects and alarms to nerve and blister vapor at low concentrations and has the capability of rejecting common shipboard interferents: (2) the Next Generation Chemical Detector (NGCD) is comprised of several detection systems for multi phase of matter sampling, location of liquid and solids on surfaces, and vapor and aerosol monitoring.

Efforts in the warning, reporting and reconnaissance area include; (1) Joint Warning and Reporting Network (JWARN) provides a fully automated NBC detection and warning process throughout the battle space; (2) Software Support Activity (SSA) is a user development system providing enterprise-wide services and coordination to facilitate net-centric interoperability; (3) the Joint Effects Model (JEM) is DoD's only accredited model for predicting hazards associated with the release of contaminants into the environment; (4) Chemical, Biological, Radiological, and Nuclear (CBRN) Information Systems (CBRN IS) aligns Chemical Biological Defense (CBD) information technology in order to utilize a common software architecture, eliminate duplicative integration effort, produce interoperable system components, and minimize time-to-market of end user capability; (5) Joint Nuclear Biological and Chemical (NBC) Reconnaissance Systems (JNBCRS) provide field commanders with point and stand-off intelligence for real time field assessment of NBC hazards which includes support of the Stryker Nuclear Biological and Chemical Reconnaissance Vehicles (NBCRV); (6) CBRN Dismounted Reconnaissance Systems (CBRN DRS) provides mission critical reconnaissance platoon dismounted capabilities for detection, presumptive identification, sample collection, marking and immediate reporting of standard NBC hazards, to include hazardous industrial materials; (7) The Next Generation Diagnostic System (NGDS) program is a DoD effort to develop and field common biological test equipment and diagnostic platform among all Military Services. A multi-incremental configuration, evolutionary development and fielding approach is proposed which will provide expanded capability for an early warning tool of health threats, early detection of health events, and overall situational awareness. NGDS will identify Biological Warfare (BW) agents and pathogens of operational concern (Increment 1); (8) the Global Biosurveillance Technology Initiatives (GBTI) will develop a globally-distributed, fully integrated and networked, state-of-the-art analytical capability for biological threats that will enable the compression of the discovery-to-decision timeframe and provide awareness and understanding of the baseline biological threat footprint; (9) the Critical Reagents Program (CRP) integrates and consolidates all DoD reagents/antibodies/DNA biological detection requirements; and (10) The

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP		<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> N/A
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Biosurveillance Portal (BSP) is a web-based enterprise environment that will facilitate collaboration, communication, and information sharing in support of the detection, management, and mitigation of manmade and naturally occurring biological events. BSP bridges the communication gaps in the Biosurveillance domain to provide a central access point for Biosurveillance information and situational awareness for DoD, interagency and allied partners supporting the early identification and response to biological events.</p> <p>Efforts in field analytics, homeland defense, and Special Purpose Units (SPU) include; (1) an integrated chemical, biological, nuclear and explosive (CBRNE) rapid response capability for the National Guard Bureaus (NGB) Weapons of Mass Destruction - Combat Support Teams (WMD-CST) and SPUs to address legacy requirements gaps/deficiencies for WMD-CST's and the SPU Chemical Biological Equipment (CBE) Chemical Biological Radiological and Nuclear Response Enterprise (CRE) and SPU-CBE Chemical Biological Incident Response Force (CBIRF) where they exist through the streamlined acquisition of Commercial-off-the-shelf (COTS)/government-off-the-shelf (GOTS) capability upgrades that incorporate proven advancements in technology to satisfy mission performance standards; (2) the Common Analytical Laboratory System (CALS), which will be modular, scalable and adaptable to a variety of concept of operations (CONOPS) and environmental conditions. Currently, fielded systems have been designed independently by various agencies with the intent of meeting specific units requirements. As a result, multiple mobile lab configurations exist with differing sustainment tails and lacking in commonality. CALS will incorporate an open architecture that can accommodate quick installation or removal of equipment as mission requirements dictate. As well, it will provide the ability to rapidly develop a common operating picture allowing first responders and DoD officials to determine the appropriate course of action; and (3) the Joint Handheld Bio-Agent Identifier (JHBI), which will provide three different handheld, polymerase chain reaction (PCR) based, bio-identification systems for the rapid identification of biowarfare agents in environmental samples at the point of contact or in far-forward settings. The three JHBI systems, which will be fielded to Special Operations Forces, will provide the necessary bio-identification capability to replace older legacy systems while reducing the size and weight burden on the Warfighter.</p>		

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Exhibit P-40, Budget Line Item Justification: FY 2018 Chemical and Biological Defense Program			Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP		P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A		Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			

Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	JF0108 / JOINT HANDHELD BIO-AGENT IDENTIFIER (JHBI)		B		- / 0.000	- / 0.000	- / 0.000	- / 2.285	- / -	- / 2.285
P-5	JF0104 / NEXT GEN CHEMICAL DETECTOR (NGCD)		B		- / 0.000	- / 0.000	- / 2.378	- / 0.000	- / -	- / 0.000
P-5	JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)	P-5a			- / 83.996	- / 27.134	- / 7.547	- / 4.253	- / -	- / 4.253
P-5	G47101 / JOINT WARNING & REPORTING NETWORK (JWARN)		A		- / 1.878	- / 0.000	- / 3.889	- / 0.981	- / -	- / 0.981
P-5	JS5230 / SOFTWARE SUPPORT ACTIVITY (SSA)		B		- / 0.100	- / 0.100	- / 0.300	- / 0.096	- / -	- / 0.096
P-5	JC0208 / JOINT EFFECTS MODEL (JEM)		A		- / 1.141	- / 3.316	- / 3.069	- / 0.983	- / -	- / 0.983
P-5	SA0006 / CBRN INFORMATION SYSTEMS (CBRN IS)		B		- / 0.000	- / 0.000	- / 0.500	- / 0.480	- / -	- / 0.480
P-5	MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)	P-5a	A		- / 4.408	- / 12.900	- / 1.956	- / 0.500	- / -	- / 0.500
P-5	MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)	P-5a, P-21	A		- / 201.496	- / 111.248	- / 90.094	- / 94.424	- / -	- / 94.424
P-5	JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)	P-5a			- / 12.482	- / 3.300	- / 7.395	- / 6.938	- / -	- / 6.938
P-5	JX0302 / GLOBAL BIO TECH INITIATIVE (GBTI)				- / 0.000	- / 1.375	- / 2.100	- / 2.017	- / -	- / 2.017
P-5	JX0210 / DEFENSE BIOLOGICAL PRODUCTS ASSURANCE PROGRAM (DBPAP)				- / 1.553	- / 1.005	- / 1.005	- / 0.995	- / -	- / 0.995
P-5	JX0301 / BIOSURVEILLANCE PORTAL (BSP)		A		- / 0.000	- / 1.620	- / 1.220	- / 1.171	- / -	- / 1.171
P-5	JS0004 / WMD - CIVIL SUPPORT TEAMS (WMD CST)	P-5a	A		- / 28.263	- / 8.206	- / 0.000	- / 0.000	- / -	- / 0.000
P-5	JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)	P-5a	B		- / 0.000	- / 0.000	- / 23.100	- / 16.402	- / -	- / 16.402
P-5	JS0008 / SPU CBE CBRN RESPONSE ENTERPRISE (SPU CBE CRE)		A		- / 0.000	- / 0.000	- / 2.500	- / 2.401	- / -	- / 2.401
P-5	JS0007 / SPU CBE CHEMICAL BIOLOGICAL INCIDENT RESPONSE FORCE (SPU CBE CBIRF)		A		- / 0.000	- / 0.000	- / 1.150	- / 1.105	- / -	- / 1.105
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 335.317</b>	<b>- / 170.204</b>	<b>- / 148.203</b>	<b>- / 135.031</b>	<b>- / -</b>	<b>- / 135.031</b>

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

**Justification:**

Situational Awareness is a primary objective of the Chemical Biological Defense Program. Operational forces have an immediate need to safely operate, survive, and sustain operations in an NBC agent threat environment. Contamination Avoidance is necessary to maintain operational efficiency and minimize the need to decontaminate vehicles, equipment, and areas. Advanced chemical defensive equipment is required to enhance US capability to detect and identify threat agents in the battle space and the homeland. Warning, reporting, and reconnaissance efforts 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. Additionally, efforts in this BLIN support Special Purpose Unit operations and the National Guard Bureau WMD-CSTs.

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JF0108 / JOINT HANDHELD BIO-AGENT IDENTIFIER (JHBI)						
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity (Units in Each)				-		-		-		-		-		-		-		
Gross/Weapon System Cost (\$ in Millions)				0.000		0.000		0.000		2.285		-		2.285				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Net Procurement (P-1) (\$ in Millions)				0.000		0.000		0.000		2.285		-		2.285				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Total Obligation Authority (\$ in Millions)				0.000		0.000		0.000		2.285		-		2.285				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-				
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JHBI - Hardware - BIOMEME (devices)	-	-	0.000	-	-	0.000	-	-	0.000	8.000	25	0.200	-	-	-	8.000	25	0.200
JHBI - Hardware - IBIS (assays)	-	-	0.000	-	-	0.000	-	-	0.000	0.240	500	0.120	-	-	-	0.240	500	0.120
JHBI - Hardware - EPISTEM (assays)	-	-	0.000	-	-	0.000	-	-	0.000	0.240	500	0.120	-	-	-	0.240	500	0.120
JHBI - Hardware - BIOMEME (assays)	-	-	0.000	-	-	0.000	-	-	0.000	0.242	600	0.145	-	-	-	0.242	600	0.145
JHBI- Hardware - IBIS (devices)	-	-	0.000	-	-	0.000	-	-	0.000	15.000	85	1.275	-	-	-	15.000	85	1.275
JHBI - Hardware - EPISTEM (devices)	-	-	0.000	-	-	0.000	-	-	0.000	5.000	85	0.425	-	-	-	5.000	85	0.425
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	0.000	-	-	2.285	-	-	-	-	-	2.285
Subtotal: Hardware Cost	-	-	0.000	-	-	0.000	-	-	0.000	-	-	2.285	-	-	-	-	-	2.285
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	-	-	2.285	-	-	-	-	-	2.285
Remarks: The Joint Handheld Bio-Agent Identifier (JHBI) program is a Joint Service Acquisition Category (ACAT) III program consisting of multiple increments to address an existing United States Special Operations Command (USSOCOM) requirement for handheld, multiplexed, environmental, bio-agent identification. The JHBI program will provide three different handheld bio-identification systems for the rapid and																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JF0108 / JOINT HANDHELD BIO-AGENT IDENTIFIER (JHBI)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>accurate identification of organisms at the point of contact for multiple mission types. Biomeme developed the "two3" system for Increment 1 and is improving that system to become the "three9" system for Increment 2. Both are highly multiplexed, smart phone-based, Polymerase Chain Reaction (PCR) identification systems; Epistem is developing the "Genedrive", a 9-plex PCR system; and Ibis is developing the Mobile Analysis Platform (MAP) with integrated sample preparation for far-forward deployment. The proposed JHBI systems will be handheld, PCR-based, multiplexed devices for the analysis of powder or liquid environmental biological samples. JHBI capabilities will provide Special Operations Forces with timely and accurate identification of 8 or more bio-agents at the point of need. Once the threshold capability is procured and fielded, additional capabilities will be developed to meet time-phases or objective requirements. These capabilities may include additional CBRN threat assays, integrated sample preparation capabilities, and supporting capabilities, as required. JHBI Increment1 is anticipated to serve as a supplemental capability to the Man-portable, multiplex, Polymerase Chain Reaction Bio-identifier known as BioFire RAZOR, with Increment 2 fielding the complete replacement of the RAZOR by FY20.</p> <p>Justification: FY18 will procure the following JHBI hardware for USSOCOM; 25 BIOMEME devices with 600 assays, 85 EPISTEM devices with 500 assays, and 85 IBIS devices with 500 assays.</p> <p>RDT&amp;E Code B Item: 0604384BP/Proj CA5</p> <p>CA5/JHBI: RDT&amp;E ; FY18 - 0.990M</p> <p>DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES</p> <p>JHBI - Full Operational Capability (Jun 2018 to Sep 2018)  JHBI - Low Rate Initial Production (Feb 2018 to Mar 2018)  JHBI - MS C (Feb 2018 to Mar 2018)  JHBI - Initial Operational Test &amp; Evaluation (Mar 2018 to Jun 2018)  JHBI - Operational Testing (Nov 2017 to Dec 2018)  JHBI - Developmental Testing (Nov 2017 to Apr 2019)</p>		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program														<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1							<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS							<b>Item Number / Title [DODIC]:</b> JF0104 / NEXT GEN CHEMICAL DETECTOR (NGCD)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B										<b>MDAP/MAIS Code:</b>								
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		0.000		2.378		0.000		-		0.000				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		0.000		2.378		0.000		-		0.000				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
<b>Total Obligation Authority</b> <i>(\$ in Millions)</i>				<b>0.000</b>		<b>0.000</b>		<b>2.378</b>		<b>0.000</b>		<b>-</b>		<b>0.000</b>				
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2016</b>			<b>FY 2017</b>			<b>FY 2018 Base</b>			<b>FY 2018 OCO</b>			<b>FY 2018 Total</b>		
	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Production Verification Test (PVT)	-	-	0.000	-	-	0.000	-	-	1.940	-	-	0.000	-	-	-	-	-	0.000
Engineering Support	-	-	0.000	-	-	0.000	-	-	0.438	-	-	0.000	-	-	-	-	-	0.000
<i>Subtotal: Recurring Cost</i>	-	-	<i>0.000</i>	-	-	<i>0.000</i>	-	-	<i>2.378</i>	-	-	<i>0.000</i>	-	-	-	-	-	<i>0.000</i>
<i>Subtotal: Hardware Cost</i>	-	-	<i>0.000</i>	-	-	<i>0.000</i>	-	-	<i>2.378</i>	-	-	<i>0.000</i>	-	-	-	-	-	<i>0.000</i>
<b>Gross/Weapon System Cost</b>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	<b>2.378</b>	-	-	<b>0.000</b>	-	-	-	-	-	<b>0.000</b>
<b>Remarks:</b> The NGCD program is several detection systems for vapor and aerosol monitoring (NGCD 1), location of liquid and solids on surfaces (NGCD 2) and sampling of multiplephases of matter (NGCD 3). NGCD will detect and identify non-traditional agents, chemical warfare agents (CWAs), toxic industrial chemicals (TICs) in the air and on surfaces. The NGCD will provide improved CWA/TIC selectivity and sensitivity on multiple platforms as well as multiple environments. This sensor will improve detection, consequence management and reconnaissance, and weapons of mass destruction (WMD) interdiction capabilities. The scope of the project includes detection of agent a few feet away from the detector as well as the sampling point of the detector. The Rapid fielding portion of this effort will focus on acceleration of more mature technology utilized for USSOCOM, meeting a portion of the NGCD capability sets.																		
<b>Justification:</b>  RDT&E Code B Item: 0603884BP/Proj CA4; 0604384BP/Proj CA5																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JF0104 / NEXT GEN CHEMICAL DETECTOR (NGCD)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>CA4/NGCD: RDT&amp;E FY14 and Prior - 35.094M; FY15 - 39.963M; FY16 - 42.869M; FY17 - 35.674M; FY18 - 1.037M; FY19 - 0.738M; FY20 - 9.881M; FY21 - 10.430M; FY22 - 6.730M  CA5/NGCD: RDT&amp;E FY14 and Prior - 0.000M; FY15 - 2.248M; FY16 - 2.304M; FY17 - 16.827M; FY18 - 57.987M; FY19 - 76.712M; FY20 - 42.885M; FY21 - 9.695M; FY22 - 3.822M</p> <p>DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES</p> <p>NGCD - Acceleration (Dec 2015 to Sep 2018)  NGCD 1 - Milestone C: Feb 2020  NGCD 1 - LRIP (Feb 2020 to Jul 2021)  NGCD 1 - FRP Decision: Jul 2021  NGCD 2 - LRIP (Feb 2021 to Dec 2022)  NGCD 3 - Milestone C: Apr 2020  NGCD 3 - LRIP (Apr 2020 to Apr 2022)  NGCD 3 - FRP: Apr 2022</p>		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				83.996		27.134		7.547		4.253		-		4.253				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				83.996		27.134		7.547		4.253		-		4.253				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				83.996		27.134		7.547		4.253		-		4.253				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	53.785	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
M4A1 JCAD - HARDWARE - Stryker Communication Adapter <sup>(†)</sup>	2.287	2,501	5.720	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
M4 JCAD - FRP - P3A Modifications	-	-	0.000	-	-	4.098	-	-	4.240	-	-	0.000	-	-	-	-	-	0.000
M4A1 JCAD - HARDWARE - JCAD Communication Adapter <sup>(†)</sup>	2.312	1,870	4.323	2.639	2,078	5.483	-	-	0.000	4.680	316	1.479	-	-	-	4.680	316	1.479
M4A1 JCAD - Hardware <sup>(†)</sup>	4.614	4,371	20.168	6.422	2,078	13.344	-	-	0.000	6.763	316	2.137	-	-	-	6.763	316	2.137
Subtotal: Recurring Cost	-	-	83.996	-	-	22.925	-	-	4.240	-	-	3.616	-	-	-	-	-	3.616
Subtotal: Hardware Cost	-	-	83.996	-	-	22.925	-	-	4.240	-	-	3.616	-	-	-	-	-	3.616
Support Cost																		
Jupiter-C CLS Fielding	-	-	0.000	-	-	2.300	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
ECBC (JUPITER-C)	-	-	0.000	-	-	0.646	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Engineering Support (Govt)	-	-	0.000	-	-	1.263	-	-	2.307	-	-	0.436	-	-	-	-	-	0.436



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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program										Date: May 2017									
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1					P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS					Item Number / Title [DODIC]: JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)									
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:									

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
System Fielding Support (Govt)	-	-	0.000	-	-	0.000	-	-	1.000	-	-	0.201	-	-	-	-	-	0.201
<i>Subtotal: Support Cost</i>	-	-	<i>0.000</i>	-	-	<i>4.209</i>	-	-	<i>3.307</i>	-	-	<i>0.637</i>	-	-	-	-	-	<i>0.637</i>
<b>Gross/Weapon System Cost</b>	-	-	<b>83.996</b>	-	-	<b>27.134</b>	-	-	<b>7.547</b>	-	-	<b>4.253</b>	-	-	-	-	-	<b>4.253</b>

**Remarks:**

The JCAD program employs an incremental acquisition strategy to develop a miniaturized, rugged, and portable point chemical agent detector that automatically and simultaneously detects, identifies and alerts in the presence of nerve, blister, and blood chemical warfare agents. The M4 JCAD entered full rate production in September 2008 and was procured through FY10. The M4A1 reduces operations and sustainment costs to the Warfighter and obtains many of the objective values in the JCAD Increment I Capability Production Document (CPD). Production of the M4A1 began April FY11. JCAD will be used for wheeled vehicles, stand alone, and individual Soldier applications. The M4 JCAD will replace the M8A1 and the M22 Automatic Chemical Agent Alarms (ACAA/ACADA). The M4A1 may also replace the Chemical Agent Monitor (CAM) and Improved Chemical Agent Monitor (ICAM) and other legacy systems currently used by the individual Services. These funds also support a Lifecycle Replacement (LR) for the Navy's Improved Point Detection System (IPDS). The MK26 Mod 1 Lifecycle Replacement (IPDS-LR) provides automatic point detection, classification, and warning when there are chemical warfare vapors external to the ship. IPDS-LR is an Ion Mobility Spectrometer (IMS) based chemical point detection system with an algorithm library and embedded data processing that automatically detects and alarms to nerve and blister vapor at low concentrations and has the capability of rejecting common shipboard interferents.

Justification: FY18 funding procures 316 JCADs and JCAD communication adapters and provides government engineering and field support.

(†) indicates the presence of a P-5a

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>								<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS				<b>Item Number / Title [DODIC]:</b> JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
M4A1 JCAD - HARDWARE - Stryker Communication Adapter		2015	Smiths Detection / Edgewood, MD	C / FFP	RDECOM, APG, MD	Dec 2014 <sup>(1)</sup>	Feb 2015	2,501	2.287	Y		
M4A1 JCAD - HARDWARE - JCAD Communication Adapter		2015	Smiths Detection / Edgewood, MD	C / FFP	RDECOM, APG, MD	Dec 2014 <sup>(2)</sup>	Feb 2015	1,870	2.312	Y		
M4A1 JCAD - HARDWARE - JCAD Communication Adapter		2016	Smiths Detection / Edgewood, MD	C / FFP	RDECOM, APG, MD	Mar 2016	Sep 2016	2,078	2.639	Y		
M4A1 JCAD - HARDWARE - JCAD Communication Adapter		2018	Smiths Detection / Edgewood, MD	SS / CPIF	RDECOM, APG, MD	Dec 2017	Jul 2018	316	4.680	Y		
M4A1 JCAD - Hardware		2015	Smiths Detection (E) / Edgewood, MD	C / FFP	RDECOM, APG, MD	Jan 2015 <sup>(3)</sup>	Mar 2015	4,371	4.614	Y		
M4A1 JCAD - Hardware		2016	Smiths Detection / Edgewood, MD	C / FFP	RDECOM, APG, MD	Mar 2016	Sep 2016	2,078	5.799	Y		
M4A1 JCAD - Hardware		2018	Smiths Detection / Edgewood, MD	SS / CPIF	RDECOM, APG, MD	Dec 2017	Jul 2018	316	6.763	Y		

**Footnotes:**

<sup>(1)</sup> (Option)

<sup>(2)</sup> (Option)

<sup>(3)</sup> (Opt 5)

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: G47101 / JOINT WARNING & REPORTING NETWORK (JWARN)					
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1.878		0.000		3.889		0.981		-		0.981				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				1.878		0.000		3.889		0.981		-		0.981				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				1.878		0.000		3.889		0.981		-		0.981				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Software Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	1.878	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JWARN INCREMENT 2 - Software & Installation (Contractor)	-	-	0.000	-	-	0.000	-	-	0.913	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	1.878	-	-	0.000	-	-	0.913	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Software Cost	-	-	1.878	-	-	0.000	-	-	0.913	-	-	0.000	-	-	-	-	-	0.000
Package Fielding Cost																		
Recurring Cost																		
JWARN INCREMENT 2 - System Fielding Support (TPF, FDT, NET)	-	-	0.000	-	-	0.000	-	-	1.553	-	-	0.981	-	-	-	-	-	0.981
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	1.553	-	-	0.981	-	-	-	-	-	0.981
Subtotal: Package Fielding Cost	-	-	0.000	-	-	0.000	-	-	1.553	-	-	0.981	-	-	-	-	-	0.981
Support Cost																		
JWARN INCREMENT 2 - Technical Engineering Support	-	-	0.000	-	-	0.000	-	-	1.423	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	-	-	0.000	-	-	0.000	-	-	1.423	-	-	0.000	-	-	-	-	-	0.000

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>										<b>Date:</b> May 2017									
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> G47101 / JOINT WARNING & REPORTING NETWORK (JWARN)									
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A										<b>MDAP/MAIS Code:</b>									

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	1.878	-	-	0.000	-	-	3.889	-	-	0.981	-	-	-	-	-	0.981

**Remarks:**

The Joint Warning and Reporting Network (JWARN) provides the Joint Forces with a comprehensive Early Warning (EW) analysis and response capability to minimize the effects of hostile Chemical, Biological, Radiological, and Nuclear (CBRN) attacks, incidents and accidents. It provides the operational capability to employ CBRN warning technology which will collect, analyze, identify, locate, report, and disseminate CBRN warnings. JWARN will transition from a Command and Control (C2) platform specific implementation to a Web-based Service Oriented Architecture (SOA) meeting the DoD's evolution to a more comprehensive Common Operating Environment (COE). JWARN Increment 2 will provide an expansion of sensors that will connect to JWARN, increased automation of message handling, improved false alarm filtering, integration of route-planning calculator, and interoperability with additional Command and Control (C2), medical information and evolving Bio-Surveillance systems. JWARN will be located in Command and Control Centers at the appropriate level and will be employed by CBRN defense specialists and other designated personnel to improve the efficiency of limited CBRN personnel assets. This employment will transfer data automatically from existing sensors and to and from the future sensors to provide commanders with the capability to support operational decision making in a CBRN environment. JWARN will integrate existing sensors into a sensor network or host C2 system, but will not provide the sensors that will be employed in the operating environment. JWARN will be compatible and integrated with Joint Services Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Systems and will operate as a standalone capability in the next increment of development. Activities include: logistical elements, support equipment, manuals and training required to operate and support the system.

Justification: FY18 supports JWARN Increment 2 Total Package Fielding (TPF) and New Equipment Training (NET).

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>															<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1							<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS							<b>Item Number / Title [DODIC]:</b> JS5230 / SOFTWARE SUPPORT ACTIVITY (SSA)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B										<b>MDAP/MAIS Code:</b>									
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>					
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-					
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.100		0.100		0.300		0.096		-		0.096					
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.100		0.100		0.300		0.096		-		0.096					
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
<b>Total Obligation Authority</b> <i>(\$ in Millions)</i>				<b>0.100</b>		<b>0.100</b>		<b>0.300</b>		<b>0.096</b>		<b>-</b>		<b>0.096</b>					
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																			
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2016</b>			<b>FY 2017</b>			<b>FY 2018 Base</b>			<b>FY 2018 OCO</b>			<b>FY 2018 Total</b>			
	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	<b>Unit Cost</b> <i>(\$ K)</i>	<b>Qty</b> <i>(Each)</i>	<b>Total Cost</b> <i>(\$ M)</i>	
<b>Support Cost</b>																			
Prior/Future combined efforts	-	-	0.100	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000	
SSA - System Fielding Support (TFP, NET)	-	-	0.000	-	-	0.100	-	-	0.300	-	-	0.096	-	-	-	-	-	0.096	
<i>Subtotal: Support Cost</i>	-	-	<b>0.100</b>	-	-	<b>0.100</b>	-	-	<b>0.300</b>	-	-	<b>0.096</b>	-	-	-	-	-	<b>0.096</b>	
<b>Gross/Weapon System Cost</b>	-	-	<b>0.100</b>	-	-	<b>0.100</b>	-	-	<b>0.300</b>	-	-	<b>0.096</b>	-	-	-	-	-	<b>0.096</b>	
<b>Remarks:</b> <p>The JPEO-CBD SSA is a user developmental support and service activity supporting all JPEO-CBD CBRND Systems by providing enterprise-wide services to facilitate net-centric interoperability of systems in acquisition for the Warfighter. The SSA provides the CBRND Warfighter with Joint Service solutions for Cybersecurity/Information Assurance (CS/IA), Integrated Architectures, Data Management/Modeling, Interoperability Certifications, Verification, Validation and Accreditation (VV&amp;A) to support interoperable and integrated net-centric, service-oriented solutions for CBRND systems within the CBDP. The SSA emphasizes development of reference implementations to guide Government and industry system and software developers to ensure that their products meet common interoperability standards.</p> <p>The latest technologies/products include the definition of a Common CBRN Sensor Integration Standard (CCSI) and the CBRN Data Model. These technologies are direct enablers for the development of CBRN integrated sensor networks and the dissemination of CBRN information across all users.</p> <p>The SSA directly supports CBDP Bio-Surveillance initiatives in providing common service oriented architecture and framework for the collection and dissemination of Biosurveillance information.</p> <p>Justification: FY18 funds SSA system fielding support to the CBDP community.</p>																			

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS							Item Number / Title [DODIC]: JC0208 / JOINT EFFECTS MODEL (JEM)					
ID Code (A=Service Ready, B=Not Service Ready) : A									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1.141		3.316		3.069		0.983		-		0.983				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				1.141		3.316		3.069		0.983		-		0.983				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				1.141		3.316		3.069		0.983		-		0.983				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Software Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	1.141	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JEM INCREMENT 2 - Software & Installation	-	-	0.000	-	-	0.901	-	-	0.541	-	-	0.173	-	-	-	-	-	0.173
Subtotal: Recurring Cost	-	-	1.141	-	-	0.901	-	-	0.541	-	-	0.173	-	-	-	-	-	0.173
Subtotal: Software Cost	-	-	1.141	-	-	0.901	-	-	0.541	-	-	0.173	-	-	-	-	-	0.173
Package Fielding Cost																		
Recurring Cost																		
JEM INCREMENT 2 - System Fielding Support (TPF, FDT, NET)	-	-	0.000	-	-	1.327	-	-	1.876	-	-	0.601	-	-	-	-	-	0.601
Subtotal: Recurring Cost	-	-	0.000	-	-	1.327	-	-	1.876	-	-	0.601	-	-	-	-	-	0.601
Subtotal: Package Fielding Cost	-	-	0.000	-	-	1.327	-	-	1.876	-	-	0.601	-	-	-	-	-	0.601
Support Cost																		
JEM INCREMENT 2 - Technical & Engineering Support	-	-	0.000	-	-	1.088	-	-	0.652	-	-	0.209	-	-	-	-	-	0.209
Subtotal: Support Cost	-	-	0.000	-	-	1.088	-	-	0.652	-	-	0.209	-	-	-	-	-	0.209
Gross/Weapon System Cost	-	-	1.141	-	-	3.316	-	-	3.069	-	-	0.983	-	-	-	-	-	0.983

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JC0208 / JOINT EFFECTS MODEL (JEM)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>
<p><b>Remarks:</b>          The Joint Effects Model (JEM) is DoD's only accredited model for predicting hazards associated with the release of contaminants into the environment. JEM is being developed in separate increments. JEM Increment 1 is a web-based software program. It is the only accredited DoD computer-based tactical and operational hazard prediction model capable of providing common representation of chemical, biological, radiological, nuclear (CBRN) and toxic industrial chemicals/toxic industrial material hazard areas and effects. It may be used in two variants: as a standalone system, or as a resident application on host command, control, communications, computers, and intelligence systems. JEM Increment 2 is capable of modeling hazards in a variety of scenarios including: counter-force, passive defense, accident and/or incidents, high altitude releases, urban NBC environments, building interiors, and human performance degradation. Battle space commanders and first responders must have a CBRN hazard prediction capability in order to make decisions that will minimize risks of CBRN contamination and enable them to continue mission operations. JEM operates in an integrated fashion with operational and tactical Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems, and in a standalone mode. JEM Increments 1 and 2 interface and communicate with the other programs such as JWARN, weather systems, intelligence systems, and various databases.</p> <p>Justification: FY18 supports JEM Increment 2 Software &amp; Installation, Total Package Fielding (TFP), New Equipment Training (NET), and Technical &amp; Engineering Support. Note, JEM Increment 2 is a software product, and there are no associated quantities.</p>		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program												Date: May 2017							
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: SA0006 / CBRN INFORMATION SYSTEMS (CBRN IS)							
ID Code (A=Service Ready, B=Not Service Ready) : B									MDAP/MAIS Code:										
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total					
Procurement Quantity (Units in Each)				-		-		-		-		-		-					
Gross/Weapon System Cost (\$ in Millions)				0.000		0.000		0.500		0.480		-		0.480					
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-					
Net Procurement (P-1) (\$ in Millions)				0.000		0.000		0.500		0.480		-		0.480					
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-					
Total Obligation Authority (\$ in Millions)				0.000		0.000		0.500		0.480		-		0.480					
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																			
Initial Spares (\$ in Millions)				-		-		-		-		-		-					
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Software Cost																			
Recurring Cost																			
Prior/Future combined efforts		-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Technical and Engineering Support		-	-	0.000	-	-	0.000	-	-	0.500	-	-	0.480	-	-	-	-	-	0.480
Subtotal: Recurring Cost		-	-	0.000	-	-	0.000	-	-	0.500	-	-	0.480	-	-	-	-	-	0.480
Subtotal: Software Cost		-	-	0.000	-	-	0.000	-	-	0.500	-	-	0.480	-	-	-	-	-	0.480
Gross/Weapon System Cost		-	-	0.000	-	-	0.000	-	-	0.500	-	-	0.480	-	-	-	-	-	0.480
Remarks:																			
CBRN IS aligns Chemical Biological Defense (CBD) information technologies in order to utilize a common software architecture, eliminate duplicative integration effort, produce interoperable system components, and minimize time-to-market of end user capability. CBD information technology is assembled from the inventory of available capability in place of the current paradigm where functionality only exists within the individual Joint Effects Model (JEM), Joint Warning and Report Network (JWARN), and Biosurveillance Portal (BSP) applications. CBRN IS aligns with the Joint Information Environment (JIE), such as milCloud, in order to field the integrated capabilities. The JIE is the cornerstone of the DoD's future - providing a secure information framework for our national senior leaders and joint force commanders, command and control forces that deliver responsive, decisive actions from any device; anytime and anywhere.																			
Justification: FY18 supports Technical and Engineering Support. Costs associated with hosting CBRN IS on milCloud in support of world-wide accessibility for war-fighters.																			



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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)					
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				4.408		12.900		1.956		0.500		-		0.500				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				4.408		12.900		1.956		0.500		-		0.500				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				4.408		12.900		1.956		0.500		-		0.500				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	4.408	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JNBCRS INCREMENT 1 - Technical Manuals	-	-	0.000	-	-	0.155	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JNBCRS NBC EQUIPMENT SUITES - CBMS II Soldier Display Unit Replacements <sup>(†)</sup>	-	-	0.000	16.667	360	6.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Software Updates	-	-	0.000	-	-	0.400	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	4.408	-	-	6.555	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Hardware Cost	-	-	4.408	-	-	6.555	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Support Cost																		
TADSS	-	-	0.000	-	-	0.745	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Engineering Support	-	-	0.000	-	-	2.600	-	-	0.156	-	-	0.000	-	-	-	-	-	0.000
Logistics Support during Doctrine, Techniques, and Tactics (DTT) Training	-	-	0.000	-	-	3.000	-	-	1.800	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Support Cost	-	-	0.000	-	-	6.345	-	-	1.956	-	-	0.500	-	-	-	-	-	0.500

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program										<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)			

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A										<b>MDAP/MAIS Code:</b>			
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	4.408	-	-	12.900	-	-	1.956	-	-	0.500	-	-	-	-	-	0.500

**Remarks:**

The Joint Nuclear Biological and Chemical Reconnaissance Systems (JNBCRS), including the Stryker Nuclear Biological and Chemical Reconnaissance Vehicles (NBCRV), and NBC equipment suites provide field commanders with point and early warning intelligence for real time field assessment of NBC hazards. The NBC Equipment Suite consists of the Chemical and Biological Mass Spectrometer II (CBMS II), Joint Biological Point Detection System (JBPDs), Chemical Vapor Sampling System (CVSS), training aids, Devices and Simulation Systems (TADSS), the Sensor Processing Group and associated initial and pipeline spares. The NBC Equipment Suite performs the vital function of detecting, identifying, collecting, reporting, and marking NBC hazards and toxic industrial chemicals. Prior year funds were used for the Joint Service Light NBC Reconnaissance System in addition to NBC equipment suites for the Stryker NBCRV.

(t) indicates the presence of a P-5a

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
JNBCRS NBC EQUIPMENT SUITES - CBMS II Soldier Display Unit Replacements		2016	Defense Logistics Agency / Philadelphia, PA	MIPR	Philadelphia, PA	Aug 2016	Jan 2017	360	16.667	Y		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity (Units in Each)				-		-		-		-		-		-				
Gross/Weapon System Cost (\$ in Millions)				201.496		111.248		90.094		94.424		-		94.424				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Net Procurement (P-1) (\$ in Millions)				201.496		111.248		90.094		94.424		-		94.424				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Total Obligation Authority (\$ in Millions)				201.496		111.248		90.094		94.424		-		94.424				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-				
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	109.774	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CBRN DRS JCAD Type of Life Buy <sup>(†)</sup>	4.614	630	2.907	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CBRN DRS Navy Configuration <sup>(†)</sup>	-	-	0.000	395.333	15	5.930	543.212	33	17.926	559.534	58	32.453	-	-	-	559.534	58	32.453
CBRN DRS Army Configuration <sup>(†)</sup>	1,060.333	60	63.620	1,035.946	37	38.330	1,099.000	34	37.366	1,044.306	36	37.595	-	-	-	1,044.306	36	37.595
CBRN DRS Army Configuration Civil Support Team (CST) <sup>(†)</sup>	795.235	17	13.519	794.704	27	21.457	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CBRN DRS Marine Corps Configuration <sup>(†)</sup>	1,459.500	8	11.676	1,585.000	8	12.680	1,632.000	7	11.424	-	-	0.000	-	-	-	-	-	0.000
CBRN DRS Initial Spares	-	-	0.000	-	-	9.654	-	-	6.077	-	-	6.170	-	-	-	-	-	6.170
Subtotal: Recurring Cost	-	-	201.496	-	-	88.051	-	-	72.793	-	-	76.218	-	-	-	-	-	76.218
Subtotal: Hardware Cost	-	-	201.496	-	-	88.051	-	-	72.793	-	-	76.218	-	-	-	-	-	76.218
Support Cost																		

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>										<b>Date:</b> May 2017							
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)							

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A										<b>MDAP/MAIS Code:</b>							
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Engineering Support (FLIR)	-	-	0.000	-	-	3.381	-	-	3.340	-	-	3.340	-	-	-	-	-	3.340
Fielding Support	-	-	0.000	-	-	3.897	-	-	2.190	-	-	2.608	-	-	-	-	-	2.608
Engineering Support	-	-	0.000	-	-	6.521	-	-	2.880	-	-	3.267	-	-	-	-	-	3.267
CBRN DRS Contractor Logistics Support	-	-	0.000	-	-	9.398	-	-	8.891	-	-	8.991	-	-	-	-	-	8.991
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>23.197</b>	-	-	<b>17.301</b>	-	-	<b>18.206</b>	-	-	-	-	-	<b>18.206</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>201.496</b>	-	-	<b>111.248</b>	-	-	<b>90.094</b>	-	-	<b>94.424</b>	-	-	-	-	-	<b>94.424</b>

**Remarks:**

The CBRN Dismounted Reconnaissance Systems (CBRN DRS) consists of portable, Commercial-Off-The-Shelf and Government-Off-The-Shelf equipment which provides personnel protection from current and emerging CBRN hazards through detection, identification, sample collection, decontamination, marking, and hazard reporting for CBRN threats. The system supports Dismounted Reconnaissance, Surveillance, and CBRN Site Assessment missions which enables more detailed and near real-time CBRN information flow for the Warfighter. In addition the CBRN DRS consists of commercial and government off-the-shelf equipment which will enhance current Civil Support Team (CST) capability to address emerging threats in a domestic incident.

Justification: FY18 funds procure (58 DR SKO's for the Navy and 36 DR SKO's for the Army) and fielding, engineering, and logistics support.

(<sup>t</sup>) indicates the presence of a P-5a

**UNCLASSIFIED**

<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS				<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)			

<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$ K)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
CBRN DRS JCAD Type of Life Buy		2015	Smiths Detection / Edgewood, MD	C / FFP	Smiths Detection, Edgewood, MD	Jan 2015	Mar 2015	630	4.614	Y		
CBRN DRS Navy Configuration <sup>(†)</sup>		2016	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jan 2016	Mar 2016	15	395.333	Y		
CBRN DRS Navy Configuration <sup>(†)</sup>		2017	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jan 2017	May 2017	33	543.212	Y		
CBRN DRS Navy Configuration <sup>(†)</sup>		2018	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jan 2018	May 2018	58	559.534	Y		
CBRN DRS Army Configuration <sup>(†)</sup>		2015	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Jan 2015 <sup>(4)</sup>	May 2015	60	1,062.950	Y		Jan 2013
CBRN DRS Army Configuration <sup>(†)</sup>		2016	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Dec 2015 <sup>(5)</sup>	Apr 2016	37	1,035.946	Y		
CBRN DRS Army Configuration <sup>(†)</sup>		2017	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Jan 2017 <sup>(6)</sup>	May 2017	34	1,099.000	Y		
CBRN DRS Army Configuration <sup>(†)</sup>		2018	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Dec 2017 <sup>(7)</sup>	Apr 2018	36	1,044.306	Y		
CBRN DRS Army Configuration Civil Support Team (CST)		2015	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jun 2015	Mar 2016	17	795.235	Y		
CBRN DRS Army Configuration Civil Support Team (CST)		2016	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	May 2016	Apr 2017	27	794.704	Y		
CBRN DRS Marine Corps Configuration		2015	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Nov 2015 <sup>(8)</sup>	Mar 2016	8	1,459.500	Y		
CBRN DRS Marine Corps Configuration		2016	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Feb 2016 <sup>(9)</sup>	May 2016	8	1,585.000	Y		
CBRN DRS Marine Corps Configuration		2017	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Jan 2017 <sup>(10)</sup>	May 2017	7	1,632.000	Y		

<sup>(†)</sup> indicates the presence of a P-21

**Footnotes:**

<sup>(4)</sup> (Option)

<sup>(5)</sup> (Option)

<sup>(6)</sup> (Option)

<sup>(7)</sup> (Option)

<sup>(8)</sup> (Option)

<sup>(9)</sup> (Option)

<sup>(10)</sup> (Option)

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Chemical and Biological Defense Program																								<b>Date:</b> May 2017	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1												<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS												<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)	

Cost Elements (Units in Each)							Fiscal Year 2015											Fiscal Year 2016											B A L A N C E				
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015											Calendar Year 2016															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P		
CBRN DRS Navy Configuration																																	
	1	2016	CBDP	15	0	15																A -	-	15							0		
Secondary Distribution			NAVY	15	0	15																A -	-	15							0		
	1	2017	CBDP	33	0	33																											33
Secondary Distribution			NAVY	33	0	33																											33
	1	2018	CBDP	58	0	58																											58
Secondary Distribution			NAVY	58	0	58																											58
CBRN DRS Army Configuration																																	
	2	2015	CBDP	60	0	60				A -	-	-	-	5	5	5	5	5	5	6	5	5	5	5	4							0	
Secondary Distribution			ARMY	60	0	60				A -	-	-	-	5	5	5	5	5	5	6	5	5	5	5	4							0	
	2	2016	CBDP	37	0	37																A -	-	-	-	5	5	5	5	5	5	7	
Secondary Distribution			ARMY	37	0	37																A -	-	-	-	5	5	5	5	5	5	7	
	2	2017	CBDP	34	0	34																											34
Secondary Distribution			ARMY	34	0	34																											34
	2	2018	CBDP	36	0	36																											36
Secondary Distribution			ARMY	36	0	36																											36
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Chemical and Biological Defense Program																				<b>Date:</b> May 2017									
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1										<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS										<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)									

Cost Elements (Units in Each)							Fiscal Year 2017														Fiscal Year 2018														B A L A N C E
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT				Calendar Year 2017											Calendar Year 2018														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
CBRN DRS Navy Configuration																																			
	1	2016	CBDP	15	15	0																												0	
Secondary Distribution			NAVY	15	15	0																												0	
	1	2017	CBDP	33	0	33				A -	-	-	-	3	4	4	4	4	4	4	2														0
Secondary Distribution			NAVY	33	0	33				A -	-	-	-	3	4	4	4	4	4	4	2														0
	1	2018	CBDP	58	0	58																	A -	-	-	-	3	4	4	4	4	39			
Secondary Distribution			NAVY	58	0	58																	A -	-	-	-	3	4	4	4	4	39			
CBRN DRS Army Configuration																																			
	2	2015	CBDP	60	60	0																												0	
Secondary Distribution			ARMY	60	60	0																												0	
	2	2016	CBDP	37	30	7	5	2																										0	
Secondary Distribution			ARMY	37	30	7	5	2																										0	
	2	2017	CBDP	34	0	34				A -	-	-	-	3	5	5	5	5	5	5	1														0
Secondary Distribution			ARMY	34	0	34				A -	-	-	-	3	5	5	5	5	5	5	1														0
	2	2018	CBDP	36	0	36																	A -	-	-	-	5	5	5	5	5	5	6		
Secondary Distribution			ARMY	36	0	36																	A -	-	-	-	5	5	5	5	5	5	6		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					



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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Chemical and Biological Defense Program																								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1												<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS												<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)			

Cost Elements (Units in Each)							Fiscal Year 2019														Fiscal Year 2020														B A L A N C E
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT				Calendar Year 2019											Calendar Year 2020														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
CBRN DRS Navy Configuration																																			
	1	2016	CBDP	15	15	0																												0	
Secondary Distribution			NAVY	15	15	0																												0	
	1	2017	CBDP	33	33	0																												0	
Secondary Distribution			NAVY	33	33	0																												0	
	1	2018	CBDP	58	19	39	4	4	4	4	4	4	4	4	4	3																			0
Secondary Distribution			NAVY	58	19	39	4	4	4	4	4	4	4	4	4	3																			0
CBRN DRS Army Configuration																																			
	2	2015	CBDP	60	60	0																												0	
Secondary Distribution			ARMY	60	60	0																												0	
	2	2016	CBDP	37	37	0																												0	
Secondary Distribution			ARMY	37	37	0																												0	
	2	2017	CBDP	34	34	0																												0	
Secondary Distribution			ARMY	34	34	0																												0	
	2	2018	CBDP	36	30	6	6																												0
Secondary Distribution			ARMY	36	30	6	6																												0
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Pine Bluff Arsenal - Pine Bluff, AR	1	6	20	0	8	9	17	0	7	11	18
2	FLIR Systems Inc. - Elkridge, MD	1	6	20	4	5	3	8	6	3	4	7

(±) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.  
 "A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				12.482		3.300		7.395		6.938		-		6.938				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				12.482		3.300		7.395		6.938		-		6.938				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				12.482		3.300		7.395		6.938		-		6.938				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	12.482	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
NGDS Increment 1 - Systems <sup>(1)</sup>	-	-	0.000	39.000	50	1.950	39.000	62	2.418	41.071	84	3.450	-	-	-	41.071	84	3.450
NGDS Increment 2 Lateral Flow Immunoassay	-	-	0.000	-	-	0.000	-	-	2.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	12.482	-	-	1.950	-	-	4.418	-	-	3.450	-	-	-	-	-	3.450
Subtotal: Hardware Cost	-	-	12.482	-	-	1.950	-	-	4.418	-	-	3.450	-	-	-	-	-	3.450
Logistics Cost																		
Recurring Cost																		
NGDS Increment 1 - Contractor Logistic Support	-	-	0.000	-	-	0.180	-	-	0.180	-	-	0.180	-	-	-	-	-	0.180
NGDS Increment 1 - Logistics Program Implementation and Initial Training	-	-	0.000	-	-	0.370	-	-	0.980	-	-	0.980	-	-	-	-	-	0.980
Subtotal: Recurring Cost	-	-	0.000	-	-	0.550	-	-	1.160	-	-	1.160	-	-	-	-	-	1.160
Subtotal: Logistics Cost	-	-	0.000	-	-	0.550	-	-	1.160	-	-	1.160	-	-	-	-	-	1.160
Support Cost																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program										<b>Date:</b> May 2017																			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS										<b>Item Number / Title [DODIC]:</b> JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)														
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :															<b>MDAP/MAIS Code:</b>														

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
NGDS Increment 1 - Provisioning - Assay and Reagents	-	-	0.000	-	-	0.000	-	-	0.600	-	-	0.791	-	-	-	-	-	0.791
NGDS Increment 1 - Contractor Web Support	-	-	0.000	-	-	0.000	-	-	0.447	-	-	0.447	-	-	-	-	-	0.447
NGDS Increment 1 - Proficiency Testing	-	-	0.000	-	-	0.000	-	-	0.450	-	-	0.450	-	-	-	-	-	0.450
NGDS Increment 1 - Training	-	-	0.000	-	-	0.100	-	-	0.320	-	-	0.320	-	-	-	-	-	0.320
NGDS Increment 1 - Fielding Support	-	-	0.000	-	-	0.700	-	-	0.000	-	-	0.320	-	-	-	-	-	0.320
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>0.800</b>	-	-	<b>1.817</b>	-	-	<b>2.328</b>	-	-	-	-	-	<b>2.328</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>12.482</b>	-	-	<b>3.300</b>	-	-	<b>7.395</b>	-	-	<b>6.938</b>	-	-	-	-	-	<b>6.938</b>

## Remarks:

The NGDS is an evolutionary acquisition family of systems to provide increments of capability over time across many echelons of the Combat Health Support System. The mission of the NGDS is to provide Chemical, Biological and Radiological (CBR) threat and infectious disease identification and U.S. Food and Drug Administration (FDA)-cleared diagnostics to inform individual patient treatment as defined in the approved NGDS Capabilities Development Document (CDD) and CBR situational awareness and disease surveillance as defined in the Common Analytical Laboratory System (CALS) CDD. NGDS Increment 1 will significantly improved diagnostic capability for deployable combat health support units (Role 3) while also improving operational suitability and affordability by developing FDA cleared biological warfare agent (BWA) and infectious disease in vitro diagnostic (IVD) assays on existing commercial diagnostic device with a well established FDA regulatory history and pipeline of commercial non-BWA infectious disease diagnostic tests. The NGDS Increment 1 program has a streamlined MS A to MS C - Limited Deployment acquisition strategy. The Next Generation Diagnostics System, Increment 2 is an acquisition program of record that will provide human diagnostic capabilities for diseases caused by chemical, biological, and radiological (CBR) warfare agents. NGDS Increment 2 complements NGDS Increment 1 by expanding the breadth of threats addressed and providing far-forward diagnostic capabilities. Procurement funds support the purchase of hardware components as well as Total Package Fielding (TPF) for initial fielding and support to systems for two years post fielding. TPF includes consumables, software security/applications, proficiency test efforts, Contractor Logistics Support, logistics & web support, instructors, and training). Next Generation Diagnostic System (NGDS) will expand the global network of laboratories in Nigeria and Ghana to support efforts to analyze, identify and combat Ebola. Funding will be invested to purchase new and additional Service lab equipment in support of Ebola efforts in Egypt and Liberia and Sierra Leone. These funds will be used for technologies and surveillance capabilities for both existing laboratories in the AFRICOM area of operations, as well as, establish new laboratories in support of other Global areas of interest. Funds will also procure additional assays crafted specifically for the ABI 7500 and MAGPIX instruments. These efforts will ensure interoperable and integration capability with biosurveillance portal.

Justification: FY18 program procures 61 NGDS Increment 1 Systems and total package fielding support.

RDT&E Code B Item: 0603884BP/Proj MB4; 0604384BP/Proj MB5; 0607384BP/Proj MB7

MB4/NGDS: RDT&E FY14 and Prior - 51.060M; FY15 - 16.353M; FY18 - 4.950M; FY19 - 12.884M; FY20 - 6.372M; FY21 - 8.867M

MB5/NGDS: RDT&E ; FY16 - 4.774M; FY17 - 12.171M; FY18 - 15.786M; FY19 - 5.616M; FY20 - 8.992M; FY21 - 9.826M; FY22 - 15.948M

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>
MB7/NGDS: RDT&E FY14 and Prior - 0.000M; FY15 - 9.405M; FY16 - 8.119M; FY17 - 6.694M; FY18 - 11.492M; FY19 - 9.382M; FY20 - 3.238M; FY21 - 6.060M; FY22 - 6.532M		
DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES		
NGDS - MS C Increment 1: Dec 2016 NGDS - USAF IOC Increment 1: Mar 2017 NGDS - USAF FOC Increment 1: Jul 2017 NGDS - FRP Increment 1: Jul 2017 NGDS - USA/USN IOC Increment 1: Dec 2017 NGDS Increment 2 - MS C Man Portable Device: Mar 2019 NGDS Increment 2 - Technology Demonstration/Interim Fielding (Jan 2018 to Jan 2019)		
(†) indicates the presence of a P-5a		

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Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1				P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS					Item Number / Title [DODIC]: JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
NGDS Increment 1 - Systems		2016	TBD / UNKNOWN	SS / FFP	**Error - Need PCO Location**	Dec 2016	Jan 2017	50	39.000	Y		
NGDS Increment 1 - Systems		2017	TBD / UNKNOWN	SS / FFP	**Error - Need PCO Location**	May 2017	Jul 2017	62	39.000	Y		
NGDS Increment 1 - Systems		2018	TBD / UNKNOWN	SS / FFP	**Error - Need PCO Location**	Nov 2017	Dec 2017	84	41.071	Y		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS							Item Number / Title [DODIC]: JX0302 / GLOBAL BIO TECH INITIATIVE (GBTI)							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity (Units in Each)				-			-			-			-			-			-		
Gross/Weapon System Cost (\$ in Millions)				0.000			1.375			2.100			2.017			-			2.017		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				0.000			1.375			2.100			2.017			-			2.017		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				0.000			1.375			2.100			2.017			-			2.017		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares (\$ in Millions)				-			-			-			-			-			-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total				
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)		
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts		-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
GBTI Assays and Reagents		-	-	0.000	-	-	0.000	58.000	25	1.450	58.000	25	1.450	-	-	-	58.000	25	1.450		
GBTI Equipment Sets		-	-	0.000	-	-	0.000	250.000	1	0.250	250.000	1	0.250	-	-	-	250.000	1	0.250		
Subtotal: Recurring Cost		-	-	0.000	-	-	0.000	-	-	1.700	-	-	1.700	-	-	-	-	-	1.700		
Subtotal: Hardware Cost		-	-	0.000	-	-	0.000	-	-	1.700	-	-	1.700	-	-	-	-	-	1.700		
Support Cost																					
GBTI PM Support		-	-	0.000	-	-	1.187	-	-	0.400	-	-	0.317	-	-	-	-	-	0.317		
GBTI - Plasmid Study		-	-	0.000	-	-	0.188	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
Subtotal: Support Cost		-	-	0.000	-	-	1.375	-	-	0.400	-	-	0.317	-	-	-	-	-	0.317		
Gross/Weapon System Cost		-	-	0.000	-	-	1.375	-	-	2.100	-	-	2.017	-	-	-	-	-	2.017		
Remarks:																					
The Global Biosurveillance Technology Initiative (GBTI) will characterize laboratory networks and develop algorithms to identify key nodes having the greatest potential to compress the time between disease event initiation and the production of actionable data. Key node data generation will be augmented in direct support of existing programs of record.																					
Justification: FY18 funding is for the procurement of 25 reagents, assays, and supplies, as well as the bioinformatics software and hardware tools (GBTI Equipment Sets) vital in fully utilizing the whole genomic sequencing capability for GBTI stakeholders (Army and Navy Service labs) located in both CONUS and OCONUS locations.																					

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS	Item Number / Title [DODIC]: JX0302 / GLOBAL BIO TECH INITIATIVE (GBTI)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:



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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JX0210 / DEFENSE BIOLOGICAL PRODUCTS ASSURANCE PROGRAM (DBPAP)								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1.553			1.005			1.005			0.995			-			0.995		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				1.553			1.005			1.005			0.995			-			0.995		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				1.553			1.005			1.005			0.995			-			0.995		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total					
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)			
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts	-	-	1.553	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
DBPAP - Inventory and Customer Management Database	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.019	-	-	-	-	-	0.019			
DBPAP - Quality Assurance/Quality Control Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.169	-	-	-	-	-	0.169			
DBPAP - Repository Equipment, Maintenance, and Service Contracts	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.807	-	-	-	-	-	0.807			
Subtotal: Recurring Cost	-	-	1.553	-	-	0.000	-	-	0.000	-	-	0.995	-	-	-	-	-	0.995			
Subtotal: Hardware Cost	-	-	1.553	-	-	0.000	-	-	0.000	-	-	0.995	-	-	-	-	-	0.995			
Support Cost																					
DBPAP - Repository Equipment, Maintenance, and Service Contracts	-	-	0.000	-	-	0.815	-	-	0.815	-	-	0.000	-	-	-	-	-	0.000			
DBPAP - Quality Assurance/Quality Control Support	-	-	0.000	-	-	0.170	-	-	0.170	-	-	0.000	-	-	-	-	-	0.000			

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>										<b>Date:</b> May 2017									
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> JX0210 / DEFENSE BIOLOGICAL PRODUCTS ASSURANCE PROGRAM (DBPAP)									

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :										<b>MDAP/MAIS Code:</b>									
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
DBPAP - Inventory and Customer Management Database	-	-	0.000	-	-	0.020	-	-	0.020	-	-	0.000	-	-	-	-	-	0.000
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>1.005</b>	-	-	<b>1.005</b>	-	-	<b>0.000</b>	-	-	-	-	-	<b>0.000</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>1.553</b>	-	-	<b>1.005</b>	-	-	<b>1.005</b>	-	-	<b>0.995</b>	-	-	-	-	-	<b>0.995</b>

## Remarks:

The CRP program will transition to the Defense Biological Products Assurance Program (DBPAP) in FY18. In order to detect anthrax spores (antigen), a critical reagent (genomics material) may be needed for use in a detection platform. Multiple medical and nonmedical platforms require a continuous, quality supply of critical reagents for effective warning to significantly enhance force survivability. They are also required for rapid medical diagnosis to ensure appropriate treatment of exposed personnel. A common set of reagents for all platforms are required. The DBPAP will ensure the standardization, quality, and availability of reagents that are critical to the successful development, test, and operation of BW detection systems and medical biological products. The DBPAP integrates and consolidates all Department of Defense (DoD) biological threat reagents/antibodies detection requirements from System Development and Demonstration (SDD) through production. The DBPAP will ensure the availability of high quality reagents and detection assays (LFI, PCR, ECL) throughout the life cycle of all systems managed to include: Biological Integrated Detection System (BIDS), Joint Biological Point Detection System (JBPDs), Joint Biological Agent and Identification Systems (JBAIDS), Joint Biological Tactical Detection System (JBTDs), Whole System Live Agent Testing (WSLAT), Joint Chemical Biological Radiological Water Monitor (JCBRAWM), Joint Portal Shield (JPS), Analytical Laboratory System (ALS), Common Analytical Laboratory Suite (CALS), National Guard Bureau (NGB) Civil Support Teams (CST), Pentagon Force Protection Agency (PFPA), Department of Homeland Security (DHS), US Department of Agriculture (USDA), Food and Drug Administration (FDA), National Institute of Allergy and Infectious Disease (NIAID), Federal Emergency Management Agency (FEMA), and US Capitol Police. The DBPAP also supports the Navy Forward Deployed Lab, the Area Medical Lab (AML), the Army 20th Support Command (Chemical, Biological, Nuclear and High Yield Explosives [CBRNE]), 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 DBPAP is also responsible for managing the production, storage and validation of Hand Held Immunochromatographic Assays (HHAs), polymerase chain reaction (PCR) genomic assays, electrochemiluminescence (ECL) immunoassays, antibodies, and select biological threat agents and genomic reference materials. The DBPAP's PCR assays have been used in the DoD's response effort to the Ebola epidemic in West Africa that began in early 2014. Deployed laboratories from US Army Medical Research Institute of Infectious Diseases (USAMRIID), the Naval Medical Research Center's (NMRC) Biological Defense Research Directorate's (BDRD) Mobile Labs and the 1st AML, as well as interagency partners such as the National Institutes of Health (NIH) National Institute of Allergies and Infectious Disease (NIAID), have all used DBPAP PCR assays to detect Ebola virus during their response missions in West Africa.

Note: Antibodies, assays, and reference materials are ordered using outside source funding (DoD and other Government agencies).

Justification: FY18 Funds support managing the production, storage, distribution and validation of Hand Held Immunochromatographic Assays (HHA), polymerase chain reaction (PCR) genomic assays, electrochemiluminescence (ECL) immunoassays, antibodies, and select biological threat agent and genomic reference materials.

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JX0301 / BIOSURVELLENCE PORTAL (BSP)						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		1.620		1.220		1.171		-		1.171				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		1.620		1.220		1.171		-		1.171				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		1.620		1.220		1.171		-		1.171				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Software Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Software and Installation	-	-	0.000	-	-	0.398	-	-	0.299	-	-	0.287	-	-	-	-	-	0.287
Subtotal: Recurring Cost	-	-	0.000	-	-	0.398	-	-	0.299	-	-	0.287	-	-	-	-	-	0.287
Subtotal: Software Cost	-	-	0.000	-	-	0.398	-	-	0.299	-	-	0.287	-	-	-	-	-	0.287
Package Fielding Cost																		
Recurring Cost																		
System Fielding Support (TPF, FDT, NET)	-	-	0.000	-	-	0.813	-	-	0.613	-	-	0.588	-	-	-	-	-	0.588
Subtotal: Recurring Cost	-	-	0.000	-	-	0.813	-	-	0.613	-	-	0.588	-	-	-	-	-	0.588
Subtotal: Package Fielding Cost	-	-	0.000	-	-	0.813	-	-	0.613	-	-	0.588	-	-	-	-	-	0.588
Support Cost																		
Technical Engineering Support	-	-	0.000	-	-	0.409	-	-	0.308	-	-	0.296	-	-	-	-	-	0.296
Subtotal: Support Cost	-	-	0.000	-	-	0.409	-	-	0.308	-	-	0.296	-	-	-	-	-	0.296
Gross/Weapon System Cost	-	-	0.000	-	-	1.620	-	-	1.220	-	-	1.171	-	-	-	-	-	1.171

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JX0301 / BIOSURVEILLANCE PORTAL (BSP)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>
<p><b>Remarks:</b>          The Biosurveillance Portal (BSP) is a web-based enterprise environment that will facilitate collaboration, communication, and information sharing in support of the detection, management, and mitigation of man-made and naturally occurring biological events. BSP bridges the communication gaps in the Biosurveillance domain to provide a central access point for Biosurveillance information and situational awareness for DoD, interagency and allied partners supporting the early identification and response to biological events.</p> <p>BSP provides an integrated suite of web-based components designed to support public health officers, environmental officers, clinicians, physicians, and CBRN personnel as they maintain their situational awareness of local, regional, and global biological threats to the force. BSP does not duplicate existing DoD capabilities, but rather leverages existing tools and technologies to provide users across multiple organizations and disciplines with a centralized "one-stop shop" for all of their Biosurveillance resources.</p> <p>Justification: FY18 funding provides for Total Package Fielding (TPF), New Equipment (NET), Technical Engineering support, and software installation and system host provider support.</p>		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program														Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0004 / WMD - CIVIL SUPPORT TEAMS (WMD CST)						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity (Units in Each)				-		-		-		-		-		-				
Gross/Weapon System Cost (\$ in Millions)				28.263		8.206		0.000		0.000		-		0.000				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Net Procurement (P-1) (\$ in Millions)				28.263		8.206		0.000		0.000		-		0.000				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Total Obligation Authority (\$ in Millions)				28.263		8.206		0.000		0.000		-		0.000				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-				
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	21.938	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
WMD CST - WMD-CST Hapsite ER SPME Module <sup>(†)</sup>	23.134	67	1.550	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE JHBI	-	-	0.000	-	-	0.650	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE PINS III	-	-	0.000	250.000	8	2.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Class 1 <sup>(†)</sup>	0.948	134	0.127	0.933	60	0.056	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Class 2 <sup>(†)</sup>	1.721	2,700	4.648	1.729	1,430	2.473	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Class 3 <sup>(†)</sup>	-	-	0.000	0.553	3,052	1.687	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - HAZMAT Boots <sup>(†)</sup>	-	-	0.000	0.070	4,593	0.323	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Filter Canister <sup>(†)</sup>	-	-	0.000	0.045	6,958	0.312	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0004 / WMD - CIVIL SUPPORT TEAMS (WMD CST)						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Subtotal: Recurring Cost	-	-	28.263	-	-	7.501	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Hardware Cost	-	-	28.263	-	-	7.501	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Support Cost																		
SPU CBE - Government Program Management	-	-	0.000	-	-	0.705	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	-	-	0.000	-	-	0.705	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Gross/Weapon System Cost	-	-	28.263	-	-	8.206	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Remarks: This program supports the acquisition and delivery of an integrated chemical, biological, radiological, nuclear and explosive (CBRNE) rapid response capability for National Guard Bureau's (NGB) Weapons of Mass Destruction Civil Support Teams (WMD-CST) and Special Purpose Units - Chemical Biological Equipment (SPU-CBE) which consists of the CBRNE Enhanced Response Force Package (CERFP), the United States Marine Corps Chemical Biological Incident Response Force (CBIRF) the United States Army Reserve (USARC) Chemical Recon Platoons, Decon Platoons, Defense Support of Civil Authority CBRN Response Force (DCRF), and the 20th Support Command Nuclear Disablement (NDT) and CBRNE Teams. Key activities of this program include ongoing life cycle assessments for the portfolio of fielded commercial-off-the-shelf (COTS) CBRNE equipment, identification and evaluation of emerging technologies, prioritization and fielding of improved capabilities to meet established requirements, and the establishment of institutionalized training. The overall capability package includes hand held detection, protection, decontamination, situational awareness software assessment and sampling tools. The purpose of this program is to address legacy requirements gaps/deficiencies for WMD-CST's and SPU-CBE's where they exist through the streamlined acquisition of COTS/government-off-the-shelf (GOTS) capability upgrades that incorporate proven advancements in technology to satisfy mission performance standards.																		
(†) indicates the presence of a P-5a																		

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS				<b>Item Number / Title [DODIC]:</b> JS0004 / WMD - CIVIL SUPPORT TEAMS (WMD CST)			

<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$ K)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
WMD CST - WMD-CST Hapsite ER SPME Module		2015	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2015	May 2015	67	23.134	Y		
SPU CBE Personal Protective Equipment - Class 1		2015	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2015 <sup>(11)</sup>	May 2015	134	0.948	Y		
SPU CBE Personal Protective Equipment - Class 1		2016	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2016	May 2016	60	0.933	Y		
SPU CBE Personal Protective Equipment - Class 2		2015	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2015 <sup>(12)</sup>	May 2015	2,700	1.721	Y		
SPU CBE Personal Protective Equipment - Class 2		2016	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2016	May 2016	1,430	1.729	Y		
SPU CBE Personal Protective Equipment - Class 3		2016	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2016	May 2016	3,052	0.553	Y		
SPU CBE Personal Protective Equipment - HAZMAT Boots		2016	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2016	May 2016	4,593	0.070	Y		
SPU CBE Personal Protective Equipment - Filter Canister		2016	Veterans Corp. / Fairfax, VA	C / FP	Boston, MA	Feb 2016	May 2016	6,958	0.045	Y		

**Footnotes:**

<sup>(11)</sup> IDIQ

<sup>(12)</sup> - IDIQ

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALs)								
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000			0.000			23.100			16.402			-			16.402		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000			0.000			23.100			16.402			-			16.402		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				0.000			0.000			23.100			16.402			-			16.402		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total					
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)			
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
FC - ACS LRIP <sup>(†)</sup>	-	-	0.000	-	-	0.000	1,571.750	4	6.287	-	-	0.000	-	-	-	-	-	0.000			
FC - ACS Production <sup>(†)</sup>	-	-	0.000	-	-	0.000	-	-	0.000	456.231	13	5.931	-	-	-	456.231	13	5.931			
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	6.287	-	-	5.931	-	-	-	-	-	5.931			
Non Recurring Cost																					
FC - ACS - Training Equipment	-	-	0.000	-	-	0.000	-	-	4.974	-	-	3.033	-	-	-	-	-	3.033			
Subtotal: Non Recurring Cost	-	-	0.000	-	-	0.000	-	-	4.974	-	-	3.033	-	-	-	-	-	3.033			
Subtotal: Hardware Cost	-	-	0.000	-	-	0.000	-	-	11.261	-	-	8.964	-	-	-	-	-	8.964			
Support Cost																					
FC - ACS - Fielding	-	-	0.000	-	-	0.000	-	-	3.860	-	-	2.200	-	-	-	-	-	2.200			
ACS - PMO Support	-	-	0.000	-	-	0.000	-	-	0.489	-	-	2.258	-	-	-	-	-	2.258			
Other Govt Agency Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.061	-	-	-	-	-	0.061			
Prime Contractor Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.650	-	-	-	-	-	1.650			
FC - ACS - Production Verification Test	-	-	0.000	-	-	0.000	-	-	0.877	-	-	0.000	-	-	-	-	-	0.000			



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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>										<b>Date:</b> May 2017									
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)									
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B																			

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
FC - ACS - Operational Test	-	-	0.000	-	-	0.000	-	-	6.613	-	-	0.000	-	-	-	-	-	0.000
FC - ACS NET, Consumables, TPT	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.269	-	-	-	-	-	1.269
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	<b>11.839</b>	-	-	<b>7.438</b>	-	-	-	-	-	<b>7.438</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	<b>23.100</b>	-	-	<b>16.402</b>	-	-	-	-	-	<b>16.402</b>

**Remarks:**

The Common Analytical Laboratory System (CALS) capability will be modular, scalable and adaptable to a variety of concept of operations (CONOPS) and environmental conditions. Currently, fielded systems have been designed independently by various agencies with the intent of meeting a specific units requirements. As a result, multiple mobile lab configurations exist with differing sustainment tails and lacking in commonality. The system under development will incorporate an open architecture that can accommodate quick installation or removal of equipment as mission requirements dictate. As well, it will provide the ability to rapidly develop a common operating picture allowing first responders and DoD officials to determine the appropriate course of action. Currently, existing fielded systems are (3) configurations, the Field Confirmatory Analytical Capability Set (FC ACS), the Field Confirmatory Integrated System (FC IS), and the Theatre Validation Integrated System (TV IS). The analytical detection systems fielded will be designed to support the specific mission and CONOPS of the gaining unit and be able to detect and/or identify Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs), Biological Warfare Agents (BWAs), and radiological material in environmental samples.

Justification: FY18 Funding procures (13) FC ACS and includes Training Assets for Test Player Training (TPT) and New Equipment Training (NET), FC ACS TPT, Consumables, Program Management (PM) and Other Government Agencies (OGA's).

RDT&E Code B Item: 0603884BP/Proj CM4; 0604384BP/Proj CM5

CM4/CALS: RDT&E FY14 and Prior - 41.368M

CM5/CALS: RDT&E FY14 and Prior - 23.730M; FY15 - 38.603M; FY16 - 6.880M; FY17 - 11.224M; FY18 - 21.411M; FY19 - 6.000M; FY20 - 11.200M

**DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES**

CALS - Developmental Test - (FC ACS) (Dec 2015 to Jun 2016)  
 CALS - System Verification Review - (FC ACS): Jul 2016  
 CALS - Functional Configuration Audit (FC ACS): Jul 2016  
 CALS - Log Demo - (FC ACS) (Jul 2016 to Nov 2017)  
 CALS - Milestone C - (FC ACS) (May 2017 to Jul 2017)  
 CALS - LRIP (FC ACS) (Jul 2017 to Aug 2017)  
 CALS - Operation Test - (FC ACS) (Jan 2018 to Mar 2018)  
 CALS - Full Rate Production - (FC ACS) (Jul 2018 to Sep 2022)  
 CALS - Critical Design Review (FC IS) (Mar 2017 to Apr 2017)

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
CALS - Developmental Test (FC IS) (Nov 2017 to Jun 2018) CALS - System Verification Review (FC IS): Jul 2018 CALS - Functional Configuration Audit (FC IS): Jul 2018 CALS - Log Demo (FC IS) (May 2018 to Aug 2018) CALS - Critical Design Review (TV IS): Jun 2017 CALS - Developmental Test (TV IS) (Jun 2018 to Feb 2019)  (†) indicates the presence of a P-5a		

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Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1			P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALs)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
FC - ACS LRIP		2017	TBD / UNKNOWN	C / FP	Aberdeen Proving Ground, Edgewood Maryland	Jan 2017	Apr 2017	4	1,571.750	Y		Jul 2016
FC - ACS Production		2018	TBD / UNKNOWN	C / FP	Aberdeen Proving Ground, Edgewood Maryland	Aug 2017	Nov 2017	13	456.231	Y		May 2017

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0008 / SPU CBE CBRN RESPONSE ENTERPRISE (SPU CBE CRE)					
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		0.000		2.500		2.401		-		2.401				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		0.000		2.500		2.401		-		2.401				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		0.000		2.500		2.401		-		2.401				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Class 2	-	-	0.000	-	-	0.000	2.065	662	1.367	2.065	650	1.342	-	-	-	2.065	650	1.342
SPU CBE Personal Protective Equipment - Class 3	-	-	0.000	-	-	0.000	0.666	1,112	0.741	0.665	1,025	0.682	-	-	-	0.665	1,025	0.682
SPU CBE Personal Protective Equipment - HAZMAT Boots	-	-	0.000	-	-	0.000	0.084	2,500	0.210	0.084	2,300	0.193	-	-	-	0.084	2,300	0.193
SPU CBE Personal Protective Equipment - Filter Canister	-	-	0.000	-	-	0.000	0.055	3,309	0.182	0.055	3,350	0.184	-	-	-	0.055	3,350	0.184
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	2.500	-	-	2.401	-	-	-	-	-	2.401
Subtotal: Hardware Cost	-	-	0.000	-	-	0.000	-	-	2.500	-	-	2.401	-	-	-	-	-	2.401
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	2.500	-	-	2.401	-	-	-	-	-	2.401
Remarks:																		
The Integrated Chemical Biological Radiological and Nuclear Response Enterprise (CBRNE) rapid response capability packages are required for the National Guard Bureau's (NGB) Special Purpose Units (SPU) Chemical Biological Equipment (CBE) Chemical Biological Radiological and Nuclear Response Enterprise (CRE) which consists of the CBRNE Enhanced Response Force Package (CERFP), the USAR Chemical Recon Platoons, Decon Platoons and Defense Support of Civil Authority CBRN Response Force (DCRF), and the 20th Support Command Nuclear Disablement (NDT) and CBRNE Teams. The																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS	<b>Item Number / Title [DODIC]:</b> JS0008 / SPU CBE CBRN RESPONSE ENTERPRISE (SPU CBE CRE)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>
<p>purpose of this program is to address legacy requirements gaps/deficiencies for SPU-CBE's where they exist through the streamlined acquisition of commercial-off-the-shelf (COTS)/government-off-the-shelf (GOTS) capability upgrades that incorporate proven advancements in technology to satisfy mission performance standards. Chemical, Biological, Radiological, Nuclear (CBRN) and High-Yield Explosive (CBRNE) protection is required for CONUS/OCONUS DoD installation physical structures as well as military personnel and others within the perimeter of the military reservation.</p> <p>Justification: FY18 Program procures 650 National Fire Protection Association (NFPA) Class Two Personal Protective Equipment (PPE) suits, and 1,025 NFPA Class Three PPE suits, 2,300 HAZMAT Boots, and 3,350 Filter Canisters for the COTS PPE Stockpile efforts in support of United States Army North (ARNORTH) DCRF and Command and Control CBNRE Response Element (C2CRE) units.</p>		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: SA0001 / SITUATIONAL AWARENESS						Item Number / Title [DODIC]: JS0007 / SPU CBE CHEMICAL BIOLOGICAL INCIDENT RESPONSE FORCE (SPU CBE CBIRF)								
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity (Units in Each)				-			-			-			-			-			-		
Gross/Weapon System Cost (\$ in Millions)				0.000			0.000			1.150			1.105			-			1.105		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				0.000			0.000			1.150			1.105			-			1.105		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				0.000			0.000			1.150			1.105			-			1.105		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares (\$ in Millions)				-			-			-			-			-			-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total				
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)		
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts		-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
SPU CBE (CBIRF) Personal Protection Equipment - Class 1		-	-	0.000	-	-	0.000	-	-	0.000	1.607	28	0.045	-	-	-	1.607	28	0.045		
SPU CBE (CBIRF) Personal Protection Equipment - Class 2		-	-	0.000	-	-	0.000	2.062	305	0.629	2.063	301	0.621	-	-	-	2.063	301	0.621		
SPU CBE (CBIRF) Personal Protection Equipment - Class 3		-	-	0.000	-	-	0.000	0.665	490	0.326	0.664	500	0.332	-	-	-	0.664	500	0.332		
SPU CBE (CBIRF) Personal Protection Equipment - HAZMAT Boots		-	-	0.000	-	-	0.000	0.084	1,226	0.103	0.082	97	0.008	-	-	-	0.082	97	0.008		
SPU CBE (CBIRF) Personal Protective Equipment - Filter Canisters		-	-	0.000	-	-	0.000	0.055	1,673	0.092	0.055	1,800	0.099	-	-	-	0.055	1,800	0.099		
Subtotal: Recurring Cost		-	-	0.000	-	-	0.000	-	-	1.150	-	-	1.105	-	-	-	-	-	1.105		
Subtotal: Hardware Cost		-	-	0.000	-	-	0.000	-	-	1.150	-	-	1.105	-	-	-	-	-	1.105		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program										<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1					<b>P-1 Line Item Number / Title:</b> SA0001 / SITUATIONAL AWARENESS					<b>Item Number / Title [DODIC]:</b> JS0007 / SPU CBE CHEMICAL BIOLOGICAL INCIDENT RESPONSE FORCE (SPU CBE CBIRF)			

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A										<b>MDAP/MAIS Code:</b>			
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	1.150	-	-	1.105	-	-	-	-	-	1.105

**Remarks:**

The Special Purpose Units-Chemical Biological Equipment (SPU-CBE) program provides the integrated CBRNE rapid response force, which includes the Chemical Biological Incident Response Force (CBIRF), the capability packages that are required for the United States Northern Command to execute Department of Defense Support of Civil Authority (DSCA) missions. The purpose of this program is to address legacy requirements gaps/deficiencies for SPU-CBEs where they exist through the streamlined acquisition of commercial-off-the-shelf (COTS)/government-off-the-shelf (GOTS) capability upgrades that incorporate proven advancements in technology to satisfy mission performance standards. Chemical, Biological, Radiological, Nuclear (CBRN) and High-Yield Explosive (CBRNE) protection is required for CONUS/OCONUS DoD installation physical structures as well as military personnel and others within the perimeter of the military reservation.

Justification: FY18 program procures 28 National Fire Protection Association (NFPA) Class One Personal Protective Equipment (PPE) suits, 301 NFPA Class Two suits, 500 NFPA Class Three suits, 97 CBRN/HAZMAT boots and 1,800 CBRN respiratory mask filters.

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Chemical and Biological Defense Program **Date:** May 2017

**Appropriation / Budget Activity / Budget Sub Activity:**  
0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP

**P-1 Line Item Number / Title:**  
PHM001 / CB PROTECTION AND HAZARD MITIGATION

**ID Code** (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	229.866	125.506	161.113	141.027	-	141.027	141.451	165.920	185.877	194.863	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	229.866	125.506	161.113	141.027	-	141.027	141.451	165.920	185.877	194.863	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	229.866	125.506	161.113	141.027	-	141.027	141.451	165.920	185.877	194.863	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

## Description:

Specific protection efforts provided include protective masks, respiratory systems, protective clothing, collective protection on numerous platforms, and medical countermeasure pre-treatments and prophylaxes.

Individual protection efforts are focused on 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 that will allow for the individual to operate in a contaminated Chemical and Biological (CB) environment with minimal degradation in his/her performance. Individual protection programs funded include; (1) the Joint Service Lightweight Integrated Suit Technology (JSLIST) is a state-of-the-art chemical protective ensemble that reduces heat stress, provides full compatibility with all interfacing equipment to promote commonality and standardization to maximize resources and eliminate redundancy among the Services; (2) the Joint Service Aircrew Mask (JSAM) system is a lightweight Chemical, Biological, Radiological and Nuclear (CBRN) protective mask consisting of mask, filter, blower, and accessories optimized to minimize impact on the wearer's performance, maximize its ability to interface with aircrew protective clothing, and provide improved field of view when compared to current protective masks; (3) the Joint Service General Purpose Mask (JSGPM) is a lightweight, protective Nuclear, Biological and Chemical (NBC) mask system. The JSGPM will provide above-the-neck, head/eye/respiratory protection against CB agents, radioactive particles, and Toxic Industrial Materials (TIMs); and (4) the Uniform Integrated Protection Ensemble (UIPE) is an individual CBRN protective system with the capability that enables selection of a tailored material solution based on the expected threat level for any given mission or platform.

Collective Protection (CP) provides life-sustaining and continued operational capabilities to the Warfighter and their equipment in support of military missions and operations as a seamless, integrated sub-system to all manner of platform, which utilizes state-of-the-art CBRN protective technologies. 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. Collective protection programs funded include;

(1) The Joint Expeditionary Collective Protection (JECPP) provides the joint expeditionary forces a CP capability which is lightweight, compact, modular, and affordable. The JECPP family of systems allows the application of CP to transportable soft-sided shelters, enclosed spaces of opportunity, and in remote austere locations as a standalone resource. JECPP will be capable of protecting personnel groups of varying size, unencumbered by individual protective equipment (IPE), from effects of CB agents, TIMs, radiological (R) particles, heat, dust, and sand; and (2) mounted on a platform, the Chemical Biological Protective Shelter (CBPS) M8E1 provides a mobile, contamination free, environmentally controlled working area for medical, combat service, and combat service support personnel to obtain relief from the continuous need to wear CB protective clothing for greater than 72 hours of operation.

Decontamination efforts facilitate the removal and detoxification of contaminants from materials without inflicting injury to personnel or damage to equipment or the environment. Procured items are environmentally friendly, reduce logistics burdens, and are effective against traditional and nontraditional agents on sensitive and non-sensitive equipment. Contamination control techniques have been

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Exhibit P-40, Budget Line Item Justification: FY 2018 Chemical and Biological Defense Program		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP		P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
developed which minimize the extent of contamination pickup and transfer and maximize the ability of units to remove contaminants both on-the-move and during dedicated decontamination operations. Decontamination programs funded include;		
(1) The Decontamination Family of Systems (DFoS) General Purpose Decontaminant (GPD) which will procure Traditional / Non-Traditional Agent (NTA) decontaminant(s) that will provide the Warfighter an increased capability to decontaminate/mitigate traditional agents / NTAs on personnel, equipment, vehicle interiors/exterior, terrain, and fixed facilities; (2) The DFoS Joint Service Equipment Wipe (JSEW) will procure chemical and biological decontamination wipes, providing an increased capability to not only decontaminate non-sensitive but also sensitive equipment that has been exposed to agents/contamination; (3) The DFoS Contamination Indicator Decontamination Assurance System (CIDAS) will provide the Joint Forces with a new capability to reduce the logistics burden of decontamination. CIDAS' three applicator configurations (small-scale, disposable large scale, and reusable large scale) will spray one of three indicator formulations (training, nerve, and blister) on militarily relevant surfaces pre- and post-decontamination to indicate the presence and location of traditional (Nerve and Blister) and non-traditional chemical warfare agents; (4) the Contaminated Human Remains Pouch (CHRP) which will procure systems with the capability to protect personnel handling and processing human remains contaminated with Chemical Biological Radiological (CBR) contamination for safe intra-theater transport. The CHRP provides the warfighter the capability to safely handle, transport, and temporarily store or inter contaminated human remains in a theater of operations; (5) Joint Biological Agent Decontamination System (JBADS) will provide the capability to conduct biological and chemical agent decontamination of the interior and exterior of aircraft and vehicle platforms.		
Medical Countermeasures (MCMs) include capabilities to protect the warfighter against CBR threats and mitigate illness, suffering, and death. MCMs will provide end-to-end countermeasures against emerging infectious diseases, genetically engineered threats, naturally occurring biological phenomena, novel chemical agents, and radiological threats. Program efforts include core medical efforts aimed at delivering pretreatments/prophylaxes and therapeutics to the warfighter. MCMs in development by the CBDP traditionally fall into one of two categories: 1) pretreatments/prophylaxes such as a plague vaccine and 2) post-exposure, pre/post-symptomatic therapeutics such as the Advance Anticonvulsant System. A family-of-systems approach for medical defense against threats is required to provide protection, to sustain performance in multiple environments, and to provide for self-aid/buddy-aid and medical treatment of CBR casualties. Fielding of prophylactic, pre-treatment, and therapeutic drugs and medical devices requires Food and Drug Administration (FDA) approval. Medical Countermeasure programs funded include; (1) the Advanced Anticonvulsant System (AAS) consists of the drug midazolam in an auto-injector to be used as treatment for nerve agent induced seizures and will be a replacement for the currently fielded Convulsant Antidote for Nerve Agent (CANA) auto-injector, which uses diazepam, and (2) Smallpox Vaccinia Immune Globulin Intravenous (VIGIV).		
Biosurveillance (BSV) will support the Joint United States Forces Korea (USFK) Portal and Integrated Threat Recognition (JUPITR) Advanced Technology Demonstration (ATD) which will find, demonstrate, transition, and transfer the best operational concepts and technology solutions in support of a holistic approach to countering biological threats from laboratory to operational use. Depending on the maturity, outputs will focus on providing component, CONOPS, augmentation of existing identification capabilities and subsystem transition into programs of record (PORs) and/or integration into existing PORs. The JUPITR ATD will use a four leg approach to demonstrate equipment, information systems, and processed that address the capability gaps and provide risk reduction for follow-on acquisition efforts.		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Chemical and Biological Defense Program								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP						<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	J10002 / JS AIRCREW MASK (JSAM)	P-5a	B		- / 11.628	- / 2.705	- / 52.284	- / 36.782	- / -	- / 36.782
P-5	J10003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)	P-5a, P-21	A		- / 144.846	- / 60.184	- / 55.118	- / 48.493	- / -	- / 48.493
P-5	MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)	P-5a	A		- / 25.765	- / 32.872	- / 13.525	- / 10.990	- / -	- / 10.990
P-5	JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECF)	P-5a	B		- / 15.993	- / 5.626	- / 12.449	- / 10.728	- / -	- / 10.728
P-5	R12301 / CB PROTECTIVE SHELTER (CBPS)	P-5a	B		- / 30.785	- / 22.834	- / 16.950	- / 16.739	- / -	- / 16.739
P-5	JD0050 / DECONTAMINATION FAMILY OF SYSTEMS (DFoS)		B		- / 0.000	- / 0.000	- / 7.602	- / 7.285	- / -	- / 7.285
P-5	JD0063 / CONTAMINATED HUMAN REMAINS POUCH (CHRP)		B		- / 0.479	- / 1.100	- / 0.000	- / 0.000	- / -	- / 0.000
P-5	JD0070 / JOINT BIOLOGICAL AGENT DECONTAMINATION SYSTEM (JBADS)		B		- / 0.000	- / 0.000	- / 3.000	- / 4.827	- / -	- / 4.827
P-5	JX0005 / DOD BIOLOGICAL VACCINE PROCUREMENT (VACCINES)		B		- / 0.370	- / 0.185	- / 0.185	- / 0.183	- / -	- / 0.183
P-5	MA0400 / PROTECTIVE CLOTHING (JSLIST)	P-5a	A		- / 0.000	- / 0.000	- / 0.000	- / 5.000	- / -	- / 5.000
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 229.866</b>	<b>- / 125.506</b>	<b>- / 161.113</b>	<b>- / 141.027</b>	<b>- / -</b>	<b>- / 141.027</b>
<p>*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> 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. Efforts in this BLIN combined provide protective equipment and medical countermeasures that supports protection prior to potential operations and mitigates the hazard if exposed.</p>										

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: JI0002 / JS AIRCREW MASK (JSAM)							
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				11.628			2.705			52.284			36.782			-			36.782		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				11.628			2.705			52.284			36.782			-			36.782		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				11.628			2.705			52.284			36.782			-			36.782		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total					
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)			
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts	-	-	11.628	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
JSAM RW - MPU-5 Hardware - LRIP/ FRP <sup>(†)</sup>	-	-	0.000	-	-	0.000	3.822	1,701	6.502	3.608	2,213	7.985	-	-	-	3.608	2,213	7.985			
JSAM SA - M69 - Hardware - LRIP/ FRP <sup>(†)</sup>	-	-	0.000	-	-	0.000	2.480	5,150	12.771	2.465	3,870	9.538	-	-	-	2.465	3,870	9.538			
JSAM TA - Mask - LRIP <sup>(†)</sup>	-	-	0.000	-	-	0.000	14.099	936	13.197	-	-	0.000	-	-	-	-	-	0.000			
JSAM TA Engineering Changes	-	-	0.000	-	-	0.000	-	-	0.636	-	-	0.000	-	-	-	-	-	0.000			
Subtotal: Recurring Cost	-	-	11.628	-	-	0.000	-	-	33.106	-	-	17.523	-	-	-	-	-	17.523			
Subtotal: Hardware Cost	-	-	11.628	-	-	0.000	-	-	33.106	-	-	17.523	-	-	-	-	-	17.523			
Logistics Cost																					
Recurring Cost																					
JSAM RW - Config Mgmt/Tech Manuals	-	-	0.000	-	-	0.000	-	-	0.072	-	-	0.049	-	-	-	-	-	0.049			
JSAM RW - Logistics Support	-	-	0.000	-	-	0.220	-	-	0.564	-	-	0.640	-	-	-	-	-	0.640			
JSAM TA Mask - Initial Spares/ Support Equipment	-	-	0.000	-	-	0.000	-	-	1.887	-	-	0.000	-	-	-	-	-	0.000			

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>															<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1						<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION						<b>Item Number / Title [DODIC]:</b> JI0002 / JS AIRCREW MASK (JSAM)						
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B										<b>MDAP/MAIS Code:</b>								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
JSAM TA Mask - New Equipment Training/ Training Equipment	-	-	0.000	-	-	0.000	-	-	0.438	-	-	0.000	-	-	-	-	-	0.000
JSAM SA M69- Training and Support Equipment	-	-	0.000	-	-	0.000	-	-	1.657	-	-	3.818	-	-	-	-	-	3.818
JSAM RW - NET Training/Training Equipment	-	-	0.000	-	-	0.000	-	-	0.504	-	-	0.775	-	-	-	-	-	0.775
JSAM RW - Tooling	-	-	0.000	-	-	0.000	-	-	0.829	-	-	0.000	-	-	-	-	-	0.000
JSAM RW - Initial Spares/Fielding Components	-	-	0.000	-	-	0.000	-	-	2.419	-	-	3.921	-	-	-	-	-	3.921
JSAM SA M69 - New Equipment Training	-	-	0.000	-	-	0.000	-	-	0.893	-	-	0.454	-	-	-	-	-	0.454
JSAM SA M69 - Initial Spares/Components	-	-	0.000	-	-	0.000	-	-	1.277	-	-	0.580	-	-	-	-	-	0.580
<i>Subtotal: Recurring Cost</i>	-	-	<i>0.000</i>	-	-	<i>0.220</i>	-	-	<i>10.540</i>	-	-	<i>10.237</i>	-	-	<i>-</i>	-	-	<i>10.237</i>
<i>Subtotal: Logistics Cost</i>	-	-	<i>0.000</i>	-	-	<i>0.220</i>	-	-	<i>10.540</i>	-	-	<i>10.237</i>	-	-	<i>-</i>	-	-	<i>10.237</i>
<b>Support Cost</b>																		
JSAM SA M69- Production Support	-	-	0.000	-	-	0.000	-	-	0.540	-	-	2.173	-	-	-	-	-	2.173
JSAM RW - Program Management	-	-	0.000	-	-	1.797	-	-	2.418	-	-	3.041	-	-	-	-	-	3.041
JSAM RW - Engineering Support	-	-	0.000	-	-	0.688	-	-	0.861	-	-	0.892	-	-	-	-	-	0.892
JSAM SA M69 - Program Management	-	-	0.000	-	-	0.000	-	-	1.824	-	-	1.359	-	-	-	-	-	1.359
JSAM SA M69 - Engineering Support	-	-	0.000	-	-	0.000	-	-	0.656	-	-	1.490	-	-	-	-	-	1.490
JSAM TA Mask - Program Management	-	-	0.000	-	-	0.000	-	-	1.896	-	-	0.000	-	-	-	-	-	0.000
JSAM TA Mask - Engineering Support	-	-	0.000	-	-	0.000	-	-	0.443	-	-	0.000	-	-	-	-	-	0.000
JSAM RW - First Article Testing	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.067	-	-	-	-	-	0.067
<i>Subtotal: Support Cost</i>	-	-	<i>0.000</i>	-	-	<i>2.485</i>	-	-	<i>8.638</i>	-	-	<i>9.022</i>	-	-	<i>-</i>	-	-	<i>9.022</i>
<b>Gross/Weapon System Cost</b>	-	-	<b>11.628</b>	-	-	<b>2.705</b>	-	-	<b>52.284</b>	-	-	<b>36.782</b>	-	-	<b>-</b>	-	-	<b>36.782</b>
<b>Remarks:</b>																		

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JI0002 / JS AIRCREW MASK (JSAM)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>The Joint Service Aircrew Mask (JSAM) system is a lightweight Chemical, Biological, Radiological and Nuclear (CBRN) protective mask consisting of mask, filter, blower (except JSAM SA), and accessories incorporating state-of-the-art technology to protect U.S. Forces from anticipated threats. The JSAM systems will be developed to support multiple aircraft platforms which will integrate with aircraft subsystems: Aircrew Life Support Equipment (ALSE), seating, portable aircrew systems, restraint systems, night vision goggles (NVGs), and communications systems. The mask is optimized to minimize impact on the wearer's performance, maximize its ability to interface with aircrew protective clothing, and provide improved field of view when compared to current protective masks.</p> <p>The JSAM Rotary Wing (RW) Mask will provide head, eye, respiratory, and CB protection and "don in flight" capability for general purpose, rotary wing aircrew in all four Services and the US Coast Guard. The JSAM for Tactical Aircraft (JSAM TA) will provide CB pressure breathing for altitude and anti-G protection. The JSAM for Strategic Aircraft (JSAM SA) will provide CB protection for aircrew positions that only need pressure breathing for altitude. Both the JSAM TA and JSAM SA will provide flame resistance, JSAM TA will provide demist/emergency demist.</p> <p>Justification: FY18 will procure 3,870 JSAM SA production masks, including initial spares, to be used in safe to fly, integration testing and fielding to various United States Air Force (USAF) , Navy (USN) &amp; Army (USA) aircraft. Conduct New Equipment Training, procure support and training equipment. FY18 will also procure 2,213 JSAM RW LRIP assets, training, tooling, and initial spares.</p> <p>RDT&amp;E Code B Item: 0604384BP/Proj IP5</p> <p>IP5/JSAM FW: RDT&amp;E FY14 and Prior - 46.040M; FY15 - 10.364M  IP5/JSAM RW: RDT&amp;E FY14 and Prior - 18.982M; FY15 - 3.179M; FY16 - 5.277M; FY17 - 0.940M; FY18 - 0.382M  IP5/JSAM SA: RDT&amp;E ; FY16 - 6.320M; FY17 - 3.539M; FY18 - 2.097M; FY19 - 2.105M; FY20 - 1.721M; FY21 - 1.338M; FY22 - 0.186M  IP5/JSAM TA: RDT&amp;E ; FY16 - 5.024M; FY17 - 4.065M; FY18 - 2.954M; FY19 - 2.329M</p> <p><b>DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES</b></p> <p>JSAM FW - AP22P(A) USAF Variant Purchase: Jul 2015  JSAM RW - MS C/ Low Rate Initial Production Decision: Jan 2015  JSAM RW - USA/USAF Multi Service Operational Test and Evaluation (Feb 2015 to Apr 2015)  JSAM RW - USN/USMC Multi Service Operational Test and Evaluation (Nov 2016 to Feb 2017)  JSAM RW - USA/USAF Full Rate Production: Nov 2016  JSAM RW - USAF Initial Operability Capability: Mar 2017  JSAM RW - USN/USMC Full Rate Production: Dec 2017  JSAM RW - USAF Full Operational Capability: Mar 2018  JSAM RW - USA Initial Operational Capability: Jul 2018  JSAM RW - USN/USMC Initial Operational Capability: Sep 2018  JSAM RW - USA/USN/USMC Full Operational Capability: Jan 2024  JSAM SA - Developmental Testing (Mar 2014 to Jun 2016)  JSAM SA - MS C / Low Rate Initial Production Decision: Oct 2016  JSAM SA - USAF/USN Operational Testing (Mar 2017 to Jun 2017)  JSAM SA - Full Rate Production: Sep 2017  JSAM SA - USAF/USN Initial Operational Capability: Mar 2018  JSAM SA - USA Operational Testing (Apr 2018 to Jun 2018)  JSAM SA - USA Initial Operational Capability: Mar 2019  JSAM TA - AP22P (A) Safe to Fly Certification (Jun 2014 to Dec 2018)  JSAM TA - Integrated (Developmental/Operational) Testing (Dec 2015 to Dec 2018)  JSAM TA - AP22P (A) ECP Integration (Dec 2013 to Dec 2018)</p>		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JI0002 / JS AIRCREW MASK (JSAM)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
JSAM TA - Capability Production Document: Nov 2018 JSAM TA - MS C/ Full Rate Production (Jan 2019 to Sep 2022) JSAM TA - Initial Operational Capability: Jul 2020  (t) indicates the presence of a P-5a		

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>									<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION					<b>Item Number / Title [DODIC]:</b> JI0002 / JS AIRCREW MASK (JSAM)			

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
JSAM RW - MPU-5 Hardware - LRIP/FRP		2017	AVOX Systems Inc. / Lancaster, NY	SS / FFP	RDECOM, APG, MD	Mar 2017	Aug 2017	1,701	3.822	Y		Oct 2016
JSAM RW - MPU-5 Hardware - LRIP/FRP		2018	AVOX Systems Inc. / Lancaster, NY	SS / FFP	RDECOM, APG, MD	Nov 2017	Mar 2018	2,213	3.608	Y		
JSAM SA - M69 - Hardware - LRIP/FRP		2017	AVON Protection Systems Inc. / Cadillac, MI	SS / FFP	RDECOM, APG, MD	Jun 2017	Aug 2017	5,150	2.480	N		Jan 2017
JSAM SA - M69 - Hardware - LRIP/FRP		2018	AVON Protection Systems Inc. / Cadillac, MI	SS / FFP	RDECOM, APG, MD	Nov 2017 <sup>(1)</sup>	May 2018	3,870	2.465	N		
JSAM TA - Mask - LRIP		2017	TBD / UNKNOWN	C / CPIF	RDECOM, APG, MD	Oct 2016	Feb 2017	936	14.099	N		

**Footnotes:**

<sup>(1)</sup> Opt 1



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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)								
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				144.846			60.184			55.118			48.493			-			48.493		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				144.846			60.184			55.118			48.493			-			48.493		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				144.846			60.184			55.118			48.493			-			48.493		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total				
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)		
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts		-	-	95.174	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
JSGPM - Combat Vehicle (M51) <sup>(†)</sup>		0.397	24,750	9.832	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
JSGPM - Ground/Ship (M50) <sup>(†)</sup>		0.249	160,000	39.840	0.255	148,599	37.893	0.263	131,233	34.514	0.313	114,177	35.737	-	-	-	0.313	114,177	35.737		
Initial Spares		-	-	0.000	-	-	7.091	-	-	8.973	-	-	4.161	-	-	-	-	-	4.161		
Production Acceptance Test		-	-	0.000	-	-	1.343	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500		
Subtotal: Recurring Cost		-	-	144.846	-	-	46.327	-	-	43.987	-	-	40.398	-	-	-	-	-	40.398		
Subtotal: Hardware Cost		-	-	144.846	-	-	46.327	-	-	43.987	-	-	40.398	-	-	-	-	-	40.398		
Package Fielding Cost																					
Recurring Cost																					
System Fielding Support (Total Package Fielding, First Destination Transportation & New Equipment...		-	-	0.000	-	-	6.032	-	-	2.510	-	-	2.300	-	-	-	-	-	2.300		
Subtotal: Recurring Cost		-	-	0.000	-	-	6.032	-	-	2.510	-	-	2.300	-	-	-	-	-	2.300		
Subtotal: Package Fielding Cost		-	-	0.000	-	-	6.032	-	-	2.510	-	-	2.300	-	-	-	-	-	2.300		

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<b>Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program</b>												<b>Date:</b> May 2017					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1						<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION						<b>Item Number / Title [DODIC]:</b> JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)					

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A										<b>MDAP/MAIS Code:</b>							
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Support Cost																		
Engineering Support	-	-	0.000	-	-	2.100	-	-	2.400	-	-	2.400	-	-	-	-	-	2.400
Program Management	-	-	0.000	-	-	5.725	-	-	6.221	-	-	3.395	-	-	-	-	-	3.395
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>7.825</b>	-	-	<b>8.621</b>	-	-	<b>5.795</b>	-	-	-	-	-	<b>5.795</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>144.846</b>	-	-	<b>60.184</b>	-	-	<b>55.118</b>	-	-	<b>48.493</b>	-	-	-	-	-	<b>48.493</b>

**Remarks:**

The Joint Service General Purpose Mask (JSGPM) is a lightweight, protective Nuclear Biological Chemical (NBC) mask system. It incorporates state-of-the-art technology to protect the U.S. Joint Forces from anticipated threats. The JSGPM provides above-the-neck, head/eye/respiratory protection against Chemical and Biological (CB) agents, radioactive particles, and Toxic Industrial Materials (TIMs). The mask design is optimized to minimize impact on the wearer's performance, and to maximize its ability to interface with fielded and future Joint Service equipment and protective clothing. The JSGPM mask system replaces the M40/M42 series of masks for Army and Marine ground and combat vehicle operations and the MCU-2/P series for Air Force and Navy ground and shipboard applications. In addition, the JSGPM replaces the M45 mask in the Land Warrior program. This can significantly reduce the number of masks that will have to be logistically supported by the Department of Defense. The M50 is the ground/ship version of the JSGPM. The M51 is the combat vehicle crewman version of the JSGPM. The M53 is the special operation version of the JSGPM.

Justification: FY18 funds procure 114,177 JSGPM Ground/Ship (M-50) masks, training, initial spares, and total package fielding to support Army requirements.

(†) indicates the presence of a P-5a

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program</b>									<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION					<b>Item Number / Title [DODIC]:</b> JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)			
<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$ K)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
JSGPM - Combat Vehicle (M51)		2014	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jul 2014 <sup>(2)</sup>	Jan 2015	24,750	0.397	Y		
JSGPM - Ground/Ship (M50) <sup>(†)</sup>		2015	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jan 2015 <sup>(3)</sup>	Mar 2015	160,000	0.249	Y		
JSGPM - Ground/Ship (M50) <sup>(†)</sup>		2016	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jan 2016 <sup>(4)</sup>	Mar 2016	148,599	0.255	Y		
JSGPM - Ground/Ship (M50) <sup>(†)</sup>		2017	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Dec 2016 <sup>(5)</sup>	Mar 2017	131,233	0.263	Y		
JSGPM - Ground/Ship (M50) <sup>(†)</sup>		2018	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jan 2018 <sup>(6)</sup>	Mar 2018	114,177	0.313	Y		

(†) indicates the presence of a P-21

**Footnotes:**

<sup>(2)</sup> Opt 4

<sup>(3)</sup> Delivery Order

<sup>(4)</sup> Delivery Order

<sup>(5)</sup> Delivery Order

<sup>(6)</sup> Delivery Order

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Exhibit P-21, Production Schedule: FY 2018 Chemical and Biological Defense Program																				Date: May 2017														
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION													Item Number / Title [DODIC]: JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)														
Cost Elements (Units in Thousands)							Fiscal Year 2014												Fiscal Year 2015												B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 3	BAL D U E A S O F 1 O C T				Calendar Year 2014												Calendar Year 2015												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
JSGPM - Ground/Ship (M50)																																		
	1	2015	CBDP	160.000	.000	160.000																A -	-	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	66.900
Secondary Distribution			ARMY	160.000	.000	160.000																A -	-	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	13.300	66.900
	1	2016	CBDP	148.599	.000	148.599																												148.599
Secondary Distribution			ARMY	148.599	.000	148.599																												148.599
	1	2017	CBDP	131.233	.000	131.233																												131.233
Secondary Distribution			ARMY	131.233	.000	131.233																												131.233
	1	2018	CBDP	114.177	.000	114.177																												114.177
Secondary Distribution			ARMY	114.177	.000	114.177																												114.177
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: FY 2018 Chemical and Biological Defense Program																								Date: May 2017											
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1										P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION														Item Number / Title [DODIC]: JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)											
Cost Elements <i>(Units in Thousands)</i>							Fiscal Year 2016														Fiscal Year 2017														B A L A N C E
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 5	BAL DUE AS OF 1 OCT							Calendar Year 2016										Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
JSGPM - Ground/Ship (M50)																																			
	1	2015	CBDP	160.000	93.100	66.900	13.300	13.300	13.300	13.300	13.700																				.000				
Secondary Distribution			ARMY	160.000	93.100	66.900	13.300	13.300	13.300	13.300	13.700																				.000				
	1	2016	CBDP	148.599	.000	148.599					A -	-	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.386						.000						
Secondary Distribution			ARMY	148.599	.000	148.599					A -	-	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.383	12.386						.000						
	1	2017	CBDP	131.233	.000	131.233															A -	-	-	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000	54.233			
Secondary Distribution			ARMY	131.233	.000	131.233															A -	-	-	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000	54.233			
	1	2018	CBDP	114.177	.000	114.177																								114.177					
Secondary Distribution			ARMY	114.177	.000	114.177																								114.177					
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: FY 2018 Chemical and Biological Defense Program																				Date: May 2017														
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1										P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION										Item Number / Title [DODIC]: JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)														
Cost Elements <i>(Units in Thousands)</i>							Fiscal Year 2018										Fiscal Year 2019														BALANCE			
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT				Calendar Year 2018										Calendar Year 2019														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
JSGPM - Ground/Ship (M50)																																		
	1	2015	CBDP	160.000	160.000	.000																									.000			
Secondary Distribution			ARMY	160.000	160.000	.000																									.000			
	1	2016	CBDP	148.599	148.599	.000																									.000			
Secondary Distribution			ARMY	148.599	148.599	.000																									.000			
	1	2017	CBDP	131.233	77.000	54.233	11.000	11.000	11.000	11.000	10.233																				.000			
Secondary Distribution			ARMY	131.233	77.000	54.233	11.000	11.000	11.000	11.000	10.233																				.000			
	1	2018	CBDP	114.177	.000	114.177				A -	-	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.512										.000		
Secondary Distribution			ARMY	114.177	.000	114.177				A -	-	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.515	9.512										.000		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Chemical and Biological Defense Program								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION				<b>Item Number / Title [DODIC]:</b> JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	AVON Protection Systems Inc. - Cadillac, MI	8,333	17,000	21,554	0	3	10	13	0	3	2	5

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total					
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-					
Gross/Weapon System Cost <i>(\$ in Millions)</i>				25.765		32.872		13.525		10.990		-		10.990					
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Net Procurement (P-1) <i>(\$ in Millions)</i>				25.765		32.872		13.525		10.990		-		10.990					
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Total Obligation Authority <i>(\$ in Millions)</i>				25.765		32.872		13.525		10.990		-		10.990					
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																			
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
Prior/Future combined efforts		-	-	25.765	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Production Lot Testing		-	-	0.000	-	-	1.945	-	-	0.752	-	-	0.240	-	-	-	-	-	0.240
UIPE 1 - Ensembles - FRP <sup>(†)</sup>		-	-	0.000	0.503	54,514	27.442	0.469	24,000	11.256	0.486	19,119	9.292	-	-	-	0.486	19,119	9.292
Subtotal: Recurring Cost		-	-	25.765	-	-	29.387	-	-	12.008	-	-	9.532	-	-	-	-	-	9.532
Subtotal: Hardware Cost		-	-	25.765	-	-	29.387	-	-	12.008	-	-	9.532	-	-	-	-	-	9.532
Support Cost																			
Program Management		-	-	0.000	-	-	1.782	-	-	1.213	-	-	1.059	-	-	-	-	-	1.059
Engineering Support		-	-	0.000	-	-	1.703	-	-	0.304	-	-	0.399	-	-	-	-	-	0.399
Subtotal: Support Cost		-	-	0.000	-	-	3.485	-	-	1.517	-	-	1.458	-	-	-	-	-	1.458
Gross/Weapon System Cost		-	-	25.765	-	-	32.872	-	-	13.525	-	-	10.990	-	-	-	-	-	10.990
Remarks:																			
The Uniform Integrated Protection Ensemble (UIPE) is a Chemical, Biological, Radiological, Nuclear (CBRN) protective system offering the capability to select a tailored material solution based on the expected threat level commensurate with operational mission requirements. Where appropriate, a family of systems approach that meets the scope of UIPE individual protection capability needs will be utilized. The objective of UIPE is to fully integrate CBRN and toxic industrial material (TIM) protections into an ensemble, identical in fit and form to the combat uniform (including mask - helmet integration and protective boots and gloves), thus negating the need for separate protective ensemble components. This integrated protection approach will result in increased warfighter operational performance in a CBRN environment. The																			



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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>
<p>UIPE program will develop, integrate, test, procure and field incremental capability solutions that are modular in function and offer improvements in form and fit over current systems; the program will explore trade-space in areas such as protection level, heat stress, durability, antimicrobial properties, flame resistance, launderability, self-detoxification, and protection time in order to provide capabilities that afford maximum utility to the warfighter. Where appropriate modeling and simulation tools will be used to lower UIPE program risks, reduce costs, and ensure a high confidence in selected technologies. UIPE is aimed specifically at providing enhanced individual protection capabilities to the warfighter through reduction of physiological and psychological effects associated with CBRN protective garment thermal burden, weight, and bulk. The UIPE program will consider modernization in order to ensure that the warfighter retains access to state of the art capability to support future operational mission requirements. The UIPE Increment 1 protective system offers the capability to select a tailored material solution based on the expected threat level commensurate with operational mission requirements. This ability to tailor the type and level of the protective system will result in optimized protection, thereby minimizing physiological and psychological burdens associated with the weight, bulk, thermal strain, and encumbrance of wearing CBRN protective equipment on the Warfighter and affording the lowest impact on the operational mission. UIPE Increment 2 will be designed to permit efficient communications, be compatible with current and developmental CBRN protective component systems, and retain CBRN protection capability after exposure to petroleum, oils, lubricants, and other environmental contaminants. UIPE Increment 2 may include hooded and non-hooded variants and will be compatible with current clothing and equipment, including load-bearing equipment, helmets, headwear, footwear, body cooling systems, and protective masks of the respective Service and Special Operational Forces.</p> <p>Justification: FY18 procures 22,000 UIPE Increment 1 garments to meet Joint Service CBRN equipment requirements.</p> <p>(t) indicates the presence of a P-5a</p>		

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<b>Exhibit P-5a, Procurement History and Planning:</b> FY 2018 Chemical and Biological Defense Program								<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1				<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION				<b>Item Number / Title [DODIC]:</b> MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
UIPE 1 - Ensembles - FRP		2016	Tennessee Apparel Corporation / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Feb 2016 <sup>(7)</sup>	Jun 2016	54,514	0.503	Y		
UIPE 1 - Ensembles - FRP		2017	Tennessee Apparel Corporation (E) / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Dec 2016 <sup>(8)</sup>	Jun 2017	24,000	0.469	Y		
UIPE 1 - Ensembles - FRP		2018	Tennessee Apparel Corporation (E) / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Nov 2017 <sup>(9)</sup>	Mar 2018	19,119	0.486	Y		

**Footnotes:**

<sup>(7)</sup> Delivery Order

<sup>(8)</sup> Delivery Order

<sup>(9)</sup> Delivery Order

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)						
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity (Units in Each)				-		-		-		-		-		-		-		
Gross/Weapon System Cost (\$ in Millions)				15.993		5.626		12.449		10.728		-		10.728				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-		-		
Net Procurement (P-1) (\$ in Millions)				15.993		5.626		12.449		10.728		-		10.728				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-		-		
Total Obligation Authority (\$ in Millions)				15.993		5.626		12.449		10.728		-		10.728				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-		-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-		-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	11.592	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
TENT KIT 2 <sup>(†)</sup>	198.900	10	1.989	-	-	0.000	198.000	10	1.980	-	-	0.000	-	-	-	-	-	0.000
STRUCTURE KIT IMPROVED <sup>(†)</sup>	134.000	18	2.412	-	-	0.000	134.294	17	2.283	144.605	38	5.495	-	-	-	144.605	38	5.495
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE <sup>(†)</sup>	-	-	0.000	269.429	14	3.772	260.300	10	2.603	272.833	6	1.637	-	-	-	272.833	6	1.637
TENT STANDALONE LARGE - GFE GENERATORS	-	-	0.000	29.214	14	0.409	29.800	10	0.298	34.500	6	0.207	-	-	-	34.500	6	0.207
Engineer Changes/ Modifications	-	-	0.000	-	-	0.035	-	-	0.069	-	-	0.118	-	-	-	-	-	0.118
Subtotal: Recurring Cost	-	-	15.993	-	-	4.216	-	-	7.233	-	-	7.457	-	-	-	-	-	7.457
Non Recurring Cost																		
First Article Testing	-	-	0.000	-	-	0.000	-	-	1.087	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	0.000	-	-	0.000	-	-	1.087	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Hardware Cost	-	-	15.993	-	-	4.216	-	-	8.320	-	-	7.457	-	-	-	-	-	7.457
Package Fielding Cost																		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program														Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)				
ID Code (A=Service Ready, B=Not Service Ready) : B											MDAP/MAIS Code:							
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Recurring Cost																		
Training / Fielding / CLS	-	-	0.000	-	-	0.000	-	-	1.030	-	-	1.115	-	-	-	-	-	1.115
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	1.030	-	-	1.115	-	-	-	-	-	1.115
Subtotal: Package Fielding Cost	-	-	0.000	-	-	0.000	-	-	1.030	-	-	1.115	-	-	-	-	-	1.115
Logistics Cost																		
Recurring Cost																		
Spares	-	-	0.000	-	-	0.040	-	-	0.072	-	-	0.073	-	-	-	-	-	0.073
Technical Data	-	-	0.000	-	-	0.001	-	-	0.001	-	-	0.001	-	-	-	-	-	0.001
Subtotal: Recurring Cost	-	-	0.000	-	-	0.041	-	-	0.073	-	-	0.074	-	-	-	-	-	0.074
Subtotal: Logistics Cost	-	-	0.000	-	-	0.041	-	-	0.073	-	-	0.074	-	-	-	-	-	0.074
Support Cost																		
Program Management and Support	-	-	0.000	-	-	1.369	-	-	2.909	-	-	2.082	-	-	-	-	-	2.082
Systems Engineering	-	-	0.000	-	-	0.000	-	-	0.117	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	-	-	0.000	-	-	1.369	-	-	3.026	-	-	2.082	-	-	-	-	-	2.082
Gross/Weapon System Cost	-	-	15.993	-	-	5.626	-	-	12.449	-	-	10.728	-	-	-	-	-	10.728
Remarks:																		
Joint Expeditionary Collective Protection (JECP) provides the Joint expeditionary forces a collective protection (CP) capability which is lightweight, compact, modular, and affordable. The JECP family of systems (FoS) include tent kits, structure kits, and standalone shelters that allow the application of CP to transportable soft-side shelters, enclosed spaces of opportunity, and remote austere locations as a standalone resource. JECP is capable of protecting personnel groups of varying size, unencumbered by individual protective equipment (IPE), from effects of chemical and biological (CB) agents, radiological (R) particles, toxic industrial materials (TIMs), heat, dust, and sand.																		
Tent kits consist of a CB protective liner, airlock system, and a CB filtration blower system. Tent Kit-1 interfaces with the US Navy's Base-X 303 and 305 general purpose tents and all organic Base-X equipment including the environmental control unit and power systems. Tent Kit-2 interfaces with the Air Force Small Shelter System (ASSS) general purpose tents and all organic ASSS equipment including the environmental control unit and power systems.																		
Structure kits may include a floorless CB protective liner or a CB protective liner with a floor, an airlock system, and a CB filtration blower system. Structure Kit-Improved (SK-I) is retrofitted to structures such as office buildings, warehouses, or hangars that provide coherent walls and roofing, ventilation systems, doors and windows, and power. Structure Kit-Unimproved (SK-UI)/Standalone Shelter System-Medium (SA-M) are retrofitted to structures such as huts, sheds or other rudimentary structures (SK-UI) that do not have any available electrical power, but provide environmental and other basic elemental protection. This configuration uses a passive CP system relying on natural airflow through protective panels.																		
Standalone large shelter (SA-L) is an all encompassing active CP shelter for multi-service use for up to 20 people. SA-L provides a general purpose tent system, CB protective liner, an airlock system, a CB filtration blower system, an environmental control unit and all necessary power and ancillary equipment.																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECp)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>The Transport Isolation System (TIS) provides an aeromedical evacuation capability to transport up to 12 patients that have contagious and/or infectious diseases (e.g. Ebola) while protecting the aircrew, airframe and all other support personnel from infection. C-17 and C-130 aircraft will provide air transport of the TIS and personnel. The users of the TIS will be USTRANSCOM. TIS will be leveraged in support of future CBRN protection technologies.</p> <p>Justification: FY18 procures 44 JECp systems in the following configurations: 38 shelter kit-improved, and 6 standalone large shelters. The employment of JECp is a strategic deterrence against enemy use of CBR agents or TIMs, and will reduce the need for personnel and equipment decontamination.</p> <p>RDT&amp;E Code B Item: 0604384BP/Proj CO5</p> <p>CO5/JECp: RDT&amp;E FY14 and Prior - 106.766M; FY15 - 7.117M; FY16 - 7.228M; FY17 - 4.224M; FY18 - 5.299M; FY19 - 5.972M; FY20 - 4.455M; FY21 - 4.930M</p> <p>DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES</p> <p>JECp - Milestone C LRIP Decision: Feb 2013  JECp - Low-Rate Initial Production Contract Option: Sep 2013  JECp - Phase 1 Production Verification Testing (PVT) (Apr 2014 to Jul 2015)  JECp - Phase 1 Multi-service Operational Test and Evaluation I (Sep 2015 to Oct 2015)  JECp - Phase 1 Multi-service Operational Test and Evaluation II (Jun 2016 to Jul 2016)  JECp - Phase 1 Full Rate Production Decision: Dec 2016  JECp - Phase 1 Type Classification/Material Release Decision: Jun 2017  JECp - Initial Operational Capability: Sep 2021  JECp - Full Operational Capability: Sep 2030</p> <p>(t) indicates the presence of a P-5a</p>		

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Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1			P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
TENT KIT 2		2015	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Nov 2015 <sup>(10)</sup>	Aug 2016	10	198.900	Y		
TENT KIT 2		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 <sup>(11)</sup>	Jan 2018	10	198.000	Y		
STRUCTURE KIT IMPROVED		2015	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Nov 2015 <sup>(12)</sup>	Aug 2016	18	134.000	Y		
STRUCTURE KIT IMPROVED		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 <sup>(13)</sup>	Oct 2017	17	134.294	Y		
STRUCTURE KIT IMPROVED		2018	TBD / UNKNOWN	C / FPIF	UNKNOWN	Jan 2018	Aug 2018	38	144.605	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE		2016	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Mar 2016 <sup>(14)</sup>	Nov 2016	14	269.429	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 <sup>(15)</sup>	Mar 2018	10	260.300	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE		2018	TBD / UNKNOWN	C / FPIF	UNKNOWN	Jan 2018	Jun 2018	6	272.833	Y		

**Footnotes:**

<sup>(10)</sup> - LRIP Option

<sup>(11)</sup> - FRP Option

<sup>(12)</sup> - LRIP Option

<sup>(13)</sup> - FRP Option

<sup>(14)</sup> - LRIP Option

<sup>(15)</sup> - FRP Option

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: R12301 / CB PROTECTIVE SHELTER (CBPS)								
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				30.785			22.834			16.950			16.739			-			16.739		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				30.785			22.834			16.950			16.739			-			16.739		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				30.785			22.834			16.950			16.739			-			16.739		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total					
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)			
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts	-	-	8.203	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
CBPS UP-ARMORED <sup>(†)</sup>	752.733	30	22.582	776.667	15	11.650	838.000	8	6.704	1,193.857	7	8.357	-	-	-	1,193.857	7	8.357			
Government Furnished Material	-	-	0.000	-	-	0.766	-	-	0.421	-	-	0.379	-	-	-	-	-	0.379			
Subtotal: Recurring Cost	-	-	30.785	-	-	12.416	-	-	7.125	-	-	8.736	-	-	-	-	-	8.736			
Non Recurring Cost																					
Organic Facilitization Costs	-	-	0.000	-	-	0.230	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
Subtotal: Non Recurring Cost	-	-	0.000	-	-	0.230	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
Subtotal: Hardware Cost	-	-	30.785	-	-	12.646	-	-	7.125	-	-	8.736	-	-	-	-	-	8.736			
Package Fielding Cost																					
Recurring Cost																					
Total Package Fielding (spares)	-	-	0.000	-	-	0.615	-	-	0.882	-	-	0.895	-	-	-	-	-	0.895			
Subtotal: Recurring Cost	-	-	0.000	-	-	0.615	-	-	0.882	-	-	0.895	-	-	-	-	-	0.895			
Subtotal: Package Fielding Cost	-	-	0.000	-	-	0.615	-	-	0.882	-	-	0.895	-	-	-	-	-	0.895			
Logistics Cost																					

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: R12301 / CB PROTECTIVE SHELTER (CBPS)					
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Recurring Cost																		
Care of Supplies in Storage	-	-	0.000	-	-	5.027	-	-	3.935	-	-	2.921	-	-	-	-	-	2.921
Integrated Logistics Support	-	-	0.000	-	-	1.304	-	-	0.605	-	-	0.556	-	-	-	-	-	0.556
New Equipment Training	-	-	0.000	-	-	1.368	-	-	1.409	-	-	1.710	-	-	-	-	-	1.710
Subtotal: Recurring Cost	-	-	0.000	-	-	7.699	-	-	5.949	-	-	5.187	-	-	-	-	-	5.187
Subtotal: Logistics Cost	-	-	0.000	-	-	7.699	-	-	5.949	-	-	5.187	-	-	-	-	-	5.187
Support Cost																		
Engineering Support	-	-	0.000	-	-	1.316	-	-	0.918	-	-	0.750	-	-	-	-	-	0.750
Management Support	-	-	0.000	-	-	0.558	-	-	2.076	-	-	1.171	-	-	-	-	-	1.171
Subtotal: Support Cost	-	-	0.000	-	-	1.874	-	-	2.994	-	-	1.921	-	-	-	-	-	1.921
Gross/Weapon System Cost	-	-	30.785	-	-	22.834	-	-	16.950	-	-	16.739	-	-	-	-	-	16.739
Remarks: The Services need 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 Chemical and Biological Protective Shelter (CBPS) satisfies this need and replaces the M51 Chemical Protective Shelter. The system consists of a Collectively Protected (CP) shelter modularized and integrated into a service selected prime-mover. The system is completely self contained, self powered, mobile, and adaptable to a variety of missions. CBPS relieves medical, combat service, and combat service support personnel from wearing chemical and biological protective clothing. The system is capable of operating continuously for 72 hours providing a contamination free environmentally controlled working area.																		
Justification: FY18 procures 7 CBPS CB modules.																		
(†) indicates the presence of a P-5a																		



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Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1				P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION					Item Number / Title [DODIC]: R12301 / CB PROTECTIVE SHELTER (CBPS)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
CBPS UP-ARMORED		2014	Smiths Detection / Edgewood, MD	C / FFP	Natick, MA	Jul 2014	Mar 2016	2	1,038.000	Y		
CBPS UP-ARMORED		2015	Smiths Detection / Edgewood, MD	C / FFP	Natick, MA	Apr 2015 <sup>(16)</sup>	Apr 2016	28	732.357	Y		
CBPS UP-ARMORED		2016	Smiths Detection / Edgewood, MD	C / FFP	Natick, MA	Jun 2016 <sup>(17)</sup>	Nov 2016	7	776.667	Y		
CBPS UP-ARMORED		2016	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jan 2016	May 2017	8	776.667	Y		
CBPS UP-ARMORED		2017	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jun 2017	Jun 2018	8	838.000	Y		
CBPS UP-ARMORED		2018	Pine Bluff Arsenal (E) / Pine Bluff, AR	MIPR	Not Applicable	Jan 2018	Mar 2019	7	1,193.857	Y		

**Footnotes:**

<sup>(16)</sup> Delivery Order

<sup>(17)</sup> Delivery Order

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: JD0050 / DECONTAMINATION FAMILY OF SYSTEMS (DFoS)								
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000			0.000			7.602			7.285			-			7.285		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000			0.000			7.602			7.285			-			7.285		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				0.000			0.000			7.602			7.285			-			7.285		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total					
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)			
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000			
DFOS CIDAS - LARGE SCALE APPLICATOR REUSABLE - Reusable	-	-	0.000	-	-	0.000	-	-	0.000	3.989	90	0.359	-	-	-	3.989	90	0.359			
DFOS CIDAS - LARGE SCALE APPLICATOR DISPOSABLE - Disposable	-	-	0.000	-	-	0.000	-	-	0.000	0.520	25	0.013	-	-	-	0.520	25	0.013			
DFOS CIDAS - NERVE INDICATOR KITS LARGE - Large Scale Nerve Kits	-	-	0.000	-	-	0.000	-	-	0.000	2.691	55	0.148	-	-	-	2.691	55	0.148			
DFOS CIDAS - NERVE INDICATOR KITS SMALL - Small Scale Nerve Kits	-	-	0.000	-	-	0.000	-	-	0.000	0.291	55	0.016	-	-	-	0.291	55	0.016			
DFOS GPD - General Purpose Decontaminants	-	-	0.000	-	-	0.000	0.035	52,482	1.837	0.035	103,599	3.626	-	-	-	0.035	103,599	3.626			
DFOS JSEW - Equipment	-	-	0.000	-	-	0.000	0.010	187,844	1.878	0.009	213,581	1.922	-	-	-	0.009	213,581	1.922			

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: JD0050 / DECONTAMINATION FAMILY OF SYSTEMS (DFoS)					
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Decontamination Wipes																		
CIDAS Production Lot Testing	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.021	-	-	-	-	-	0.021
GPD Production Lot Testing	-	-	0.000	-	-	0.000	-	-	0.451	-	-	0.060	-	-	-	-	-	0.060
JSEW Production Lot Testing	-	-	0.000	-	-	0.000	-	-	0.210	-	-	0.026	-	-	-	-	-	0.026
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	4.376	-	-	6.191	-	-	-	-	-	6.191
Subtotal: Hardware Cost	-	-	0.000	-	-	0.000	-	-	4.376	-	-	6.191	-	-	-	-	-	6.191
Logistics Cost																		
Recurring Cost																		
GPD New Equipment Training	-	-	0.000	-	-	0.000	-	-	0.570	-	-	0.010	-	-	-	-	-	0.010
GPD Transportation and Shipping	-	-	0.000	-	-	0.000	-	-	0.250	-	-	0.075	-	-	-	-	-	0.075
JSEW New Equipment Training	-	-	0.000	-	-	0.000	-	-	0.353	-	-	0.010	-	-	-	-	-	0.010
JSEW Transportation and Shipping	-	-	0.000	-	-	0.000	-	-	0.175	-	-	0.050	-	-	-	-	-	0.050
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	1.348	-	-	0.145	-	-	-	-	-	0.145
Subtotal: Logistics Cost	-	-	0.000	-	-	0.000	-	-	1.348	-	-	0.145	-	-	-	-	-	0.145
Support Cost																		
CIDAS Program Management Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.033	-	-	-	-	-	0.033
CIDAS Engineering Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.039	-	-	-	-	-	0.039
GPD Engineering Support	-	-	0.000	-	-	0.000	-	-	0.574	-	-	0.069	-	-	-	-	-	0.069
GPD Program Management Support	-	-	0.000	-	-	0.000	-	-	0.420	-	-	0.300	-	-	-	-	-	0.300
JSEW Engineering Support	-	-	0.000	-	-	0.000	-	-	0.525	-	-	0.072	-	-	-	-	-	0.072
JSEW Program Management Support	-	-	0.000	-	-	0.000	-	-	0.359	-	-	0.436	-	-	-	-	-	0.436
Subtotal: Support Cost	-	-	0.000	-	-	0.000	-	-	1.878	-	-	0.949	-	-	-	-	-	0.949
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	7.602	-	-	7.285	-	-	-	-	-	7.285

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JD0050 / DECONTAMINATION FAMILY OF SYSTEMS (DFoS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p><b>Remarks:</b></p> <p>The Decontamination Family of Systems (DFoS) - General Purpose Decontaminant (GPD) Program will provide thorough and operational decontamination capabilities for Hardened Military Equipment (HME), to include tactical vehicles, shipboard surfaces, crew-served weapons, and individual weapons, in hostile and non-hostile environments where it is reasonable to expect chemical, biological, radiological, and nuclear (CBRN) and Non-Traditional Agents (NTA) weapons will be employed or Toxic Industrial Materials (TIMs) may be encountered. The GPD will be employed within the integrated battle space as a means to decontaminate hazards posing threats to military personnel and operations including peacekeeping, stability and support, or consequence management operations. The GPD will be applied directly to the contaminated surface and be capable of reducing/neutralizing Chemical and Biological (CB) contamination to thorough levels within thirty (30) minutes of application. The GPD will be compatible with hardened materials consistent with those found on a Detailed Equipment Decontamination (DED) line. The GPD will be safe, suitable and compatible with HME and be operable in all operational environments that have been exposed to CB contamination.</p> <p>The Decontamination Family of Systems (DFoS) - Joint Service Equipment Wipe (JSEW) Program will provide Warfighters with an immediate/operational decontamination capability for sensitive and non-sensitive equipment that has been exposed to chemical agents/contamination. There is currently no documented decontamination capability that is non-destructive to sensitive equipment. The JSEW will be applied directly to contaminated sensitive and non-sensitive equipment and will be capable of removing gross contamination within five minutes following application. The JSEW will provide the means to minimize or negate the vulnerability to and effects of chemical attacks for peacekeeping, stability and support or consequence management operations.</p> <p>The Decontamination Family of Systems (DFoS) Contamination Indicator Decontamination Assurance System (CIDAS) Program will provide the Joint Forces with a new capability to reduce the logistics burden of decontamination by indicating presence and location of traditional (Nerve and Blister) and non-traditional chemical agents on militarily relevant surfaces pre- and post-decontamination. It will consist of an indicator and an applicator, for which there will be three applicator configurations (small scale, disposable large scale, and reusable large scale) and three indicator formulations (training, nerve and blister). Post application, the CIDAS will not cause material degradation other than that which is allowable in service platforms' specifications to complete primary mission functions. CIDAS reusable large scale applicators must achieve an Operational Availability of 0.90, measured continuously during a thorough decontamination mission pulse in accordance with the CIDAS Army Operational Mode Summary / Mission Profile. The CIDAS indicator will not degrade Individual Protection Equipment (IPE), below minimum required IPE Chemical Warfare Agent protection performance, in less than 12 hours or according to IPE CWA protection time requirements whichever is less.</p> <p>Justification: FY18 funds will procure 103,599 gallons of GPD chemical and biological (CB) agent thorough decontaminant for hardened military equipment. 213,581 JSEW chemical agent equipment decontamination wipes for sensitive and non-sensitive equipment to meet IOC. 80 CIDAS large scale applicators, 55 CIDAS large scale nerve kits and 55 CIDAS small scale nerve kits.</p>		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program														<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1							<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION							<b>Item Number / Title [DODIC]:</b> JD0063 / CONTAMINATED HUMAN REMAINS POUCH (CHRP)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B										<b>MDAP/MAIS Code:</b>								
<b>Resource Summary</b>				<b>Prior Years</b>		<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.479		1.100		0.000		0.000		-		0.000				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.479		1.100		0.000		0.000		-		0.000				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
<b>Total Obligation Authority</b> <i>(\$ in Millions)</i>				<b>0.479</b>		<b>1.100</b>		<b>0.000</b>		<b>0.000</b>		<b>-</b>		<b>0.000</b>				
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
<b>Cost Elements</b>	<b>Prior Years</b>			<b>FY 2016</b>			<b>FY 2017</b>			<b>FY 2018 Base</b>			<b>FY 2018 OCO</b>			<b>FY 2018 Total</b>		
	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)	<b>Unit Cost</b> (\$ K)	<b>Qty</b> (Each)	<b>Total Cost</b> (\$ M)
Hardware Cost																		
Non Recurring Cost																		
Prior/Future combined efforts	-	-	0.479	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CHRP - Outer Case Production/RDS Equipment	-	-	0.000	140.000	1	0.140	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CHRP - CHRT Prototype Production	-	-	0.000	3.333	45	0.150	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CHRP - CHR Transfer Case	-	-	0.000	3.467	60	0.208	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
First Article Testing	-	-	0.000	-	-	0.250	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
<i>Subtotal: Non Recurring Cost</i>	-	-	<i>0.479</i>	-	-	<i>0.748</i>	-	-	<i>0.000</i>	-	-	<i>0.000</i>	-	-	-	-	-	<i>0.000</i>
<i>Subtotal: Hardware Cost</i>	-	-	<b>0.479</b>	-	-	<b>0.748</b>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	-	-	-	<b>0.000</b>
Support Cost																		
Program Management Support	-	-	0.000	-	-	0.352	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
<i>Subtotal: Support Cost</i>	-	-	<b>0.000</b>	-	-	<b>0.352</b>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	-	-	-	<b>0.000</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>0.479</b>	-	-	<b>1.100</b>	-	-	<b>0.000</b>	-	-	<b>0.000</b>	-	-	-	-	-	<b>0.000</b>
<b>Remarks:</b>																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JD0063 / CONTAMINATED HUMAN REMAINS POUCH (CHRP)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>The Contaminated Human Remains Pouch (CHRP) program will procure systems with the capability to protect personnel handling and processing human remains contaminated with Chemical Biological Radiological (CBR) contamination for safe intra-theater transport. The CHRP provides the warfighter the capability to safely handle, transport, and temporarily store or inter contaminated human remains in a theater of operations. The CHRP Variant E system provides the warfighter the capability to safely handle, transport, and temporarily store or inter Ebola contaminated human remains in a theater of operations and transport Ebola contaminated human remains to the Continental United States. The CHR Transfer Case (CHRT) is a component of the CHRP System that allows for the safe transport of CBR contaminated human remains from an OCONUS location.</p>		

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: JD0070 / JOINT BIOLOGICAL AGENT DECONTAMINATION SYSTEM (JBADS)					
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity (Units in Each)				-		-		-		-		-		-		-		
Gross/Weapon System Cost (\$ in Millions)				0.000		0.000		3.000		4.827		-		4.827				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Net Procurement (P-1) (\$ in Millions)				0.000		0.000		3.000		4.827		-		4.827				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Total Obligation Authority (\$ in Millions)				0.000		0.000		3.000		4.827		-		4.827				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-		-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-		-		-		-		-		-		-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JBADS Increment I Hardware	-	-	0.000	-	-	0.000	2,200.000	1	2.200	4,519.000	1	4.519	-	-	-	4,519.000	1	4.519
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	2.200	-	-	4.519	-	-	-	-	-	4.519
Subtotal: Hardware Cost	-	-	0.000	-	-	0.000	-	-	2.200	-	-	4.519	-	-	-	-	-	4.519
Logistics Cost																		
Recurring Cost																		
First Article Testing	-	-	0.000	-	-	0.000	-	-	0.492	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	0.000	-	-	0.000	-	-	0.492	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Logistics Cost	-	-	0.000	-	-	0.000	-	-	0.492	-	-	0.000	-	-	-	-	-	0.000
Support Cost																		
Program Management	-	-	0.000	-	-	0.000	-	-	0.308	-	-	0.308	-	-	-	-	-	0.308
Subtotal: Support Cost	-	-	0.000	-	-	0.000	-	-	0.308	-	-	0.308	-	-	-	-	-	0.308
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	3.000	-	-	4.827	-	-	-	-	-	4.827
Remarks:																		
The JBADS will provide the capability to conduct biological and chemical agent decontamination of the interior and exterior of aircraft and vehicle platforms. The capabilities will be provided in two increments. Increment I will provide thorough biological decontamination of the interior and exterior of cargo aircraft. The JBADS Increment I is a capability set that will include a shelter to encapsulate an airframe, a																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> JD0070 / JOINT BIOLOGICAL AGENT DECONTAMINATION SYSTEM (JBADS)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B		<b>MDAP/MAIS Code:</b>
<p>decontamination delivery system (e.g. hot-humid air-blower, etc.), environmental control and monitoring system(s), and other ancillary components required to ensure efficacious biological agent decontamination. It will provide the capability to decontaminate biologically contaminated airframes to safe levels and allow more rapid return to service. Increment II will expand upon the Increment I capability set. Increment II will develop multiple decontaminants and modular designs to address various platforms and chemical agent decontamination.</p> <p>Justification: FY18 will procure 1 Increment I Low Rate Initial Production JBADS.</p> <p>RDT&amp;E Code B Item: 0603884BP/Proj DE4; 0604384BP/Proj DE5</p> <p>DE4/JBADS: RDT&amp;E FY14 and Prior - 0.000M; FY15 - 1.553M; FY16 - 2.753M DE5/JBADS: RDT&amp;E ; FY16 - 3.750M; FY17 - 5.069M; FY18 - 6.046M; FY19 - 8.167M; FY20 - 0.222M</p> <p>DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES</p> <p>JBADS - Engineering Trade Analysis/Design Modifications (Jul 2015 to Sep 2015) JBADS - Increment I Biothermal Decontamination Characterization Testing (Jun 2015 to Dec 2015) JBADS - Capability Development Document: Nov 2016 JBADS - Increment I MS B: Feb 2017 JBADS - Increment I First Article Build (Feb 2018 to May 2018) JBADS - Increment I Product Verification Testing (Feb 2018 to Sep 2018) JBADS - Increment I Capability Production Document: Nov 2018 JBADS - Increment I Initial Operational Test and Evaluation (Nov 2018 to Feb 2019) JBADS - Increment I MS C / FRP: Jun 2019 JBADS Increment 2 - Increment II Hot Air Dry Testing: Feb 2019 JBADS Increment 2 - Increment II MS B (Jan 2021 to Mar 2021) JBADS Increment 2 - Increment II Design Verification Testing (Jan 2021 to Dec 2021) JBADS Increment 2 - Increment II EMD Contract Award (Apr 2021 to Jun 2021) JBADS Increment 2 - Increment II MS C/LRIP (Jul 2022 to Sep 2022)</p>		



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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program														Date: May 2017							
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1						P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION								Item Number / Title [DODIC]: JX0005 / DOD BIOLOGICAL VACCINE PROCUREMENT (VACCINES)							
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity (Units in Each)				-			-			-			-			-			-		
Gross/Weapon System Cost (\$ in Millions)				0.370			0.185			0.185			0.183			-			0.183		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				0.370			0.185			0.185			0.183			-			0.183		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				0.370			0.185			0.185			0.183			-			0.183		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares (\$ in Millions)				-			-			-			-			-			-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total				
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)		
Package Fielding Cost																					
Recurring Cost																					
Prior/Future combined efforts		-	-	0.370	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
Vaccinia Immune Globulin-Support Costs		-	-	0.000	-	-	0.185	-	-	0.185	-	-	0.183	-	-	-	-	-	0.183		
Subtotal: Recurring Cost		-	-	0.370	-	-	0.185	-	-	0.185	-	-	0.183	-	-	-	-	-	0.183		
Subtotal: Package Fielding Cost		-	-	0.370	-	-	0.185	-	-	0.185	-	-	0.183	-	-	-	-	-	0.183		
Gross/Weapon System Cost		-	-	0.370	-	-	0.185	-	-	0.185	-	-	0.183	-	-	-	-	-	0.183		
Remarks:																					
The biological vaccine procurement program is critical for national defense. These products directly support the Secretary of Defense program to maintain a DoD capability to acquire and stockpile adequate quantities of all Biological Warfare (BW) vaccines to protect the programmed force against validated BW agents. Items currently in the stockpile are the FDA licensed Anthrax Vaccine Adsorbed (AVA), Smallpox vaccine, and Vaccinia Immune Globulin Intravenous (VIGIV). Funding supports vaccine and licensed biologic production, quality assurance and control, equipment validation, process change management, documentation control, and all FDA license maintenance and post-approval commitments (Phase 4 clinical trials). The annual vaccination program for the Services is funded by the Defense Health Program.																					
Justification: FY18 funds provide support for VIGIV associated with emergency use product.																					
RDT&E Code B Item: 0603884BP/Proj MB4; 0604384BP/Proj MB5																					

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LI PHM001 - CB PROTECTION AND HAZARD MITIGATION  
Chemical and Biological Defense Program

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Exhibit P-5, Cost Analysis: FY 2018 Chemical and Biological Defense Program														Date: May 2017							
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1							P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION							Item Number / Title [DODIC]: MA0400 / PROTECTIVE CLOTHING (JSLIST)							
ID Code (A=Service Ready, B=Not Service Ready) : A											MDAP/MAIS Code:										
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity (Units in Each)				-			-			-			-			-			-		
Gross/Weapon System Cost (\$ in Millions)				0.000			0.000			0.000			5.000			-			5.000		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				0.000			0.000			0.000			5.000			-			5.000		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				0.000			0.000			0.000			5.000			-			5.000		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares (\$ in Millions)				-			-			-			-			-			-		
Gross/Weapon System Unit Cost (\$ in Thousands)				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total				
		Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)		
Hardware Cost																					
Recurring Cost																					
Prior/Future combined efforts		-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000		
PROTECTIVE SUIT - JSLIST Garment <sup>(†)</sup>		-	-	0.000	-	-	0.000	-	-	0.000	0.409	11,361	4.650	-	-	-	0.409	11,361	4.650		
Subtotal: Recurring Cost		-	-	0.000	-	-	0.000	-	-	0.000	-	-	4.650	-	-	-	-	-	4.650		
Subtotal: Hardware Cost		-	-	0.000	-	-	0.000	-	-	0.000	-	-	4.650	-	-	-	-	-	4.650		
Support Cost																					
Engineering Support		-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.350	-	-	-	-	-	0.350		
Subtotal: Support Cost		-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.350	-	-	-	-	-	0.350		
Gross/Weapon System Cost		-	-	0.000	-	-	0.000	-	-	0.000	-	-	5.000	-	-	-	-	-	5.000		
Remarks:																					
The Joint Service Lightweight Integrated Suit Technology (JSLIST) is a Joint Service chemical protective ensemble and production program. The protective clothing program integrates technological improvements in protective military garments. These improvements provide service members chemical/biological (CB) protection in all combat theaters. In addition, the program provides commonality, standardization and full compatibility of all interfacing equipment. The JSLIST program fields a common chemical protective ensemble to US Forces. The program provides state-of-the-art chemical protection, reduced heat stress, full compatibility with all interfacing equipment, provides 24 hours of protection and 45 days of uncontaminated wear and is launderable, 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. Senior Level Enterprise Review impacted the final POM18 position and resurrected the JSLIST budget line for a two year period in FY18/19. The JSLIST suits purchased in these years will provide capability to the Joint Services until UIPE 2 is scheduled for production and fielding.																					

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D / 03 / 1	<b>P-1 Line Item Number / Title:</b> PHM001 / CB PROTECTION AND HAZARD MITIGATION	<b>Item Number / Title [DODIC]:</b> MA0400 / PROTECTIVE CLOTHING (JSLIST)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A		<b>MDAP/MAIS Code:</b>
<p>Note: Procurement Quantity reflects only quantities of JSLIST overgarment. Monthly deliveries are less than minimum production rate due to vendor having multiple customers ordering JSLIST overgarments, P21 is reflective of MA0400 Protective Clothing (JSLIST) funding only.</p> <p>Justification: FY18 procures 11,361 JSLIST overgarments to meet Joint Service CBRN equipment requirements.</p> <p>(t) indicates the presence of a P-5a</p>		

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Exhibit P-5a, Procurement History and Planning: FY 2018 Chemical and Biological Defense Program									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1			P-1 Line Item Number / Title: PHM001 / CB PROTECTION AND HAZARD MITIGATION						Item Number / Title [DODIC]: MA0400 / PROTECTIVE CLOTHING (JSLIST)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
PROTECTIVE SUIT - JSLIST Garment		2018	ReadyOne Industries / El Paso, TX	Reqn	DLA Troop Support, Philadelphia, PA	Nov 2017	Jan 2018	11,361	0.409	Y		

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