Department of Defense
Fiscal Year (FY) 2019 Budget Estimates

February 2018

Chemical and Biological Defense Program

Defense-Wide Justification Book Volume 1 of 2

Procurement, Defense-Wide

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Table of Volumes

Volume 1 Table of Contents

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Chemical Biological Defense Program Overview

The threat posed by chemical, biological, radiological, and nuclear (CBRN) weapons is real and evolving. Sustained use of chemical weapons in the Middle East and the increasing threat of weapons of mass destruction (WMD) on the Korean Peninsula not only illustrate the reality of threats we face, but also undermine the norms that protect civilians and security forces from these weapons. While many of these threats remain within the arsenals of our state and non-state adversaries, the variety of threats is no longer a static list of restricted CBRN materials. The concurrent emergence of dual-use technologies and increased access to shared information are lowering the expertise required to harness these technologies for illicit purposes. Proliferation of technology, increased ease of access, challenges to detecting illicit activity, and our limited ability to anticipate how our adversaries might employ WMD all heighten the risk of unforeseen and unattributable attacks against the U.S. or its allies.

The sustained lethality of the Joint Force and its ability to continue the mission depends on the warfighter's ability to deter, prevent, protect, mitigate, respond to, and recover from CBRN weapons use and effects. The Chemical and Biological Defense Program (CBDP) supplies the materiel solutions to enable countering WMD (CWMD) missions ranging from combat operations to DoD support of domestic incident prevention and response as part of an integrated and layered defense. This 2019 budget request includes $1.36 billion aligned to improve near-term readiness for the highest Department, Joint Service, and Combatant Command CWMD priorities across these mission spaces.

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 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. The 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. The 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. The 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 close multiple capability gaps and provide multi-layered and integrated defenses. Enhanced warning, protection, and countermeasures sustain combat power 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 operational challenges and logistical burdens. Modular and customizable solutions will be effective against a broad range of challenges in varied environments.

- Detectors and Sensors – The CBDP is developing the next generation of suitable, effective, and affordable broad-spectrum CB detection capabilities to address 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 equipment and aircraft. Novel decontamination approaches are focusing on broad applicability to chemicals or biologicals, while minimizing harm to individuals, equipment, and platforms.

FY19 Budget Request Highlights

- The FY 2019 Research, Development, Test and Evaluation (RDT&E) budget request of $1,048 million (M) supports key efforts including:
  - $286 million supporting RDT&E efforts advancing environmental (detectors) and medical surveillance capabilities providing enhanced situational awareness of traditional and non-traditional chemical threats as well as traditional and emerging biological threats.
  - $256 million to continue support of research and development of medical countermeasures (MCMs) vaccines and therapeutics addressing high priority biological threats.
  - $114 million to continue support of research and development of medical countermeasures focused on protecting and treating against traditional and non-traditional chemical agents.
  - $97 million to support critical chemical and biological defense research, development, and test infrastructure and operations.
  - $79 million supporting biosurveillance, warning & reporting, decision support, and modeling and simulation capabilities.
  - $77 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.
  - $66 million supporting basic research and threat agent sciences advancing fundamental knowledge and experimental research in the life and physical sciences.
  - $37 million supporting concepts development, technology demonstrations, and experimentation capability demonstrations to demonstrate enhanced military operational capability for technologies and equipment.

- The FY 2019 Procurement budget request of $311 million supports key efforts including:

- $91 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.
- $72 million to procure modernized respiratory and ocular protection for ground and air forces.
- $48 million to procure Common Analytical Laboratory Systems providing a modular, scalable and adaptable analytical capability for a variety of operating and environmental conditions.
- $40 million to procure modernized Collective Protection capabilities (Joint Expeditionary Collective Protection and CB Protective Shelters).
- $22 million to procure protective ensembles supporting enhanced protection for the Joint Force, to include 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 capabilities that enhance the flexibility to anticipate, identify, and quickly respond to the challenges. 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 Joint Force ability to find, track, interdict, and eliminate CBRN weapons or emerging threats. These efforts ensure that currently available technologies are produced, procured, and provided and that cutting-edge technologies are harnessed to provide improved capabilities in the future. This is achieved through developing operationally relevant capabilities for the Joint Force that are complementary and holistically reduce identified risks. The CBDP continues to enhance CBRN readiness to counter known and emerging threats and collaborates with interagency and international partners to increase the 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 equipped 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 2019 President's Budget
Exhibit P-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

26 Jan 2018

Appropriation	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
Procurement, Defense-Wide	309,316	276,058	276,058	
Total Defense-Wide	309,316	276,058	276,058	

Defense-Wide
FY 2019 President's Budget
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Total Obligational Authority
(Dollars in Thousands)

26 Jan 2018

Appropriation	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
Procurement, Defense-Wide				
Total Defense-Wide				

Defense-Wide
FY 2019 President's Budget
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(Dollars in Thousands)

26 Jan 2018

Appropriation	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
Procurement, Defense-Wide	276,058		276,058
Total Defense-Wide	276,058		276,058

Defense-Wide
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(Dollars in Thousands)

26 Jan 2018

Appropriation	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement, Defense-Wide	310,937		310,937
Total Defense-Wide	310,937		310,937

Defense-Wide
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26 Jan 2018

Organization: Procurement, Defense-Wide	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
Chemical and Biological Defense Program, CBDP	309,316	276,058	276,058	
Total	309,316	276,058	276,058	

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Organization: Procurement, Defense-Wide	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
Chemical and Biological Defense Program, CBDP				
Total				

P-119PB: FY 2019 President's Budget (Published Version), as of January 26, 2018 at 11:03:42

Defense-Wide
FY 2019 President's Budget
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Total Obligational Authority
(Dollars in Thousands)

26 Jan 2018

Organization: Procurement, Defense-Wide	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
Chemical and Biological Defense Program, CBDP	276,058		276,058
Total	276,058		276,058

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Organization: Procurement, Defense-Wide	FY 2019 Base	FY 2019 OCO	FY 2019 Total
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26 Jan 2018

Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
03. Chemical/Biological Defense	309,316	276,058	276,058	
Total Procurement, Defense-Wide	309,316	276,058	276,058	

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Budget Activity	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
03. Chemical/Biological Defense				
Total Procurement, Defense-Wide				

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Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
03. Chemical/Biological Defense	276,058		276,058
Total Procurement, Defense-Wide	276,058		276,058

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Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2019 Base	FY 2019 OCO	FY 2019 Total
03. Chemical/Biological Defense	310,937		310,937
Total Procurement, Defense-Wide	310,937		310,937

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26 Jan 2018

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2017 (Base + OCO) Quantity	FY 2017 (Base + OCO) Cost	FY 2018 PB Request with CR Adj Base Quantity	FY 2018 PB Request with CR Adj Base Cost	FY 2018 Total PB Requests* with CR Adj Base Quantity	FY 2018 Total PB Requests* with CR Adj Base Cost	FY 2018 PB Request with CR Adj OCO Quantity	FY 2018 PB Request with CR Adj OCO Cost	Sec
Budget Activity 03: Chemical/Biological Defense											
CBDP											
74	Chemical Biological Situational Awareness	A		158,956		135,031		135,031			U
75	CB Protection & Hazard Mitigation	A		150,360		141,027		141,027			U
Total Chemical/Biological Defense				309,316		276,058		276,058			
Total Procurement, Defense-Wide				309,316		276,058		276,058			

P-119PB: FY 2019 President's Budget (Published Version), as of January 26, 2018 at 11:03:42

Defense-Wide
FY 2019 President's Budget
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26 Jan 2018

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2018 Total PB Requests+ with CR Adj OCO Quantity	FY 2018 Total PB Requests+ with CR Adj OCO Cost	FY 2018 Emergency Requests** Emergency Quantity	FY 2018 Emergency Requests** Emergency Cost	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs Quantity	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs Cost	FY 2018 Remaining Req Emergency Quantity	FY 2018 Remaining Req Emergency Cost	Sec
Budget Activity 03: Chemical/Biological Defense											
CBDP											
74	Chemical Biological Situational Awareness	A									U
75	CB Protection & Hazard Mitigation	A									U
Total Chemical/Biological Defense											
Total Procurement, Defense-Wide											

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26 Jan 2018

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency** Quantity	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency** Cost	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs Quantity	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs Cost	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency Quantity	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency Cost	Sec
Budget Activity 03: Chemical/Biological Defense									
CBDP									
74	Chemical Biological Situational Awareness	A		135,031				135,031	U
75	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	

P-119PB: FY 2019 President's Budget (Published Version), as of January 26, 2018 at 11:03:42

Defense-Wide
FY 2019 President's Budget
Exhibit P-1 FY 2019 President's Budget
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(Dollars in Thousands)

26 Jan 2018

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2019 Base Quantity	FY 2019 Base Cost	FY 2019 OCO Quantity	FY 2019 OCO Cost	FY 2019 Total Quantity	FY 2019 Total Cost	Sec
Budget Activity 03: Chemical/Biological Defense									
CBDP									
74	Chemical Biological Situational Awareness	A		166,418				166,418	U
75	CB Protection & Hazard Mitigation	A		144,519				144,519	U
Total Chemical/Biological Defense				310,937				310,937	
Total Procurement, Defense-Wide				310,937				310,937	

P-119PB: FY 2019 President's Budget (Published Version), as of January 26, 2018 at 11:03:42

Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 0300D: Procurement, Defense-Wide

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Line Item Table of Contents (Alphabetically by Line Item Title)

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Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	356.452	158.956	135.031	166.418	-	166.418	215.154	288.820	325.652	360.847	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	356.452	158.956	135.031	166.418	-	166.418	215.154	288.820	325.652	360.847	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**356.452**	**158.956**	**135.031**	**166.418**	**-**	**166.418**	**215.154**	**288.820**	**325.652**	**360.847**	**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 Improved (chemical agent) Point Detection System Life Cycle Replacement (IPDS-LR) 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) will be separated into distinct programs starting in FY19: Aerosol & Vapor Chemical Agent Detector (AVCAD) for vapor and aerosol monitoring (formerly NGCD 1), Proximate Chemical Agent Detector (PCAD) for location of liquid and solids on surfaces (formerly NGCD 2), Multi-Phase Chemical Agent Detector (MPCAD) for sampling of multiple phases of matter (formerly NGCD 3), and Wearable Chemical Agent Detector (WCAD) (formerly NGCD 4), and USSOCOM efforts. The systems will detect and identify non-traditional agents, chemical warfare agents (CWA), toxic industrial chemicals (TICs) in the air and on surfaces. The NGCD will provide improved NTA/CWA/TIC selectivity and sensitivity on multiple platforms as well as multiple environments. The sensors will improve detection, consequence management and reconnaissance, and weapons of mass destruction (WMD) interdiction capabilities.

Efforts in the warning, reporting and reconnaissance area include; (1) The Joint Personal Dosimeter - Individual (JPD-I) will provide a sensor to record and retrieve a Service member's radiation exposure from occupational to tactical levels (2) Joint Warning and Reporting Network (JWARN) provides a fully automated NBC detection and warning process throughout the battle space; (3) Software Support Activity (SSA) is a user development system providing enterprise-wide services and coordination to facilitate net-centric interoperability; (5) the Joint Effects Model (JEM) is DoD's only accredited model for predicting hazards associated with the release of contaminants into the environment; (5) 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; (6) 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); (7) CBRN Dismounted Reconnaissance Systems (CBRN DRS) provides mission critical dismounted reconnaissance capabilities for detection, presumptive identification, sample collection, marking and immediate reporting of CBRN hazards; (8) The Next Generation Diagnostic System (NGDS) program is a DoD effort to

Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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		

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); (9) 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; (10) the Critical Reagents Program (CRP) integrates and consolidates all DoD reagents/antibodies/DNA biological detection requirements. In FY18 funding and responsibilities for these requirements transitions from CRP to the Defense Biological Products Assurance Program (DBPAP); and (11) 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 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.

Efforts in field analytics, homeland defense, and Defense Support to Civil Authorities (DSCA) Special Purpose Units (SPUs) include; (1) the Joint Handheld Bio-Agent Identifier (JHBI), which will provide handheld, bio-identification systems for the rapid identification of biowarfare agents in environmental samples at the point of contact or in far-forward settings. The 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; (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) Personal Protective Equipment (PPE) for the Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise (CRE). The CRE includes certain United States Northern Command (NORTHCOM), National Guard Bureau (NGB), and the Chemical Biological Incident Response Force (CBIRF), a unit in the United States Marine Corps (USMC), assigned a Homeland Defense Mission. These specialized units require Commercial Off The Shelf (COTS) equipment including PPE which has been tested and certified to meet National consensus standards such as; National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), and National Institute of Occupational Safety and Health (NIOSH). The PPE fielded may include the suit ensemble, breathing protection such as Self-Contained Breathing Apparatus (SCBA) and Powered Air-Purifying Respirators (PAPR), boots, CBRN respirator filters, and other accessories which are required for certification.

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.

Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 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	SA0015 / AEROSOL VAPOR CHEMICAL AGENT DETECTOR (AVCAD)				- / 0.000	- / 0.000	- / 0.000	- / 1.722	- / -	- / 1.722
P-5	JF0108 / JOINT HANDHELD BIO-AGENT IDENTIFIER (JHBI)		B		- / 0.000	- / 0.000	- / 2.285	- / 1.092	- / -	- / 1.092
P-5	SA0012 / JOINT PERSONNEL DOSIMETER-INDIVIDUAL (JPD-I)	P-5a	A		- / 0.000	- / 0.000	- / 0.000	- / 5.000	- / -	- / 5.000
P-5	JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)	P-5a	A		- / 62.868	- / 7.547	- / 4.253	- / 3.500	- / -	- / 3.500
P-5	G47101 / JOINT WARNING & REPORTING NETWORK (JWARN)		A		- / 0.766	- / 3.889	- / 0.981	- / 0.502	- / -	- / 0.502
P-5	JX0300 / BIOSURVEILLANCE (BSV)				- / 1.311	- / 2.600	- / 0.000	- / 0.000	- / -	- / 0.000
P-5	JS5230 / SOFTWARE SUPPORT ACTIVITY (SSA)		B		- / 0.100	- / 0.300	- / 0.096	- / 0.094	- / -	- / 0.094
P-5	JC0208 / JOINT EFFECTS MODEL (JEM)		A		- / 4.457	- / 3.069	- / 0.983	- / 0.911	- / -	- / 0.911
P-5	SA0006 / CBRN INFORMATION SYSTEMS (CBRN IS)		B		- / 0.000	- / 0.500	- / 0.480	- / 0.753	- / -	- / 0.753
P-5	MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)	P-5a	A		- / 16.427	- / 7.451	- / 0.500	- / 0.000	- / -	- / 0.000
P-5	MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)	P-5a, P-21	A		- / 249.227	- / 90.445	- / 94.424	- / 91.081	- / -	- / 91.081
P-5	JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)	P-5a	A		- / 15.782	- / 5.095	- / 6.938	- / 5.842	- / -	- / 5.842
P-5	JX0302 / GLOBAL BIO TECH INITIATIVE (GBTI)				- / 1.336	- / 2.100	- / 2.017	- / 1.976	- / -	- / 1.976
P-5	JX0210 / DEFENSE BIOLOGICAL PRODUCTS ASSURANCE PROGRAM (DBPAP)				- / 2.558	- / 1.005	- / 0.995	- / 0.975	- / -	- / 0.975
P-5	JX0301 / BIOSURVELLENCE PORTAL (BSP)		A		- / 1.620	- / 1.220	- / 1.171	- / 1.148	- / -	- / 1.148
P-5	JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)	P-5a, P-21	B		- / 0.000	- / 23.100	- / 16.402	- / 48.317	- / -	- / 48.317
P-5	JS0008 / SPU CBE CBRN RESPONSE ENTERPRISE (SPU CBE CRE)		A		- / 0.000	- / 8.416	- / 2.401	- / 2.400	- / -	- / 2.400
P-5	JS0007 / SPU CBE CHEMICAL BIOLOGICAL INCIDENT RESPONSE FORCE (SPU CBE CBIRF)		A		- / 0.000	- / 2.219	- / 1.105	- / 1.105	- / -	- / 1.105
P-40	**Total Gross/Weapon System Cost**				**- / 356.452**	**- / 158.956**	**- / 135.031**	**- / 166.418**	**- / -**	**- / 166.418**

*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.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** SA0015 / AEROSOL VAPOR CHEMICAL AGENT DETECTOR (AVCAD)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	1.722	-	1.722
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	1.722	-	1.722
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**1.722**	**-**	**1.722**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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																		
Prior/Future combined efforts	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
AVCAD - Production Verification Test (PVT)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.395	-	-	-	-	-	1.395
Engineering Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.327	-	-	-	-	-	0.327
Subtotal: Support Cost	***-***	***-***	***0.000***	***-***	***-***	***0.000***	***-***	***-***	***0.000***	***-***	***-***	***1.722***	***-***	***-***	***-***	***-***	***-***	***1.722***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**1.722**	**-**	**-**	**-**	**-**	**-**	**1.722**

Remarks:
The Aerosol & Vapor Chemical Agent Detector (AVCAD) (formerly NGCD 1) will provide the Joint Forces a man-portable system to detect and identify aerosol and vapor chemical threats, and will also be employed on manned and unmanned platforms.

Justification: FY19 funding for Production Qualification Test (PQT) and engineering support.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	2.285	1.092	-	1.092
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	2.285	1.092	-	1.092
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**2.285**	**1.092**	**-**	**1.092**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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 - three9 (devices)	-	-	0.000	-	-	0.000	8.000	25	0.200	-	-	0.000	-	-	-	-	-	0.000
JHBI - Hardware - Mobile Analysis Platform (assays)	-	-	0.000	-	-	0.000	0.240	500	0.120	0.240	762	0.183	-	-	-	0.240	762	0.183
JHBI - Hardware - Genedrive (assays)	-	-	0.000	-	-	0.000	0.240	500	0.120	0.240	1,500	0.360	-	-	-	0.240	1,500	0.360
JHBI - Hardware - three9 (assays)	-	-	0.000	-	-	0.000	0.242	600	0.145	0.242	1,500	0.363	-	-	-	0.242	1,500	0.363
JHBI- Hardware - Mobile Analysis Platform (devices)	-	-	0.000	-	-	0.000	15.000	85	1.275	-	-	0.000	-	-	-	-	-	0.000
JHBI - Hardware - Genedrive (devices)	-	-	0.000	-	-	0.000	5.000	85	0.425	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*2.285*	-	-	*0.906*	-	-	-	-	-	*0.906*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***2.285***	**-**	**-**	***0.906***	**-**	**-**	**-**	**-**	**-**	***0.906***
Support Cost																		
JHBI Support Costs	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.186	-	-	-	-	-	0.186
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.186***	**-**	**-**	**-**	**-**	**-**	***0.186***

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological 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:

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	2.285	-	-	1.092	-	-	-	-	-	1.092

Remarks:

The Joint Handheld Bio-Agent Identifier (JHBI) program is a Joint Service Acquisition Category (ACAT) III program that addresses an existing United States Special Operations Command (USSOCOM) requirement for handheld, multiplexed, environmental, bio-agent identification. The JHBI program will provide handheld bio-collection preparation, and identification systems for the rapid and 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 developed 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 and will be supported by tools for quickly collecting and preparing raw biological samples for use on these identifiers. 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.

Justification: FY19 will procure the following JHBI hardware for USSOCOM; 762 MAPs assays, 1500 Genedrive assays, and 1500 three9 assays.

RDT&E Code B Item: 0604384BP/Proj CA5

CA5/JHBI: RDT&E ; FY18 - 0.990M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

JHBI - Full Operational Capability: Sep 2018
JHBI - Low Rate Initial Production (Feb 2018 to Mar 2018)
JHBI - MS C: Feb 2018
JHBI - Operational Testing (Nov 2017 to Jun 2018)
JHBI - Developmental Testing (Nov 2017 to Jan 2018)

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** SA0012 / JOINT PERSONNEL DOSIMETER-INDIVIDUAL (JPD-I)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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
JPD-I End Item(†)	-	-	0.000	-	-	0.000	-	-	0.000	0.244	14,918	3.640	-	-	-	0.244	14,918	3.640
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*3.640*	-	-	-	-	-	*3.640*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***3.640***	**-**	**-**	**-**	**-**	**-**	***3.640***
Logistics Cost																		
Recurring Cost																		
JPD-I - Fielding Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.360	-	-	-	-	-	0.360
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.360*	-	-	-	-	-	*0.360*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.360***	**-**	**-**	**-**	**-**	**-**	***0.360***
Support Cost																		
JPD-I - Program Management and System Engineering	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.000	-	-	-	-	-	1.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***1.000***	**-**	**-**	**-**	**-**	**-**	***1.000***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**5.000**	**-**	**-**	**-**	**-**	**-**	**5.000**

Remarks:

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** SA0012 / JOINT PERSONNEL DOSIMETER-INDIVIDUAL (JPD-I)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

The Joint Personal Dosimeter - Individual (JPD-I) will provide a sensor to record and retrieve a Service member's radiation exposure from occupational to tactical levels. This capability provides a Joint solution reducing life-cycle costs while also address lessons learned from Operation Tomodachi.

Note: Responsibility for Passive Radiological Nuclear Protection capabilities is in transition from Nuclear Matters to Chem Bio Defense per OSD Memorandum. Army also plans to fund $5.2M in FY19 Base and $21M in FY 19 OCO toward this effort on Army item B92400. in addition, the Navy plans to leverage this Product Office's contract to procure JPD-I systems in FY20.

Justification: FY19 Funds will provide for procurement, training and fielding of 14,918 JPD-I System to the Army.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: SA0012 / JOINT PERSONNEL DOSIMETER-INDIVIDUAL (JPD-I)

Cost Elements	OCO	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
JPD-I End Item		2019	TBD / UNKNOWN	C / FFP	TBD	May 2019	Aug 2019	14,918	0.244	Y		

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	62.868	7.547	4.253	3.500	-	3.500
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	62.868	7.547	4.253	3.500	-	3.500
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**62.868**	**7.547**	**4.253**	**3.500**	**-**	**3.500**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	40.068	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
M4A1 JCAD - HARDWARE - JCAD Communication Adapter(†)	2.639	2,078	5.483	4.586	222	1.018	4.680	316	1.479	4.247	291	1.236	-	-	-	4.247	291	1.236
M4A1 JCAD - Hardware(†)	6.422	2,078	13.344	6.631	222	1.472	6.763	316	2.137	6.137	291	1.786	-	-	-	6.137	291	1.786
M4A1 JCAD - HARDWARE - IPDS LR - Hardware(†)	137.000	29	3.973	142.593	27	3.850	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*62.868*	-	-	*6.340*	-	-	*3.616*	-	-	*3.022*	-	-	-	-	-	*3.022*
Subtotal: Hardware Cost	**-**	**-**	***62.868***	**-**	**-**	***6.340***	**-**	**-**	***3.616***	**-**	**-**	***3.022***	**-**	**-**	**-**	**-**	**-**	***3.022***
Support Cost																		
Engineering Support (Govt)	-	-	0.000	-	-	0.667	-	-	0.436	-	-	0.353	-	-	-	-	-	0.353
System Fielding Support (Govt)	-	-	0.000	-	-	0.311	-	-	0.201	-	-	0.125	-	-	-	-	-	0.125
IPDS LR Engineering Support	-	-	0.000	-	-	0.229	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.207***	**-**	**-**	***0.637***	**-**	**-**	***0.478***	**-**	**-**	**-**	**-**	**-**	***0.478***

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)
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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	62.868	-	-	7.547	-	-	4.253	-	-	3.500	-	-	-	-	-	3.500

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 replaced the M8A1 and the M22 Automatic Chemical Agent Alarms (ACAA/ACADA). 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 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 Improved (chemical agent) Point Detection System Life Cycle 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 at low concentrations and has the capability of rejecting common shipboard interferents.

Justification: FY19 funding procures 291 JCADs and JCAD communication adapters and provides government engineering and field support.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JF0100 / JOINT CHEMICAL AGENT DETECTOR (JCAD)

Cost Elements	OCO	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 - 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 - JCAD Communication Adapter		2019	Smiths Detection / Edgewood, MD	SS / FFP	RDECOM, APG, MD	Dec 2018 (1)	Jul 2019	291	4.247	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		
M4A1 JCAD - Hardware		2019	Smiths Detection / Edgewood, MD	SS / FFP	RDECOM, APG, MD	Dec 2018 (2)	Jul 2019	291	6.137	Y		
M4A1 JCAD - HARDWARE - IPDS LR - Hardware		2016	Bruker Detection Corp. / Billerica, MA	C / FFP	Billerica, MA	May 2016	Dec 2016	29	132.533	Y		
M4A1 JCAD - HARDWARE - IPDS LR - Hardware		2017	Bruker Detection Corp. / Billerica, MA	C / FFP	Billerica, MA	May 2017 (3)	Dec 2017	27	142.593	Y		

Footnotes:

(1) (Option)

(2) (Option)

(3) (OPT 6)

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.766	3.889	0.981	0.502	-	0.502
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.766	3.889	0.981	0.502	-	0.502
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.766**	**3.889**	**0.981**	**0.502**	**-**	**0.502**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	0.766	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JWARN 2 - Software & Installation (Contractor)	-	-	0.000	-	-	0.913	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*0.766*	-	-	*0.913*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Software Cost	**-**	**-**	***0.766***	**-**	**-**	***0.913***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Package Fielding Cost																		
Recurring Cost																		
JWARN 2 - System Fielding Support (TPF, FDT, NET)	-	-	0.000	-	-	1.553	-	-	0.981	-	-	0.502	-	-	-	-	-	0.502
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*1.553*	-	-	*0.981*	-	-	*0.502*	-	-	-	-	-	*0.502*
Subtotal: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***1.553***	**-**	**-**	***0.981***	**-**	**-**	***0.502***	**-**	**-**	**-**	**-**	**-**	***0.502***
Support Cost																		
JWARN 2 - Technical Engineering Support	-	-	0.000	-	-	1.423	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.423***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**0.766**	**-**	**-**	**3.889**	**-**	**-**	**0.981**	**-**	**-**	**0.502**	**-**	**-**	**-**	**-**	**-**	**0.502**

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**

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 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: FY19 supports JWARN 2 Total Package Fielding (TPF) and New Equipment Training (NET).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JX0300 / BIOSURVEILLANCE (BSV)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1.311	2.600	0.000	0.000	-	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1.311	2.600	0.000	0.000	-	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1.311**	**2.600**	**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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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																		
Non Recurring Cost																		
Prior/Future combined efforts	-	-	1.311	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
BSV - Purchase Camp Humphreys test items	-	-	0.000	68.421	38	2.600	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*1.311*	-	-	*2.600*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Hardware Cost	**-**	**-**	***1.311***	**-**	**-**	***2.600***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**1.311**	**-**	**-**	**2.600**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**0.000**

Remarks:

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. Current efforts purchase test items in support of Camp Humphreys Fielding.

Justification:

RDT&E Code B Item: 0603884BP/Proj CA4; 0603884BP/Proj MB4; 0604384BP/Proj MB5

CA4/BSV: RDT&E FY16 and Prior - 31.132M; FY17 - 8.656M; FY18 - 8.768M; FY19 - 10.140M; FY20 - 0.400M

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JX0300 / BIOSURVEILLANCE (BSV)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:

MB4/BSV: RDT&E FY16 and Prior - 160.339M
MB5/BSV: RDT&E FY16 and Prior - 42.287M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

BSV - Competitive Prototyping Contract Award: Mar 2013
BSV - JUPITR ATD (Dec 2013 to Dec 2019)
BSV - MDA IPR: Aug 2013
BSV - MS C - ATD Portal: Jun 2017

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JS5230 / SOFTWARE SUPPORT ACTIVITY (SSA)
ID Code (A=Service Ready, B=Not Service Ready) : B		MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.100	0.300	0.096	0.094	-	0.094
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.100	0.300	0.096	0.094	-	0.094
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.100**	**0.300**	**0.096**	**0.094**	**-**	**0.094**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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																		
Prior/Future combined efforts	-	-	0.100	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SSA - System Fielding Support (TPF, NET)	-	-	0.000	-	-	0.300	-	-	0.096	-	-	0.094	-	-	-	-	-	0.094
Subtotal: Support Cost	**-**	**-**	***0.100***	**-**	**-**	***0.300***	**-**	**-**	***0.096***	**-**	**-**	***0.094***	**-**	**-**	**-**	**-**	**-**	***0.094***
Gross/Weapon System Cost	**-**	**-**	**0.100**	**-**	**-**	**0.300**	**-**	**-**	**0.096**	**-**	**-**	**0.094**	**-**	**-**	**-**	**-**	**-**	**0.094**

Remarks:

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&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.

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.

The SSA directly supports CBDP Biosurveillance initiatives in providing common service oriented architecture and framework for the collection and dissemination of Biosurveillance information.

Justification: FY19 funds SSA system fielding support to the CBDP community.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	4.457	3.069	0.983	0.911	-	0.911
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	4.457	3.069	0.983	0.911	-	0.911
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**4.457**	**3.069**	**0.983**	**0.911**	**-**	**0.911**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	4.457	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JEM 2 - Software & Installation	-	-	0.000	-	-	0.834	-	-	0.173	-	-	0.160	-	-	-	-	-	0.160
Subtotal: Recurring Cost	-	-	*4.457*	-	-	*0.834*	-	-	*0.173*	-	-	*0.160*	-	-	-	-	-	*0.160*
Subtotal: Software Cost	**-**	**-**	***4.457***	**-**	**-**	***0.834***	**-**	**-**	***0.173***	**-**	**-**	***0.160***	**-**	**-**	**-**	**-**	**-**	***0.160***
Package Fielding Cost																		
Recurring Cost																		
JEM 2 - System Fielding Support (TFP, FDT, NET)	-	-	0.000	-	-	1.228	-	-	0.601	-	-	0.557	-	-	-	-	-	0.557
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*1.228*	-	-	*0.601*	-	-	*0.557*	-	-	-	-	-	*0.557*
Subtotal: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***1.228***	**-**	**-**	***0.601***	**-**	**-**	***0.557***	**-**	**-**	**-**	**-**	**-**	***0.557***
Support Cost																		
JEM 2 - Technical & Engineering Support	-	-	0.000	-	-	1.007	-	-	0.209	-	-	0.194	-	-	-	-	-	0.194
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.007***	**-**	**-**	***0.209***	**-**	**-**	***0.194***	**-**	**-**	**-**	**-**	**-**	***0.194***
Gross/Weapon System Cost	**-**	**-**	**4.457**	**-**	**-**	**3.069**	**-**	**-**	**0.983**	**-**	**-**	**0.911**	**-**	**-**	**-**	**-**	**-**	**0.911**

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JC0208 / JOINT EFFECTS MODEL (JEM)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Remarks:

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 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 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 1 and 2 interface and communicate with the other programs such as JWARN, weather systems, intelligence systems, and various databases.

Justification: FY19 supports JEM 2 Software & Installation, Total Package Fielding (TPF), New Equipment Training (NET), and Technical & Engineering Support. Note, JEM 2 is a software product, and there are no associated quantities.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.500	0.480	0.753	-	0.753
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.500	0.480	0.753	-	0.753
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.500**	**0.480**	**0.753**	**-**	**0.753**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	0.500	-	-	0.480	-	-	0.753	-	-	-	-	-	0.753
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.500*	-	-	*0.480*	-	-	*0.753*	-	-	-	-	-	*0.753*
Subtotal: Software Cost	**-**	**-**	***0.000***	**-**	**-**	***0.500***	**-**	**-**	***0.480***	**-**	**-**	***0.753***	**-**	**-**	**-**	**-**	**-**	***0.753***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.500**	**-**	**-**	**0.480**	**-**	**-**	**0.753**	**-**	**-**	**-**	**-**	**-**	**0.753**

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: FY19 supports Technical and Engineering Support. Costs associated with hosting CBRN-IS on milCloud in support of world-wide accessibility for warfighters.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	16.427	7.451	0.500	0.000	-	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	16.427	7.451	0.500	0.000	-	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**16.427**	**7.451**	**0.500**	**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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	16.427	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JNBCRS INCREMENT 1 - Engineering and Technical Support (Gov't)	-	-	0.000	-	-	1.223	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JNBCRS INCREMENT 1 - Specifications and Drawings	-	-	0.000	-	-	0.004	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JNBCRS NBC EQUIPMENT SUITES - CBMS II Uninterrupted Power Supplies (UPS)(†)	-	-	0.000	13.300	360	4.788	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Vehicle Maintenance	-	-	0.000	-	-	0.121	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
UPS Installation Kits(†)	-	-	0.000	2.313	300	0.694	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*16.427*	-	-	*6.830*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Hardware Cost	**-**	**-**	***16.427***	**-**	**-**	***6.830***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Software Cost																		

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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)
Non Recurring Cost																		
JNBCRS INCREMENT 1 - RMF & Integration Support	-	-	0.000	-	-	0.341	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*0.341*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Software Cost	**-**	**-**	***0.000***	**-**	**-**	***0.341***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Support Cost																		
Engineering Support	-	-	0.000	-	-	0.040	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Logistics Support during Doctrine, Techniques, and Tactics (DTT) Training	-	-	0.000	-	-	0.240	-	-	0.500	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.280***	**-**	**-**	***0.500***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**16.427**	**-**	**-**	**7.451**	**-**	**-**	**0.500**	**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**0.000**

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.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: MC0100 / JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)

Cost Elements	OCO	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 Uninterrupted Power Supplies (UPS)		2017	Defense Logistics Agency / Philadelphia, PA	MIPR	Philadelphia, PA	Aug 2017	Mar 2018	360	13.300	Y		
UPS Installation Kits		2017	Edgewood Chemical Biological Center (ECBC) / Aberdeen Proving Ground, MD	MIPR	ADM	Nov 2017	May 2018	300	2.313	Y		

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	249.227	90.445	94.424	91.081	-	91.081
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	249.227	90.445	94.424	91.081	-	91.081
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**249.227**	**90.445**	**94.424**	**91.081**	**-**	**91.081**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	210.897	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CBRN DRS Navy Configuration(†)	-	-	0.000	398.240	25	9.956	559.534	58	32.453	410.000	54	22.140	-	-	-	410.000	54	22.140
CBRN DRS Army Configuration(†)	1,035.946	37	38.330	1,084.640	50	54.232	1,044.306	36	37.595	1,150.000	16	18.400	-	-	-	1,150.000	16	18.400
CBRN DRS Air Force Configuration(†)	-	-	0.000	-	-	0.000	-	-	0.000	399.231	65	25.950	-	-	-	399.231	65	25.950
CBRN DRS Initial Spares	-	-	0.000	-	-	6.177	-	-	6.170	-	-	6.170	-	-	-	-	-	6.170
Subtotal: Recurring Cost	-	-	*249.227*	-	-	*70.365*	-	-	*76.218*	-	-	*72.660*	-	-	-	-	-	*72.660*
Subtotal: Hardware Cost	**-**	**-**	***249.227***	**-**	**-**	***70.365***	**-**	**-**	***76.218***	**-**	**-**	***72.660***	**-**	**-**	**-**	**-**	**-**	***72.660***
Support Cost																		
CBRN DRS Engineering Support (FLIR)	-	-	0.000	-	-	3.341	-	-	3.340	-	-	3.340	-	-	-	-	-	3.340
CBRN DRS Fielding Support	-	-	0.000	-	-	4.403	-	-	2.608	-	-	2.823	-	-	-	-	-	2.823
CBRN DRS Engineering Support	-	-	0.000	-	-	3.515	-	-	3.267	-	-	3.267	-	-	-	-	-	3.267

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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)
CBRN DRS Contractor Logistics Support	-	-	0.000	-	-	8.821	-	-	8.991	-	-	8.991	-	-	-	-	-	8.991
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***20.080***	**-**	**-**	***18.206***	**-**	**-**	***18.421***	**-**	**-**	**-**	**-**	**-**	***18.421***
Gross/Weapon System Cost	**-**	**-**	**249.227**	**-**	**-**	**90.445**	**-**	**-**	**94.424**	**-**	**-**	**91.081**	**-**	**-**	**-**	**-**	**-**	**91.081**

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.

Note: FY18 Navy Configuration costs will be updated with a 1% inflation rate during FY19PB. Total Navy procurement for FY18 is 40 systems that will be completely delivered by November 2018. Army Configuration procurement will be changed to 52 systems that will be completely delivered by December 2018. All updates will be made once the FY18 budget is passed and the system unlocks. The FY18 contract to PBA was awarded in Dec 2017 instead of Jan 2018 and the contract award to FLIR has been delayed until Feb 2018. All production deliveries do not exceed 12 months.

Justification: FY19 funds procure 54 CBRN DRS for the Navy, 16 for the Army, and 65 for the Air Force, as well as, fielding, engineering, and logistics support.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)

Cost Elements	OCO	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
CBRN DRS Navy Configuration(†)		2017	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jan 2017	May 2017	25	398.240	Y		
CBRN DRS Navy Configuration(†)		2018	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Jan 2018	May 2018	58	559.534	Y		
CBRN DRS Navy Configuration(†)		2019	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff, AR	Mar 2019	Jul 2019	54	410.000	Y		
CBRN DRS Army Configuration(†)		2016	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Jan 2017 (4)	Jun 2017	37	1,035.946	Y		
CBRN DRS Army Configuration(†)		2017	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Jan 2017 (5)	May 2017	50	1,084.640	Y		
CBRN DRS Army Configuration(†)		2018	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Dec 2017 (6)	Apr 2018	36	1,044.306	Y		
CBRN DRS Army Configuration(†)		2019	FLIR Systems Inc. / Elkridge, MD	C / FFP	RDECOM, Edgewood, MD	Dec 2018 (7)	Jun 2019	16	1,150.000	Y		
CBRN DRS Air Force Configuration(†)		2019	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Pine Bluff Arsenal, Pine Bluff AR	Jan 2019	May 2019	65	399.231	Y		

(†) indicates the presence of a P-21

Footnotes:

(4) (Option)

(5) (Option)

(6) (Option)

(7) (Option)

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)

Cost Elements (Units in Each)							Fiscal Year 2017												Fiscal Year 2018											BALANCE
										Calendar Year 2017														Calendar Year 2018								
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
CBRN DRS Navy Configuration																														
	1	2017	CBDP	25	0	25				A -	-	-	-	3	3	3	3	3	3	3	2	2									0
Secondary Distribution			*NAVY*	*25*	*0*	*25*				*A -*	*-*	*-*	*-*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*2*	*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*
	1	2019	CBDP	54	0	54																									54
Secondary Distribution			*NAVY*	*54*	*0*	*54*																									*54*
CBRN DRS Army Configuration																														
	2	2016	CBDP	37	0	37				A -	-	-	-	-	2	2	2	2	2	2	2	4	4	5	5	5					0
Secondary Distribution			*ARMY*	*37*	*0*	*37*				*A -*	*-*	*-*	*-*	*-*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*4*	*4*	*5*	*5*	*5*					*0*
	2	2017	CBDP	50	0	50				A -	-	-	-	5	7	7	7	7	7	7	3										0
Secondary Distribution			*ARMY*	*50*	*0*	*50*				*A -*	*-*	*-*	*-*	*5*	*7*	*7*	*7*	*7*	*7*	*7*	*3*										*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*
	2	2019	CBDP	16	0	16																									16
Secondary Distribution			*ARMY*	*16*	*0*	*16*																									*16*
CBRN DRS Air Force Configuration																														
	3	2019	CBDP	65	0	65																									65
Secondary Distribution			*AF*	*65*	*0*	*65*																									*65*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)

Cost Elements (Units in Each)							Fiscal Year 2019												Fiscal Year 2020												
										Calendar Year 2019												Calendar Year 2020										
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BALANCE
CBRN DRS Navy Configuration																															
	1	2017	CBDP	25	25	0																									0
Secondary Distribution			*NAVY*	*25*	*25*	*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*
	1	2019	CBDP	54	0	54						A	-	-	-	3	6	6	6	6	6	6	6	6	3						0
Secondary Distribution			*NAVY*	*54*	*0*	*54*						*A*	-	-	-	*3*	*6*	*6*	*6*	*6*	*6*	*6*	*6*	*6*	*3*						*0*
CBRN DRS Army Configuration																															
	2	2016	CBDP	37	37	0																									0
Secondary Distribution			*ARMY*	*37*	*37*	*0*																									*0*
	2	2017	CBDP	50	50	0																									0
Secondary Distribution			*ARMY*	*50*	*50*	*0*																									*0*
	2	2018	CBDP	36	30	6	6																								0
Secondary Distribution			*ARMY*	*36*	*30*	*6*	*6*																								*0*
	2	2019	CBDP	16	0	16			A	-	-	-	-	-	5	5	5	1													0
Secondary Distribution			*ARMY*	*16*	*0*	*16*			*A*	-	-	-	-	-	*5*	*5*	*5*	*1*													*0*
CBRN DRS Air Force Configuration																															
	3	2019	CBDP	65	0	65				A	-	-	-	5	6	6	6	6	6	6	6	6	6	6							0
Secondary Distribution			*AF*	*65*	*0*	*65*				*A*	-	-	-	*5*	*6*	*6*	*6*	*6*	*6*	*6*	*6*	*6*	*6*	*6*							*0*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** MC0101 / CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	5	3	8	0	5	5	10
2	FLIR Systems Inc. - Elkridge, MD	1	6	20	4	6	15	21	6	3	5	8
3	Pine Bluff Arsenal - Pine Bluff, AR	1	6	20	4	3	5	8	0	5	5	10

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	15.782	5.095	6.938	5.842	-	5.842
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	15.782	5.095	6.938	5.842	-	5.842
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**15.782**	**5.095**	**6.938**	**5.842**	**-**	**5.842**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	13.832	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
NGDS 1 - Systems(†)	39.000	50	1.950	39.938	64	2.556	41.071	84	3.450	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*15.782*	-	-	*2.556*	-	-	*3.450*	-	-	*0.000*	-	-	-	-	-	*0.000*
Non Recurring Cost																		
NGDS 2 MAN-PORTABLE DIAGNOSTIC AND ASSAYS - NGDS 2 Man Portable Diagnostic System (MPDS)(†)	-	-	0.000	-	-	0.000	-	-	0.000	11.000	208	2.288	-	-	-	11.000	208	2.288
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*2.288*	-	-	-	-	-	*2.288*
Subtotal: Hardware Cost	**-**	**-**	***15.782***	**-**	**-**	***2.556***	**-**	**-**	***3.450***	**-**	**-**	***2.288***	**-**	**-**	**-**	**-**	**-**	***2.288***
Package Fielding Cost																		
Non Recurring Cost																		
NGDS 2 Man Portable Diagnostic System (MPDS) TPF	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.091	-	-	-	-	-	1.091
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*1.091*	-	-	-	-	-	*1.091*

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)
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.

	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
Cost Elements	**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: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***1.091***	**-**	**-**	**-**	**-**	**-**	***1.091***
Logistics Cost																		
Recurring Cost																		
NGDS 1 - Contractor Logistic Support	-	-	0.000	-	-	0.000	-	-	0.180	-	-	0.309	-	-	-	-	-	0.309
NGDS 1 - Logistics Program Implementation and Initial Training	-	-	0.000	-	-	0.566	-	-	0.980	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.566*	-	-	*1.160*	-	-	*0.309*	-	-	-	-	-	*0.309*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***0.566***	**-**	**-**	***1.160***	**-**	**-**	***0.309***	**-**	**-**	**-**	**-**	**-**	***0.309***
Support Cost																		
NGDS 1 - PMO Support	-	-	0.000	-	-	0.682	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
NGDS 1 - Provisioning - Assay and Reagents	-	-	0.000	-	-	0.526	-	-	0.791	-	-	0.720	-	-	-	-	-	0.720
NGDS 1 - Contractor Web Support	-	-	0.000	-	-	0.149	-	-	0.447	-	-	0.108	-	-	-	-	-	0.108
NGDS 1 - Proficiency Testing	-	-	0.000	-	-	0.000	-	-	0.450	-	-	0.276	-	-	-	-	-	0.276
NGDS 1 - Training	-	-	0.000	-	-	0.296	-	-	0.320	-	-	0.670	-	-	-	-	-	0.670
NGDS 1 - Fielding Support	-	-	0.000	-	-	0.320	-	-	0.320	-	-	0.380	-	-	-	-	-	0.380
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.973***	**-**	**-**	***2.328***	**-**	**-**	***2.154***	**-**	**-**	**-**	**-**	**-**	***2.154***
Gross/Weapon System Cost	**-**	**-**	**15.782**	**-**	**-**	**5.095**	**-**	**-**	**6.938**	**-**	**-**	**5.842**	**-**	**-**	**-**	**-**	**-**	**5.842**

Remarks:

The NGDS is an 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 (CALS) CDD. NGDS 1 will significantly improve diagnostic capability for deployable combat health support units 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 1 program received MS C approval for limited production and deployment in December 2016.

NGDS 2 will complement NGDS 1 by developing diagnostics for unmet biological pathogen and toxin threats, chemical and radiological exposures, and to provide capability to lower echelons of care. NGDS 2 will provide additional capability for diagnosis of CBR-induced diseases, suitable for use in far forward environments.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)
ID Code (A=Service Ready, B=Not Service Ready) : A		MDAP/MAIS Code:

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.

Justification: FY19 program procures 62 NGDS 1 systems, provides continued logistics support post-fielding of the NGDS 1 systems, and procures 50 NGDS 2 Man Portable Diagnostic systems and TPF.

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

MB4/NGDS: RDT&E FY16 and Prior - 72.958M; FY18 - 4.950M; FY19 - 12.884M; FY20 - 6.372M; FY21 - 8.867M
MB5/NGDS: RDT&E FY16 and Prior - 4.768M; FY17 - 10.943M; FY18 - 15.786M; FY19 - 5.616M; FY20 - 8.992M; FY21 - 9.826M; FY22 - 15.948M; FY23 - 16.682M
MB7/NGDS: RDT&E FY16 and Prior - 26.666M; FY17 - 6.557M; FY18 - 11.492M; FY19 - 9.382M; FY20 - 3.238M; FY21 - 6.060M; FY22 - 6.532M; FY23 - 2.969M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

NGDS - MS C Increment 1: Dec 2016
NGDS - USAF IOC Increment 1 (Mar 2017 to Jul 2017)
NGDS - USAF FOC Increment 1: Dec 2017
NGDS - FRP Increment 1: Jan 2018
NGDS - USA/USN IOC Increment 1 (Mar 2018 to Jun 2018)
NGDS Increment 2 - Man Portable Dx System (MPDS) MS C: Jul 2019

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JM8788 / NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)

Cost Elements	OCO	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
NGDS 1 - Systems		2016	BioFire Dx / Salt Lake City, UT	SS / FFP	ACC-APG-NCD, Ft. Detrick, MD	Dec 2016	Jan 2017	50	39.000	Y		
NGDS 1 - Systems		2017	BioFire Dx / Salt Lake City, UT	SS / FFP	ACC-APG-NCD, Ft. Detrick, MD	Dec 2017 (8)	Apr 2018	64	41.226	Y		
NGDS 1 - Systems		2018	BioFire Dx / Salt Lake City, UT	SS / FFP	ACC-APG-NCD, Ft. Detrick, MD	Nov 2017 (9)	Dec 2017	84	41.071	Y		
NGDS 2 MAN-PORTABLE DIAGNOSTIC AND ASSAYS - NGDS 2 Man Portable Diagnostic System (MPDS)		2019	TBD / UNKNOWN	SS / FFP	TBD	Jul 2019	Sep 2019	208	11.000	Y		

Footnotes:

(8) Option

(9) Option

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1.336	2.100	2.017	1.976	-	1.976
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1.336	2.100	2.017	1.976	-	1.976
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1.336**	**2.100**	**2.017**	**1.976**	**-**	**1.976**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	1.336	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
GBTI Assays and Reagents	-	-	0.000	58.000	25	1.450	58.000	25	1.450	58.000	25	1.450	-	-	-	58.000	25	1.450
GBTI Equipment Sets	-	-	0.000	250.000	1	0.250	250.000	1	0.250	250.000	1	0.250	-	-	-	250.000	1	0.250
Subtotal: Recurring Cost	-	-	*1.336*	-	-	*1.700*	-	-	*1.700*	-	-	*1.700*	-	-	-	-	-	*1.700*
Subtotal: Hardware Cost	**-**	**-**	***1.336***	**-**	**-**	***1.700***	**-**	**-**	***1.700***	**-**	**-**	***1.700***	**-**	**-**	**-**	**-**	**-**	***1.700***
Support Cost																		
GBTI PM Support	-	-	0.000	-	-	0.400	-	-	0.317	-	-	0.276	-	-	-	-	-	0.276
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.400***	**-**	**-**	***0.317***	**-**	**-**	***0.276***	**-**	**-**	**-**	**-**	**-**	***0.276***
Gross/Weapon System Cost	**-**	**-**	**1.336**	**-**	**-**	**2.100**	**-**	**-**	**2.017**	**-**	**-**	**1.976**	**-**	**-**	**-**	**-**	**-**	**1.976**

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. In FY19, GBTI will close. The Targeted Acquisition of Reference Materials Augmenting Capabilities (TARMAC) will track projects of mutual interest, formerly under GBTI, with the Chemical Biological Defense Program. Under TARMAC, these projects will cover a variety of activities and will provide data and information used to facilitate the identification of unknown threats and the development of new countermeasures. Key node data generation will be augmented in direct support of existing programs of record.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JX0302 / GLOBAL BIO TECH INITIATIVE (GBTI)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Justification: FY19 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.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2.558	1.005	0.995	0.975	-	0.975
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2.558	1.005	0.995	0.975	-	0.975
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2.558**	**1.005**	**0.995**	**0.975**	**-**	**0.975**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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																		
Prior/Future combined efforts	-	-	2.558	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
DBPAP - Repository Equipment, Maintenance, and Service Contracts	-	-	0.000	-	-	0.815	-	-	0.826	-	-	0.806	-	-	-	-	-	0.806
DBPAP - Quality Assurance/Quality Control Support	-	-	0.000	-	-	0.170	-	-	0.169	-	-	0.169	-	-	-	-	-	0.169
DBPAP - Inventory and Customer Management Database	-	-	0.000	-	-	0.020	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	***-***	***-***	***2.558***	***-***	***-***	***1.005***	***-***	***-***	***0.995***	***-***	***-***	***0.975***	***-***	***-***	***-***	***-***	***-***	***0.975***
Gross/Weapon System Cost	**-**	**-**	**2.558**	**-**	**-**	**1.005**	**-**	**-**	**0.995**	**-**	**-**	**0.975**	**-**	**-**	**-**	**-**	**-**	**0.975**

Remarks:

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 relevant platforms are required. The Defense Biological Products Assurance Program (DBPAP) will ensure the standardization, quality, and availability of reagents that are critical to the successful development, test, and operation of Biological Warfare (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 (Lateral Flow Immunoassays (LFI), Polymerase Chain Reaction (PCR), electrochemiluminescence (ECL)) throughout the life cycle of all systems managed to include: Biological Integrated Detection System

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**	

(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), PCR genomic assays, 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). The CRP program has transitioned to the Defense Biological Products Assurance Program (DBPAP).

Justification: FY19 funds support repository management (i.e. production, storage, distribution and quality assurance validation) of assays, antibodies, select biological threat agent and genomic reference materials.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1.620	1.220	1.171	1.148	-	1.148
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1.620	1.220	1.171	1.148	-	1.148
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1.620**	**1.220**	**1.171**	**1.148**	**-**	**1.148**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	1.620	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Software and Installation	-	-	0.000	-	-	0.301	-	-	0.287	-	-	0.278	-	-	-	-	-	0.278
Subtotal: Recurring Cost	-	-	*1.620*	-	-	*0.301*	-	-	*0.287*	-	-	*0.278*	-	-	-	-	-	*0.278*
Subtotal: Software Cost	**-**	**-**	***1.620***	**-**	**-**	***0.301***	**-**	**-**	***0.287***	**-**	**-**	***0.278***	**-**	**-**	**-**	**-**	**-**	***0.278***
Package Fielding Cost																		
Recurring Cost																		
System Fielding Support (TFP, FDT, NET)	-	-	0.000	-	-	0.601	-	-	0.588	-	-	0.581	-	-	-	-	-	0.581
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.601*	-	-	*0.588*	-	-	*0.581*	-	-	-	-	-	*0.581*
Subtotal: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***0.601***	**-**	**-**	***0.588***	**-**	**-**	***0.581***	**-**	**-**	**-**	**-**	**-**	***0.581***
Support Cost																		
Technical Engineering Support	-	-	0.000	-	-	0.318	-	-	0.296	-	-	0.289	-	-	-	-	-	0.289
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.318***	**-**	**-**	***0.296***	**-**	**-**	***0.289***	**-**	**-**	**-**	**-**	**-**	***0.289***
Gross/Weapon System Cost	**-**	**-**	**1.620**	**-**	**-**	**1.220**	**-**	**-**	**1.171**	**-**	**-**	**1.148**	**-**	**-**	**-**	**-**	**-**	**1.148**

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JX0301 / BIOSURVELLENCE PORTAL (BSP)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Remarks:

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.

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.

Justification: FY19 funding provides for Total Package Fielding (TPF), New Equipment Training (NET), Technical Engineering support, and software installation and system host provider support.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	23.100	16.402	48.317	-	48.317
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	23.100	16.402	48.317	-	48.317
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**23.100**	**16.402**	**48.317**	**-**	**48.317**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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 IS LRIP(†)	-	-	0.000	-	-	0.000	-	-	0.000	1,625.000	4	6.500	-	-	-	1,625.000	4	6.500
ACS Training Articles(†)	-	-	0.000	464.375	8	3.715	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
ACS LRIP(†)	-	-	0.000	464.368	19	8.823	257.870	23	5.931	-	-	0.000	-	-	-	-	-	0.000
ACS Production(†)	-	-	0.000	-	-	0.000	-	-	0.000	399.370	54	21.566	-	-	-	399.370	54	21.566
ACS - Training Equipment	-	-	0.000	-	-	0.000	-	-	0.000	-	-	4.439	-	-	-	-	-	4.439
FC - ACS NET, Comsumables, TPT	-	-	0.000	-	-	0.000	-	-	4.710	-	-	3.909	-	-	-	-	-	3.909
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*12.538*	-	-	*10.641*	-	-	*36.414*	-	-	-	-	-	*36.414*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***12.538***	**-**	**-**	***10.641***	**-**	**-**	***36.414***	**-**	**-**	**-**	**-**	**-**	***36.414***
Support Cost																		
ACS - PMO Support	-	-	0.000	-	-	4.367	-	-	2.216	-	-	6.701	-	-	-	-	-	6.701
Prime Contractor Support	-	-	0.000	-	-	6.195	-	-	3.545	-	-	5.202	-	-	-	-	-	5.202
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***10.562***	**-**	**-**	***5.761***	**-**	**-**	***11.903***	**-**	**-**	**-**	**-**	**-**	***11.903***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**23.100**	**-**	**-**	**16.402**	**-**	**-**	**48.317**	**-**	**-**	**-**	**-**	**-**	**48.317**

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological 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:

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.

Note: Milestone C for the CALS ACS Variant took place in FY17. Due to a delay in the JE-RDAP Contract Award, the program procured long lead analytical components through GSA in FY17 for it's initial LRIP Systems. This award is followed by a JE RDAP Contract action that will complete and deliver the FY17, as well as, the FY18 LRIP Systems.

Justification: FY19 PROC Funding procures (4) FC IS LRIP systems and (54) FC ACS systems, and includes Training Assets for Test Player Training (TPT) and New Equipment Training (NET), Consumables and warranty/CLS costs for all but the CST fielded systems, Program Management (PM) and Other Government Agencies (OGA's).

RDT&E Code B Item: 0603884BP/Proj CM4; 0604384BP/Proj CM5; 0606384BP/Proj CM7

CM4/CALS: RDT&E FY16 and Prior - 41.368M
CM5/CALS: RDT&E FY16 and Prior - 95.951M; FY17 - 12.223M; FY18 - 21.411M; FY19 - 6.000M; FY20 - 11.200M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

CALS - Milestone C - (FC ACS) (May 2017 to Jul 2017)
CALS - LRIP (FC ACS) (Apr 2018 to Sep 2018)
CALS - Operation Test - (FC ACS) (Jan 2019 to Dec 2019)
CALS - Full Rate Production - (FC ACS) (Jul 2019 to Sep 2022)
CALS - Critical Design Review (FC IS) (May 2017 to Jun 2017)
CALS - Developmental Test (FC IS) (Jan 2018 to Sep 2018)
CALS - System Verification Review (FC IS) (Jan 2019 to Mar 2019)
CALS - Functional Configuration Audit (FC IS) (Jan 2019 to Mar 2019)
CALS - Log Demo (FC IS) (Jul 2018 to Nov 2018)
CALS - Milestone C (FC IS): Apr 2019
CALS - LRIP (FC IS) (Jul 2019 to Sep 2019)
CALS - Operational Test (FC IS) (Jan 2020 to Mar 2020)
CALS - Full Rate Production (FC IS) (Aug 2020 to Sep 2022)
CALS - Critical Design Review (TV IS): Jan 2018
CALS - Developmental Test (TV IS) (Jun 2018 to Feb 2019)
CALS - Functional Configuration Audit (TV IS) (Jul 2019 to Aug 2019)
CALS - Log Demo (TV IS) (Nov 2018 to Jan 2019)
CALS - Milestone C (TV IS): Sep 2019

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**

CALS - LRIP (TV IS) (Nov 2019 to Jan 2020)
CALS - Operational Test (TV IS) (May 2020 to Jul 2020)
CALS - Full Rate Production (TV IS) (Jan 2021 to Sep 2022)
CALS - To Address Technical Obsolescence (Jan 2019 to Sep 2023)

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological Situational Awareness	Item Number / Title [DODIC]: JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)

Cost Elements	OCO	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 IS LRIP(†)		2019	TBD / UNKNOWN	C / FFP	Aberdeen Proving Ground, Edgewood Maryland	May 2019	Aug 2019	4	1,625.000	N		
ACS Training Articles		2017	Veterans Corp. / Fairfax, VA	C / FFP	Aberdeen Proving Ground, Edgewood Maryland	Aug 2017	Sep 2017	8	464.375	Y		
ACS LRIP		2017	Veterans Corp. / Fairfax, VA	C / FFP	Aberdeen Proving Ground, Edgewood Maryland	Aug 2017	Sep 2017	19	464.368	Y		
ACS LRIP		2018	TBD / UNKNOWN	C / FFP	Aberdeen Proving Ground, Edgewood Maryland	Apr 2018	Jul 2018	23	257.870	Y		
ACS Production(†)		2019	TBD / UNKNOWN	C / FFP	Aberdeen Proving Ground, Edgewood Maryland	Nov 2018	Apr 2019	54	399.370	Y		

(†) indicates the presence of a P-21

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)

Cost Elements (Units in Each)							Fiscal Year 2017												Fiscal Year 2018												BALANCE
										Calendar Year 2017														Calendar Year 2018									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
FC IS LRIP																															
	1	2019	CBDP	4	0	4																									4
Secondary Distribution			*ARMY*	*4*	*0*	*4*																									*4*
ACS Production																															
	2	2019	CBDP	54	0	54																									54
Secondary Distribution			*ARMY*	*54*	*0*	*54*																									*54*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)

Cost Elements (Units in Each)							Fiscal Year 2019												Fiscal Year 2020												BALANCE
										Calendar Year 2019														Calendar Year 2020									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
FC IS LRIP																															
	1	2019	CBDP	4	0	4								A -	-	-	2	2													0
Secondary Distribution			*ARMY*	*4*	*0*	*4*								*A -*	-	-	*2*	*2*													*0*
ACS Production																															
	2	2019	CBDP	54	0	54		A -	-	-	-	-	9	9	9	9	9	9													0
Secondary Distribution			*ARMY*	*54*	*0*	*54*		*A -*	-	-	-	-	*9*	*9*	*9*	*9*	*9*	*9*													*0*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological Situational Awareness	**Item Number / Title [DODIC]:** JS0005 / COMMON ANALYTICAL LABORATORY SYSTEM (CALS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	TBD - UNKNOWN	1	12	15	0	7	4	11	0	11	2	13
2	TBD - UNKNOWN	1	12	15	0	7	4	11	0	11	2	13

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	8.416	2.401	2.400	-	2.400
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	8.416	2.401	2.400	-	2.400
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**8.416**	**2.401**	**2.400**	**-**	**2.400**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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 - Portable Isotopic Neutron Spectrometer	-	-	0.000	231.000	4	0.924	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
SPU CBE Personal Protective Equipment - Class 2	-	-	0.000	-	-	0.000	2.065	650	1.342	2.066	350	0.723	-	-	-	2.066	350	0.723
SPU CBE Personal Protective Equipment - Class 3	-	-	0.000	0.603	3,025	1.825	0.665	1,025	0.682	0.665	600	0.399	-	-	-	0.665	600	0.399
SPU CBE Personal Protective Equipment - HAZMAT Boots	-	-	0.000	0.060	2,888	0.173	0.084	2,300	0.193	0.084	2,192	0.184	-	-	-	0.084	2,192	0.184
SPU CBE Personal Protective Equipment - Filter Canister	-	-	0.000	0.041	5,500	0.228	0.055	3,350	0.184	0.055	2,542	0.140	-	-	-	0.055	2,542	0.140
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*3.150*	-	-	*2.401*	-	-	*1.446*	-	-	-	-	-	*1.446*
Non Recurring Cost																		
SPU CBE JHBI Engineering Change	-	-	0.000	-	-	4.916	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*4.916*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 7001SA1000 / Chemical Biological 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:

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***8.066***	**-**	**-**	***2.401***	**-**	**-**	***1.446***	**-**	**-**	**-**	**-**	**-**	***1.446***
Support Cost																		
Program Management and Support	-	-	0.000	-	-	0.350	-	-	0.000	-	-	0.954	-	-	-	-	-	0.954
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.350***	**-**	**-**	***0.000***	**-**	**-**	***0.954***	**-**	**-**	**-**	**-**	**-**	***0.954***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**8.416**	**-**	**-**	**2.401**	**-**	**-**	**2.400**	**-**	**-**	**-**	**-**	**-**	**2.400**

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 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.

Justification: FY19 Program procures 350 National Fire Protection Association (NFPA) Class Two Personal Protective Equipment (PPE) suits, 600 NFPA Class Three PPE suits, 2,192 HAZMAT Boots, and 2,542 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.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	2.219	1.105	1.105	-	1.105
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	2.219	1.105	1.105	-	1.105
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**2.219**	**1.105**	**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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	2.644	45	0.119	1.607	28	0.045	1.607	28	0.045	-	-	-	1.607	28	0.045
SPU CBE (CBIRF) Personal Protection Equipment - Class 2	-	-	0.000	2.020	356	0.719	2.063	301	0.621	2.062	243	0.501	-	-	-	2.062	243	0.501
SPU CBE (CBIRF) Personal Protection Equipment - Class 3	-	-	0.000	-	-	0.000	0.664	500	0.332	0.664	443	0.294	-	-	-	0.664	443	0.294
SPU CBE (CBIRF) Personal Protection Equipment - HAZMAT Boots	-	-	0.000	-	-	0.000	0.082	97	0.008	0.100	30	0.003	-	-	-	0.100	30	0.003
SPU CBE (CBIRF) Personal Protective Equipment - Filter Canisters	-	-	0.000	-	-	0.000	0.055	1,800	0.099	0.055	1,733	0.095	-	-	-	0.055	1,733	0.095
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.838*	-	-	*1.105*	-	-	*0.938*	-	-	-	-	-	*0.938*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.838***	**-**	**-**	***1.105***	**-**	**-**	***0.938***	**-**	**-**	**-**	**-**	**-**	***0.938***
Support Cost																		

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 7001SA1000 / Chemical Biological 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:**

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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 and Technical Support	-	-	0.000	-	-	0.300	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Program Management and Support	-	-	0.000	-	-	0.534	-	-	0.000	-	-	0.167	-	-	-	-	-	0.167
SPU CBE (CBIRF) Sets, Kits, and Outfits	-	-	0.000	-	-	0.547	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.381***	**-**	**-**	***0.000***	**-**	**-**	***0.167***	**-**	**-**	**-**	**-**	**-**	***0.167***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**2.219**	**-**	**-**	**1.105**	**-**	**-**	**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: FY19 program procures 28 National Fire Protection Association (NFPA) Class One Personal Protective Equipment (PPE) suits, 243 NFPA Class Two suits, 443 NFPA Class Three suits, 30 CBRN/ HAZMAT boots and 1,733 Filter Canisters.

Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	244.958	150.360	141.027	144.519	-	144.519	182.915	153.431	195.068	190.440	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	244.958	150.360	141.027	144.519	-	144.519	182.915	153.431	195.068	190.440	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**244.958**	**150.360**	**141.027**	**144.519**	**-**	**144.519**	**182.915**	**153.431**	**195.068**	**190.440**	**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 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; (2) 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 (3) 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; (4) 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.

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 (JECP) provides the joint expeditionary forces a CP capability which is lightweight, compact, modular, and affordable. The JECP 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. JECP will be capable of protecting personnel groups of varying size, unencumbered by individual protective equipment (IPE), from effects of CB agents, TIMs, radiological 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 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 developed which minimize the extent of contamination pickup and transfer and maximize the ability of units to remove contaminates both on-the-move and during dedicated decontamination operations.

Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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		

Decontamination programs funded include; (1) The Decontamination Family of Systems (DFoS) General Purpose Decontaminant (GPD) 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/exteriors, terrain, and fixed facilities; (2) The DFoS Joint Service Equipment Wipe (JSEW) will procure chemical decontamination wipes, providing an increased capability to not only decontaminate non-sensitive but also sensitive equipment exposed to agents/ contamination; (3) The DFoS Contamination Indicator Decontamination Assurance System (CIDAS) is a contamination indicator/decontamination assurance technology. It will consist of an indicator and an applicator, with three applicator configurations (small-scale, tactical large scale, and reusable large scale applicators) and three indicator formulations (nerve training, nerve and blister indicators). The indicator will be sprayed on tactical vehicles, aircraft, ships, crew-served weapons, and individual weapons that may have been exposed to traditional and non-traditional chemical contamination. DFoS CIDAS is a new capability for the Joint Forces that will 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; (4) Joint Biological Agent Decontamination System (JBADS) will provide the capability to conduct biological agent decontamination of the interior and exterior of aircraft and vehicle platforms; (5) the Contaminated Human Remains System (CHRS) program will procure systems with the capability to protect personnel handling and processing human remains contaminated with Chemical Biological Radiological (CBR) contamination for safe transport from OCONUS to CONUS. The CHRS program provides the warfighter the capability to safely handle, transport, and temporarily store or bury contaminated human remains in a theater of operations or in the United States.

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).

Exhibit P-40, Budget Line Item Justification: PB 2019 Chemical and Biological Defense Program	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 03: Chemical/Biological Defense / BSA 1: CBDP	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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		

Exhibits Schedule					Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 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	JI0002 / JS AIRCREW MASK (JSAM)	P-5a, P-21	B		- / 13.920	- / 33.423	- / 36.782	- / 54.775	- / -	- / 54.775
P-5	JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)	P-5a, P-21	A		- / 119.187	- / 65.374	- / 48.493	- / 16.927	- / -	- / 16.927
P-5	MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)	P-5a, P-21	A		- / 42.865	- / 16.025	- / 10.990	- / 13.064	- / -	- / 13.064
P-5	JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)	P-5a, P-21	B		- / 20.382	- / 13.699	- / 10.728	- / 22.752	- / -	- / 22.752
P-5	R12301 / CB PROTECTIVE SHELTER (CBPS)	P-5a, P-21	B		- / 48.234	- / 16.950	- / 16.739	- / 17.673	- / -	- / 17.673
P-5	JD0050 / DECONTAMINATION FAMILY OF SYSTEMS (DFoS)		B		- / 0.000	- / 4.704	- / 7.285	- / 12.035	- / -	- / 12.035
P-5	JD0070 / JOINT BIOLOGICAL AGENT DECONTAMINATION SYSTEM (JBADS)		B		- / 0.000	- / 0.000	- / 4.827	- / 1.000	- / -	- / 1.000
P-5	JM6677 / ADVANCED ANTICONVULSANT SYSTEM (AAS)		B		- / 0.000	- / 0.000	- / 0.000	- / 0.360	- / -	- / 0.360
P-5	JX0005 / DOD BIOLOGICAL VACCINE PROCUREMENT (VACCINES)		B		- / 0.370	- / 0.185	- / 0.183	- / 0.183	- / -	- / 0.183
P-5	JD0404 / CONTAMINATED HUMAN REMAINS SYSTEM (CHRS)		B		- / 0.000	- / 0.000	- / 0.000	- / 0.750	- / -	- / 0.750
P-5	MA0400 / PROTECTIVE CLOTHING (JSLIST)	P-5a	A		- / 0.000	- / 0.000	- / 5.000	- / 5.000	- / -	- / 5.000
P-40	**Total Gross/Weapon System Cost**				**- / 244.958**	**- / 150.360**	**- / 141.027**	**- / 144.519**	**- / -**	**- / 144.519**

*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:
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 provide protective equipment and medical countermeasures that supports protection prior to potential operations and mitigates the hazard if exposed.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	13.920	33.423	36.782	54.775	-	54.775
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	13.920	33.423	36.782	54.775	-	54.775
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**13.920**	**33.423**	**36.782**	**54.775**	**-**	**54.775**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	13.920	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JSAM RW - MPU-5 Hardware - LRIP/ FRP(†)	-	-	0.000	3.001	2,535	7.608	3.608	2,213	7.985	3.100	4,200	13.020	-	-	-	3.100	4,200	13.020
JSAM SA - M69 - Hardware - FRP(†)	-	-	0.000	2.459	5,194	12.771	2.465	3,870	9.538	2.465	4,535	11.179	-	-	-	2.465	4,535	11.179
JSAM TA - Case- FRP	-	-	0.000	-	-	0.000	-	-	0.000	0.217	645	0.140	-	-	-	0.217	645	0.140
JSAM TA - Mask - FRP(†)	-	-	0.000	-	-	0.000	-	-	0.000	11.115	645	7.169	-	-	-	11.115	645	7.169
Subtotal: Recurring Cost	-	-	*13.920*	-	-	*20.379*	-	-	*17.523*	-	-	*31.508*	-	-	-	-	-	*31.508*
Subtotal: Hardware Cost	**-**	**-**	***13.920***	**-**	**-**	***20.379***	**-**	**-**	***17.523***	**-**	**-**	***31.508***	**-**	**-**	**-**	**-**	**-**	***31.508***
Logistics Cost																		
Recurring Cost																		
JSAM RW - Config Mgmt/Tech Manuals	-	-	0.000	-	-	0.212	-	-	0.049	-	-	0.150	-	-	-	-	-	0.150
JSAM RW - Logistics Support	-	-	0.000	-	-	0.522	-	-	0.640	-	-	0.850	-	-	-	-	-	0.850
JSAM TA Mask - Initial Spares/ Support Equipment	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.717	-	-	-	-	-	1.717

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0002 / JS AIRCREW MASK (JSAM)
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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	0.000	-	-	1.978	-	-	-	-	-	1.978
JSAM SA M69- Training and Support Equipment	-	-	0.000	-	-	1.293	-	-	3.818	-	-	0.812	-	-	-	-	-	0.812
JSAM RW - NET Training/Training Equipment	-	-	0.000	-	-	0.062	-	-	0.775	-	-	1.000	-	-	-	-	-	1.000
JSAM RW - Tooling	-	-	0.000	-	-	0.732	-	-	0.000	-	-	0.400	-	-	-	-	-	0.400
JSAM RW - Initial Spares/Fielding Components	-	-	0.000	-	-	2.072	-	-	3.921	-	-	2.950	-	-	-	-	-	2.950
JSAM SA M69 - New Equipment Training	-	-	0.000	-	-	0.893	-	-	0.454	-	-	0.430	-	-	-	-	-	0.430
JSAM SA M69 - Initial Spares/Components	-	-	0.000	-	-	1.277	-	-	0.580	-	-	0.028	-	-	-	-	-	0.028
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*7.063*	-	-	*10.237*	-	-	*10.315*	-	-	-	-	-	*10.315*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***7.063***	**-**	**-**	***10.237***	**-**	**-**	***10.315***	**-**	**-**	**-**	**-**	**-**	***10.315***
Support Cost																		
JSAM SA M69- Production Support	-	-	0.000	-	-	0.540	-	-	2.173	-	-	1.027	-	-	-	-	-	1.027
JSAM RW - Program Management	-	-	0.000	-	-	1.693	-	-	3.041	-	-	3.553	-	-	-	-	-	3.553
JSAM RW - Engineering Support	-	-	0.000	-	-	1.268	-	-	0.892	-	-	1.607	-	-	-	-	-	1.607
JSAM SA M69 - Program Management	-	-	0.000	-	-	1.824	-	-	1.359	-	-	2.719	-	-	-	-	-	2.719
JSAM SA M69 - Engineering Support	-	-	0.000	-	-	0.656	-	-	1.490	-	-	1.817	-	-	-	-	-	1.817
JSAM TA Mask - Program Management	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.998	-	-	-	-	-	1.998
JSAM TA Mask - Engineering Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.231	-	-	-	-	-	0.231
JSAM RW - First Article Testing	-	-	0.000	-	-	0.000	-	-	0.067	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***5.981***	**-**	**-**	***9.022***	**-**	**-**	***12.952***	**-**	**-**	**-**	**-**	**-**	***12.952***
Gross/Weapon System Cost	**-**	**-**	**13.920**	**-**	**-**	**33.423**	**-**	**-**	**36.782**	**-**	**-**	**54.775**	**-**	**-**	**-**	**-**	**-**	**54.775**

Remarks:

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JI0002 / JS AIRCREW MASK (JSAM)
ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:	

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.

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.

Justification: FY19 will procure 4,200 JSAM RW production masks, training, tooling, and initial spares. FY19 will procure 4,535 JSAM SA production masks, including initial spares, to be used for fielding to various United States Air Force (USAF), United States Navy (USN) and United States Army (USA) aircraft. JSAM SA will conduct New Equipment Training, procure spare parts and support equipment. FY19 will also procure 645 JSAM TA production masks including transit cases, initial spares/support equipment, and training to meet IOC for United States Marines (USMC).

RDT&E Code B Item: 0604384BP/Proj IP5

IP5/JSAM RW: RDT&E FY16 and Prior - 24.389M; FY17 - 1.393M; FY18 - 0.382M
IP5/JSAM SA: RDT&E FY16 and Prior - 6.169M; FY17 - 4.747M; FY18 - 2.097M; FY19 - 2.105M; FY20 - 1.721M; FY21 - 1.338M; FY22 - 0.186M
IP5/JSAM TA: RDT&E FY16 and Prior - 4.615M; FY17 - 5.557M; FY18 - 2.954M; FY19 - 2.329M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

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 - USN/USMC Full Rate Production: Feb 2018
JSAM RW - USAF Initial Operability Capability: Sep 2018
JSAM RW - USA Initial Operational Capability: Sep 2018
JSAM RW - USAF Full Operational Capability: Oct 2018
JSAM RW - USN/USMC Initial Operational Capability: Oct 2018
JSAM RW - USA/USN/USMC Full Operational Capability: Sep 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 Aug 2017)
JSAM SA - Full Rate Production: Jan 2018
JSAM SA - USAF/USN Initial Operational Capability (Apr 2018 to Jul 2018)
JSAM SA - USA Operational Testing (Apr 2018 to Jun 2018)
JSAM SA - USA Initial Operational Capability: Apr 2019
JSAM SA - USAF/USN/USA/USMC Integration and Airworthiness Certification Testing (Jan 2017 to Dec 2021)
JSAM TA - AP22P (A) Safe to Fly Certification (Dec 2014 to Dec 2018)
JSAM TA - Integrated (Developmental/Operational) Testing (Dec 2015 to Sep 2018)
JSAM TA - AP22P (A) ECP Integration (Dec 2015 to Dec 2018)

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JI0002 / JS AIRCREW MASK (JSAM)
ID Code (A=Service Ready, B=Not Service Ready) : B		MDAP/MAIS Code:

JSAM TA - Capability Production Document: Jan 2019
JSAM TA - MS C / Full Rate Production: Jan 2019
JSAM TA - Initial Operational Capability: Jul 2020

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JI0002 / JS AIRCREW MASK (JSAM)

Cost Elements	OCO	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	Jun 2017	Feb 2018	2,535	3.001	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 RW - MPU-5 Hardware - LRIP/FRP(†)		2019	TBD / UNKNOWN	C / FFP	RDECOM, APG, MD	Nov 2018	Apr 2019	4,200	3.100	Y		Mar 2018
JSAM SA - M69 - Hardware - FRP(†)		2017	AVON Protection Systems Inc. / Cadillac, MI	SS / FFP	RDECOM, APG, MD	Mar 2018	Sep 2018	5,194	2.459	N		Nov 2017
JSAM SA - M69 - Hardware - FRP(†)		2018	AVON Protection Systems Inc. / Cadillac, MI	SS / FFP	RDECOM, APG, MD	Nov 2017 (1)	May 2018	3,870	2.465	N		
JSAM SA - M69 - Hardware - FRP(†)		2019	AVON Protection Systems Inc. / Cadillac, MI	SS / FFP	RDECOM, APG, MD	Nov 2018 (2)	Jun 2019	4,535	2.465	N		
JSAM TA - Mask - FRP(†)		2019	Cam Lock Limited / Aldershot Hampshire, UK	SS / FFP	NAVAIR, Patuxent River, MD	Feb 2019	Aug 2019	645	11.115	N		Jun 2018

(†) indicates the presence of a P-21

Footnotes:
(1) Opt 1
(2) Opt 2

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0002 / JS AIRCREW MASK (JSAM)

Cost Elements (Units in Each)							Fiscal Year 2017												Fiscal Year 2018												BALANCE
										Calendar Year 2017														Calendar Year 2018								
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSAM RW - MPU-5 Hardware - LRIP/FRP																															
	1	2017	CBDP	2,535	0	2,535									A	-	-	-	-	-	-	-	200	250	300	360	360	360	360	345	0
			ARMY	*1,059*	*0*	*1,059*									*A*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*136*	*344*	*26*	*-*	*208*	*345*	*0*
Secondary Distribution			*AF*	*800*	*0*	*800*									*A*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*200*	*250*	*-*	*16*	*334*	*-*	*-*	*-*	*0*
			MC	*512*	*0*	*512*									*A*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*360*	*152*	*-*	*0*
			NAVY	*164*	*0*	*164*									*A*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*164*	*-*	*-*	*-*	*-*	*-*	*0*
	1	2018	CBDP	2,213	0	2,213														A	-	-	-	100	175	175	225	225	225	225	863
			ARMY	*900*	*0*	*900*														*A*	*-*	*-*	*-*	*100*	*50*	*50*	*100*	*100*	*100*	*100*	*300*
Secondary Distribution			*MC*	*750*	*0*	*750*														*A*	*-*	*-*	*-*	*-*	*75*	*75*	*75*	*75*	*75*	*75*	*300*
			NAVY	*563*	*0*	*563*														*A*	*-*	*-*	*-*	*-*	*50*	*50*	*50*	*50*	*50*	*50*	*263*
	2	2019	CBDP	4,200	0	4,200																									4,200
			ARMY	*3,650*	*0*	*3,650*																									*3,650*
Secondary Distribution			*MC*	*229*	*0*	*229*																									*229*
			NAVY	*321*	*0*	*321*																									*321*
JSAM SA - M69 - Hardware - FRP																															
	3	2017	CBDP	5,194	0	5,194																		A	-	-	-	-	-	3,000	2,194
Secondary Distribution			*AF*	*3,791*	*0*	*3,791*																		*A*	*-*	*-*	*-*	*-*	*-*	*1,811*	*1,980*
			NAVY	*1,403*	*0*	*1,403*																		*A*	*-*	*-*	*-*	*-*	*-*	*1,189*	*214*
	3	2018	CBDP	3,870	0	3,870														A	-	-	-	-	-	1,935	-	-	-	-	1,935
Secondary Distribution			*ARMY*	*728*	*0*	*728*														*A*	*-*	*-*	*-*	*-*	*-*	*364*	*-*	*-*	*-*	*-*	*364*
			AF	*3,067*	*0*	*3,067*														*A*	*-*	*-*	*-*	*-*	*-*	*1,534*	*-*	*-*	*-*	*-*	*1,533*
			NAVY	*75*	*0*	*75*														*A*	*-*	*-*	*-*	*-*	*-*	*37*	*-*	*-*	*-*	*-*	*38*
	3	2019	CBDP	4,535	0	4,535																									4,535
Secondary Distribution			*ARMY*	*568*	*0*	*568*																									*568*
			AF	*3,197*	*0*	*3,197*																									*3,197*
			NAVY	*770*	*0*	*770*																									*770*
JSAM TA - Mask - FRP																															
	4	2019	CBDP	645	0	645																									645
Secondary Distribution			*MC*	*645*	*0*	*645*																									*645*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JI0002 / JS AIRCREW MASK (JSAM)

Cost Elements (Units in Each)							Fiscal Year 2019												Fiscal Year 2020												
							Calendar Year 2019												Calendar Year 2020												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BALANCE
JSAM RW - MPU-5 Hardware - LRIP/FRP																														
	1	2017	CBDP	2,535	2,535	0																								0
Secondary Distribution			*ARMY*	*1,059*	*1,059*	*0*																								*0*
			AF	*800*	*800*	*0*																								*0*
			MC	*512*	*512*	*0*																								*0*
			NAVY	*164*	*164*	*0*																								*0*
	1	2018	CBDP	2,213	1,350	863	300	300	263																					0
Secondary Distribution			*ARMY*	*900*	*600*	*300*	*100*	*100*	*100*																					*0*
			MC	*750*	*450*	*300*	*100*	*100*	*100*																					*0*
			NAVY	*563*	*300*	*263*	*100*	*100*	*63*																					*0*
	2	2019	CBDP	4,200	0	4,200		A -	-	-	-	-	360	360	360	360	360	360	360	360	360	360	360	240						0
Secondary Distribution			*ARMY*	*3,650*	*0*	*3,650*		*A -*	-	-	-	-	*170*	*170*	*190*	*360*	*360*	*360*	*360*	*360*	*360*	*360*	*360*	*240*						*0*
			MC	*229*	*0*	*229*		*A -*	-	-	-	-	*80*	*80*	*69*	-	-	-	-	-	-	-	-	-						*0*
			NAVY	*321*	*0*	*321*		*A -*	-	-	-	-	*110*	*110*	*101*	-	-	-	-	-	-	-	-	-						*0*
JSAM SA - M69 - Hardware - FRP																														
	3	2017	CBDP	5,194	3,000	2,194	-	-	-	-	-	2,194																		0
Secondary Distribution			*AF*	*3,791*	*1,811*	*1,980*	-	-	-	-	-	*1,980*																		*0*
			NAVY	*1,403*	*1,189*	*214*	-	-	-	-	-	*214*																		*0*
	3	2018	CBDP	3,870	1,935	1,935	-	1,935																						0
Secondary Distribution			*ARMY*	*728*	*364*	*364*	-	*364*																						*0*
			AF	*3,067*	*1,534*	*1,533*	-	*1,533*																						*0*
			NAVY	*75*	*37*	*38*	-	*38*																						*0*
	3	2019	CBDP	4,535	0	4,535		A -	-	-	-	-	-	-	3,000	-	-	-	-	-	1,535									0
Secondary Distribution			*ARMY*	*568*	*0*	*568*		*A -*	-	-	-	-	-	-	*320*	-	-	-	-	-	*248*									*0*
			AF	*3,197*	*0*	*3,197*		*A -*	-	-	-	-	-	-	*2,003*	-	-	-	-	-	*1,194*									*0*
			NAVY	*770*	*0*	*770*		*A -*	-	-	-	-	-	-	*677*	-	-	-	-	-	*93*									*0*
JSAM TA - Mask - FRP																														
	4	2019	CBDP	645	0	645					A -	-	-	-	-	-	65	65	65	65	65	65	65	65	65	60				0
Secondary Distribution			*MC*	*645*	*0*	*645*					*A -*	-	-	-	-	-	*65*	*65*	*65*	*65*	*65*	*65*	*65*	*65*	*65*	*60*				*0*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0002 / JS AIRCREW MASK (JSAM)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	AVOX Systems Inc. - Lancaster, NY	45	250	400	0	8	8	16	0	1	4	5
2	TBD - UNKNOWN	45	250	400	0	1	5	6	0	1	5	6
3	AVON Protection Systems Inc. - Cadillac, MI	100	500	6,000	0	17	6	23	0	1	6	7
4	Cam Lock Limited - Aldershot Hampshire, UK	60	167	333	0	4	6	10	0	2	6	8

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	119.187	65.374	48.493	16.927	-	16.927
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	119.187	65.374	48.493	16.927	-	16.927
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**119.187**	**65.374**	**48.493**	**16.927**	**-**	**16.927**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	78.497	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JSGPM - Ground/Ship (M50)(†)	0.255	148,599	37.893	0.263	154,547	40.646	0.313	114,177	35.737	-	-	0.000	-	-	-	-	-	0.000
JSGPM - Ground/Ship (M51)(†)	0.449	6,225	2.797	0.468	8,991	4.205	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
JSGPM - Ground/Ship (M53A1)(†)	-	-	0.000	-	-	0.000	-	-	0.000	2.085	3,683	7.679	-	-	-	2.085	3,683	7.679
Initial Spares	-	-	0.000	-	-	7.899	-	-	4.161	-	-	1.473	-	-	-	-	-	1.473
Production Acceptance Test	-	-	0.000	-	-	0.600	-	-	0.500	-	-	0.350	-	-	-	-	-	0.350
Subtotal: Recurring Cost	-	-	*119.187*	-	-	*53.350*	-	-	*40.398*	-	-	*9.502*	-	-	-	-	-	*9.502*
Subtotal: Hardware Cost	**-**	**-**	***119.187***	**-**	**-**	***53.350***	**-**	**-**	***40.398***	**-**	**-**	***9.502***	**-**	**-**	**-**	**-**	**-**	***9.502***
Package Fielding Cost																		
Recurring Cost																		
System Fielding Support (Total Package Fielding, First Destination Transportation & New Equipment...	-	-	0.000	-	-	1.733	-	-	2.300	-	-	1.809	-	-	-	-	-	1.809
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*1.733*	-	-	*2.300*	-	-	*1.809*	-	-	-	-	-	*1.809*

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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:**

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***1.733***	**-**	**-**	***2.300***	**-**	**-**	***1.809***	**-**	**-**	**-**	**-**	**-**	***1.809***
Support Cost																		
Engineering Support	-	-	0.000	-	-	2.399	-	-	2.400	-	-	2.400	-	-	-	-	-	2.400
Program Management	-	-	0.000	-	-	7.892	-	-	3.395	-	-	3.216	-	-	-	-	-	3.216
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***10.291***	**-**	**-**	***5.795***	**-**	**-**	***5.616***	**-**	**-**	**-**	**-**	**-**	***5.616***
Gross/Weapon System Cost	**-**	**-**	**119.187**	**-**	**-**	**65.374**	**-**	**-**	**48.493**	**-**	**-**	**16.927**	**-**	**-**	**-**	**-**	**-**	**16.927**

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, and the M53 is the special operations version of the JSGPM.

Justification: FY19 funds procure 3,683 JSGPM Ground/Ship (M53A1) masks, training, initial spares, and total package fielding to support Army requirements.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)

Cost Elements	OCO	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
JSGPM - Ground/Ship (M50)		2016	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jan 2016 (3)	Mar 2016	148,599	0.255	Y		
JSGPM - Ground/Ship (M50)		2017	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Nov 2016 (4)	Mar 2017	154,547	0.263	Y		
JSGPM - Ground/Ship (M50)		2018	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Jan 2018 (5)	Mar 2018	114,177	0.313	Y		
JSGPM - Ground/Ship (M51)		2016	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Aug 2017	Jan 2018	6,225	0.449	Y		
JSGPM - Ground/Ship (M51)		2017	AVON Protection Systems Inc. / Cadillac, MI	C / FPIF	RDECOM, APG, MD	Aug 2017	Jan 2018	8,991	0.468	Y		
JSGPM - Ground/Ship (M53A1)(†)		2019	TBD / UNKNOWN	C / FFP	TBD	Nov 2018	Apr 2019	3,683	2.085	Y		

(†) indicates the presence of a P-21

Footnotes:

(3) Delivery Order

(4) Delivery Order

(5) Delivery Order

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)

Cost Elements (Units in Each)							Fiscal Year 2016												Fiscal Year 2017												BALANCE
										Calendar Year 2016														Calendar Year 2017									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	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 (M53A1)																															
	1	2019	CBDP	3,683	0	3,683																									3,683
Secondary Distribution			*ARMY*	*3,683*	*0*	*3,683*																									*3,683*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)

Cost Elements (Units in Each)							Fiscal Year 2018												Fiscal Year 2019											BALANCE
							Calendar Year 2018															Calendar Year 2019									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	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 (M53A1)																														
	1	2019	CBDP	3,683	0	3,683														A	-	-	-	-	-	1,183	2,500				0
Secondary Distribution			*ARMY*	*3,683*	*0*	*3,683*														*A*	-	-	-	-	-	*1,183*	*2,500*				*0*

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JI0003 / JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	TBD - UNKNOWN	1,000	2,566	10,267	0	1	5	6	0	1	5	6

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	42.865	16.025	10.990	13.064	-	13.064
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	42.865	16.025	10.990	13.064	-	13.064
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**42.865**	**16.025**	**10.990**	**13.064**	**-**	**13.064**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	15.423	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Ancillary Equipment	-	-	0.000	-	-	0.000	-	-	0.000	-	-	3.782	-	-	-	-	-	3.782
Production Lot Testing	-	-	0.000	-	-	0.718	-	-	0.240	-	-	0.264	-	-	-	-	-	0.264
UIPE 1 - Ensembles - FRP(†)	0.503	54,514	27.442	0.462	24,345	11.256	0.486	19,119	9.292	0.503	14,275	7.180	-	-	-	0.503	14,275	7.180
Subtotal: Recurring Cost	-	-	*42.865*	-	-	*11.974*	-	-	*9.532*	-	-	*11.226*	-	-	-	-	-	*11.226*
Subtotal: Hardware Cost	**-**	**-**	***42.865***	**-**	**-**	***11.974***	**-**	**-**	***9.532***	**-**	**-**	***11.226***	**-**	**-**	**-**	**-**	**-**	***11.226***
Logistics Cost																		
Non Recurring Cost																		
Integrated Footwear Solution (IFS)	-	-	0.000	-	-	2.500	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*2.500*	-	-	*0.000*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***2.500***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Support Cost																		
Program Management	-	-	0.000	-	-	1.219	-	-	1.059	-	-	1.574	-	-	-	-	-	1.574
Engineering Support	-	-	0.000	-	-	0.332	-	-	0.399	-	-	0.264	-	-	-	-	-	0.264
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***1.551***	**-**	**-**	***1.458***	**-**	**-**	***1.838***	**-**	**-**	**-**	**-**	**-**	***1.838***

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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:**

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	42.865	-	-	16.025	-	-	10.990	-	-	13.064	-	-	-	-	-	13.064

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 ancillary equipment, 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 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.

Justification: FY19 procures 14,275 UIPE Increment 1 garments to meet Joint Service CBRN equipment requirements. FY19 also provides production lot testing, ancillary equipment (socks, gloves, and neck dams), and engineering support.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)

Cost Elements	OCO	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 (6)	Jun 2016	54,514	0.503	Y		
UIPE 1 - Ensembles - FRP(†)		2017	Tennessee Apparel Corporation / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Dec 2016 (7)	Jun 2017	24,345	0.462	Y		
UIPE 1 - Ensembles - FRP(†)		2018	Tennessee Apparel Corporation / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Nov 2017 (8)	Mar 2018	19,119	0.486	Y		
UIPE 1 - Ensembles - FRP(†)		2019	Tennessee Apparel Corporation / Tullahoma, TN	C / FFP	RDECOM, Natick, MA	Nov 2018 (9)	Dec 2018	14,275	0.503	Y		

(†) indicates the presence of a P-21

Footnotes:

(6) Delivery Order

(7) Delivery Order

(8) Delivery Order

(9) Delivery Order

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)

Cost Elements (Units in Thousands)							Fiscal Year 2016												Fiscal Year 2017												BALANCE
										Calendar Year 2016														Calendar Year 2017									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
UIPE 1 - Ensembles - FRP																															
	1	2016	CBDP	54.514	.000	54.514					A -	-	-	-	4.543	4.543	4.543	4.543	4.543	4.543	4.543	4.543	4.543	4.543	4.543	4.541					.000
Secondary Distribution			*SOCOM*	*54.514*	*.000*	*54.514*					*A -*	-	-	-	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.543*	*4.541*					*.000*
	3	2017	CBDP	24.345	.000	24.345															A -	-	-	-	-	-	4.000	4.000	3.000	3.000	10.345
Secondary Distribution			*SOCOM*	*24.345*	*.000*	*24.345*															*A -*	-	-	-	-	-	*4.000*	*4.000*	*3.000*	*3.000*	*10.345*
	2	2018	CBDP	19.119	.000	19.119																									19.119
Secondary Distribution			*SOCOM*	*19.119*	*.000*	*19.119*																									*19.119*
	3	2019	CBDP	14.275	.000	14.275																									14.275
Secondary Distribution			*SOCOM*	*14.275*	*.000*	*14.275*																									*14.275*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)

Cost Elements (Units in Thousands)							Fiscal Year 2018												Fiscal Year 2019											BALANCE
										Calendar Year 2018														Calendar Year 2019								
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
UIPE 1 - Ensembles - FRP																														
	1	2016	CBDP	54.514	54.514	.000																								.000
Secondary Distribution			*SOCOM*	*54.514*	*54.514*	*.000*																								*.000*
	3	2017	CBDP	24.345	14.000	10.345	2.000	2.000	2.000	2.000	2.345																			.000
Secondary Distribution			*SOCOM*	*24.345*	*14.000*	*10.345*	*2.000*	*2.000*	*2.000*	*2.000*	*2.345*																			*.000*
	2	2018	CBDP	19.119	.000	19.119		A -	-	-	-	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	1.119									.000
Secondary Distribution			*SOCOM*	*19.119*	*.000*	*19.119*		*A -*	-	-	-	*2.000*	*2.000*	*2.000*	*2.000*	*2.000*	*2.000*	*2.000*	*2.000*	*2.000*	*1.119*									*.000*
	3	2019	CBDP	14.275	.000	14.275														A -	.881	1.300	1.300	1.300	1.300	1.300	1.300	1.300	1.300	1.300	1.694
Secondary Distribution			*SOCOM*	*14.275*	*.000*	*14.275*														*A -*	*.881*	*1.300*	*1.300*	*1.300*	*1.300*	*1.300*	*1.300*	*1.300*	*1.300*	*1.300*	*1.694*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)

Cost Elements (Units in Thousands)							Fiscal Year 2020												Fiscal Year 2021												BALANCE
										Calendar Year 2020														Calendar Year 2021									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
UIPE 1 - Ensembles - FRP																															
	1	2016	CBDP	54.514	54.514	.000																									.000
Secondary Distribution			*SOCOM*	*54.514*	*54.514*	*.000*																									*.000*
	3	2017	CBDP	24.345	24.345	.000																									.000
Secondary Distribution			*SOCOM*	*24.345*	*24.345*	*.000*																									*.000*
	2	2018	CBDP	19.119	19.119	.000																									.000
Secondary Distribution			*SOCOM*	*19.119*	*19.119*	*.000*																									*.000*
	3	2019	CBDP	14.275	12.581	1.694	1.300	.394																							.000
Secondary Distribution			*SOCOM*	*14.275*	*12.581*	*1.694*	*1.300*	*.394*																							*.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	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0401 / CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	Tennessee Apparel Corporation - Tullahoma, TN	2,000	4,000	6,000	0	1	6	7	0	4	4	8
2	Tennessee Apparel Corporation - Tullahoma, TN	2,000	4,000	6,000	0	1	6	7	0	1	4	5
3	Tennessee Apparel Corporation - Tullahoma, TN	1,300	4,000	6,000	0	2	0	2	0	1	1	2

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	20.382	13.699	10.728	22.752	-	22.752
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	20.382	13.699	10.728	22.752	-	22.752
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**20.382**	**13.699**	**10.728**	**22.752**	**-**	**22.752**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	16.610	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
TENT KIT 2(†)	-	-	0.000	148.273	11	1.631	-	-	0.000	170.000	21	3.570	-	-	-	170.000	21	3.570
STRUCTURE KIT IMPROVED(†)	-	-	0.000	99.480	25	2.487	144.605	38	5.495	-	-	0.000	-	-	-	-	-	0.000
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE(†)	269.429	14	3.772	270.647	17	4.601	272.833	6	1.637	275.000	52	14.300	-	-	-	275.000	52	14.300
TENT STANDALONE LARGE - GFE GENERATORS	-	-	0.000	39.800	5	0.199	34.500	6	0.207	-	-	0.000	-	-	-	-	-	0.000
Engineer Changes/ Modifications	-	-	0.000	-	-	0.000	-	-	0.118	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*20.382*	-	-	*8.918*	-	-	*7.457*	-	-	*17.870*	-	-	-	-	-	*17.870*
Subtotal: Hardware Cost	**-**	**-**	***20.382***	**-**	**-**	***8.918***	**-**	**-**	***7.457***	**-**	**-**	***17.870***	**-**	**-**	**-**	**-**	**-**	***17.870***
Package Fielding Cost																		
Recurring Cost																		
Training / Fielding / CLS	-	-	0.000	-	-	0.700	-	-	1.115	-	-	1.137	-	-	-	-	-	1.137
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.700*	-	-	*1.115*	-	-	*1.137*	-	-	-	-	-	*1.137*

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***0.700***	**-**	**-**	***1.115***	**-**	**-**	***1.137***	**-**	**-**	**-**	**-**	**-**	***1.137***
Logistics Cost																		
Recurring Cost																		
Spares	-	-	0.000	-	-	1.388	-	-	0.073	-	-	0.074	-	-	-	-	-	0.074
Technical Data	-	-	0.000	-	-	0.083	-	-	0.001	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*1.471*	-	-	*0.074*	-	-	*0.074*	-	-	-	-	-	*0.074*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***1.471***	**-**	**-**	***0.074***	**-**	**-**	***0.074***	**-**	**-**	**-**	**-**	**-**	***0.074***
Support Cost																		
Program Management and Support	-	-	0.000	-	-	1.484	-	-	2.082	-	-	3.436	-	-	-	-	-	3.436
Systems Engineering	-	-	0.000	-	-	1.126	-	-	0.000	-	-	0.235	-	-	-	-	-	0.235
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***2.610***	**-**	**-**	***2.082***	**-**	**-**	***3.671***	**-**	**-**	**-**	**-**	**-**	***3.671***
Gross/Weapon System Cost	**-**	**-**	**20.382**	**-**	**-**	**13.699**	**-**	**-**	**10.728**	**-**	**-**	**22.752**	**-**	**-**	**-**	**-**	**-**	**22.752**

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.

Justification: FY19 procures 73 JECP systems in the following configurations: 21 tent kit 2s, and 52 standalone large shelters.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & 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:

RDT&E Code B Item: 0604384BP/Proj CO5

CO5/JECP: RDT&E FY16 and Prior - 113.919M; FY17 - 2.640M; FY18 - 5.299M; FY19 - 5.972M; FY20 - 4.455M; FY21 - 4.930M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

JECP - Phase 1 Full Rate Production Decision: Dec 2016
JECP - Phase 1 Type Classification/Materiel Release Decision: Nov 2017
JECP - Initial Operational Capability: Sep 2021
JECP - Full Operational Capability: Sep 2030

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)

Cost Elements	OCO	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		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 (10)	Dec 2017	11	148.273	Y		
TENT KIT 2		2019	TBD / UNKNOWN	C / FFP	UNKNOWN	Jan 2019 (11)	Aug 2019	21	170.000	Y		
STRUCTURE KIT IMPROVED		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 (12)	Dec 2017	25	99.480	Y		
STRUCTURE KIT IMPROVED		2018	Leidos (E) / Abingdon, MD	C / FPIF	Aberdeen, MD	Jan 2018	Aug 2018	38	144.605	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE(†)		2016	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Mar 2016 (13)	Nov 2016	14	269.429	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE(†)		2017	Leidos / Abingdon, MD	C / FFP	Aberdeen, MD	Apr 2017 (14)	Nov 2017	17	270.647	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE(†)		2018	Leidos / Abingdon, MD	C / FPIF	Aberdeen, MD	Jan 2018	Jun 2018	6	272.833	Y		
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE(†)		2019	TBD / UNKNOWN	C / FFP	UNKNOWN	Jan 2019	Aug 2019	52	275.000	Y		

(†) indicates the presence of a P-21

Footnotes:

(10) - FRP Option

(11) - FRP Option

(12) - FRP Option

(13) - LRIP Option

(14) - FRP Option

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)

Cost Elements (Units in Each)							Fiscal Year 2016												Fiscal Year 2017											BALANCE
										Calendar Year 2016														Calendar Year 2017								
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE																														
	1	2016	CBDP	14	0	14						A	-	-	-	-	-	-	-	8	6									0
Secondary Distribution			*ARMY*	*8*	*0*	*8*						*A*	-	-	-	-	-	-	-	*8*	-									*0*
			NAVY	*6*	*0*	*6*						*A*	-	-	-	-	-	-	-	-	*6*									*0*
	1	2017	CBDP	17	0	17																			A	-	-	-	-	-	17
Secondary Distribution			*ARMY*	*11*	*0*	*11*																			*A*	-	-	-	-	-	*11*
			NAVY	*6*	*0*	*6*																			*A*	-	-	-	-	-	*6*
	2	2018	CBDP	6	0	6																									6
Secondary Distribution			*ARMY*	*6*	*0*	*6*																									*6*
	3	2019	CBDP	52	0	52																									52
Secondary Distribution			*ARMY*	*52*	*0*	*52*																									*52*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)

Cost Elements (Units in Each)							Fiscal Year 2018												Fiscal Year 2019											BALANCE
										Calendar Year 2018														Calendar Year 2019									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE																														
	1	2016	CBDP	14	14	0																								0
Secondary Distribution			*ARMY*	*8*	*8*	*0*																								*0*
			NAVY	*6*	*6*	*0*																								*0*
	1	2017	CBDP	17	0	17	-	17																						0
Secondary Distribution			*ARMY*	*11*	*0*	*11*	-	*11*																						*0*
			NAVY	*6*	*0*	*6*	-	*6*																						*0*
	2	2018	CBDP	6	0	6				A	-	-	-	-	5	1														0
Secondary Distribution			*ARMY*	*6*	*0*	*6*				*A*	-	-	-	-	*5*	*1*														*0*
	3	2019	CBDP	52	0	52																A	-	-	-	-	-	-	5	5	42
Secondary Distribution			*ARMY*	*52*	*0*	*52*																*A*	-	-	-	-	-	-	*5*	*5*	*42*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)

Cost Elements (Units in Each)							Fiscal Year 2020												Fiscal Year 2021												BALANCE
										Calendar Year 2020														Calendar Year 2021									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TENT STANDALONE LARGE - STANDALONE SHELTER LARGE																														
	1	2016	CBDP	14	14	0																									0
Secondary Distribution			*ARMY*	*8*	*8*	*0*																									*0*
			NAVY	*6*	*6*	*0*																									*0*
	1	2017	CBDP	17	17	0																									0
Secondary Distribution			*ARMY*	*11*	*11*	*0*																									*0*
			NAVY	*6*	*6*	*0*																									*0*
	2	2018	CBDP	6	6	0																									0
Secondary Distribution			*ARMY*	*6*	*6*	*0*																									*0*
	3	2019	CBDP	52	10	42	5	5	5	5	5	5	5	5	2																0
Secondary Distribution			*ARMY*	*52*	*10*	*42*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*2*																*0*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JP1111 / JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	Leidos - Abingdon, MD	5	20	45	0	1	9	10	0	5	8	13
2	Leidos - Abingdon, MD	5	20	45	2	3	5	8	0	3	5	8
3	TBD - UNKNOWN	5	20	45	2	3	5	8	0	3	7	10

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	48.234	16.950	16.739	17.673	-	17.673
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	48.234	16.950	16.739	17.673	-	17.673
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**48.234**	**16.950**	**16.739**	**17.673**	**-**	**17.673**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	17.631	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
CBPS UP-ARMORED(†)	746.415	41	30.603	927.222	9	8.345	1,193.857	7	8.357	1,044.000	8	8.352	-	-	-	1,044.000	8	8.352
Government Furnished Material	-	-	0.000	-	-	0.137	-	-	0.379	-	-	0.678	-	-	-	-	-	0.678
Subtotal: Recurring Cost	-	-	*48.234*	-	-	*8.482*	-	-	*8.736*	-	-	*9.030*	-	-	-	-	-	*9.030*
Subtotal: Hardware Cost	**-**	**-**	***48.234***	**-**	**-**	***8.482***	**-**	**-**	***8.736***	**-**	**-**	***9.030***	**-**	**-**	**-**	**-**	**-**	***9.030***
Package Fielding Cost																		
Recurring Cost																		
Total Package Fielding (spares)	-	-	0.000	-	-	0.648	-	-	0.895	-	-	0.750	-	-	-	-	-	0.750
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.648*	-	-	*0.895*	-	-	*0.750*	-	-	-	-	-	*0.750*
Subtotal: Package Fielding Cost	**-**	**-**	***0.000***	**-**	**-**	***0.648***	**-**	**-**	***0.895***	**-**	**-**	***0.750***	**-**	**-**	**-**	**-**	**-**	***0.750***
Logistics Cost																		
Recurring Cost																		
Care of Supplies in Storage	-	-	0.000	-	-	2.202	-	-	2.921	-	-	1.830	-	-	-	-	-	1.830
Integrated Logistics Support	-	-	0.000	-	-	1.033	-	-	0.556	-	-	0.533	-	-	-	-	-	0.533

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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)
New Equipment Training	-	-	0.000	-	-	0.565	-	-	1.710	-	-	1.000	-	-	-	-	-	1.000
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*3.800*	-	-	*5.187*	-	-	*3.363*	-	-	-	-	-	*3.363*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***3.800***	**-**	**-**	***5.187***	**-**	**-**	***3.363***	**-**	**-**	**-**	**-**	**-**	***3.363***
Support Cost																		
Engineering Support	-	-	0.000	-	-	1.985	-	-	0.750	-	-	1.350	-	-	-	-	-	1.350
Management Support	-	-	0.000	-	-	2.035	-	-	1.171	-	-	3.180	-	-	-	-	-	3.180
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***4.020***	**-**	**-**	***1.921***	**-**	**-**	***4.530***	**-**	**-**	**-**	**-**	**-**	***4.530***
Gross/Weapon System Cost	**-**	**-**	**48.234**	**-**	**-**	**16.950**	**-**	**-**	**16.739**	**-**	**-**	**17.673**	**-**	**-**	**-**	**-**	**-**	**17.673**

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: FY19 procures 8 CBPS CB modules, and provides total package fielding, new equipment training, and engineering support.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: R12301 / CB PROTECTIVE SHELTER (CBPS)

Cost Elements	OCO	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(†)		2015	Smiths Detection / Edgewood, MD	C / FFP	Natick, MA	Apr 2015 (15)	Apr 2016	28	732.357	Y		
CBPS UP-ARMORED(†)		2016	Smiths Detection / Edgewood, MD	C / FFP	Natick, MA	Jun 2016 (16)	Nov 2016	7	776.692	Y		
CBPS UP-ARMORED(†)		2016	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jan 2016	Jan 2017	6	776.692	Y		
CBPS UP-ARMORED(†)		2017	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jun 2017	Dec 2017	9	927.222	Y		
CBPS UP-ARMORED(†)		2018	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jan 2018	Mar 2019	7	1,193.857	Y		
CBPS UP-ARMORED(†)		2019	Pine Bluff Arsenal / Pine Bluff, AR	MIPR	Not Applicable	Jan 2019	Jan 2020	8	1,044.000	Y		

(†) indicates the presence of a P-21

Footnotes:
(15) Delivery Order
(16) Delivery Order

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** R12301 / CB PROTECTIVE SHELTER (CBPS)

Cost Elements (Units in Each)							Fiscal Year 2015												Fiscal Year 2016												BALANCE
										Calendar Year 2015														Calendar Year 2016									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
CBPS UP-ARMORED																															
	1	2015	CBDP	28	0	28							A	-	-	-	-	-	-	-	-	-	-	-	1	5	5	5	5	5	2
Secondary Distribution			*ARMY*	*28*	*0*	*28*							*A*	-	-	-	-	-	-	-	-	-	-	-	*1*	*5*	*5*	*5*	*5*	*5*	*2*
	1	2016	CBDP	7	0	7																					A	-	-	-	-	7
Secondary Distribution			*ARMY*	*7*	*0*	*7*																					*A*	-	-	-	-	*7*
	2	2016	CBDP	6	0	6																A	-	-	-	-	-	-	-	-	-	6
Secondary Distribution			*ARMY*	*6*	*0*	*6*																*A*	-	-	-	-	-	-	-	-	-	*6*
	2	2017	CBDP	9	0	9																										9
Secondary Distribution			*ARMY*	*9*	*0*	*9*																										*9*
	3	2018	CBDP	7	0	7																										7
Secondary Distribution			*ARMY*	*7*	*0*	*7*																										*7*
	4	2019	CBDP	8	0	8																										8
Secondary Distribution			*ARMY*	*8*	*0*	*8*																										*8*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** R12301 / CB PROTECTIVE SHELTER (CBPS)

Cost Elements (Units in Each)							Fiscal Year 2017												Fiscal Year 2018												
							Calendar Year 2017																Calendar Year 2018									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BALANCE
CBPS UP-ARMORED																															
	1	2015	CBDP	28	26	2	2																								0
Secondary Distribution			*ARMY*	*28*	*26*	*2*	*2*																								*0*
	1	2016	CBDP	7	0	7	-	5	2																						0
Secondary Distribution			*ARMY*	*7*	*0*	*7*	-	*5*	*2*																						*0*
	2	2016	CBDP	6	0	6	-	-	-	3	-	-	-	-	-	-	-	-	-	3											0
Secondary Distribution			*ARMY*	*6*	*0*	*6*	-	-	-	*3*	-	-	-	-	-	-	-	-	-	*3*											*0*
	2	2017	CBDP	9	0	9									A -	-	-	-	-	-	3	3	3								0
Secondary Distribution			*ARMY*	*9*	*0*	*9*									*A -*	-	-	-	-	-	*3*	*3*	*3*								*0*
	3	2018	CBDP	7	0	7																A -	-	-	-	-	-	-	-	-	7
Secondary Distribution			*ARMY*	*7*	*0*	*7*																*A -*	-	-	-	-	-	-	-	-	*7*
	4	2019	CBDP	8	0	8																									8
Secondary Distribution			*ARMY*	*8*	*0*	*8*																									*8*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & Hazard Mitigation	Item Number / Title [DODIC]: R12301 / CB PROTECTIVE SHELTER (CBPS)

Cost Elements (Units in Each)							Fiscal Year 2019												Fiscal Year 2020												BALANCE
										Calendar Year 2019														Calendar Year 2020								
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
CBPS UP-ARMORED																															
	1	2015	CBDP	28	28	0																									0
Secondary Distribution			*ARMY*	*28*	*28*	*0*																									*0*
	1	2016	CBDP	7	7	0																									0
Secondary Distribution			*ARMY*	*7*	*7*	*0*																									*0*
	2	2016	CBDP	6	6	0																									0
Secondary Distribution			*ARMY*	*6*	*6*	*0*																									*0*
	2	2017	CBDP	9	9	0																									0
Secondary Distribution			*ARMY*	*9*	*9*	*0*																									*0*
	3	2018	CBDP	7	0	7	-	-	-	-	-	5	2																		0
Secondary Distribution			*ARMY*	*7*	*0*	*7*	-	-	-	-	-	*5*	*2*																		*0*
	4	2019	CBDP	8	0	8				A -	-	-	-	-	-	-	-	-	-	-	-	3	3	2							0
Secondary Distribution			*ARMY*	*8*	*0*	*8*				*A* -	-	-	-	-	-	-	-	-	-	-	-	*3*	*3*	*2*							*0*
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** R12301 / CB PROTECTIVE SHELTER (CBPS)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2019	1-8-5 For 2019	MAX For 2019	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	Smiths Detection - Edgewood, MD	1	5	17	12	13	6	19	0	8	5	13
2	Pine Bluff Arsenal - Pine Bluff, AR	1	5	5	0	3	16	19	0	8	12	20
3	Pine Bluff Arsenal - Pine Bluff, AR	1	5	5	0	3	16	19	0	3	14	17
4	Pine Bluff Arsenal - Pine Bluff, AR	1	5	5	0	3	16	19	0	3	12	15

(‡) 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).

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	4.704	7.285	12.035	-	12.035
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	4.704	7.285	12.035	-	12.035
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**4.704**	**7.285**	**12.035**	**-**	**12.035**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	3.989	90	0.359	4.348	155	0.674	-	-	-	4.348	155	0.674
DFoS CIDAS - LARGE SCALE APPLICATOR TACTICAL - Tactical	-	-	0.000	-	-	0.000	0.520	25	0.013	0.544	364	0.198	-	-	-	0.544	364	0.198
DFoS CIDAS - NERVE INDICATOR KITS LARGE - Large Scale Nerve Training Kits	-	-	0.000	-	-	0.000	-	-	0.000	0.519	840	0.436	-	-	-	0.519	840	0.436
DFoS CIDAS - NERVE INDICATOR KITS LARGE - Large Scale Nerve Kits	-	-	0.000	-	-	0.000	2.691	55	0.148	1.254	284	0.356	-	-	-	1.254	284	0.356
DFoS CIDAS - NERVE INDICATOR KITS SMALL Test - Small Scale Nerve Training Kits	-	-	0.000	-	-	0.000	-	-	0.000	0.155	1,219	0.189	-	-	-	0.155	1,219	0.189
DFoS CIDAS - NERVE INDICATOR	-	-	0.000	-	-	0.000	0.291	55	0.016	0.198	3,200	0.634	-	-	-	0.198	3,200	0.634

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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)
KITS SMALL Test - Small Scale Nerve Kits																		
DFoS GPD - DFoS General Purpose Decontaminants	-	-	0.000	-	-	0.000	0.035	103,599	3.626	0.035	97,714	3.420	-	-	-	0.035	97,714	3.420
DFoS JSEW - Equipment Decontamination Wipes	-	-	0.000	0.009	270,160	2.453	0.009	213,581	1.922	0.009	212,444	1.912	-	-	-	0.009	212,444	1.912
DFoS CIDAS Surveillance Testing	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.053	-	-	-	-	-	0.053
DFoS CIDAS Transportation and Shipping	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.082	-	-	-	-	-	0.082
DFoS JSEW Contract Delivery Requirements	-	-	0.000	-	-	0.228	-	-	0.000	-	-	0.180	-	-	-	-	-	0.180
DFoS CIDAS Production Lot Testing	-	-	0.000	-	-	0.000	-	-	0.021	-	-	0.023	-	-	-	-	-	0.023
DFoS GPD Production Lot Testing	-	-	0.000	-	-	0.000	-	-	0.060	-	-	0.075	-	-	-	-	-	0.075
DFoS JSEW Tech Manuals	-	-	0.000	-	-	0.007	-	-	0.026	-	-	0.150	-	-	-	-	-	0.150
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*2.688*	-	-	*6.191*	-	-	*8.382*	-	-	-	-	-	*8.382*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***2.688***	**-**	**-**	***6.191***	**-**	**-**	***8.382***	**-**	**-**	**-**	**-**	**-**	***8.382***
Logistics Cost																		
Recurring Cost																		
DFoS GPD New Equipment Training	-	-	0.000	-	-	0.000	-	-	0.010	-	-	0.010	-	-	-	-	-	0.010
DFoS GPD Transportation and Shipping	-	-	0.000	-	-	0.000	-	-	0.075	-	-	0.085	-	-	-	-	-	0.085
DFoS JSEW New Equipment Training	-	-	0.000	-	-	0.000	-	-	0.010	-	-	0.000	-	-	-	-	-	0.000
DFoS JSEW Transportation and Shipping	-	-	0.000	-	-	0.000	-	-	0.050	-	-	0.150	-	-	-	-	-	0.150
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.145*	-	-	*0.245*	-	-	-	-	-	*0.245*
Subtotal: Logistics Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.145***	**-**	**-**	***0.245***	**-**	**-**	**-**	**-**	**-**	***0.245***
Support Cost																		

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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)
DFoS CIDAS Program Management Support	-	-	0.000	-	-	0.000	-	-	0.033	-	-	1.672	-	-	-	-	-	1.672
DFoS CIDAS Engineering Support	-	-	0.000	-	-	0.000	-	-	0.039	-	-	0.386	-	-	-	-	-	0.386
DFoS GPD Engineering Support	-	-	0.000	-	-	0.321	-	-	0.069	-	-	0.150	-	-	-	-	-	0.150
DFoS GPD Program Management Support	-	-	0.000	-	-	0.329	-	-	0.300	-	-	0.600	-	-	-	-	-	0.600
DFoS JSEW Engineering Support	-	-	0.000	-	-	0.493	-	-	0.072	-	-	0.100	-	-	-	-	-	0.100
DFoS JSEW Program Management Support	-	-	0.000	-	-	0.873	-	-	0.436	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***2.016***	**-**	**-**	***0.949***	**-**	**-**	***3.408***	**-**	**-**	**-**	**-**	**-**	***3.408***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**4.704**	**-**	**-**	**7.285**	**-**	**-**	**12.035**	**-**	**-**	**-**	**-**	**-**	**12.035**

Remarks:

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 DFoS 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 DFoS 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 DFoS GPD will be compatible with hardened materials consistent with those found on a Detailed Equipment Decontamination (DED) line. The DFoS GPD will be safe, suitable and compatible with HME and be operable in all operational environments that have been exposed to CB contamination.

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 DFoS JSEW will be applied directly to contaminated sensitive and non-sensitive equipment and will be capable of removing gross contamination and reducing contact hazard immediately without leaving a residue. The DFoS 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.

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, tactical large scale, and reusable large scale) and three indicator formulations (nerve training, nerve and blister). Post application, the DFoS CIDAS will not cause material degradation other than that which is allowable in service platforms' specifications to complete primary mission functions. DFoS 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 DFoS CIDAS Army Operational Mode Summary / Mission Profile. The DFoS 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.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	P-1 Line Item Number / Title: 8001PH1000 / CB Protection & 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:

Justification: FY19 funds will procure 212,444 DFoS JSEW chemical agent equipment decontamination wipes. 97,714 gallons of DFoS GPD chemical and biological (CB) agent thorough decontaminant for hardened military equipment. 155 reusable and 364 tactical DFoS CIDAS large scale applicators, 284 DFoS CIDAS large scale nerve kits and 840 DFoS CIDAS large scale nerve training kits, and 3,200 DFoS CIDAS small scale nerve kits and 1,219 DFoS CIDAS small scale nerve training kits.

RDT&E Code B Item: 0603884BP/Proj DE4; 0604384BP/Proj DE5

DE4/DFoS CIDAS: RDT&E FY16 and Prior - 4.856M
DE4/DFoS GPD: RDT&E FY16 and Prior - 5.915M
DE4/DFoS JSCMC: RDT&E ; FY21 - 4.437M; FY22 - 3.391M; FY23 - 3.391M
DE4/DFoS JSEW: RDT&E FY16 and Prior - 2.948M
DE5/DFoS CIDAS: RDT&E FY16 and Prior - 11.320M; FY17 - 4.812M; FY18 - 9.483M; FY19 - 4.757M; FY20 - 2.994M; FY21 - 2.512M
DE5/DFoS GPD: RDT&E FY16 and Prior - 10.493M; FY17 - 0.100M
DE5/DFoS JSCMC: RDT&E ; FY23 - 2.464M
DE5/DFoS JSEW: RDT&E FY16 and Prior - 5.944M

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	4.827	1.000	-	1.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	4.827	1.000	-	1.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**4.827**	**1.000**	**-**	**1.000**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	4,519.000	1	4.519	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*4.519*	-	-	*0.000*	-	-	-	-	-	*0.000*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***4.519***	**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.000***
Support Cost																		
Engineering Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.849	-	-	-	-	-	0.849
Program Management	-	-	0.000	-	-	0.000	-	-	0.308	-	-	0.151	-	-	-	-	-	0.151
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.308***	**-**	**-**	***1.000***	**-**	**-**	**-**	**-**	**-**	***1.000***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**4.827**	**-**	**-**	**1.000**	**-**	**-**	**-**	**-**	**-**	**1.000**

Remarks:
The JBADS will provide the capability to conduct biological agent decontamination of the interior and exterior of the C-130 aircraft. The JBADS is a capability set that will include a shelter to encapsulate an airframe, a 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. Future capability may address biological decontamination of other airframes and vehicles.

Justification: FY19 Follow on activities supporting the First Article Build procured in FY18.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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:**

RDT&E Code B Item: 0603884BP/Proj DE4; 0604384BP/Proj DE5

DE4/JBADS: RDT&E FY16 and Prior - 5.848M
DE5/JBADS: RDT&E FY16 and Prior - 3.460M; FY17 - 3.814M; FY18 - 6.046M; FY19 - 8.167M; FY20 - 0.222M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

JBADS - Capability Development Docuemnt (Nov 2016 to Dec 2016)
JBADS - MS B: May 2017
JBADS - First Article Build (May 2018 to Sep 2018)
JBADS - Product Verification Testing (May 2018 to Sep 2018)
JBADS - Initial Operational Test and Evaluation: Jun 2019
JBADS - Capability Production Document: Sep 2019
JBADS - MS C / FRP: Sep 2019
JBADS - FOT&E (Nov 2019 to Dec 2019)
JBADS - IOC: Nov 2019
JBADS - FOC: Jul 2021

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JM6677 / ADVANCED ANTICONVULSANT SYSTEM (AAS)
ID Code (A=Service Ready, B=Not Service Ready) : B		**MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.360	-	0.360
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.360	-	0.360
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.360**	**-**	**0.360**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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
AAS	-	-	0.000	-	-	0.000	-	-	0.000	0.017	21,000	0.360	-	-	-	0.017	21,000	0.360
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.360*	-	-	-	-	-	*0.360*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.360***	**-**	**-**	**-**	**-**	**-**	***0.360***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.360**	**-**	**-**	**-**	**-**	**-**	**0.360**

Remarks:

The Advanced Anticonvulsant System (AAS) will consist of the drug midazolam in an autoinjector for use in treating nerve agent induced seizures and will replace the currently fielded Convulsant Antidote for Nerve Agent (CANA) autoinjector, which uses diazepam. Procurement funds will support Initial Operational Capability (IOC) supporting the AAS phase-in/CANA phase-out plan along with transitioning the program to the Defense Logistics Agency (DLA) for sustainment. FDA approval anticipated 2QFY20 with IOC in FY20 and FOC in FY23.

Justification: Justification: FY19 funding supports procurement of 21,000 autoinjectors consisting of midazolam.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.370	0.185	0.183	0.183	-	0.183
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.370	0.185	0.183	0.183	-	0.183
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.370**	**0.185**	**0.183**	**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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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	-	-	0.183	-	-	0.183	-	-	-	-	-	0.183
Subtotal: Recurring Cost	-	-	*0.370*	-	-	*0.185*	-	-	*0.183*	-	-	*0.183*	-	-	-	-	-	*0.183*
Subtotal: Package Fielding Cost	**-**	**-**	***0.370***	**-**	**-**	***0.185***	**-**	**-**	***0.183***	**-**	**-**	***0.183***	**-**	**-**	**-**	**-**	**-**	***0.183***
Gross/Weapon System Cost	**-**	**-**	**0.370**	**-**	**-**	**0.185**	**-**	**-**	**0.183**	**-**	**-**	**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: FY19 funds provide support for VIGIV associated with emergency use product.

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

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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:**

MB4/VAC BOT: RDT&E FY16 and Prior - 106.426M
MB4/VACCINES: RDT&E FY16 and Prior - 59.662M
MB5/VAC BOT: RDT&E FY16 and Prior - 300.706M; FY17 - 29.349M; FY18 - 38.139M; FY19 - 30.442M; FY20 - 29.680M; FY21 - 47.990M; FY22 - 35.216M; FY23 - 26.829M
MB5/VAC PLG: RDT&E FY16 and Prior - 358.711M; FY17 - 26.387M; FY18 - 47.357M; FY19 - 46.538M; FY20 - 55.315M; FY21 - 49.341M; FY22 - 17.931M; FY23 - 5.304M
MB5/VACCINES: RDT&E FY16 and Prior - 74.717M

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JD0404 / CONTAMINATED HUMAN REMAINS SYSTEM (CHRS)
ID Code (A=Service Ready, B=Not Service Ready) : B		**MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.750	-	0.750
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.750	-	0.750
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.750**	**-**	**0.750**
(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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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
IPT Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.097	-	-	-	-	-	0.097
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.097*	-	-	-	-	-	*0.097*
Non Recurring Cost																		
CHRT	-	-	0.000	-	-	0.000	-	-	0.000	5.400	100	0.540	-	-	-	5.400	100	0.540
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.540*	-	-	-	-	-	*0.540*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.637***	**-**	**-**	**-**	**-**	**-**	***0.637***
Support Cost																		
Program Management and Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.113	-	-	-	-	-	0.113
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.113***	**-**	**-**	**-**	**-**	**-**	***0.113***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.750**	**-**	**-**	**-**	**-**	**-**	**0.750**

Remarks:
The Contaminated Human Remains System (CHRS) program will procure systems with the capability to protect personnel handling and processing human remains contaminated with Chemical Biological Radiological (CBR) contamination for safe transport from OCONUS to CONUS. The CHRS program provides the warfighter the capability to safely handle, transport, and temporarily store or inter contaminated human remains in a theater of operations or in the United States.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** JD0404 / CONTAMINATED HUMAN REMAINS SYSTEM (CHRS)
ID Code (A=Service Ready, B=Not Service Ready) : B		**MDAP/MAIS Code:**

The CHRS will address two capabilities identified within the Contamination Mitigation (ConMit) Initial Capabilities Document: a Contaminated Human Remains Transfer Case (CHRT) packaging solution to safely repatriate chemical, biological, or radiological contaminated human remains to the Continental United States and a sustainable Contaminated Remains Mitigation System (CRMS) to reduce the hazard to warfighters by decontaminating chemical, biological, or radiological contaminated human remains. The CHRT is a triple layer hazardous material transport container that must adhere to federal and international requirements for transport. The CHRT will address the capability gap for contaminated human remains repatriation identified in the Contamination Mitigation Initial Capabilities Document.

Justification: FY19 funds will procure 100 CHRT systems to satisfy service quantity requirements.

RDT&E Code B Item: 0603884BP/Proj DE4; 0604384BP/Proj DE5

DE4/CHRS: RDT&E ; FY17 - 0.500M; FY18 - 7.425M; FY19 - 3.458M; FY20 - 0.987M
DE5/CHRS: RDT&E ; FY20 - 6.187M; FY21 - 4.430M; FY22 - 1.479M; FY23 - 1.479M

DEVELOPMENT/TEST STATUS AND MAJOR MILESTONES

CHRS - Milestone A - CHRT: Jan 2018
CHRS - Contract Award - CHRT: Mar 2018
CHRS - Development Test (DT) - CHRT (Jun 2018 to Aug 2018)
CHRS - Milestone C - CHRT: Jul 2019
CHRS - Operational Test (OT) - CHRT (Nov 2019 to Feb 2020)
CHRS - Full Rate Production (FRP) - CHRT: May 2020
CHRS - Initial Operational Capability (IOC) - CHRT: Nov 2020
CHRS - Full Operational Capability (FOC) - CHRT: Nov 2021
CHRS - Milestone A - CRMS: Nov 2018
CHRS - Contract Award - CRMS: Nov 2019
CHRS - Development Test (DT) - CRMS (Feb 2020 to Oct 2020)
CHRS - Operational Test (OT) - CRMS (Jul 2021 to May 2022)
CHRS - Milestone C / LRIP - CRMS: Oct 2021
CHRS - Full Rate Production (FRP) - CRMS: Feb 2022
CHRS - Initial Operational Capability (IOC) - CRMS: Jul 2022
CHRS - Full Operational Capability (FOC) - CRMS: Nov 2023

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	5.000	5.000	-	5.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	5.000	5.000	-	5.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**5.000**	**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 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 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(†)	-	-	0.000	-	-	0.000	0.409	11,361	4.650	0.511	5,684	2.905	-	-	-	0.511	5,684	2.905
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*4.650*	-	-	*2.905*	-	-	-	-	-	*2.905*
Subtotal: Hardware Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***4.650***	**-**	**-**	***2.905***	**-**	**-**	**-**	**-**	**-**	***2.905***
Support Cost																		
Program Mgmt Support	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.955	-	-	-	-	-	0.955
Engineering Support	-	-	0.000	-	-	0.000	-	-	0.350	-	-	0.405	-	-	-	-	-	0.405
Production Lot Testing (PLT)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.735	-	-	-	-	-	0.735
Subtotal: Support Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.350***	**-**	**-**	***2.095***	**-**	**-**	**-**	**-**	**-**	***2.095***
Gross/Weapon System Cost	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**5.000**	**-**	**-**	**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, providing service members chemical/biological (CB) protection in all combat theaters. The JSLIST provides state-of-the-art chemical percutaneous protection as well as reduced heat stress, weight and bulk with increased durability and improved fit over fielded legacy systems. In addition, the JSLIST provides commonality and standardization by fielding the same suit to the Joint Forces. Senior Level Enterprise Review impacted the final POM18 position and resurrected the JSLIST budget line which now provides resources in FY18 through FY23. JSLISTs purchased in these years will provide capability to the Joint Services until UIPE Family of Systems is scheduled for production and begins fielding.

Exhibit P-5, Cost Analysis: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0400 / PROTECTIVE CLOTHING (JSLIST)
ID Code (A=Service Ready, B=Not Service Ready) : A		**MDAP/MAIS Code:**

Justification: FY19 procures 5,684 JSLIST overgarments to meet Joint Service CBRN equipment requirements.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 Chemical and Biological Defense Program		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 03 / 1	**P-1 Line Item Number / Title:** 8001PH1000 / CB Protection & Hazard Mitigation	**Item Number / Title [DODIC]:** MA0400 / PROTECTIVE CLOTHING (JSLIST)

Cost Elements	OCO	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		
PROTECTIVE SUIT - JSLIST Garment		2019	ReadyOne Industries / El Paso, TX	Reqn	DLA Troop Support, Philadelphia, PA	Nov 2018	Jan 2019	5,684	0.511	Y		

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