



# JPEO-CBRND

Preventing the Worst by Providing the Best

## COMMAND BRIEF

**Dr. Jason W. Roos**

Joint Program Executive Officer for Chemical, Biological, Radiological and Nuclear Defense

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# PROTECTING THE JOINT FORCE



**CBRN PROTECTION**



**CBRN MEDICAL**



**CBRN SENSORS**



## OUR MISSION

Protect the Joint Force from weapons of mass destruction by generating affordable capabilities.



## OUR VISION

A resilient Joint Force enabled to fight and win unencumbered by a chemical, biological, radiological, or nuclear environment; championed by innovative, agile, results-oriented acquisition professionals.

# JOINT PROGRAM EXECUTIVE OFFICE FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENSE (JPEO-CBRND)

Who we are and where we are headed

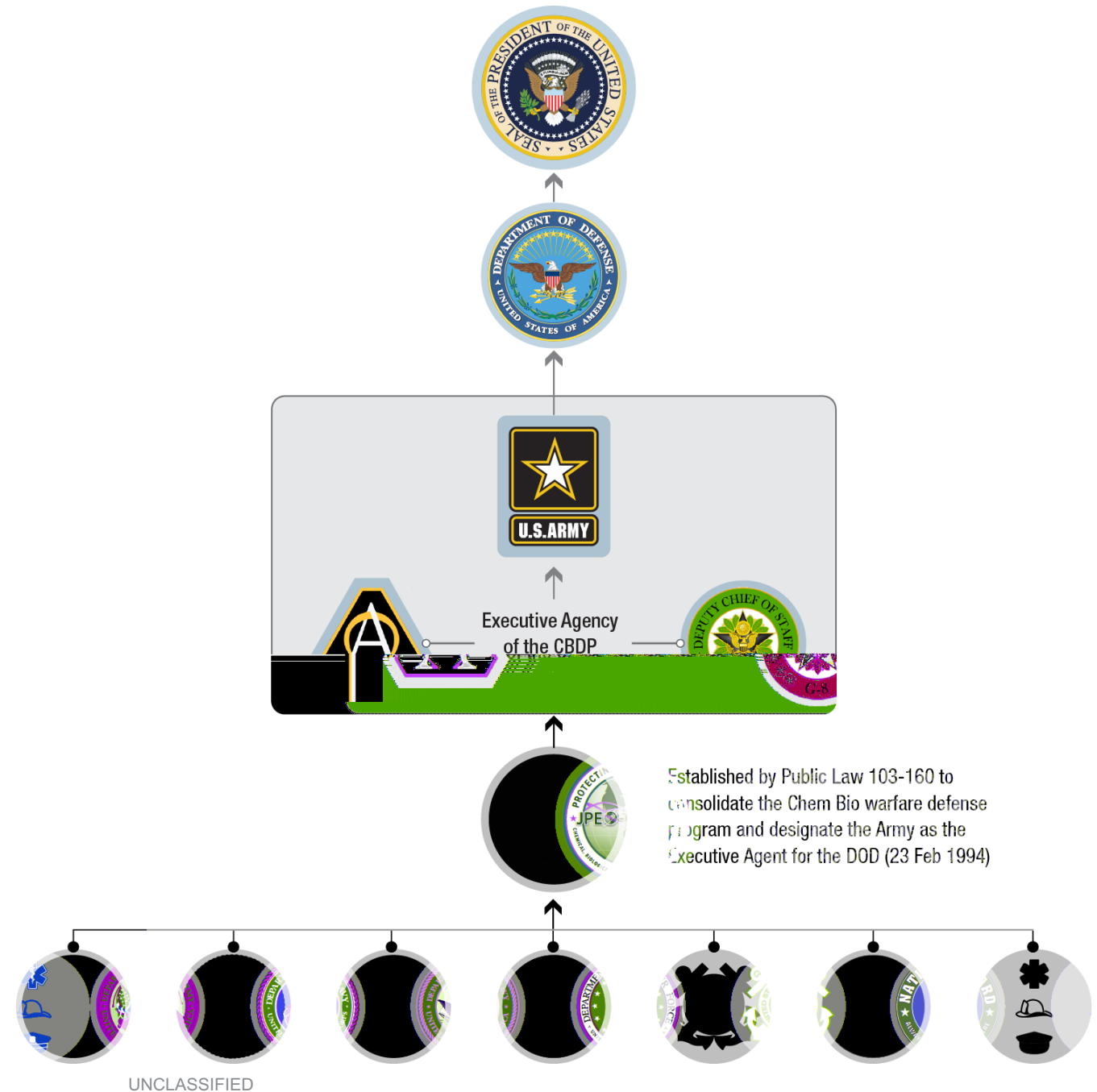


# Department of Defense

## Chemical Biological Defense Program (CBDP)

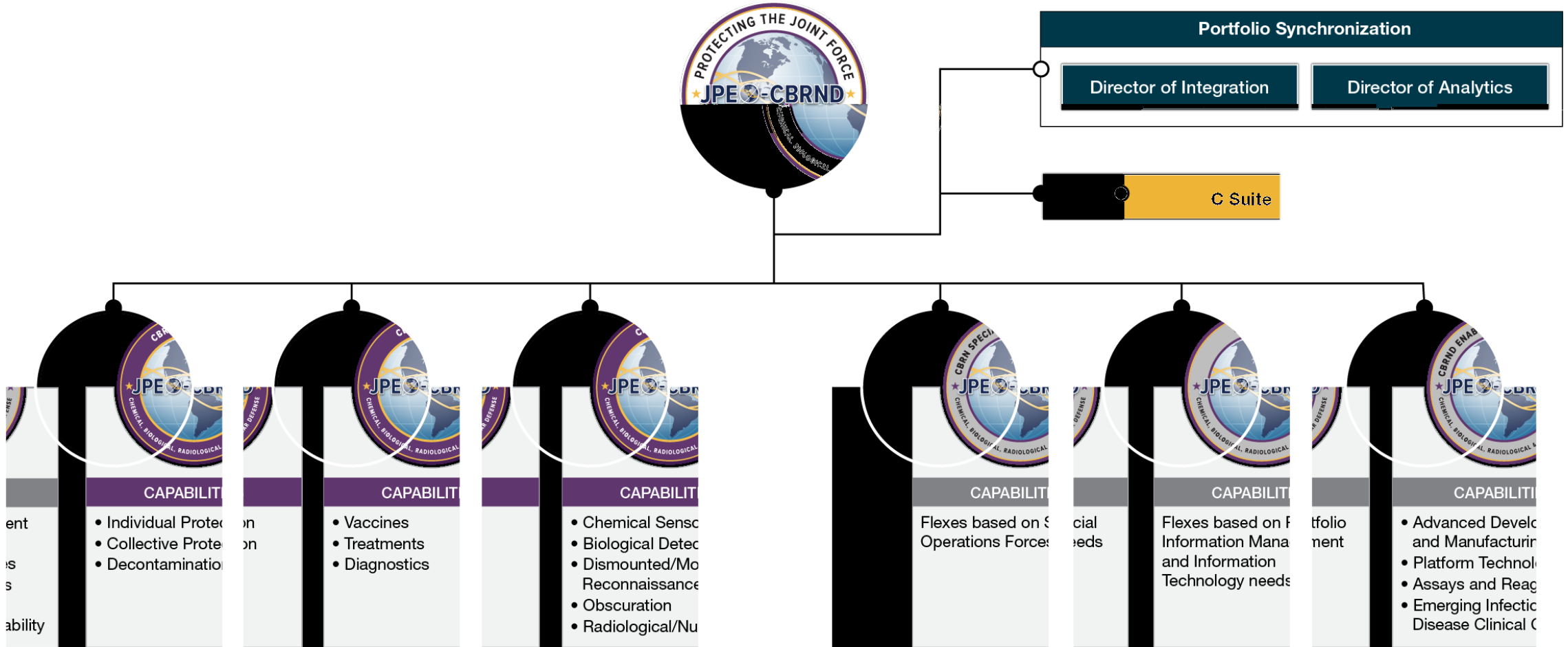
### NATIONAL POLICIES AND GUIDANCE:

- ❖ National Security Strategy
- ❖ National Military Strategy to Combat Weapons of Mass Destruction
- ❖ National Strategy for Homeland Security
- ❖ National Strategy to Combat Weapons of Mass Destruction
- ❖ Strategy for Homeland Defense and Civil Support
- ❖ National Strategy for Counterterrorism
- ❖ National Strategy for Countering Biological Threats
- ❖ National Strategy for Biological Surveillance



# JPEO-CBRND

## Organization

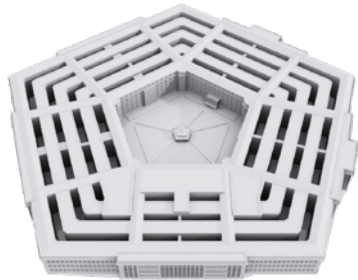


# DEPARTMENT OF DEFENSE

## Chemical Biological Defense Program (CBDP)



WHITE HOUSE

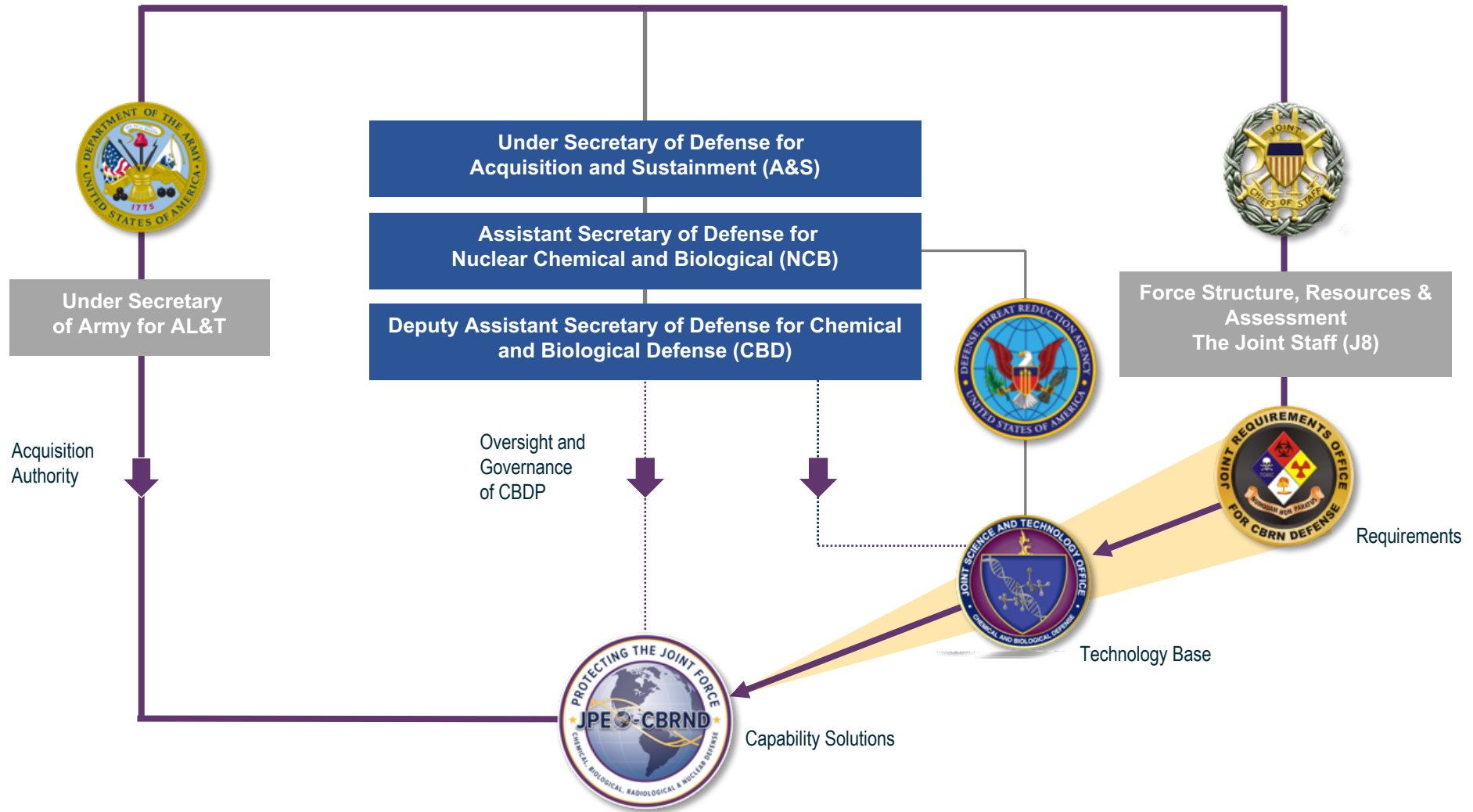


THE PENTAGON



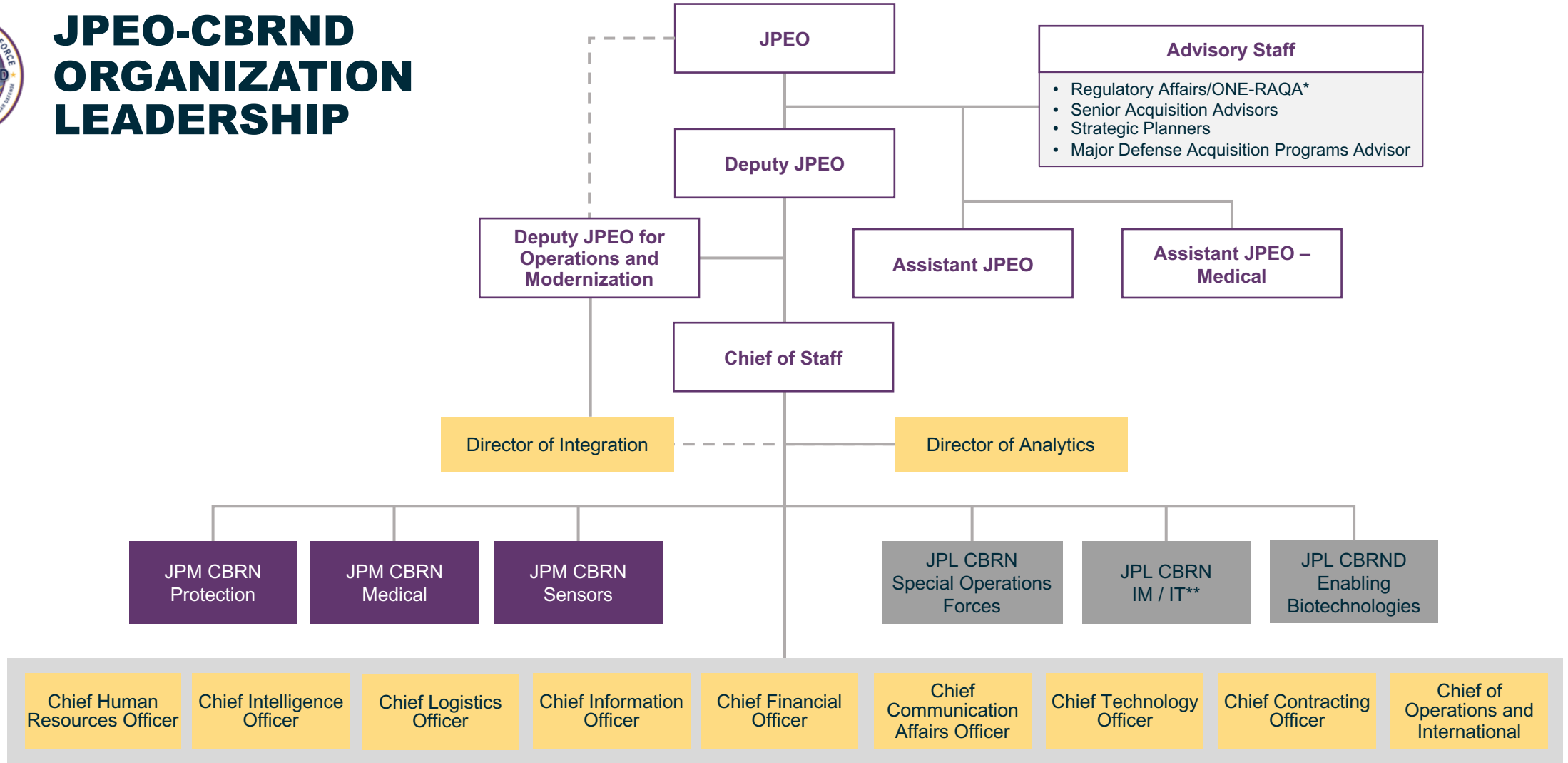
# POSITION/ROLE OF JPEO-CBRND

Within the DoD CBDP





# JPEO-CDRND ORGANIZATION LEADERSHIP



<b>Legend</b>					*One Network of Excellence – Regulatory Affairs and Quality Assurance **Information Management / Information Technology	- - - Operational Control (OPCON) — Administrative Control (ADCON)
	Front office	Headquarters	Joint Program Manager	Joint Program Lead		



# A GLIMPSE AT **INTEGRATED LAYERED DEFENSE**



## PROTECT



### MEDICAL PROPHYLAXIS

Initial layer of protection

- Vaccination
- Pre-treatment



### PPE, COLLECTIVE PROTECTION

Reduction of primary and secondary exposure to CBRN threats

- Suits and masks
- Filtration
- Tents

## UNDERSTAND



### EARLY WARNING

Enable commander's operational decision making

- Data fusion
- Network sensors
- Communication
- Detectors

## MITIGATE



### DIAGNOSTICS

Lower echelon rapid diagnostics to determine treatment and reduce further exposure

- Point of need
- Laboratory and mobile
- Reconnaissance

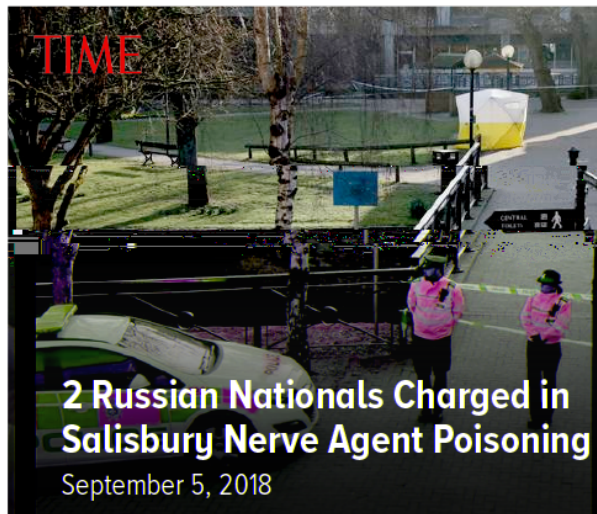


### THERAPEUTICS/ DECONTAMINATION

Post exposure prophylaxis administered upon agent exposure

- Treatments
- Personnel and materiel decontamination

# WE FACE A COMPLEX THREAT ENVIRONMENT



# FUTURE CAPABILITIES



## PROTECTION

- Next generation protective ensemble
- Non-restrictive respiratory and ocular protection
- Tactical disablement
- Filtration technologies
- Integrated contamination mitigation
- Coatings and barriers



## MEDICAL

- One treatment, many threats
- Rapid medical countermeasures response
- Genomic sequencing
- Pre-symptomatic diagnostics
- Advanced Manufacturing



## SENSORS

- Robotics and autonomous systems
- Decision support tools
- Machine learning, artificial intelligence
- Space and intelligence, reconnaissance, surveillance
- Threat agnostic detection and identification
- Modernized radiological/nuclear detection and identification
- Integrated Early Warning

# ENTRY POINTS TO ENGAGE



## GOVERNMENT AND INDUSTRY ENGAGEMENTS

- Industry Days
- Conferences
- Office Calls
- Chemical Biological Defense Acquisition Initiatives Forum
- NBC Industry Group

**POC:** PUBLIC AFFAIRS OFFICE

**EMAIL:** USARMY.APG.DOD-JPEO-CBRND.MBX.JPEO-CBD-PUBLIC-AFFAIRS-OFFICE@MAIL.MIL

**PHONE:** 410-436-9000

## TECHNOLOGY AND INNOVATIONS

- Spark
- Early Discoveries
- Accelerator for Innovative Minds
- Cooperative Research and Development Agreement

**POC:** DAVE RESTIONE

**EMAIL:** DAVID.M.RESTIONE.CIV@MAIL.MIL

**PHONE:** 410-417-4566

## OTHER TRANSACTION AUTHORITY (OTA)

- Medical CBRN Defense Consortium (MCDC) OTA – RDTE
- Combating Weapons of Mass Destruction (CWMD) OTA – RDTE

**POC:** BARRY G. SAYER

**EMAIL:** BARRY.G.SAYER.CIV@MAIL.MIL

**PHONE:** 717-404-2650

**WEB:** [www.medcbrn.org](http://www.medcbrn.org)

[www.cwmdconsortium.org](http://www.cwmdconsortium.org)

## CONTRACTS

- JE-OPETS – Contract Support Personnel
- JE-RDAP – Development, Procurement, and Sustainment
- JE-CLASS – Logistics
- Stand Alone Contracts

**POCS:**

ALAN BURKET

**EMAIL:** ALAN.R.BURKET.CIV@MAIL.MIL

**PHONE:** 443-655-8608

MICHELE BOARDWINE

**EMAIL:** MICHELE.L.BOARDWINE.CIV@MAIL.MIL

**PHONE:** 410-436-0803

[JPEOCBRND.OSD.MIL/work-with-us](http://JPEOCBRND.OSD.MIL/work-with-us)



# JPEO-**CBRND** STRATEGIC GOALS

## ACQUISITION EXCELLENCE

The JPEO-**CBRND** will be an exemplar and engaging workplace environment that prioritizes work-life balance and maximizes opportunities for professional growth and learning for every member of the workforce.

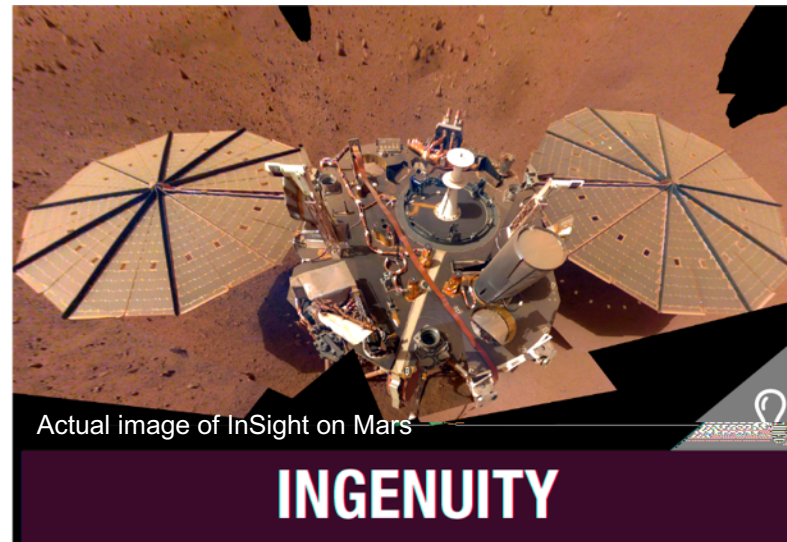
## TRANSFORMATIONAL CAPABILITIES

The JPEO-**CBRND** will reset the Joint Force **CBRND** to be the go-to organization for accelerated delivery of **CBRND/CWMD** capabilities.

## WORKPLACE OF CHOICE

The JPEO-**CBRND** will be a safe, respectful, and modernized workplace by 2030 by integrating emerging technologies into a suite of modernized **CBRND** capabilities that enable warfighter operations and situational understanding unencumbered by a **CBRN** environment.

# THINKING BIG TOGETHER



“Never tell people how to do things.  
Tell them what to do and they will surprise  
you with their ingenuity.”

–George S. Patton, U.S. Army General

# JPEO-CBRND PROTECTION PORTFOLIO

Today and Tomorrow



CURRENT

- ▶ Chemical Biological Protection Shelter (CBPS)
- ▶ Collectively Protected Field Hospital (CPFH)
- ▶ Joint Expeditionary Collective Protection (JECF)

- ▶ Alternative Footwear Solutions (AFS)
- ▶ Integrated Footwear System (IFS)
- ▶ Joint Protective Aircrew Ensemble (JPAGE)
- ▶ Joint Service Aircrew Mask - Rotary Wing
- ▶ Joint Service Aircrew Mask for Strategic Aircraft
- ▶ JSLIST Block 2 Glove Upgrade Non-Flame Resistant (JB2GU nFR) variant
- ▶ Joint Service Aircrew Mask - Tactical Aircraft (JSAM-TA)
- ▶ Joint Service Lightweight Integrated Suit Technology (JSLIST)
- ▶ M50/M51 Joint Service General Purpose Mask (JSGPM)
- ▶ M53A1 Mask

- ▶ CBRN Covers Coatings and Protective Overlays (C3PO)
- ▶ Contamination Indicator Decontamination Assurance System (CIDAS) - Nerve
- ▶ Joint General Purpose Decontaminant for Hardened Military Equipment (JGPD-HME)
- ▶ Joint Service Equipment Wipe (JSEW)
- ▶ M12A1 Decontamination Apparatus
- ▶ M26 Joint Service Transportable Decontamination System - Small Scale (JSTDS-SS)
- ▶ Reactive Skin Decontamination Lotion (RSDL)

## ▶ COLLECTIVE



## ▶ INDIVIDUAL



## ▶ DECONTAMINATION



FUTURE

- ▶ Contaminated Human Remains System/ Contaminated Human Remains Transfer Case (CHRS/CHRT)
- ▶ Filter Improvements (Guard Bed for M98, M93/M59 Parts EMI Upgrade, M48A1 Redesign, etc)
- ▶ Next Generation Collective Protection for Ships and Buildings

- ▶ Advanced System for Protection and Integrated Reduction of Encumbrances (ASPIRE) (FY25)
- ▶ Ground Mask MWO (FY24)
- ▶ Uniform Integrated Protection Ensemble (UIPE) Family of Systems:
  - UIPE General Purpose
  - UIPE Air
  - UIPE Glove

- ▶ Contamination Indicator Decontamination Assurance System (CIDAS) - Blister
- ▶ Joint Biological Aircraft Decontamination System (JBADS)
- ▶ Next Generation Personnel Decontamination
- ▶ Tactical Contamination Mitigation System (TCMS)
- ▶ Service Equipment Decontamination System (SEDS)
- ▶ Wide Area Decontamination System (WADS)

# JPEO-CBRND MEDICAL PORTFOLIO

## Today and Tomorrow

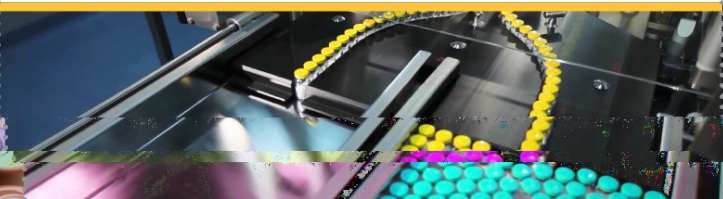
CURRENT

- ▶ Anthrax Vaccine (AVA)
- ▶ Anti-Ebola mAb
- ▶ Nucleic Acid Launched mAb Countermeasures
- ▶ Polyclonal Rapid Response Platform
- ▶ Smallpox Vaccine (SPX VAC)
- ▶ Virus like Particle Platform
- ▶ Vero Cell Platform

### CAPABILITY:

- ▶ Dedicated DoD Biomanufacturing Network
- ▶ Special Immunization Program

## ▶ PROPHYLAXIS



## ▶ THERAPEUTICS

- ▶ Antidote Treatment Nerve Agent Autoinjector (ATNAA)
- ▶ Convulsant Antidote for Nerve Agents (CANA)
- ▶ Soman Nerve Agent Pretreatment Pyridostigmine (SNAPP)
- ▶ Single-Use Atropine Autoinjector
- ▶ 10 in 2 Interagency Antibody Challenge (FY23)\*
- ▶ Alternate Autoinjector (AUTOINJ)
- ▶ Advanced Anticonvulsant System (AAS)
- ▶ Antiviral Therapeutic (AV TX)
- ▶ Countering Emerging Threats – Rapid Acquisition and Investigation of Drugs for Repurposing (CET RAIDR)
- ▶ Improved Nerve Agent Treatment System – Centrally Acting (INATS CA)
- ▶ Phage Therapy
- ▶ Rapid Opioid Countermeasure System (ROCS)

- ▶ Next Generation Diagnostic System (NGDS)
- ▶ NGDS – Sentinel & Food and Water Environmental Detection Panels

## ▶ DIAGNOSTICS



- ▶ Modernization Medical (MOD MED)
- ▶ NGDS 2 – Man Portable Diagnostic System (NGDS 2 MPDS)
- ▶ NGDS 2 – Chemical Diagnostics (NGDS 2 CHEM DX)

FUTURE

- ▶ Anti-botulinum Neurotoxin A/B Monoclonal Antibodies (BOT mAbs)
- ▶ Nucleic Acid Launched mAb Countermeasures
- ▶ Plague Monoclonal Antibodies (PLG mAbs)
- ▶ Smallpox Antiviral Post Exposure Prophylaxis (SPX AV PEP)
- ▶ Vaccine Acceleration by Modular Progression (VAMP) (FY22)\*
- ▶ Vaccine Storage and Stability Testing (VSST)

### CAPABILITY:

- ▶ Whole-of-government National Biomanufacturing Partnership
- ▶ Computational Acceleration of MCM Development



# JPEO-CBRND SENSORS PORTFOLIO

Today and Tomorrow



CURRENT

- ▶ Enhanced Maritime Biological Detection (EMBD)
- ▶ Joint Biological Tactical Detection System (JBTDSD)
- ▶ Joint Chemical Agent Detector (JCAD) - M4A1
- ▶ Joint Personal Dosimeter-Individual (JPD-IND)
- ▶ Man-Portable Radiological Detection System (MRDS)
- ▶ Radiological Detection System (RDS)

- ▶ Analytical Laboratory System Modification (ALS MOD)
- ▶ Common Analytical Laboratory System (CALS)
- ▶ CBRN Sensors Integration on Robotic Platforms (CSIRP) (on UGV and UAV)
- ▶ Dismounted Reconnaissance Sets, Kits, and Outfits (DR SKO)
- ▶ NBCRV CBR Sampling and Detection Suite
- ▶ Portable Isotopic Neutron Spectroscopy (PINS)

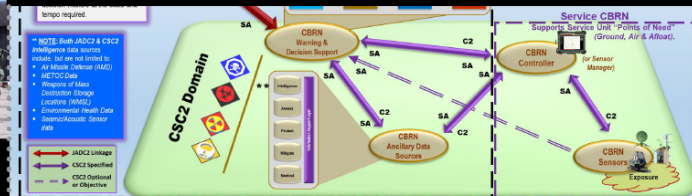
- ▶ Limited Heat Strain Monitoring Capabilities
- ▶ Robotics, Autonomy & Artificial Intelligence (AI)
- ▶ Biosurveillance Portal
- ▶ Joint Warning and Reporting Network (JWARN)

## ▶ POINT/STANDOFF



## ▶ RECONNAISSANCE

## ▶ INTEGRATED EARLY WARNING



FUTURE

- ▶ Aerosol Vapor Chemical Agent Detector (AVCAD)
- ▶ Multi-Phase Chemical Agent Detector (MPCAD)
- ▶ Compact Vapor Chemical Agent Detector (CVCAD)
- ▶ JCAD Solid Liquid Adapter (SLA)
- ▶ Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite Upgrade (SSU)
- ▶ Proximate Chemical Agent Detector (PCAD)
- ▶ Reactive-Chemistry Orthogonal Surface and Environmental Threat Ticket Array (ROSETTA)

- ▶ CALS
- ▶ CSIRP (on UGV and UAV)
- ▶ DR SKO
- ▶ NBCRV SSU

- ▶ Biological Defense Innovation Program (BDIP) (FY23)
- ▶ CBRN Support to Command & Control (CSC2) (FY22)
  - IEW ECD is a integral part of CSC2
  - Collaboration between JPM S and JPL IM/IT
- ▶ Wearable Monitors for Total Health Awareness (FY21)

*Sensors Modernization effort will manage technology refresh and modernization for all programs*

# JPEO-CBRND SPECIAL OPERATIONS FORCES PORTFOLIO

Today and Tomorrow



CURRENT

- ▶ All Purpose-Personal Protective Ensemble (AP-PPE) Modernization
- ▶ Chemical-Biological Aircraft Survivability Barrier (CASB)
- ▶ CASCADE
- ▶ Modular Powered Air Purifying Respirator (MPAPR)
- ▶ Sub-Terranean Mission (SUB-T)
- ▶ Tactical Advanced Threat Protective Ensemble (TATPE)

- ▶ Enhanced Warfighter Augmented Training (EWAT)
- ▶ Gas Atmospheric Sample Processor (GASP)
- ▶ Gamma-Ray Analysis of Chemical Elements (GRACE)
- ▶ Joint Handheld Biological Agent Identifier (JHBI)
- ▶ Rapid Austere Environment Sample Preparation (RASP)
- ▶ Wintergreen

- ▶ Contaminated Casualty Containment Litter (C3L)
- ▶ Chemical Biological Aircraft Survivability Barrier (CASB)
- ▶ Chemical Biological-Ground Mobility Barrier (CB-GMB)
- ▶ Chemical Warfare Agent Device Packaging (CWA DP)
- ▶ Contaminated Waste Mitigation System (CWMS)
- ▶ Non-Standard Chemical Biological Aircraft Survivability Barrier (NS-CASB)

## ▶ PROTECT



## ▶ MITIGATE



## ▶ UNDERSTAND

- ▶ Assault Respirator (AR)
- ▶ Micro Powered Air Purifying Respirator (MICRO PAPR)
- ▶ Modular Self-Contained Breathing Apparatus (M-SCBA)
- ▶ Optimized CBRN Hydration System

- ▶ Carbide-Derived Carbon Solid Phase Micro Extraction (CDC-SPME)
- ▶ Hyperspectral Imaging Unmanned Aircraft System (HIS UAS)
- ▶ Lightweight Flame Photometric Detector (LFPD)
- ▶ Low Temp Plasma Mas Spec (LTPMS)
- ▶ Next Generation Bio Sequencing (NGBS)
- ▶ Targeted Handheld Optical Recognition (THOR)
- ▶ Unmanned Ground and Aerial Vehicle Sensor Integration (UGV UAV)

- ▶ Clear Decon Slurry (CDS)
- ▶ Expedient Liquid Barrier System (ELBS)
- ▶ Forward Area Mobility Spray System (FAMS-S)
- ▶ Houndfish
- ▶ Paper on Demand (POD)
- ▶ Sensitive Equipment Decontamination System (SEDS)

FUTURE



# CONTACT

## Dr. Jason W. Roos

Joint Program Executive Officer for  
Chemical, Biological, Radiological and Nuclear Defense

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410-436-4141

[jason.w.roos.civ@mail.mil](mailto:jason.w.roos.civ@mail.mil)

[www.jpeocbrnd.osd.mil](http://www.jpeocbrnd.osd.mil)

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### Public Affairs Office

Phone: 410-436-9000

[usarmy.apg.dod-jpeo-cbrnd.mbx.jpeo-cbd-public-affairs-office@mail.mil](mailto:usarmy.apg.dod-jpeo-cbrnd.mbx.jpeo-cbd-public-affairs-office@mail.mil)

### Contracting

Alan Burket | 443-655-8608

Barry Sayer | 717-404-2650

### Online

[jpeocbrnd.osd.mil](http://jpeocbrnd.osd.mil)



@JPEOCBRND



# BACKUPS

# A GLIMPSE AT **INTEGRATED LAYERED DEFENSE**





# JPEO-CBRND ORGANIZATION LEADERSHIP



*Acting DJPEO – Assisted Acquisition/ Medical (COVID-19 Response)*  
**Ms. Nicole Kilgore**  
Executive Assistant  
*Ms. Megan Danjou*



DJPEO – Operations and Modernization  
**Mr. Dan McCormick**  
Executive Assistant  
*Ms. Heather Steinhilber*



Director of Integration  
**Mr. Paul Gietka**



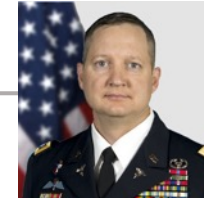
JPEO  
**Dr. Jason Roos**  
Executive Assistant  
*Ms. Quneitra Quintero*



Acting Deputy JPEO  
**Mr. Kyle Perkins**  
Executive Assistant  
*Ms. Heather Steinhilber*



Assistant JPEO  
**Ms. Emma Wilson**



Assistant JPEO – Medical  
**COL Sean McMurry**



Chief of Staff  
**Mr. Gordon Graham**  
Executive Assistant  
*Ms. Heidi Kilburn*



Director of Analytics  
**Mr. Wyatt Ulrich**



Senior Medical Regulatory Advisor/Director  
**Ms. Carmen Maher**  
Executive Assistant  
*Ms. Shelley Hilgenberg*



Assistant Chief of Staff  
**Ms. Karen House**

## Joint Project Managers (JPM)



JPM CBRN Protection  
**Ms. Deborah Olson**  
Executive Assistant  
*Ms. Brenda Lopez-Price*



JPM CBRN Medical  
**COL Ryan Eckmeier**  
Executive Assistant  
*Ms. Jenn Scott*



JPM CBRN Sensors  
**COL Robert Carter III**  
Executive Assistant  
*Ms. Marjorie Giles (Margie)*

## Joint Project Leads (JPL)



JPL CBRN Special Operations Forces  
**Mr. Michael Poe**  
Executive Assistant  
*Ms. Tiffany Dickinson*



JPL CBRN IM/IT  
**Mr. Scott White**  
Executive Assistant  
*Ms. Jeanette Benton*



JPL CBRND Enabling Biotechnologies  
**Mr. Bruce Goodwin (Acting)**  
Executive Assistant  
*Ms. Shelley Hilgenberg*