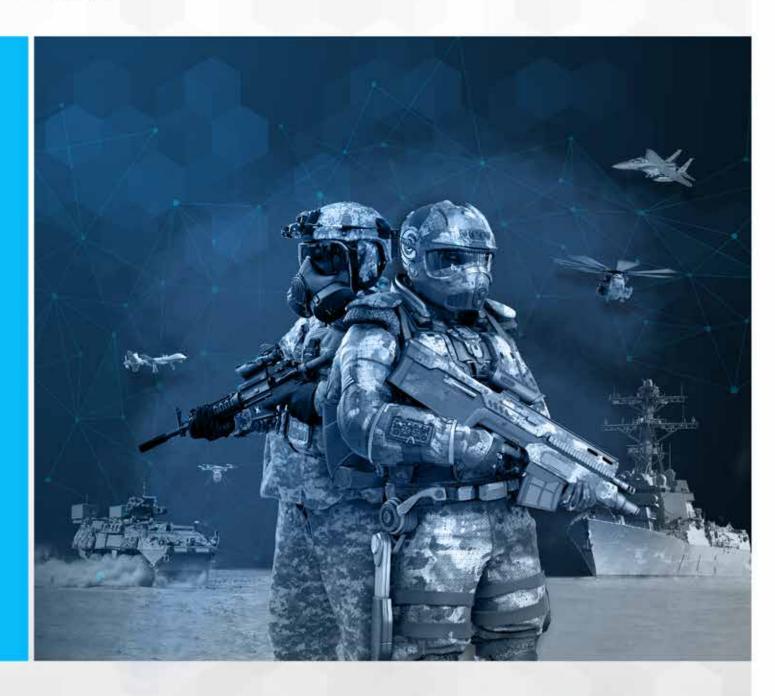


JPEO-CBRND CAPABILITIES CATALOG

2024



JOINT PROGRAM EXECUTIVE OFFICE FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENSE







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A NOTE FROM MR. DARRYL J. COLVIN

s an Army PEO, a component of the Chemical and Biological Defense Program, and acquisition partner across DoD, the JPEO-CBRND leads, manages, and directs the acquisition, fielding, and integration of CBRN sensors, protective equipment, medical countermeasures, and capabilities for combined, Joint All Domain Operations. We also focus on defense-enabling biotechnologies and integration initiatives providing solutions to reduce risk, compress timelines, and improve acquisition outcomes across the entire portfolio.

JPEO-CBRND's role is critical. As our Warfighters face a complex battlefield, the Joint Force has to fight and win across all domains—sea, land, air, cyber, and space—to defeat our adversaries. In addition to the threat posed by traditional chemical, biological, radiological, and nuclear weapons, we must be able to rapidly respond to a constantly evolving threat landscape. We need to quickly understand emerging threats in order to remain agile and responsive and meet the needs of the Joint Force.

To align with these realities and future CBRN defense needs, the JPEO-CBRND mission statement reflects our strategic focus on Joint All-Domain Operations, and our operational focus on integrating CBRN defense capabilities to deny our adversaries any advantage to using chemical, biological, radiological and nuclear weapons.

We accomplish this mission by working with internal and external partners to develop and deliver CBRN defense capabilities that are compatible and interoperable with current and future equipment. Our partnerships with government, academia, industry, and international allies make it possible for us to push the boundaries of innovation, rapidly find solutions, and deliver the capabilities required for our Warfighters to operate in any CBRN denied environment.

Working with our DoD and CBDP partners—the Deputy Assistant Secretary of Defense for Chemical and Biological Defense, the Joint Science and Technology Office, the Joint Requirements Office and the Executive Agent—we are shaping JPEO-CBRND's extraordinary future as we continue to serve the Joint Force.



Mr. Darryl J. Colvin Joint Program Executive Officer for Chemical, Biological, Radiological and Nuclear Defense

P.A.I.D. U.P.

PEOPLE

ADAPT to the Joint Force's need INTEGRATE

DELIVER

UNITY of command/effort PIVOT incremental capability

WHERE WE FIT WITHIN THE CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM*

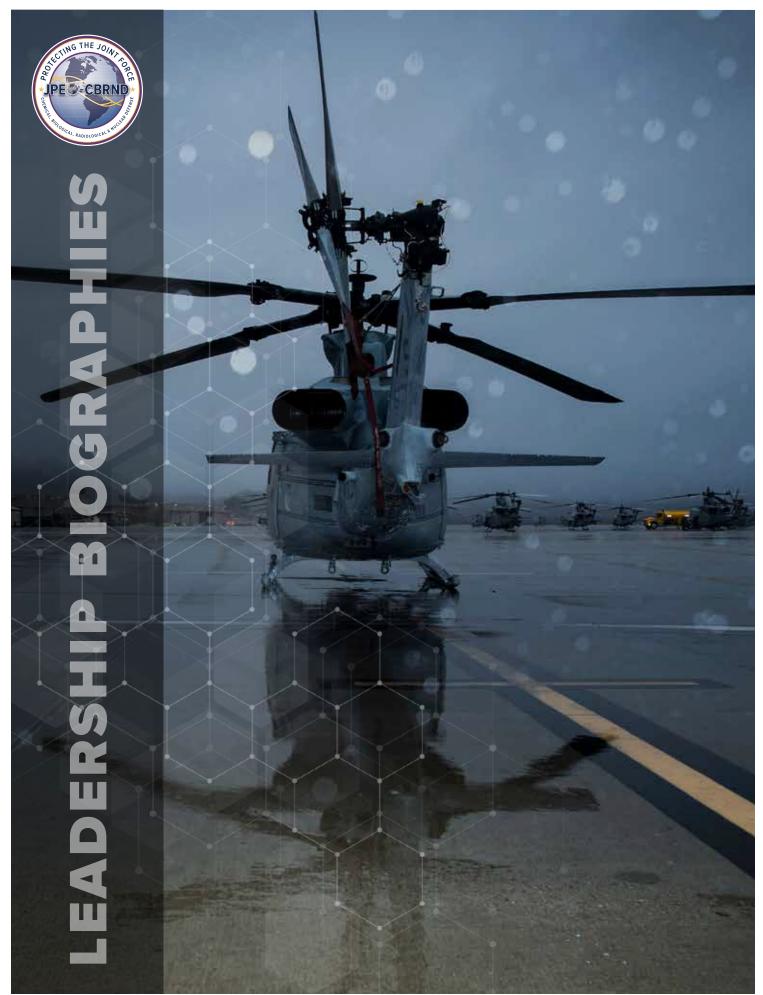
The JPEO-CBRND is one of the four components of the Chemical and Biological Defense Program, which is led by the Deputy Assistant Secretary of Defense for Chemical and Biological Defense. The CBDP consists of the:

- Joint Requirements Office, which develops requirements based on Warfighter needs;
- Joint Science and Technology Office, which conducts basic scientific and technical research;
- JPEO-CBRND, which performs advanced development and acquisition, and;
- CBRND Test and Evaluation Executive, which carries out test and evaluation activities.

While JPEO-CBRND receives guidance and oversight from the Deputy Assistant Secretary of Defense for Chemical and Biological Defense, the organization's acquisition authority comes from the Assistant Secretary of the Army for Acquisition, Logistics, and Technology.



*The JPEO-CBRND also receives funding and guidance from the Army, the other Military Services, and/or DASD(TRAC) to support acquisition, fielding, and integration of radiological and nuclear passive defense capabilities for combined, Joint All Domain Operations. Additionally, the JPEO-CBRND may be called upon to support DoD and/or interagency efforts to prepare for, respond to, and recover from biological incidents.



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Mr. Darryl Colvin
JOINT PROGRAM EXECUTIVE OFFICER

MR. DARRYL COLVIN

Mr. Darryl Colvin is the Joint Program Executive Officer for CBRN Defense. In this role, Mr. Colvin leads civilian and military multi-disciplinary teams whose mission is to provide integrated layered CBRN defense capabilities to the Joint Force across combined Joint All-Domain Operations.

Mr. Colvin was previously Deputy Program
Executive Officer (PEO) Missiles and Space;
Acting Deputy PEO for Missiles and Space;
Acting Deputy PEO Soldier; and Deputy for
Acquisition and Systems Management for
PEO Missiles and Space. He was also Project
Manager Ground-based Midcourse Defense
Interceptor for the Missile Defense Agency
and Project Manager for the PEO Missiles and
Space Lower Tier Project Office.

His prior acquisition assignments include Operations and Integration Officer, Army Tactical Operations Center Product Office; Product Manager for Field Artillery Launchers; Systems Coordinator for Army Tactical Missile System; and Executive Officer to the Deputy for Systems Management, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology.

Mr. Colvin was commissioned through the University of Missouri at Rolla ROTC Program and retired as a Lieutenant Colonel after faithfully and proudly serving 20 years active duty to the nation.

Mr. Colvin holds a Bachelor of Science from University of Missouri at Rolla and a Master of Science from Colorado School of Mines. He is a graduate of the Army Command and General Staff College and Senior Service College Fellowship Program.

His civilian and military awards and decorations include the Decoration for Exceptional Civilian Service Award, Superior Civilian Service Award, Commander's Award for Civilian Service, Legion of Merit, Meritorious Service Medal, the Army Commendation Medal, and Army Achievement Medal.



Ms. Nicole Kilgore
DEPUTY JOINT PROGRAM
EXECUTIVE OFFICER

MS. NICOLE KILGORE

Ms. Nicole Kilgore is the Deputy Joint Program Executive Officer for CBRN Defense. In this role, she provides leadership, technical, and programmatic direction in support of decision-making across the entire portfolio. Most recently, Ms. Kilgore was Acting Deputy JPEO for Assisted Acquisition/ Medical (COVID-19 Response), where she led the DoD's COVID-19 Joint Assisted Acquisition efforts in support of the Department of Health and Human Services.

Ms. Kilgore brings over 30 years of combined industry and civilian service experience to her role. She was previously Deputy Joint Project Manager (JPM) for CBRN Medical where she provided overall direction and guidance for the Medical Portfolio. Prior positions at JPM CBRN Medical included Chief of Staff; Joint Product Lead of Platforms for Rapid Integrated Solutions for Medical Countermeasures; Joint Product Manager, Joint Vaccine Acquisition Program; Primary Manager, Filovirus Vaccine Program; and Science Manager, Medical Identification and

Treatment Systems. She served as Acting Medical Director, Office of Deputy Assistant Secretary of Defense for Chemical and Biological Defense. Prior to joining the Department of Defense, Ms. Kilgore was Senior Manager of Virology and Safety Operations for Panacos Pharmaceuticals.

Ms. Kilgore holds a Bachelor of Science from Mount Saint Mary's College, a Master of Science from Hood College, and a Master of Science from National Defense University. She attended the Defense Acquisition University's Advanced Program Management Course and Advanced Leadership Course at the Army Management Staff College.

Ms. Kilgore is a member of the Army Acquisition Corps, DAWIA Level III certified in Program Management, and a Project Management Professional. Her awards include the Commander's Award for Civilian Service, Excellence in Federal Career Award, and Superior Civilian Service Award.



Mr. Gordon Graham CHIEF OF STAFF

MR. GORDON GRAHAM

Mr. Gordon Graham is the Chief of Staff for the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND). In this role, he provides expertise in acquisition, budget, program management, and directorate staff management. Mr. Graham works across functional areas to build consensus and ensure JPEO-CBRND programs have the resources required to support delivery of CBRN defense capabilities to the Warfighter and the nation.

Mr. Graham's work experience includes 34 years of combined logistics, acquisition and program management experience gained during active duty and civilian service. He was commissioned from the Reserve Officer Training Corps at The University of North Carolina Wilmington in 1988. He was a Distinguished Military Graduate and received a Bachelor of Arts in Psychology. Mr. Graham also holds a Master of Science in General Administration from Central Michigan University and a Master of Arts in Procurement

and Acquisition Management from Webster University. His military education includes the Ordnance Officers' Basic Course, the Combined Logistics Officers' Advanced Course, the U.S. Navy Explosive Ordnance Disposal (EOD) Course, the Combined Arms and Services Staff School Course, Army Command and General Staff College, and Defense Systems Management College Program Manager's Course. He is currently Advanced (Level III) certified in Program Management.

Mr. Graham's military awards include the Legion of Merit Medal & Award presented at his retirement. Other awards include the Bronze Star, Defense Meritorious Service Medal (two oak leaf clusters), Army Meritorious Service Medal (three oak leaf clusters), Army Commendation Medal (four oak leaf clusters), Army Achievement Medal (two oak leaf clusters), Army Basic Airborne and EOD Badges, and Office of the Secretary of Defense Staff Badge.



Mr. Wyatt Ulrich
DIRECTOR FOR ACQUISITION
& SYSTEMS MANAGEMENT

MR. WYATT ULRICH

Mr. Wyatt Ulrich is the Director for Acquisition and Systems Management (DASM) for the JPEO-CBRND, serving as a key senior advisor to improve acquisition rigor and discipline across the JPEO-CBRND's acquisition portfolio. In this role. Mr. Ulrich oversees and implements acquisition policy within the JPEO-CBRND and supports the JPMs and JPLs as they prepare for milestone decisions while bringing together multi-functional teams from across the JPEO-CBRND to resolve issues and challenges prior to a milestone decision. Mr. Ulrich leverages over 25 years of experience in strategy, analysis, and evaluation of DoD and CBRN Defense programs to integrate acquisition activities at the portfolio level, and coordinate and communicate with senior acquisition leaders across the JPEO, Army, the Office of the Secretary of Defense, and other CBRN Defense stakeholders.

Most recently, he served as the Director of CBRN Analytics for the JPEO-CBRND, where he led a diverse team in the performance of activities to implement portfolio insight efforts across the JPEO-CBRND. He led the action steps and created the overarching vision and establishment of time phased milestones for JPEO implementation of its data management activities, Army Acquisition Reform initiatives, advanced analytics, and adoption of a continuous and persistent portfolio insight process. Mr. Ulrich holds a Master's in Operations Research from the George Washington University and a Bachelor of Science from Towson University. He is a certified Program Manager (PM) Level IV (Advanced) and has received the Department of Army Superior Civilian Service Award and Commander's Award for Civilian Service.



Ms. Rachel Overman
JOINT WARFIGHTER
CONCEPT INTEGRATOR

MS. RACHEL OVERMAN

Ms. Rachel Overman is the Joint Warfighter
Concept Integrator for the JPEO-CBRND. In
this role, she serves as an advisor to JPEOCBRND senior leaders across the portfolio on
requirements generation and synchronization
with acquisition processes. She also conducts
strategic analysis to better understand portfolio
alignment and gaps and interfaces with wholeof-government counterparts to ensure JPEO
capabilities meet the needs of the Joint Force
and support the National Defense Strategy. Prior
to her current role, Ms. Overman served as the
Deputy Product Manager for Biological Defense
Pharmaceuticals within the Joint Project Manager
for CBRN Medical.

Ms. Overman has held many programmatic roles within the Department of Defense, from engineer to Assistant Project Manager, up to Product Manager, as well as working for the Assistant Secretary of the Army (Acquisition,

Logistics and Technology) at Headquarters as a Department of the Army Systems Coordinator for ACAT I programs, Defense Business systems, and Medical Programs for the U.S. Army. She has experience working for many Program Executive Offices and Commands including the U.S. Special Operations Command, PEO Simulation, Training and Instrumentation, PEO Enterprise Information Systems, and the PEO Command, Control, Communications, Computers and Intelligence. Ms. Overman holds a Bachelor of Science degree in Computer Engineering from the University of Central Florida and a Master of Science degree in Program Management from the University of Maryland. She is also a graduate of the U.S. Army Competitive Development Group/Army Acquisition Fellowship, a member of the Army Acquisition Corp, and is Level III certified in Program Management and Engineering.

JOINT PROJECT MANAGER (JPM) AND JOINT PROJECT LEAD (JPL) DESCRIPTIONS



JPM CBRN PROTECTION

JPM CBRN Protection develops, fields and sustains CBRN protection and mitigation capabilities for the warfighter and the Nation. They develop next-generation physical protection capabilities, like masks and suits, that reduce physiological burden and enhance protection against emerging threats. JPM CBRN Protection also develops contamination mitigation technologies, including decontamination systems, to significantly decrease the time and materials required to decontaminate personnel and equipment.



JPM CBRN MEDICAL

JPM CBRN Medical facilitates the advanced development and acquisition of medical solutions, such as nerve agent antidotes and diagnostic systems, to combat CBRN and emerging threats. They deliver safe, effective, and affordable medical solutions to counter threats and enable the Joint Force to fight and win in any denied environment. JPM CBRN Medical products span the continuum of medical care, providing an integrated layered medical defense, to include prevention, diagnosis, and treatment.



JPM CBRN SENSORS

JPM CBRN Sensors develops, fields and sustains CBRN sensors, reconnaissance systems, and mobile laboratory capabilities. They provide integrated early warning by bringing together the products in their portfolio along with robotics and autonomous systems, decision support tools, machine learning and artificial intelligence to provide situational awareness and understanding of CBRN threats.



JPM CBRN SPECIAL OPERATIONS FORCES

JPM CBRN SOF rapidly acquires and equips
Special Operations and Special Purpose
Forces with critical CBRN defense equipment
necessary for mission success. Their focus is to
further develop crucial technologies necessary
for survival and unimpeded operations in
denied CBRN environments. These technologies
are transitioned to other Programs of Record
as appropriate to enhance the capability of the
Joint Force.



JPL CBRN INTEGRATION

JPL CBRN Integration is responsible for the total lifecycle of enterprise information technology systems and provides enterprisewise CBRN threat warning and reporting, hazard prediction, and decision support capabilities for the collection, analysis, and dissemination of CBRN defense information. These capabilities provide commanders with more complete situational understanding of all the threats in the battlespace by integrating CBRN defense systems with traditional defense systems.



JPL CBRND ENABLING BIOTECHNOLOGIES

JPL CBRND Enabling Biotechnologies enables the rapid development, manufacture, and fielding of safe and effective medical solutions across the full product spectrum, including development, clinical trials, manufacturing, and validated biological threat detection materials. These solutions support programs across the JPEO-CBRND portfolio by lowering product development risks and accelerating product maturity.

JPEO-CBRND ORGANIZATION LEADERSHIP



Mr. Darryl Colvin



Deputy JPEO Ms. Nicole Kilgore



Chief of Staff Mr. Gordon Graham



Director for Acquisition & Systems Management Mr. Wyatt Ulrich



Joint Warfighter Concept Integrator Ms. Rachel Overman

Joint Project Managers (JPM)



JPM CBRN Protection Mr. Steven Batts



JPM CBRN Medical
COL Matthew Clark



JPM CBRN Sensors COL Robert Carter III



JPM CBRN Special Operations Forces Ms. Lindsay Longobardi

Joint Project Leads (JPL)



JPL CBRN Integration Mr. Paul Gietka



JPL CBRND Enabling Biotechnologies Mr. Bruce Goodwin

JPEO-CBRND STRATEGIC GOALS



STRATEGIC GOAL 1

Achieve CBRN Defense integration, interoperability, and interdependence across all warfighting domains and functions.

STRATEGIC GOAL 2

Foster an environment that seeks innovative enterprise solutions across industry, academia, and warfighters that is agile, versatile and efficient.

STRATEGIC GOAL 3

Provide indispensable value to the warfighter, DoD, Congress, the Nation and our Allies and Partners.

UNCOMPROMISING INTEGRITY

Perform your work to the highest standard. Be honest and transparent, even when it's difficult. Be accountable for your words and your actions. Choose to do what's right every time.



COMMITTED TO EXCELLENCE

Our Warfighters deserve the best we can deliver, so strive for greatness in all your work. Keep your mind open to new and different ways of doing things. Be willing to accept feedback and seek opportunities to learn and improve.



RESPECT FOR ALL

Each member of the JPEO family has their own values, experiences, and identities. Take that into consideration in all your interactions. Treat yourself and others with dignity and fairness.



ALWAYS READY

No matter what challenges we face, always be ready to adapt and respond. We can accomplish anything when we work as a team.



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Advanced System for Protection and Integrated Reduction of Encumbrances (ASPIRE)

Description: ASPIRE will provide respiratory and ocular protection against Chemical, Biological, Radiological and Nuclear threats that allows near normal operations by minimizing or eliminating physical and psychological burden and increasing Warfighter lethality.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)



Advanced System for Protection and Integration Reduction of Encumbrances - Enhanced Biological Defense (ASPIRE-ENBD)

Description: Advanced System for Protection and Integrated Reduction of Encumbrances - Enhanced Biodefense (ASPIRE-ENBD) will develop and evaluate a half-mask / bio-mask that will provide respiratory protection against biological agents while minimizing physical and psychological burden and increasing Warfighter lethality.

AAF Pathway:

Undetermined (UND)

Acquisition Category:

Acquisition Phase:

-



Autonomous Decontamination System (ADS)

Description: ADS will provide a semi-autonomous supported capability that relies on precision detection capabilities, modernized decontaminants, and robotics to allow a Chemical, Biological, Radiological and Nuclear decon squad to provide thorough decontamination on critical mission equipment.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)

Projected Activities:

FY25: Milestone AFY27: Milestone B



Biological Containment Isolation System - Enhanced Biological Defense (BCIS-ENBD)

Description: BCIS-ENBD will provide a ground-based isolation area for personnel infected or suspected of infection of biological organism or infectious disease and allows medical staff to monitor and/or treat while decreasing the risk of infecting other patients and staff.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



Chemically Protected Deployable Medical System (CP DEPMEDS)

Description: Chemically Protected Deployable Medical System (CP DEPMEDS)
Reconfiguration and Tech Refresh effort reestablishes the field hospitals' capability to sustain continuous medical operations in Chemical Biological Radiological environments, unencumbered by Individual Protective Equipment for medical personnel and patients.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Decontamination Family of Systems Contamination Indicator Decontamination Assurance System Nerve (DFoS CIDAS Nerve)

Description: DFoS Contamination Indicator Decontamination Assurance System Nerve (DFoS CIDAS Nerve) will visually indicate the presence and location of trace amounts of traditional and non-traditional nerve agents on tactical vehicles, crew-served weapons, and individual weapons pre- and post-decontamination.

Benefits to Warfighter: Reduces the logistics burden (e.g., water, manpower, decontaminants) of decontamination by indicating presence and location of trace nerve agents on surfaces pre- and post-decontamination. Apply pre-decontamination operations to indicate surface contamination and prioritize/segregate contaminated assets and in post-decontamination operations as visible verification of the decontamination process Family of Systems – each includes applicator and indicator.

Contractor(s):

• FLIR Detection, Inc. (Prime)

Program Status:

• FY11: Milestone A

FY15: Milestone B

• FY20: Milestone C

Projected Activities:

• FY25: Initial Operational Capability

FY28: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Joint Expeditionary Collective Protection (JECP)

Description: Joint Expeditionary Collective Protection (JECP) is a family of systems that will allow the application of Collective Protection to transportable soft-side shelters, enclosed spaces of opportunity, and in remote austere locations as a standalone resource.

Benefits to Warfighter: JECP is a family of systems that protects personnel and infrastructure from chemical, biological, radiological and toxic industrial material contamination on the battlefield and during military operations other than war.

Contractor(s):

- Leidos (Prime)
- Production Products Manufacturing & Sales Co. Inc. (Prime)

Program Status:

FY06: Milestone AFY08: Milestone BFY13: Milestone C

Projected Activities:

FY24: Initial Operational CapabilityFY25: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Joint Service Aircrew Mask Rotary Wing (JSAM RW)

Description: Joint Service Aircrew Mask Rotary Wing (JSAM RW) variant provides head, eye, respiratory and Chemical and Biological protection for general purpose rotary wing aircrew except the AH-64 Apache and the V-22 Osprey.

Benefits to Warfighter: The JSAM RW is capable of being donned and doffed while in flight and decreases thermal burden compared to legacy systems. The mask allows Warfighters to survive and maintain operations in a chemical and biological threat environment.

Contractor(s):

• Avox Systems Inc. (Prime)

Program Status:

- FY00: Milestone AFY03: Milestone B
- FY15: Milestone C
- FY19: Initial Operational Capability

Projected Activities:

• FY26: Full Operational Capability



Joint Service Aircrew Mask Strategic Aircraft (JSAM SA)

Description: Joint Service Aircrew Mask Strategic Aircraft (JSAM SA) mask will provide individual respiratory, ocular, and percutaneous protection of chemical and biological warfare agents, and select toxic industrial chemicals for United States (U.S.) Army, U.S. Air Force, U.S. Navy, and U.S. Marine Corps strategic aircrew.

Benefits to Warfighter: Allows fixed-wing aircrew of non-ejection aircraft to survive and maintain operations in a chemical and biological threat environment.

Program Status:

- FY17: Milestone C
- FY21: Initial Operational Capability

Projected Activities:

• FY25: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)



Non Medical Personal Protective Equipment (NON MED PPE)

Description: Non-Medical Personal Protective Equipment (NON-MED PPE) will procure commercial off the shelf equipment to allow the Operational Force to maintain a 90-day contingency supply of NON-MED PPE.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

_

Acquisition Phase:

-



Portable Patient Transport System - Enhanced Biological Defense (PPTS-ENBD)

Description: Portable Patient Transport System - Enhanced Biological Defense (PPTS-ENBD) will provide a biocontainment isolation system to safely transport personnel infected or suspected of infection from a biological threat.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Service Equipment Decontamination System (SEDS)

Description: Service Equipment Decontamination System (SEDS), when employed with other Integrated Contamination Mitigation Systems, will provide the Joint Force with the capability to recover contaminated equipment and maximize tactical flexibility and fighting strength by reducing the need for Personal Protective Equipment.

Benefits to Warfighter: Provide contamination mitigation capabilities for hardened, sensitive and/or critical equipment that have been exposed to chemical and biological contamination. Recover contaminated equipment and reduce the need for protective equipment to maximize tactical flexibility and fighting strength.

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Program Status:

- FY21: Milestone A
- FY23: Milestone B

Projected Activities:

- FY26: Milestone C
- FY28: Initial Operational Capability
- FY29: Full Operational Capability



Shipboard Isolation System (SIS)

Description: Shipboard Isolation System (SIS) will provide the capability to temporarily isolate or quarantine personnel to prevent the spread of a biological threat and safely evacuate patients for transfer off the ship. Capability will contain and medically monitor/treat patients while protecting embarked crew and personnel.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Technology Maturation & Risk Reduction (TMRR)

Tactical Contamination Mitigation System (TCMS)

Description: TCMS) will be employed during decontamination operations as far forward as possible to reduce Chemical and Biological contamination on vehicles, weapons, and individual combat equipment to the lowest possible levels, which permits safe reduction of Mission Oriented Protective Posture levels.

Benefits to Warfighter: Forward deployed contamination mitigation capability that allows for expeditious execution of decontamination and results in reduced Mission Oriented Protective Posture (MOPP).

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Program Status:

FY23: Milestone A

Projected Activities:

• FY25: Milestone B

FY27: Milestone C



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Uniform Integrated Protection Ensemble Family of Systems Air (UIPE FoS Air)

Description: Uniform Integrated Protection Ensemble Family of Systems Air (UIPE FoS Air) will provide protection from operationally relevant traditional, non-traditional, and advanced chemical, biological, radiological, and nuclear/Toxic Industrial Materials threats likely to be encountered during joint force operations.

Benefits to Warfighter: UIPE FoS Air is intended to reduce physiological burden and weight compared to current aircrew protective garments, shielding aircrew personnel conducting operations in a CBRN threat environment. When integrated with existing (or codevelopmental) flight equipment and individual protective equipment, the UIPE FoS Air will provide full-body percutaneous protection as a part of an ensemble for all personnel who serve as aircrew for aviation platforms.

Contractor(s):

• READYONE INDUSTRIES, INC. (Prime)

Program Status:

- FY17: Milestone A
- FY20: Milestone C
- FY22: Initial Operational Capability
- FY22: Full Operational Capability

Projected Activities:

- FY24: Initial Operational Capability
- FY29: Full Operational Capability



Uniform Integrated Protection Ensemble Family of Systems Footwear (UIPE FoS Footwear)

Description: UIPE FoS Footwear will give the Warfighter durable, flame resistant, percutaneous protection from operationally relevant traditional, non-traditional, and advanced Chemical, Biological, Radiological and Nuclear/Toxic Industrial Material threats encountered during joint force operations.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT II

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

Description: Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP) will develop solutions that provide the broad spectrum of users with individual, percutaneous protective equipment that can be employed in a contaminated environment with minimal to no degradation in performance.

Benefits to Warfighter: Provides all general-purpose Service Members with improved Chemical and Biological (CB) protection, reduced thermal burden in all combat theaters and an improved fit, function and integration with current combat kits and equipment as compared to legacy systems.

Contractor(s):

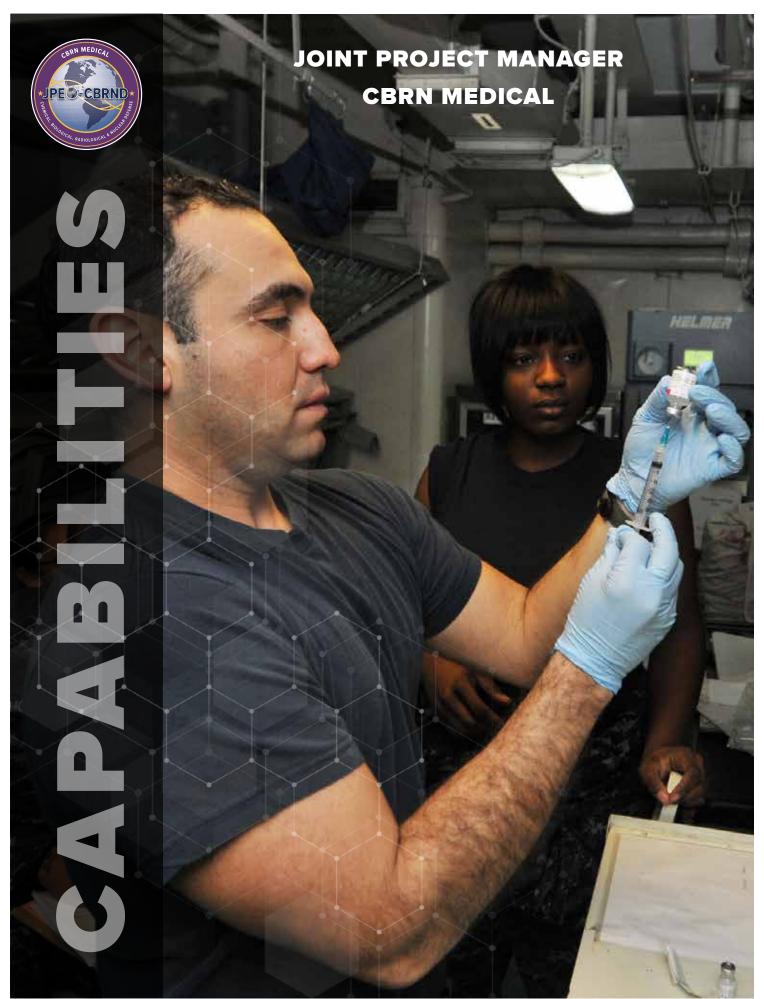
• READYONE INDUSTRIES, INC.

Program Status:

• FY21: Milestone B

Projected Activities:

- FY24: Milestone C
- FY28: Initial Operational Capability
- FY36: Full Operational Capability



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Advanced Anticonvulsant System (AAS)

Description: Advanced Anticonvulsant System (AAS) advanced development treats seizures including those caused by exposure to nerve agents via intramuscular injection of midazolam in an autoinjector.

Benefits to Warfighter: AAS is an improved therapeutic regimen utilizing midazolam administered in an autoinjector. Midazolam is more water-soluble and stops seizures, including those triggered by nerve agent exposure, faster than diazepam which is contained in the currently fielded Convulsant Antidote Nerve Agent (CANA) autoinjector.

Contractor(s):

RAFA LABORATORIES LTD. (Prime)

Program Status:

FY01: Milestone AFY07: Milestone BFY13: Milestone C

• FY24: Initial Operational Capability

Projected Activities:

• FY25: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)



Advanced Differential Diagnostics (ADD)

Description: Advanced Differential Diagnostics (ADD) will provide the capability to perform presumptive disease classification and differentiation of unknown biological threats, during early stages of illness, suitable for use at the lowest Roles of Care.

Benefits to Warfighter: ADD will provide timely feedback for early medical intervention in operational environments by determining the nature of infection in symptomatic patients, identifying warfighters who may be infectious, and assessing severity in early stages of illness.

Program Status:

• FY24: Milestone A

Projected Activities:

FY26: Milestone BFY28: Milestone C

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)

Antiviral Oral Therapeutics Program (AVO TX)

Description: Antiviral Oral Therapeutic (AVO TX) will develop and deliver Food and Drug Administration approved oral broad spectrum antiviral therapeutic for the warfighter.

Benefits to Warfighter: The AVO TX product is a treatment for the warfighter exposed to or infected with alphavirus infection. This product is lifesaving to the warfighter and provides warfighters with the ability to return to the fight.

Projected Activities:

• FY25: Milestone B





AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Antiviral Therapeutics (AV TX)

Description: Antiviral Therapeutics (AV TX) Filovirus will evaluate a broad-spectrum antiviral therapeutic to treat against Marburg virus and other filoviruses.

Benefits to Warfighter: The AVTX program delivers non-clinical data to determine the human effective dose (HED) and drug activity in the body to inform a Clinical Practice Guideline (CPG) for use of Remdesivir as a treatment against MARV infections. Additionally, this product provides lifesaving capabilities for use as a PAN-FILO treatment.

Contractor(s):

- Battelle Memorial Institute (Prime)
- Gilead Sciences, Inc. (Prime)

Program Status:

• FY09: Milestone A

• FY19: Milestone B



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT II

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Botulinum Monoclonal Antibodies (BOT MAB)

Description: Botulinum Monoclonal Antibodies (BOT MAB) will counter exposure to Botulinum neurotoxin serotypes A and B utilizing advanced platform technologies.

Benefits to Warfighter: Effective anti-BoNT mAbs will protect early entry, quick reaction, contingency, or special mission forces deploying to an area of responsibility with a credible threat of BoNT exposure. There is no FDA-approved prophylaxis MCM against BoNT. Development of MCMs to mitigate the BoNT threat will fill an essential capability gap by protecting the warfighter after exposure to BoNT, thus enabling their recovery from a biowarfare attack and sustaining mission lethality in a contaminated environment.

Contractor(s):

- Resilience Government Services, Inc. (Prime)
- ADVANCED TECHNOLOGY INTERNATIONAL

Program Status:

FY21: Milestone AFY22: Milestone B



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)

Botulinum Toxin Therapeutic (BOT TX)

Description: Botulinum Toxin Therapeutic (BOT TX) will develop and deliver a Food and Drug Administration-approved treatment for the warfighter to treat respiratory depression caused by botulinum toxin exposure.

Benefits to Warfighter: The BOT TX program is developing a therapeutic for the warfighter following exposure or intoxication of BoNT. This product is lifesaving by delaying progression of respiratory failure in intoxicated patients.

Projected Activities:

FY25: Milestone A



Consolidated Nerve Agent Treatment System (CNATS)

Description: Consolidated Nerve Agent Treatment System (CNATS) will develop and deliver a Food and Drug Administration-approved autoinjector that combines nerve agent treatments, including an improved oxime, to reduce the number of autoinjectors carried by Service Members.

Benefits to Warfighter: The CNATS will increase survivability of the warfighter and will develop and deliver a multi-drug autoinjector by leveraging already, or soon to be approved, platforms to unencumber the warfighter to treat when faced with a nerve agent exposure.

Projected Activities:

 FY26: Milestone A FY30: Milestone B FY35: Milestone C

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Improved Nerve Agent Treatment System-Centrally Acting (INATS CA)

Description: Improved Nerve Agent Treatment System Centrally Acting (INATS CA) advanced development provides an enhanced capability treatment regimen offering greater protection over a broader spectrum of toxic nerve agents and improves the performance of fielded Food and Drug Administration approved medical countermeasures.

Benefits to Warfighter: A centrally-acting anticholinergic drug, like scopolamine, is an important therapy that will increase therapeutic efficacy of countermeasures over atropine alone, especially in brain tissue; reduce the logistical burden for additional atropine and offer greater protection over a broader spectrum of toxic nerve agent threats, such as Fourth Generation Agents (FGA). SNAPP modernization will increase compliance and operational utility as well as provide a PB extended release (PB ER) formulation.

Contractor(s):

(Prime)

ADVANCED TECHNOLOGY INTERNATIONAL Amneal Pharmaceuticals of New York, LLC (Prime)

ADVANCED TECHNOLOGY INTERNATIONAL

Program Status:

• FY04: Milestone A FY22: Milestone B

Projected Activities:

• FY27: Milestone C

• FY28: Initial Operational Capability

• FY31: Full Operational Capability



AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Modernization Medical (MOD MED)

Description: Modernization Medical (MOD MED) supports improvements to fielded systems and supports post-fielding Food and Drug Administration requirements for devices and combination products.

Benefits to Warfighter: The Modernization Medical (MOD MED) program maintains fielded capabilities and modernizes medical countermeasures, including FDA-approved autoinjectors and diagnostic equipment, through developmental engineering efforts to sustain technologies and address emerging threats.

Contractor(s):

BioFire Defense, LLC (Prime)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Next Generation Diagnostics System 2 Chemical Diagnostics (NGDS 2 CHEMDX)

Description: Next Generation Diagnostic System 2 - Chemical Diagnostics (NGDS 2 ChemDx) will provide far-forward, immediate medical diagnostic capability for suspected nerve agent exposure.

Benefits to Warfighter: The NGDS 2 ChemDX provides the far-forward warfighter with the immediate capability to inform diagnosis of potential NA exposure, including non-traditional agents, before outward symptoms are present. The NGDS 2 ChemDX provides the capability to inform treatment and medical care, and the Commander's force protection decisions, thereby increasing overall likelihood of individual and unit survival.

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Projected Activities:

FY25: Milestone C

• FY26: Initial Operational Capability

• FY28: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Next Generation Diagnostics System 2 Man Portable Diagnostic System (NGDS 2 MPDS)

Description: Next Generation Diagnostic System 2 Man Portable Diagnostic System (NGDS 2 MPDS) is a portable diagnostic device and assays to diagnose diseases in austere, far-forward environments.

Benefits to Warfighter: The NGDS 2 MPDS will provide easy to-use tests for earlier patient diagnosis far-forward across the range of military operations, and improve decision support for treatment, and evacuation, and quarantine, in order to help mitigate the effects of exposure to unknown infectious disease and biological agents.

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Program Status:

• FY19: Milestone B

Projected Activities:

FY26: Milestone C



Reactivating Nerve Agent Treatment System (RNATS)

Description: Reactivating Nerve Agent Treatment System (RNATS) will develop and deliver a Food and Drug Administration-approved improved oxime in a vial.

Benefits to Warfighter: A reactivator, like HI-6, is an important therapy that will offer greater survivability over a broad spectrum of nerve agent threats, including emerging chemical threats and fourth generation agents (FGAs).

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Projected Activities:

FY25: Milestone AFY26: Milestone B

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Materiel Solution Analysis (MSA)



AAF Pathway: Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:

Smallpox Antiviral PEP (SPX AV PEP)

Description: Smallpox Antiviral PEP (SPX AV PEP) will expand the scope of the TPOXX product to include post-exposure prophylaxis for smallpox and establish a stockpile of TPOXX for Department of Defense use.

Benefits to Warfighter: This effort will complete all required non-clinical and clinical studies necessary to submit a supplemental New Drug Application (sNDA), seeking approval of TPOXX® for PEP to close the "window of vulnerability" by providing a treatment option for smallpox after it is too late for vaccination to be effective, and prior to clinically-evident disease. If needed, the Warfighter will have doses of IV and oral TPOXX immediately ready for distribution.

Contractor(s):

- SIGA TECHNOLOGIES (Prime)
- MURTECH, INC.
- ADVANCED TECHNOLOGY INTERNATIONAL



Surveillance and Pathogen Characterization - Enhanced Biological Defense (SPCHAR-ENBD)

Description: SPCHAR-ENBD, through its pathogenicity studies, will investigate disease progression and measure biomarkers of selected Chemical, Biological, Radiological, and Nuclear threat agents, and/or verify usefulness of models to inform medical defense against biological warfare threats.

Benefits to Warfighter: SPCHAR delivers the necessary assay refinement and validation that is critical for delivery of medical countermeasures to the warfighter.

Contractor(s):

GIGAGEN, INC. (Prime)

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:



Vaccine Acceleration By Modular Progression - Enhanced Biological Defense (VAMP-ENBD)

Description: Vaccine Acceleration by Modular Progression - Enhanced Biological Defense (VAMP-ENBD) will leverage lessons learned from the COVID-19 pandemic response to improve future emergency response and create interim vaccine capabilities.

Benefits to Warfighter: VAMP program will expedite prototype vaccine MCM delivery by advancing and accelerating development of existing vaccine platforms.

Contractor(s):

- BAVARIAN NORDIC A/S. (Prime)
- LUMEN BIOSCIENCE INC (Prime)
- ADVANCED TECHNOLOGY INTERNATIONAL
- DYNAVAX TECHNOLOGIES CORPORATION

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:



Vaccine Storage and Stability Testing (VSST)

Description: Vaccine Storage and Stability Testing (VSST) utilizes Congressional directed funding for the Botulinum and Plague vaccines to maintain the existing vaccine material in Good Manufacturing Practice storage and initiates an adaptive clinical trial in support of potential future emergency response.

Contractor(s):

- DYNAVAX TECHNOLOGIES CORPORATION
 DynPort Vaccine Company LLC (Prime) (Prime)

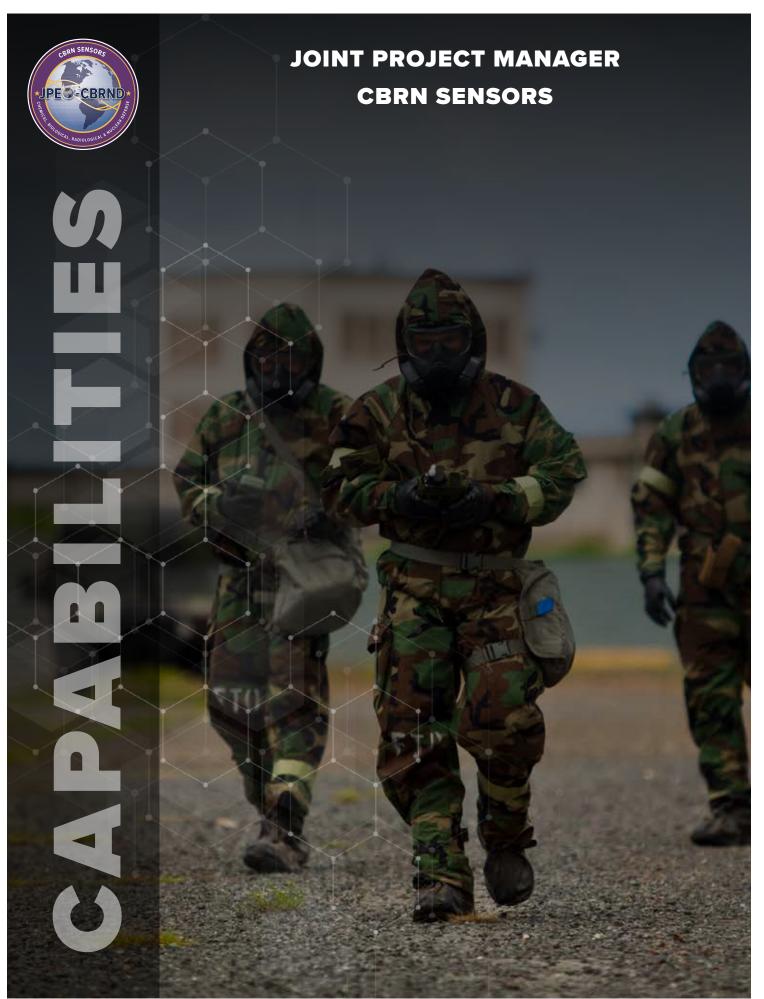
 - FISHER BIOSERVICES INC. (Prime)

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:



JPM CBRN SENSORS



Aerosol Vapor Chemical Agent Detector (AVCAD)

Description: Aerosol Vapor Chemical Agent Detector (AVCAD) is filling critical gaps in current Joint Force chemical sensor capabilities, in the areas of liquid, solid and dusty aerosol Chemical Warfare Agent detection, and detection of specific advanced threats/Non-Traditional Agents.

Benefits to Warfighter: AVCAD provides a man-portable, sensitive aerosol and vapor chemical detection capability.

Contractor(s):

• Smiths Detection Inc. (Prime)

Program Status:

FY14: Milestone AFY18: Milestone B

• FY23: Milestone C

Projected Activities:

• FY27: Initial Operational Capability

• FY32: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Operations & Support (O&S)

Analytical Laboratory System Modification (ALS MOD)

Description: Analytical Laboratory System Modification (ALS MOD) addresses critical analytical equipment obsolescence and system functionality for NGB WMD-CSTs. It is modular, scalable, and adaptable to various environmental conditions and supports the specific mission of CONOPS.

Benefits to Warfighter: The ALS MWO addresses ALS Increment 1 obsolescence issues and will optimize the Warfighter's ability to analyze data by providing enhanced human factors and engineering controls, a larger shelter and work space, upgraded software, larger databases to help identify unknowns, and improved process flow integration.

Program Status:

• FY23: Full Operational Capability

JPM CBRN SENSORS



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT II

Acquisition Phase:

Production & Deployment (P&D)

Chemical Biological Radiological Nuclear Dismounted Reconnaissance Systems (CBRN DRS)

Description: CBRN Dismounted Reconnaissance System (CBRN DRS) provides CBRN and EOD Warfighters with a comprehensive suite of detection/identification, protection, sample collection, hazard marking, decontamination, and support capabilities during dismounted reconnaissance, sensitive site assessment and render safe missions.

Benefits to Warfighter: CBRN DR SKO provides a comprehensive, all-hazards dismounted reconnaissance and site assessment capability to protect against, detect, and decontaminate chemical warfare agents, biological warfare agents, toxic industrial chemicals, and other hazards. SMPs will provide enhanced detection, protection, and situational awareness.

Contractor(s):

- FLIR DETECTION, INC. (Prime)
- L2 Defense, Inc.

Program Status:

FY11: Milestone BFY13: Milestone C

· FY22: Full Operational Capability

Projected Activities:

• FY24: Full Operational Capability



Chemical Indicator (CIND)

Description: The Colorimetric Indicator (C-IND) provides low-burden, higher confidence liquid, solid and vapor hazard detection capabilities for traditional and emerging chemical hazards.

Projected Activities:

FY25: Milestone AFY27: Milestone B

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)

JPM CBRN SENSORS



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Common Analytical Laboratory System Field Confirmatory Analytical Capability Set (CALS FC ACS)

Description: Common Analytical Laboratory System Field Confirmatory Analytical Capability Set (CALS FC ACS) is a common suite of CB COTS/GOTS to support DoD field analytic units. FC ACS results will assist and/or support Commanders or local authority decisions on protection, treatment, decontamination and planning of future operations.

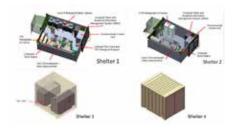
Benefits to Warfighter: Information produced by FC ACS will assist commanders or the local authority with managing and mitigating the effects of a CBR attack or disaster by providing the ability to rapidly develop a common operating picture to determine the appropriate course of action.

Program Status:

• FY17: Milestone C

Projected Activities:

FY26: Initial Operational CapabilityFY27: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Common Analytical Laboratory System Theater Validation Integrated System (CALS TV IS)

Description: Common Analytical Laboratory System Theater Validation Integrated System (CALS TV IS) integrates a common suite of CB COTS/GOTS to provide a common, modular, and transportable/mobile system to support USA AML and CARA Units and provide a high level of confidence in results via orthogonal technologies and expanded suite.

Benefits to Warfighter: The CALS TVIS will optimize the Warfighter's ability to analyze environmental samples by providing a mobile laboratory capable of providing Theater Validation results against Chemical and Biological threats. The system includes two large shelters, which gives the user ample space to perfy24: Reassess technology maturity neering controls in order to help identify unknown and prand feasibility of meeting validated samples for CALS analysis.

Program Status:

FY20: Milestone C



Compact Vapor Chemical Agent Detector (CVCAD)

Description: Compact Vapor Chemical Agent Detector (CVCAD) is a man-worn, mounted, or unmanned robotic capability for the detection of chemical hazards.

Benefits to Warfighter: CVCAD alerts Warfighters to the presence of chemical vapor hazards and is applicable to man-worn and unmanned applications.

Contractor(s):

- Collins Aerospace
- FLIR DETECTION, INC.

Program Status:

FY14: Milestone A

- · General Electric
- N5 Sensors, Inc

Projected Activities:

• FY24: Milestone B

AAF Pathway:

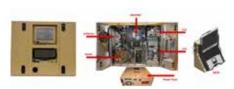
Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Technology Maturation & Risk Reduction (TMRR)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Enhanced Maritime Biological Detection (EMBD)

Description: EMBD is a technology refresh to the JBPDS for the USN. It will provide an automated biological point detection capability to detect, collect & identify biological warfare agents and improved detection capability while increasing reliability and maintainability and lowering support costs over JBPDS.

Benefits to Warfighter: Enhanced Maritime Biological Detection (EMBD) is a next generation biological detection capability being fielded to the US Navy. EMBD increases the probability of detection of BWAs, reduces false alarms, reduces hardware failure rates and increases system reliability, availability and maintainability. EMBD's improved detection sensitivity and background discrimination provides the Navy the ability to "detect to inform" which will reduce the number of contaminated ships and minimize casualties.

Contractor(s):

• Chemring Sensors and Electronic Systems, Inc. (Prime)

Program Status:

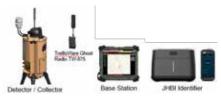
FY18: Milestone B

FY20: Milestone C

• FY23: Initial Operational Capability

Projected Activities:

• FY28: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT II

Acquisition Phase:

Production & Deployment (P&D)

Joint Biological Tactical Detection System (JBTDS)

Description: Joint Biological Tactical Detection System (JBTDS) provides the Joint Warfighter detection, collection, and identification capability of Biological Warfare Agent (BWA) aerosols to enhance battle space awareness, protect and preserve the forces, and support time sensitive force protection decisions.

Benefits to Warfighter: The JBTDS' ability to detect, collect, and identify biological warfare agents at very low concentrations gives Warfighters additional time to make decisions and take action to prevent or reduce the risk of exposure. Gold-standard molecular technology provides field confirmatory bioagent identification, enabling Commanders to rapidly support battlespace decisions.

Contractor(s):

 CHEMRING SENSORS AND ELECTRONIC SYSTEMS, INC. (Prime)

Program Status:

FY11: Milestone AFY14: Milestone BFY23: Milestone C

- MRIGLOBAL (Prime)
- BIOMEME, INC.

Projected Activities:

FY29: Initial Operational CapabilityFY32: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Joint Personal Dosimeter-Individual (JPD-I)

Description: The Joint Personal Dosimeter-Individual (JPD-I) is intended to replace DoDs legacy dosimeters (the Navys IM-270 and the Armys PDR-75 Series Systems). The JPD will provide a sensor to record and retrieve a Service members radiation exposure from occupational to tactical levels.

Benefits to Warfighter: JPD-I will support radiological defense missions, which include detecting and tracking the accumulated total dose an individual receives from ionizing radiation and recorded in the individuals' medical records. JPD-I provides near real time indication of total absorbed dose to the individual without the need to use a separate reader. Capable to achieve National Voluntary Laboratory Accreditation Program (NVLAP) to obtain Dose of Record for Warfighter's Medical Records.

Contractor(s):

• Mirion Technologies, Inc (Prime)

Program Status:

• FY17: Milestone C

• FY23: Initial Operational Capability

Projected Activities:

• FY32: Full Operational Capability



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Man-portable Radiological Detection System (MRDS)

Description: Man-portable Radiological Detection System (MRDS) increases capabilities to detect, localize, presumptively identify, and field-confirm the presence of Special Nuclear Material. It is networked to provide near real-time, tactical level situational awareness during CWMD Interdiction and Elimination operations.

Benefits to Warfighter: MRDS increases the Warfighter's awareness of radiological threats at the tactical level.

Contractor(s):

- Advanced Measurement Technology, Inc. (Prime)
- Bruker Detection Corp. (Prime)

Program Status:

- FY18: Milestone C
- FY23: Full Rate Production

- Leidos (Prime)
- Interfuze (Prime)

Projected Activities:

- FY24: Initial Operational Capability
- FY31: Full Operational Capability



Non-targeted Sequencing Identification System (NSIS)

Description: Non-Targeted Sequencing Identification System (NSIS) will provide the National Guard with a Metagenomic Sequencing capability within their WMD-CST formations.

Projected Activities:

- FY25: Milestone B
- FY27: Initial Operational Capability
- FY28: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Pre-Materiel Solution Analysis (Pre-MSA)



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT II

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU)

Description: NBC Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU) provides maneuver formations the ability to conduct mounted reconnaissance and surveillance missions of CBRN named areas of interest (NAIs).

Contractor(s):

- ADVANCED TECHNOLOGY INTERNATIONAL
 L2 Defense, Inc.
 (Prime)
 MRIGLOBAL
 - **Projected Activities:**
 - FY28: Initial Operational CapabilityFY42: Full Operational Capability



Radio Isotope Identification Detector (RIID)

Description: Radio Isotope Identification Detector (RIID) is a Family of handheld, ruggedized, and networked RIIDs that use different COTS technologies to locate, identify, and characterize radiological and nuclear (RN) material, including special nuclear materials.

Contractor(s):

SYMETRICA INC. (Prime)

Program Status:

- FY19: Milestone A
- FY22: Initial Operational Capability
- FY22: Milestone C

Projected Activities:

• FY27: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)



AAF Pathwav:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Radiological Detection System (RDS)

Description: Radiological Detection System (RDS) provides a standard DoD RDS that will replace the current radiation detection, indication, and computation (RADIAC) systems (AN/PDR-77, AN/VDR-2, ADM-300, and MFR Suite) used by the Joint Services and consolidate the capabilities into one joint solution.

Benefits to Warfighter: The RDS will provide Warfighters with an understanding of their total exposure to various types of radiation.

Contractor(s):

• Visionary Products Inc. (Prime)

Program Status:

- FY14: Milestone A
- FY23: Milestone C



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Screening Obscuration Module (SOM)

Description: Screening Obscuration Module (SOM) is a modular medium-area and duration screening obscuration capability that is located at the small element level of conventional force units and is employed at the tactical in a mounted or dismounted configuration.

Benefits to Warfighter: -Increases Soldier and Platform Survivability.

- -Degrades the enemy's ability to detect US targets.
- -Supports Mounted and Dismounted units

Contractor(s):

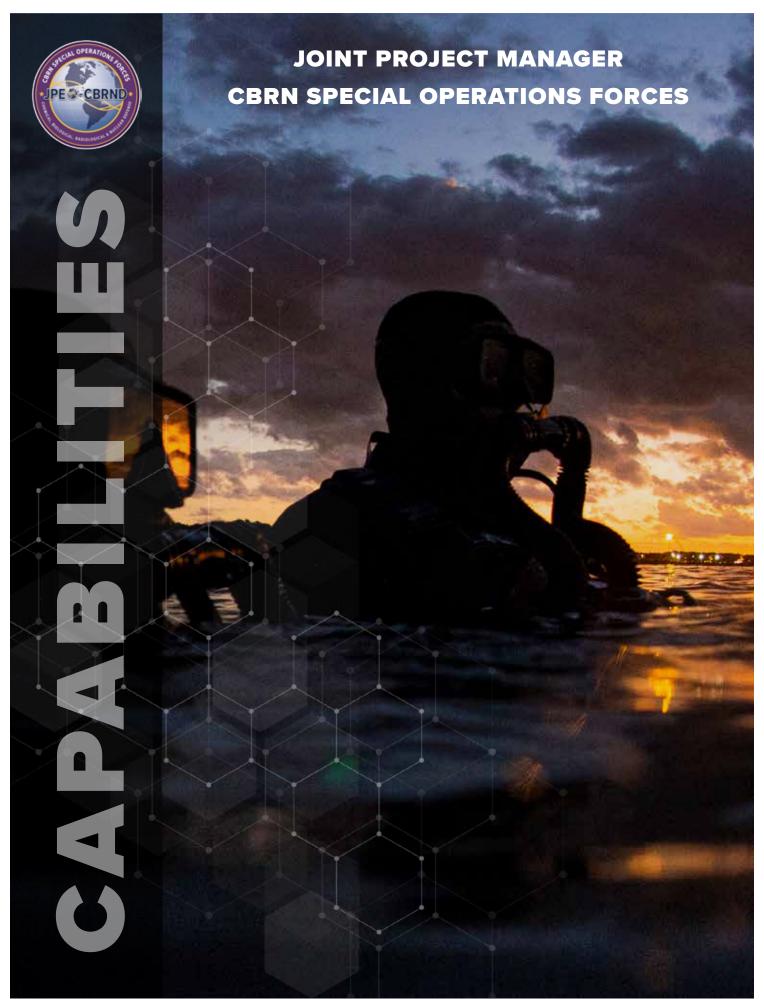
• L3HARRIS TECHNOLOGIES, INC. (Prime)

Program Status:

- FY06: Milestone A
- FY22: Milestone C

Projected Activities:

- FY24: Full Operational Capability
- FY24: Initial Operational Capability



JPM CBRN SPECIAL OPERATIONS FORCES



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

Critical Equipment Decontamination System (CEDS)

Description: CEDS will provide the capability to rapidly decontaminate Chemical and Biological agents from critical operational equipment to a level that allows re-use and without wearing protective equipment to quickly re-equip the force.

Benefits to Warfighter: Provides transportable system variants with the capability to rapidly decontaminate CB agents from critical operational equipment to a level that allows re-use and without wearing protective equipment to quickly re-equip the force maximizing tactical flexibility and fighting strength.

Contractor(s):

- ADVANCED TECHNOLOGY INTERNATIONAL (Prime)
- MRIGLOBAL (Prime)

Program Status:

FY21: Milestone AFY24: Milestone B

Projected Activities:

- FY25: Milestone C
- FY27: Initial Operational CapabilityFY28: Full Operational Capability



Far Forward Biological Sequencing (FFBS)

Description: FFBS system is a rapid handheld biological sequencing device that will identify Biological Warfare Agents to include emerging or engineered biological weapons/ threats on or near the objective. It will provide far-forward Special Operations Forces and Special Operation Task Forces the detect-to-inform capability.

Program Status:

• FY24: Milestone B

Projected Activities:

- FY26: Milestone C
- FY27: Initial Operational CapabilityFY28: Full Operational Capability

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT IV

Acquisition Phase:

Engineering & Manufacturing Development (EMD)

JPM CBRN SPECIAL OPERATIONS FORCES







Forward Area Mobility Spray System (FAMS-S)

Description: Forward Area Mobility Spray System (FAMS-S) will provide Special Operations Forces and SOF Task Forces a man-portable and mobile platform capable of rapidly decontaminating chemical and biological agents from the various vehicles or support equipment.

AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL

Projected Activities:

FY26: Initial Operational Capability









AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:

Special Purpose Unit Rapid Capability Development and **Deployment (SPU RCDD)**

Description: Special Purpose Unit Rapid Capability Development and Deployment (SPU RCDD) enables the Special Operations Force (SOF) Warfighter to deter, prevent, protect against, mitigate, respond to, and recover from chemical, biological, radiological, and nuclear (CBRN) threats and effects as part of an integrated and layered defense.

Benefits to Warfighter: SPU RCDD enables the Warfighter to deter, prevent, protect against, mitigate, respond to, and recover from chemical, biological, radiological, and nuclear (CBRN) threats and effects as part of an integrated and layered defense.

Contractor(s):

- D. WHEATLEY ENTERPRISES, INC. (Prime) MRIGLOBAL
- ADVANCED TECHNOLOGY INTERNATIONAL Tennessee Apparel Corp.

Projected Activities:

• FY24: Initial Operational Capability

JPM CBRN SPECIAL OPERATIONS FORCES



AAF Pathway:

Major Capability Acquisition (MCA)

Acquisition Category:

ACAT III

Acquisition Phase:

Production & Deployment (P&D)

Tactical Advanced Threat Protective Ensemble (TATPE)

Description: TATPE will bridge the gap between current military Chemical and Biological protective ensembles and tactical assault suits by providing increased protection on the battlefield applied against specific Combating Weapons of Mass Destruction crisis response mission executions.

Benefits to Warfighter: First of its kind ensemble that provides hybrid Level A/ Level B protection against non-traditional and advanced threat agents to high risk personnel. This capability enables CBRN and Explosive Ordnance Disposal operators to maintain both a tactical posture and a high level of CBRN protection while performing CWMD missions.

Contractor(s):

• ATLANTIC DIVING SUPPLY, INC. (Prime)

Program Status:

- FY22: Milestone B
- FY22: Milestone C
- FY22: Milestone C

Projected Activities:

- FY22: Milestone B
- FY24: Initial Operational Capability
- FY25: Full Operational Capability



AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:

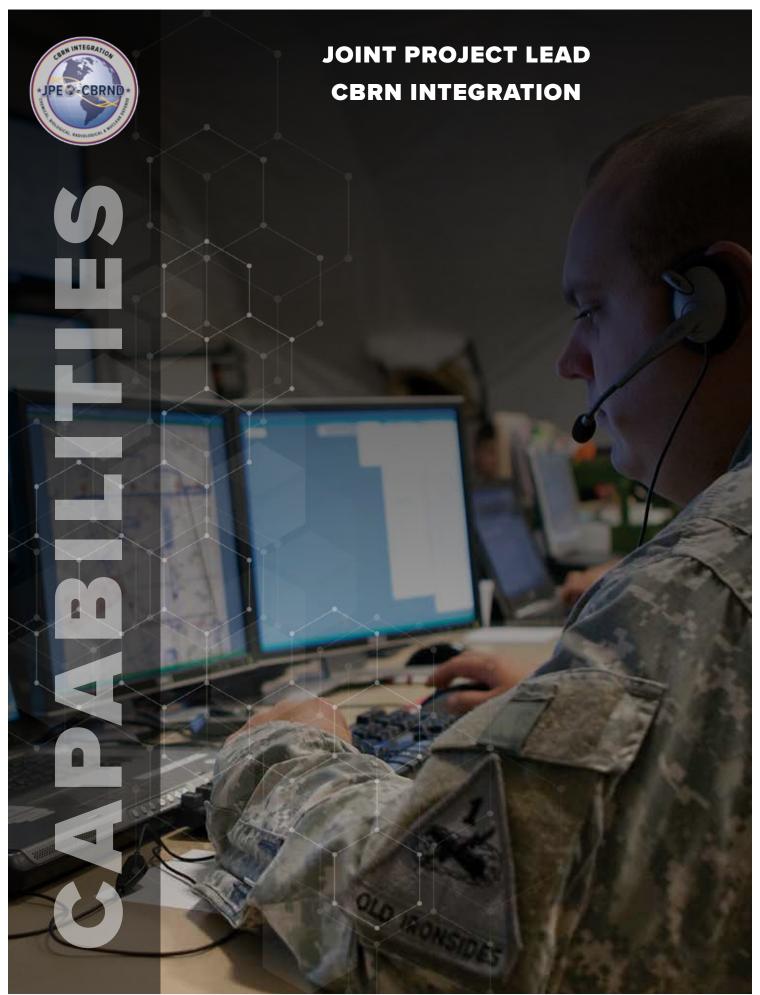
Wearable All-hazard Remote-monitoring Program (WARP)

Description: WARP is a family of wearable and attachable sensors to collect, transmit, and integrate information about the operational environment, disposition of the assault force members, and status of key mission equipment in order to optimize actions on the objective and facilitate reconstruction of the force post-mission.

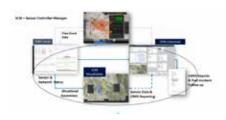
Benefits to Warfighter: Real-time physiological and environmental monitoring increases operational mission effectiveness by allowing commanders to be aware of hazards at the earliest opportunity and reduce the strain on each warfighter.

Contractor(s):

ADVANCED TECHNOLOGY INTERNATIONAL



JPL CBRN INTEGRATION



AAF Pathway:

Software Acquisition (SWP)

Acquisition Category:

Non-Major SWP

Acquisition Phase:

Execution (Execution)

CBRN Support to Command and Control (CSC2)

Description: CSC2 is the enablement of situational awareness and C2 to continue military operations in an actual or threatened Chemical, Biological, Radiological, and Nuclear (CBRN) environment and includes shaping and prevention, CBRN hazard and attack analysis, network integration, and decision support.

Benefits to Warfighter: -Integrates CBRN sensor data & information into a common architecture

- -Allows for a near plug-and-play capability for integration of CBRN data into Service's Computing Environments
- -Provides initial suite of decision support applications for accelerated decision making, automated CBRN hazard warning and reporting, and fusion with non-CBRN data
- -AI/ML analytics reduce false alarm rates and increase confidence
- -Common CBRN User Interface (UI) that reduces training and logistics burden

Contractor(s):

- DCS CORPORATION (Prime)
- V2X



Defense Business System (JACKS DBS) Description: JACKS DBS is the knowledge management system for

Description: JACKS DBS is the knowledge management system for information related to the acquisition and support of Chemical, Biological, Radiological, and Nuclear Defense products and programs.

Joint Acquisition Chemical Biological Knowledge System

Benefits to Warfighter: Centralized tool for authoritative CBDP information.

Provides CBRN product information, training, visualization, and reporting to all Services, other government agencies, and foreign partners.

Provides oversight and automates business processes for the BSAT Biorisk Program Office. Tracks BSAT inventory that is stored, maintained, and used by DoD BSAT labs.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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JPL CBRN INTEGRATION



AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

Acquisition Phase:

Mobile Field Kit (MFK)

Description: Mobile Field Kit (MFK) is the National Guard Buerau's interim Chemical, Biological, Radiological, and Nuclear (CBRN) Awareness & Understanding capability for the Homeland mission. MFK will be transitioned to CBRN Support to Command and Control.

Benefits to Warfighter: Baseline operational CBRN Integrated Early Warning capability for the National Guard Bureua in support of the Homeland Defense mission

Contractor(s):

- ADVANCED TECHNOLOGY INTERNATIONAL (Prime)
- World Wide Technology-Asynchrony



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Accelerated Antibodies - Enhanced Biological Defense (AA-ENBD)

Description: AA-ENBD will develop prophylactic and therapeutic monoclonal antibody (mAb) medical countermeasure against a broad range threats. The effort will target the identification and manufacture of mAbs to support non-clinical and clinical testing and delivery of doses for potential use in emergency response situations.

Benefits to Warfighter: Using the proven mAb platform, Accelerated Antibodies will provide the Warfighter with a portfolio of mAb MCMs through Phase 1 clinical trial. This will provide a response capability, enabling much more rapid fielding for Warfighter protection and treatment.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Contractor(s):

- Mapp Biopharmaceutical, Inc. (Prime)
- IDBiologics, Inc.

• JUST-EVOTEC BIOLOGICS, INC.



Chemical Biological Incident Preparedness and Response Advanced Design Manufacturing (CBIPR ADM)

Description: Chemical Biological Incident Preparedness and Response ADM (CBIPR-ADM) will establish and enhance proven biopharmaceutical and vaccine manufacturing technologies to accelerate the delivery of medical countermeasures as part of a medical integrated layered defense.

Benefits to Warfighter: Priority access to domestic MCM manufacturing capabilities that will provide an increased level of preparedness and response to counter current and emerging chemical and biological threats.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Contractor(s):

• Resilience Government Services, Inc. (Prime)



AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Defense Biological Products Assurance Program (DBPAP)

Description: Defense Biological Product Assurance Program (DBPAP) integrates and consolidates Department of Defense reagents (i.e., antibodies/antigens) and biological warfare agent detection requirements.

Benefits to Warfighter: DBPAO provides a capability for early detection of known and emerging biological threats that enables treatment of exposed Warfighters. DBPAO facilitates biodefense assay and reagent requirements to support programs for other US government organizations, including the Department of Homeland Security, US Capitol Police, National Institute of Allergy and Infectious Diseases, and US Secret Service. DBPAO assays are used in DoD and civilian government facilities.

Contractor(s):

- HII MISSION DRIVEN INNOVATIVE SOLUTIONS INC. (Prime)
- IDENTRUST SERVICES, LLC (Prime)
- MESO SCALE DIAGNOSTICS, LLC (Prime)
- MURTECH, INC. (Prime)



AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Generative Unconstrained Intelligent Drug Engineering - Enhanced Biological Defense (GUIDE-ENBD)

Description: GUIDE-ENBD is an advanced, integrated computational and experimental platform that accelerates medical countermeasure (MCM) development by harnessing the power of advanced simulation and machine learning to enable reduction of development risk to MCMs, preemptive preparedness and rapid response.

Benefits to Warfighter: GUIDE will accelerate medical countermeasure development and reduce costs by addressing risk across the drug development life cycle. GUIDE enables preemptive candidate discovery/design and rapid response to unanticipated threats to stay ahead of emerging and engineered threats to the Warfighter.

Contractor(s):

- BATTELLE MEMORIAL INSTITUTE
- Lawerence Livermore National Laboratory
- Sandia National Laboratory
- Los Alamos National Laboratory
- A-Alpha Bio



Medical Countermeasures Manufacturing Optimization (MCM MFRO)

Description: Medical Countermeasure Manufacturing Optimization (MCM MFRO) for Biologics shall develop and optimize manufacturing solutions that aim to produce MCMs suitable to conduct a Phase 1 Clinical Trial within 100 days from threat/pathogen identification.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

-



Medical Countermeasures Platform Technologies (MCMPT)

Description: Medical Countermeasures Platform Technologies (MCMPT) will establish new platform technologies to improve upon the standard drug discovery, design, manufacture, and testing processes in order to reduce the medical countermeasure development risks to enable rapid response.

Benefits to Warfighter: The MCMPT program will establish platform capabilities that will reduce MCM development risks for vaccines and antibodies. These capabilities can be leveraged to accelerate the MCM development cycle and rapidly deliver products to the Warfighter.

Contractor(s):

- · Houston Methodist Research Institute
- · Vanderbilt University

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Plague Monoclonal Antibodies (PLG MAB)

Description: Plague Monoclonal Antibodies (PLG MAB) will develop a prophylactic monoclonal antibody cocktail against exposure to aerosolized plague bacteria (Yersinia pestis).

Benefits to Warfighter: PLG MAB will provide a pre-exposure prophylactic to counter exposure to aerosolized plague bacteria.

Contractor(s):

• JUST-EVOTEC BIOLOGICS, INC. (Prime)

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

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Acquisition Phase:

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Rapid Access to Products in Development (RAPID)

Description: Rapid Access to Products in Development (RAPID) will employ a tiered database of prototype medical countermeasures (MCM), data packages, and MCM doses to enable potential use in an emergency or continued development as a Program of Record.

Benefits to Warfighter: RAPID will provide the Warfighter with a broad portfolio of developmental MCMs for use during an emergency response.

Contractor(s):

- DynPort Vaccine Company LLC
- FISHER BIOSERVICES INC.

AAF Pathway:

Not Applicable (N/A)

Acquisition Category:

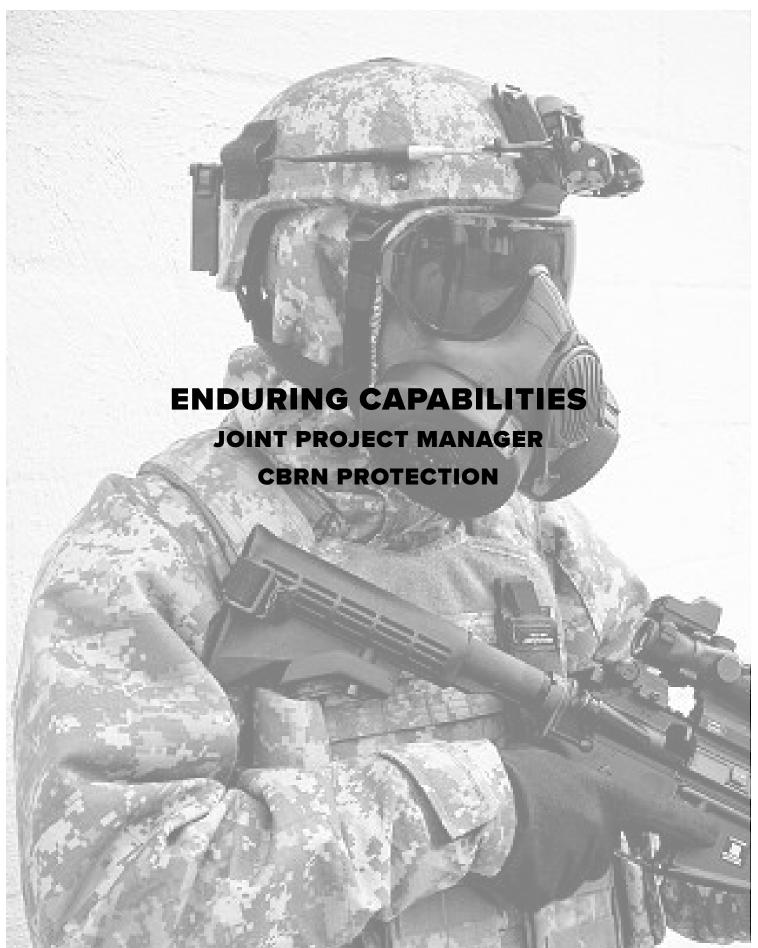
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Acquisition Phase:

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Chemical Biological Protective Shelter M8E1 (CBPS M8E1)

Description: Chemical and Biological Protective Shelter (CBPS M8E1) is a mobile, self-contained collective protection system that provides a Chemical and Biological contamination free working area for Role I and II medical treatment facilities and other selected units.



Collectively Protected Field Hospital (CPFH)

Description: CPFH provides collective protection to the core components and integrates collective protection components into expeditionary field hospitals to enable sustained medical treatment in a Chemical Biological and Radiological contaminated environment without the use of mission oriented protective posture gear.



Contaminated Human Remains System (CHRS)

Description: Contaminated Human Remains System (CHRS) will be used by Mortuary Affairs organizations if the need arises to repatriate chemical, biological, or radiological contaminated human remains.



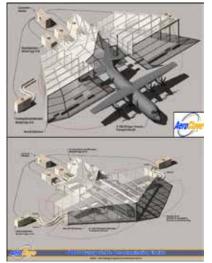
Decontamination Family of Systems General Purpose Decontaminant (DFoS GPD)

Description: DFoS GPD provides operational and thorough decontamination capabilities for tactical vehicles, shipboard surfaces, crew-served weapons, and individual/personal weapons in hostile and non-hostile environments that have been exposed to traditional and non-traditional Chemical and Biological contamination.



Decontamination Family of Systems Joint Service Equipment Wipe (DFoS JSEW)

Description: DFoS JSEW is a portable wipe system applied directly to the contaminated equipment surface and is capable of removing gross contamination within five minutes following application, in durable packaging easily opened in Mission-Oriented Protective Posture (MOPP) IV, and is non-hazardous, non-flammable and inherently safe.



Joint Biological Agent Decontamination System (JBADS)

Description: Joint Biological Agent Decontamination System (JBADS) will provide the capability to conduct biological warfare agent decontamination of the interior and exterior of aircraft to safe levels, to allow more rapid return to service.



Joint Protective Aircrew Ensemble (JPACE)

Description: JPACE provides below-the-neck Chemical and Biological protection for aviators and aircrew personnel when worn in place of the flight suit or over the Chemical Protective Undergarment.



Joint Service Aircrew Mask Apache (MPU-6 JSAM Apache)

Description: JSAM Apache provides face, eye, and respiratory protection for United States Army AH-64/D aircrew against battlefield concentrations of Chemical and Biological agents, toxins, toxic industrial materials and radioactive particulate matter.



Joint Service Aircrew Mask Tactical Aircraft (JSAM TA)

Description: Joint Service Aircrew Mask Tactical Aircraft (JSAM TA) provides respiratory, ocular and percutaneous protection of chemical biological warfare agents and select toxic industrial chemicals for tactical aircrew members. Interfaces with aircrew protective clothing and integrates with aircraft subsystems for mission operations.



Joint Service Chem/Bio Coverall for Combat Vehicle Crewmen (JC3)

Description: J3 provides Chemical and Biological agent and radiological particle protection for combat vehicle crewmen. It is a flame-resistant garment made from a petroleum, oil, and lubricant resistant, selectively permeable membrane material.



Joint Service Chemical Environmental Survivability Mask (M52 JSCESM)

Description: JSCESM protects against chemical vapor and airborne biological and particulate threats where standard Mission Oriented Protective Posture equipment would be used. It provides emergency escape protection for situations such as emergency evacuations and noncombatant operations.



Joint Service General Purpose Mask (JSGPM)

Description: JSGPM is an above-the-neck chemical and biological respirator that protects against battlefield concentrations of chemical-biological agents, toxins, Toxic Industrial Materials, and radioactive particulate matter.



Joint Service General Purpose Mask M53A1 (JSGPM M53A1)

Description: Joint Service General Purpose Mask M53A1 (JSGPM M53A1) is an above-theneck chemical biological protective respirator against battlefield concentrations of Chemical and Biological agents, toxins, Toxic Industrial Materials and radioactive particulate matter.

Benefits to Warfighter: M53A1 mask system is National Institute for Occupational Safety and Health (NIOSH) approved and can be used to support both military and domestic missions. It has the capability to be used either as a Air Purifying Respirator (APR), a Powered Air Purifying Respirator (PAPR), or a Self Contained Breathing Apparatus (SCBA).

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ENDURING CAPABILITIES JPM CBRN PROTECTION



Joint Service Lightweight Integrated Suit Technology (JSLIST)

Description: JSLIST is a durable, launderable, protective suit providing protection against battlefield concentrations of known chemical, biological, and radiological threats. It is worn over the service uniform and includes a two-piece suit, overboots, gloves, and respiratory equipment.



Joint Service Lightweight Integrated Suit Technology - Alternative Footwear Solutions (JSLIST AFS)

Description: JSLIST AFS is a protective overboot worn over normal combat footwear to provide foot protection against liquid, dust, particulate, or sporulated toxic material, Chemical and Biological warfare agents, and radiological fallout particles when worn as part of the JSLIST, JPACE, or JC3.



Joint Service Lightweight Integrated Suit Technology Block 1 Glove Upgrade Flame Resistant (JSLIST JB1GU FR)

Description: JSLIST JB1GU FR protects the hands from exposure to liquid, vapor, and aerosol chemical and biological hazards. It is a component of the JSLIST ensemble and offers increased tactility/dexterity and an inner chemical protective liner for sweat management.



Joint Service Lightweight Integrated Suit Technology Block 1 Glove Upgrade Non-Flame Resistant (JSLIST JB1GU nFR)

Description: JSLIST JB1GU nFR protects the hands from exposure to liquid, vapor, and aerosol chemical and biological hazards, offers increased tactility/dexterity, and has an inner chemical protective liner for sweat management.



Joint Service Lightweight Integrated Suit Technology Integrated Footwear System (JSLIST IFS)

Description: JSLIST IFS is a sock/liner system worn under normal combat footwear to protect the foot against chemical and biological hazards. It is issued as a component of the JSLIST and the JPACE.



Joint Service Transportable Decon System Small Scale (JSTDS SS)

Description: JSTDS SS provides a portable, enhanced operational decontamination capability that supports thorough decontamination operations of medium to large mobile or fixed equipment and aircraft.



M40 Series Mask Program (M40 SMP)

Description: M40 SMP replaced the M17 SMP as the standard Army field mask, providing improved comfort, fit and protection. The mask consists of a silicone rubber face piece with an in-turned peripheral face seal, binocular rigid eye lens system and elastic head harness.



M41A1 Protection Assessment Test System (M41A1 PATS)

Description: M41A1 Protection Assessment Test System (M41A1 PATS) is a test system that measures the fit factor of the protective mask on the Soldier, emphasizing the importance of the masks proper fit and wear. The PATS is the Army's only means of testing/verifying mask fit. The M41A1 PATS addresses obsolescence of the M41 PATS.



M42 Series Mask Program (M42 SMP)

Description: M42 SMP protective mask provides respiratory, eye and face protection against chemical and biological agents, radioactive fallout particles, and battlefield contaminants. A Combat Vehicle Crewman Mask variant includes a built-in microphone for wire communication.



M45 Aircrew Chemical-Biological Mask System (M45 CBM)

Description: M45 ACBM aircrew protective mask provides aircrew and hard-to-fit personnel with above-the-neck, head, eye, and respiratory protection against all known chemical and biological threat agents and radiological particulates.



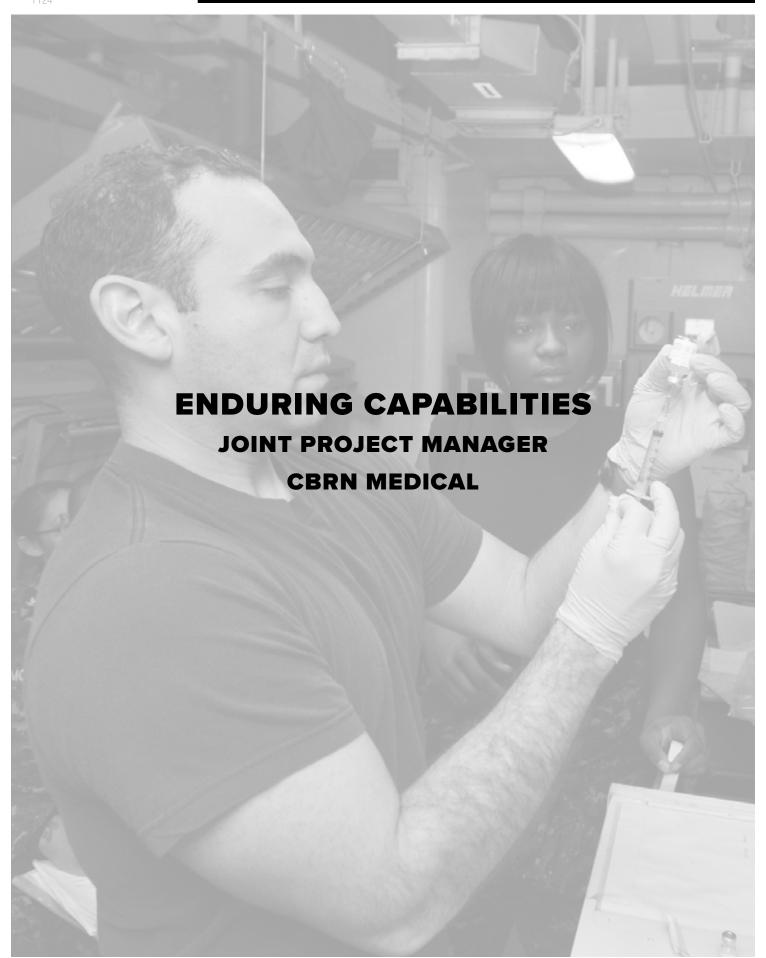
M48 Chemical-Biological Apache Aviator Mask (M48 CB-AAM)

Description: M48 CB-AAM provides face, eye, and respiratory protection from battlefield concentrations of chemical and biological agents, toxins, and radioactive particulate matter. It provides flame and thermal protection with reduced heat stress and can be donned and doffed in-flight.



Mass Personnel Decontamination (MPD)

Description: The MPD shall provide Warfighters with the capability to reduce the hazards associated with mass casualty decontamination efforts for protected and unprotected personnel, causalities and Contaminated Human Remains (CHR) potentially exposed to CBRN hazards. The MPD will consist of a standardized, modular system using a scalable approach in order to increase capability.



ENDURING CAPABILITIES JPM CBRN MEDICAL



Atropine Autoinjector (Atropine Autoinjector)

Description: The Atropine Autoinjector is authorized for Emergency Use for the initial treatment of muscarinic symptoms of known or suspected poisoning in individuals exposed to nerve agents or certain insecticides (organophosphorus and/or carbamate).



Next Generation Diagnostic System 1 (NGDS 1)

Description: Next Generation Diagnostic System I (NGDS 1) will identify biological hazards in human clinical specimens and provide diagnostic information to facilitate delivery of appropriate Medical Coutnermeasures.





Rapid Opioid Countermeasure System (ROCS)

Description: Rapid Opioid Countermeasure System (ROCS) supports the development and fielding of a Food and Drug Administration approved 10 mg naloxone autoinjector as a rescue treatment that will counteract the adverse effects from exposure to opioids.

ENDURING CAPABILITIES JPM CBRN MEDICAL



Reactive Skin Decontamination Lotion (RSDL)

Description: Reactive Skin Decontamination Lotion (RSDL) is a Food and Drug Administration (FDA) approved medical device, that is individually carried, skin decontamination kit. It provides the Warfighter the ability to decontaminate the skin, after exposure to Chemical/Biological (CB) warfare agents, in support of immediate and thorough personnel decontamination operations.



Validated Nucleic Acid Vaccine Construction (COVID VAC)

Description: COVID VAC will design and construct vaccine prototypes on validated nucleic acid vaccine platforms and evaluate them in appropriate animal models through Phase 1 clinical trials for safety as needed. COVID VAC will be performed through the Vaccine Acceleration by Modular Progression effort.

ENDURING CAPABILITIES JOINT PROJECT MANAGER **CBRN SENSORS**



AN/PDR-75A Radiac Set (AN/PDR 75A)

Description: AN/PDR-75 measures prompt and residual gamma doses and neutron doses. It monitors and records the total dose exposure of individual personnel to gamma and neutron radiation and responds to and measures prompt radiation from nuclear bursts.



AN/PDR-77 Radiac Set (AN/PDR-77)

Description: AN/PDR-77 detects and measures alpha, beta, gamma, and X-ray radiation. It replaces the older AN/PDR-56F and AN/PDR-60, which relied on aging technology and were not sensitive enough to accomplish the Army's alpha detection mission.



AN/VDR-2 Radiac Set (AN/VDR-2)

Description: AN/VDR-2 detects and measures nuclear radiation from fallout and radioisotopes. It performs ground radiological surveys from vehicles or, in the dismounted mode, as a handheld instrument.



Automatic Chemical Agent Alarm (M8A1 ACAA)

Description: M8A1 ACAA is a remote, continuous air sampling alarm which automatically detects nerve agent vapors and warns personnel with both audible and visual signals. The detector unit senses the presence of nerve agent vapor and sounds an audible alarm and a remote visual signal.



Automatic Chemical Agent Detector Alarm (ACADA)

Description: ACADA is an automatic chemical agent alarm system capable of detecting, warning, and identifying standard blister and nerve agents simultaneously. It's man-portable, operates independently after system start-up, provides audible & visual alarm, and provides communication interface to support battlefield automation systems.



Biological Integrated Detection System (BIDS) (M31A2 BIDS)



Chemical Agent Detector Kit M256A2 (M256A2)

Description: A collection of chemical materials and testing equipment for the purpose of determining the presence and identity of toxic chemical warfare agents. Excludes Analyzing Kit, Chemical Agent.



Chemical Reconnaissance and Explosives Screening Set (CRESS)

Description: CRESS is a disposable/consumable kit designed to quickly and easily screen for specific explosives and their precursors. It uses colorimetric technology to determine if unknown bulk solids, liquids, and trace chemicals are likely to be prohibited compounds.



Discharger, Grenade, Smoke, Countermeasure: M6 (M6)

Description: M6 Countermeasure Discharger is a four-tube smoke grenade launcher that enables combat vehicles to conceal themselves from hostile surveillance, target acquisition and weapon guidance systems. It interfaces with vehicle integrated defense systems.

ENDURING CAPABILITIES

ENDURING CAPABILITIES JPM CBRN SENSORS



Dry Filter Unit (DFU)

Description: DFU is a biological air sampler that collects and concentrates biological particulates from ambient air, which is drawn through a filter via electrical blower. The filter placed into buffer solution, shaken to extract particles, and analyzed using hand-held assays for presumptive identification of biological warfare agents.



Generator, Smoke, Mechanical: Mechanized smoke obscurant system, M58 (M58 Smoke Generator)

Description: M58 Smoke Generator enables the defeat of enemy reconnaissance, surveillance, intelligence and target acquisition systems operating in the visual, infrared, and millimeter wave regions of the electromagnetic spectrum.



Improved Chemical Agent Monitor (ICAM)

Description: ICAM is a hand-held, soldier-operated, post-attack device used for monitoring chemical agent contamination on people and equipment. It detects vapors of chemical agents by sensing molecular ions of specific mobility (time of flight) and uses timing and microprocessor techniques to reject interferences.



Joint Chemical Agent Detector (JCAD)

Description: JCAD is a miniaturized, rugged, and portable point chemical agent detector that automatically and simultaneously detects, identifies, and alerts the presence of nerve, blister, and blood chemical warfare agents.



Joint Chemical Agent Detector M4A1 (JCAD M4A1)

Description: Joint Chemical Agent Detector M4A1 (JCAD M4A1) is a miniaturized chemical agent detector capability for the detection of vaporized chemical agents. It includes the Solid Liquid Adaptor to vaporize surface samples, and includes the Improved Point Detection System-Lifecycle Replacement for shipboard chemical vapor detection.



Joint Chemical Agent Detector Solid Liquid Adapter (JCAD SLA)

Description: The JCAD SLA is an Additional Authorized List (AAL) item to the M4A1 JCAD. The JCAD SLA kit effort continues the development of the JCAD CED, which was an NGCD acceleration effort for USSOCOM. The SLA interfaces with the fielded M4A1 JCAD to allow for solid and liquid sampling of NTAs, PBAs, and explosives off surfaces. The SLA kit provides a point solution to detect NTAs and PBAs off surfaces.

ENDURING CAPABILITIES JPM CBRN SENSORS



Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM)

Description: JCBRAWM detects, identifies, and quantifies chemical, biological, and radiological contamination during water-monitoring missions: source site selection/reconnaissance, treatment verification, and quality assurance of stored and distributed product water.

Joint Handheld Bio-agent Identifier (JHBI)



Description: Joint Handheld Bio-Agent Identifier (JHBI) provides the capability to rapidly and accurately identify bio-agents at the point of contact in a handheld Polymerase Chain Reaction (PCR) device that includes integrated/automated sample preparation.



Light Vehicle Obscuration Smoke System (LVOSS)

Description: LVOSS counters threat weapon systems operating in the visual and near infrared portion of the electromagnetic spectrum.

ENDURING CAPABILITIES JPM CBRN SENSORS



M106 Screening Obscuration Devices - Visual Restricted Terrain (SOD-Vr)

Description: SOD-Vr provides screening obscuration effects for Warfighters operating in restricted terrain to increase survivability and enhance breaking contact and assault protection. It was transferred to the Joint Program Executive Office Armaments & Ammunition in 2016.



Unified Command Suite (UCS)

Description: The Unified Command Suite (UCS) provides secure, continuous, reliable, short-and long-range communications between the Weapons of Mass Destruction – Civil Support Team (WMD-CST), lateral/higher-echelon civilian and military operational commanders, and Incident Command Posts.

ENDURING CAPABILITIES JOINT PROJECT MANAGER **CBRN SPECIAL OPERATIONS FORCES**

ENDURING CAPABILITIES JPM CBRN SPECIAL OPERATIONS FORCES



Chemical Biological Aircraft Survivability Barrier (CASB)

Description: Chemical Biological Aircraft Survivability Barrier (CASB) supports the warfighter by enabling the use of airlift aircraft for exfiltration of chemically or biologically contaminated personnel and cargos while preserving the aircraft for continued unrestricted operations without need for decontamination.





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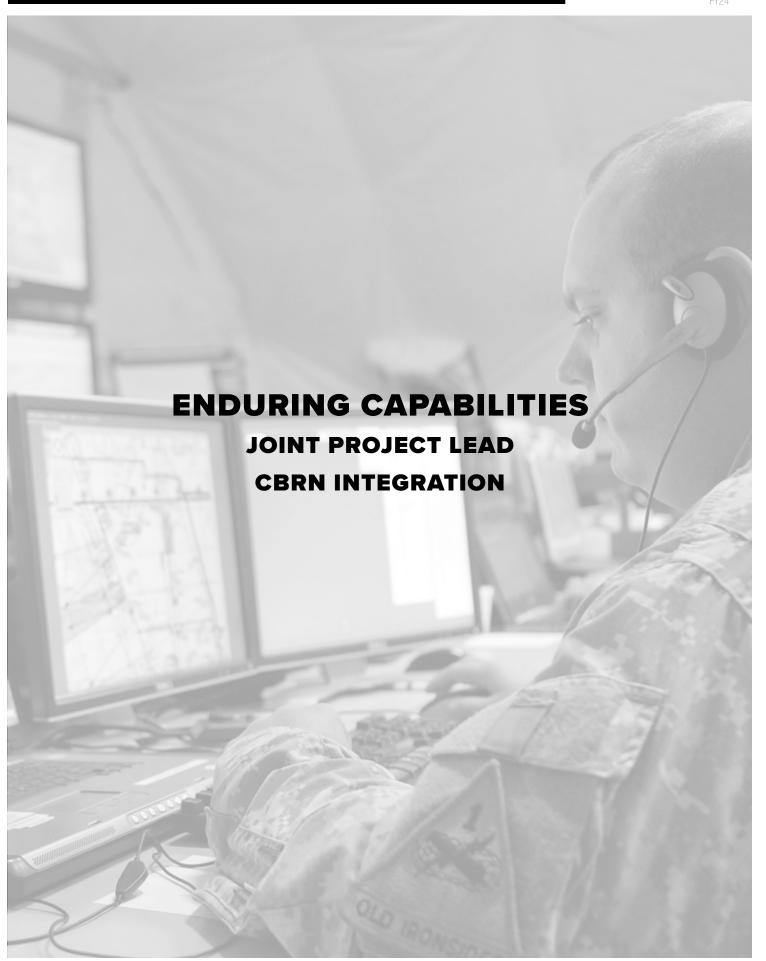
Forward Area Mobility Spray System - Rapid Prototyping (FAMS-S-RP)

Description: FAMS-S - RP will provide Special Operations Forces (SOF) and SOF Task Forces a man-portable and mobile platform capable of rapidly decontaminating chemical and biological agents from the exterior of aircraft, helicopters, boats, vehicles, or support equipment.



Uniform Integrated Protection Ensemble 1 (UIPE 1)

Description: Uniform Integrated Protection Ensemble Increment 1 Provides individual protective capabilities to the Warfighter through reduction of physiological and psychological burdens associated with the weight, bulk, thermal strain, and encumbrance of wearing Improve operational suitability CBRN protective gear.

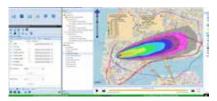


ENDURING CAPABILITIES JPL CBRN INTEGRATION



Chemical Biological Radiological Nuclear Information System (CBRN IS)

Description: Chemical, Biological, Radiological, and Nuclear Defense Information System provides a web-based capability that allows users to collect, collaborate, and disseminate CBRN hazard data for greater situational awareness of the CBRN environment and aid in decision support.



Joint Effects Model 2 (JEM 2)

Description: Joint Effects Model (JEM) 2 is a software application that models and simulates the effects of CBRN weapon strikes and incidents that is approved for use by operational warfighters. JEM 2 applies advanced physics using weather, terrain, and agent characteristics to predict the time-phased impact of CBRN and Toxic Industrial Chemicals/Materials. JEM 2 displays hazard information on a common operational picture and allows commanders to assess risk and take steps to mitigate the effects of weapons of mass destruction on operational forces. The JEM 2 program was directed to complete development and enter sustainment two years early by the FY19 Defense Wide Review. JEM 2 will complete development and transition to sustainment beginning Q1 FY22.



Joint Warning And Reporting Network 2 (JWARN 2)

Description: Joint Warning and Reporting Network (JWARN) 2 is a software application that provides warning and reporting to enable an immediate and integrated response to threats of contamination by CBRN incidents. JWARN 2 provides a digital display of CBRN reports on the a common operational picture, presented through Service-provided Command and Control systems resident at all echelons of command. Enhanced situational battlespace awareness provides Commanders the ability to support warfighter battle management and continuity of operations in a contaminated environment. JWARN 2 will complete development and transition to sustainment beginning Q1 FY22.



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ACRONYM	DEFINITION
AA-ENBD	Accelerated Antibodies - Enhanced Biological Defense
AAF	Adaptive Acquisition Framework
AAL	Additional Authorized List
AAS	Advanced Anticonvulsant System
ACAA	Automatic Chemical Agent Alarm
ACADA	Automatic Chemical Agent Palarm Automatic Chemical Agent Detector Alarm
ADD	Advanced Differential Diagnostics
ADS	Autonomous Decontamination System
ALS	-
ALS MOD	Analytical Laboratory System
	Analytical Laboratory System Modification
APR	Air Purifying Respirator
ASPIRE	Advanced System for Protection and Integrated Reduction of Encumbrances
ASPIRE-ENBD	Advanced System for Protection and Integration Reduction of Encumbrances - Enhanced Biological Defense
AV TX	Antiviral Therapeutics
AVCAD	Aerosol Vapor Chemical Agent Detector
AVO TX	Antiviral Oral Therapeutics Program
BCIS-ENBD	Biological Containment Isolation System - Enhanced Biological Defense
BIDS	Biological Integrated Detection System
BOT MAB	Botulinum Monoclonal Antibodies
BOT TX	Botulinum Toxin Therapeutic
BWA	Biological Warfare Agent
CALS FC ACS	Common Analytical Laboratory System Field Confirmatory Analytical Capability Set
CALS TV IS	Common Analytical Laboratory System Theater Validation Integrated System
CANA	Convulsive Antidote for Nerve Agents
CASB	Chemical Biological Aircraft Survivability Barrier
СВ	Chemical Biological
CB-AAM	Chemical-Biological Apache Aviator Mask
CB COTS/GOTS	Chemical Biological Commercial Off-The-Shelf/Government Off-The-Shelf
СВМ	Chemical-Biological Mask System
CBDP	Chemical and Biological Defense Program
CBIPR ADM	Chemical Biological Incident Preparedness and Response Advanced Design Manufacturing
CBPS	Chemical and Biological Protective Shelter
CBRN	Chemical, Biological, Radiological and Nuclear
CBRND	Chemical, Biological, Radiological and Nuclear Defense
CBRN DRS	Chemical, Biological, Radiological Nuclear Dismounted Reconnaissance Systems
CEDS	Critical Equipment Decontamination System
CHRS	Contaminated Human Remains System
CIND	Chemical Indicator
COVID VAC	Validated Nucleic Acid Vaccine Construction
CP DEPMEDS	Chemically Protected Deployable Medical System
CPFH	Collectively Protected Field Hospital
CPG	Clinical Practice Guideline

ACRONYM	DEFINITION
CRESS	Chemical Reconnaissance and Explosives Screening Set
CSC2	Chemical Biological Radiological Nuclear Support to Command & Control
CVCAD	Compact Vapor Chemical Agent Detector
CWMD	Countering Weapons of Mass Destruction
DBPAP	Defense Biological Product Assurance Program
DFoS GPD	Decontamination Family of Systems General Purpose Decontaminant
DFoS JSEW	Decontamination Family of Systems Joint Service Equipment Wipe
DFU	Dry Filter Unit
EMBD	Enhanced Maritime Biological Detection
EMD	Engineering & Manufacturing Development
EOD	Explosive Ordnance Disposal
FAMS-S-RP	Forward Area Mobility Spray System - Rapid Prototyping
FDA	Food and Drug Administration
FGA	Fourth Generation Agents
GUIDE-ENBD	Generative Unconstrained Intelligent Drug Engineering - Enhanced Biological Defense
HED	Human Effective Dose
ICAM	Improved Chemical Agent Monitor
JACKS DBS	Joint Acquisition Chemical Biological Knowledge System Defense Business System
JBADS	Joint Biological Agent Decontamination System
JBPDS	Joint Biological Point Detection System
JBTDS	Joint Biological Tactical Detection System
JC3	Joint Service Chem/Bio Coverall for Combat Vehicle Crewmen
JCAD	Joint Chemical Agent Detector
JCAD SLA	Joint Chemical Agent Detector Solid Liquid Adapter
JCBRAWM	Joint Chemical Biological Radiological Agent Water Monitor
JECP	Joint Expeditionary Collective Protection
JEM	Joint Effects Model
JHBI	Joint Handheld Bio-Agent Identifier
JPACE	Joint Protective Aircrew Ensemble
JPD-I	Joint Personal Dosimeter-Individual
JPEO-CBRND	Joint Program Executive Officer for Chemical, Biological, Radiological and Nuclear Defense
JPL	Joint Project Lead
JPM	Joint Project Manager
JSAM Apache	Joint Service Aircrew Mask Apache
JSAM RW	Joint Service Aircrew Mask Rotary Wing
JSAM SA	Joint Service Aircrew Mask Strategic Aircraft
JSAM TA	Joint Service Aircrew Mask Tactical Aircraft
JSCESM	Joint Service Chemical Environmental Survivability Mask
JSEW	Joint Service Equipment Wipe
JSGPM	Joint Service General Purpose Mask
JSGPM M53A1	Joint Service General Purpose Mask M53A1
JSLIST	Joint Service Lightweight Integrated Suit Technology

ACRONYM	DEFINITION
JSLIST AFS	Joint Service Lightweight Integrated Suit Technology - Alternative Footwear Solutions
JSLIST IFS	Joint Service Lightweight Integrated Suit Technology Integrated Footwear System
JSLIST JB1GU FR	Joint Service Lightweight Integrated Suit Technology Block 1 Glove Upgrade Flame Resistant
JSLIST JB1GU nFR	Joint Service Lightweight Integrated Suit Technology Block 1 Glove Upgrade Non-Flame Resistant
JSTDS SS	Joint Service Transportable Decon System Small Scale
JWARN	Joint Warning and Reporting Network
LVOSS	Light Vehicle Obscuration Smoke System
mAb	Monoclonal Antibody
MCA	Major Capability Acquisition
MCM	Medical Countermeasure
MCM MFRO	Medical Countermeasures Manufacturing Optimization
MCMPT	Medical Countermeasure Platform Technologies
MFK	Mobile Field Kit
MOD MED	Modernization Medical
MOPP	Mission Oriented Protective Posture
MPD	Mass Personnel Decontamination
MRDS	Man-Portable Radiological Detection System
MSA	Materiel Solution Analysis
MTA	Middle Tier of Acquisition
NA	Nerve Agent
NAIs	Named Areas of Interest
NBCRV SSU	Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade
NGB	National Guard Bureau
NGB WMD-CSTs	National Guard Bureau Weapons of Mass Destruction Civil Support Team
NGDS	Next Generation Diagnostic System
NGDS 2 ChemDX	Next Generation Diagnostics System 2 Chemical Diagnostics
NGDS 2 MPDS	Next Generation Diagnostics System 2-Man Portable Diagnostic System
NIOSH	National Institute for Occupational Safety and Health
NON MED PPE	Non Medical Personal Protective Equipment
NSIS	Non-Targeted Sequencing Identification System
NTA	Non-Traditional Agent
NVLAP	National Voluntary Laboratory Accreditation Program
O&S	Operations & Support
P&D	Production & Deployment
PAPR	Powered Air Purifying Respirator
PATS	Protective Assessment Test System
PBA	Pharmaceutical Based Agent
PCR	Polymerase Chain Reaction
PLG MAB	Plague Monoclonal Antibodies
POM	Program Objective Memorandum
POR	Programs of Record
PPE	Personal Protective Equipment
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ACRONYM	DEFINITION
PPTS-ENBD	Portable Patient Transport System - Enhanced Biological Defense
RADIAC	Radiation Detection, Indication and Computation
RAPID	Rapid Access to Products in Development
RDS	Radiological Detection System
RIID	Radio Isotope Identification Detector
RN	Radiological and Nuclear
RNATS	Reactivating Nerve Agent Treatment System
ROCS	Rapid Opioid Countermeasure System
RSDL	Reactive Skin Decontamination Lotion
S&T	Science & Technology
SCBA	Self Contained Breathing Apparatus
SEDS	Service Equipment Decontamination System
SIS	Shipboard Isolation System
SLA	Solid Liquid Adapter
SMP	Series Mask Program
sNDA	Supplemental New Drug Application
SOD-Vr	Screening Obscuration Devices - Visual Restricted Terrain
SOF	Special Operations Forces
SOM	Screening Obscuration Module
SPCHAR-ENBD	Surveillance and Pathogen Characterization - Enhanced Biological Defense
SPU RCDD	Special Purpose Unit Rapid Capability Development and Deployment
SPX AV PEP	Smallpox Antiviral Post-Exposure Prophylaxis
TATPE	Tactical Advanced Threat Protective Ensemble
TCMS	Tactical Contamination Mitigation System
TMRR	Technology Maturation & Risk Reduction
UCS	Unified Command Suite
UI	User Interface
UIPE	Uniform Integrated Protection Ensemble
UIPE FoS	Uniform Integrated Protection Ensemble Family of Systems
UIPE FoS Gloves - RP	Uniform Integrated Protection Ensemble Family of Systems Glovers - Rapid Prototyping
UIPE FoS GP	Uniform Integrated Protection Ensemble Family of Systems General Purpose
USA	U.S. Army
USAF	U.S. Air Force
USMC	U.S. Marine Corps
USN	U.S. Navy
USSOCOM	U.S. Special Operations Command
VAMP	Vaccine Acceleration by Modular Progression
VAMP-ENBD	Vaccine Acceleration by Modular Progression - Enhanced Biodefense
VSST	Vaccine Storage and Stability Testing
WMD-CST	Weapons of Mass Destruction Civil Support Team













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