



# 711 HPW

## COUNTERPROLIFERATION BRANCH

### The Laboratorian's Role in the Counterproliferation Mission

#### (Briefing Charts)



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**711<sup>th</sup> HPW/RHPC**

***Counter Any Agent, Anywhere, Any Time***

## Report Documentation Page

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# OUTLINE



- **What is Counterproliferation?**
- **Counterproliferation Branch Mission & Priorities**
- **Counterproliferation Branch Mission Areas**
- **The Medical Lab Technician's Role**
- **Questions**



# What is Counterproliferation?



- **Counterproliferation refers to diplomatic, intelligence and military efforts to combat the proliferation of weapons including both conventional weapons and weapons of mass destruction.**



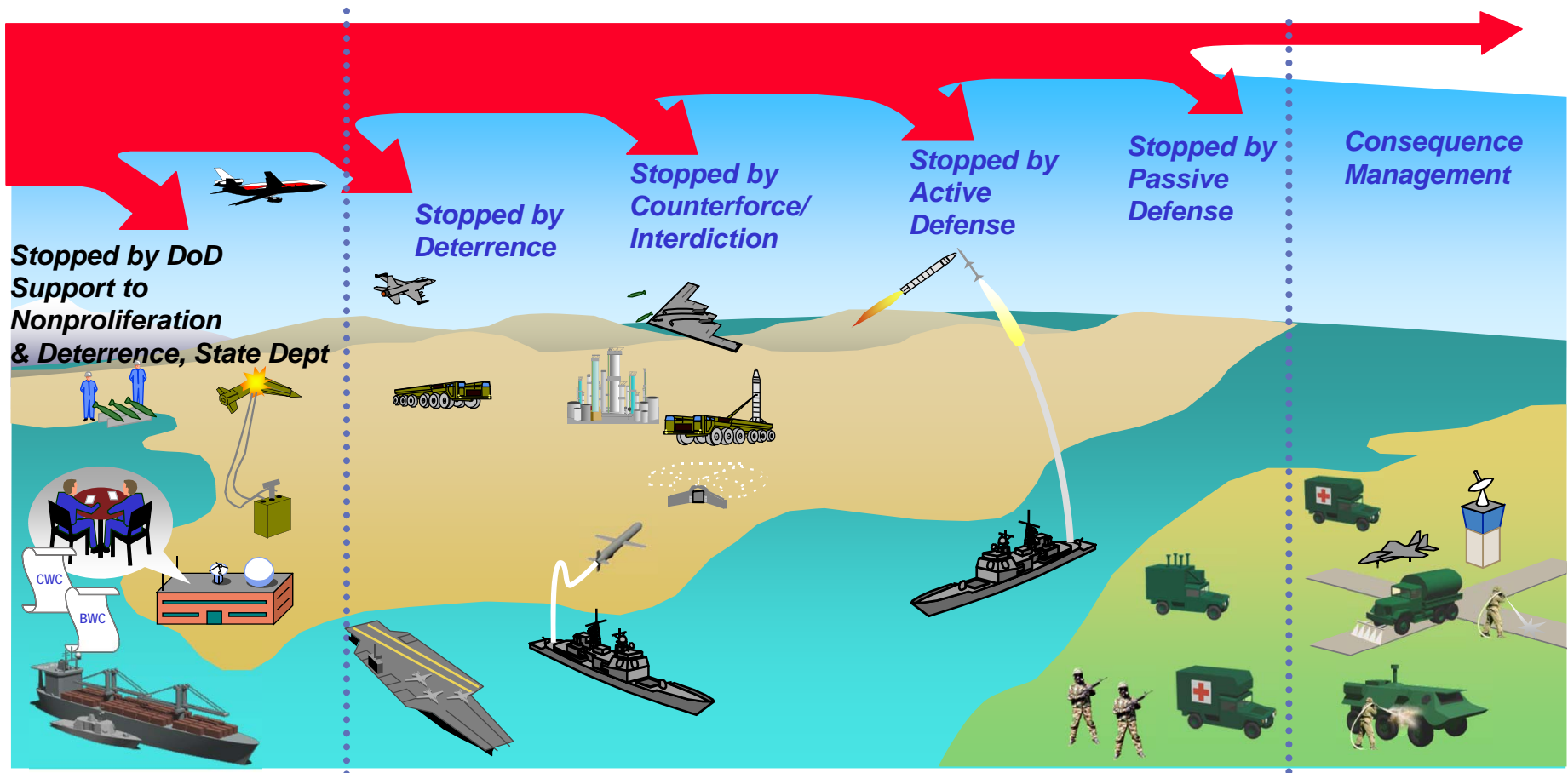
# National Strategy for Combating WMD



## Nonproliferation

## Counterproliferation

## Consequence Management





# Counterproliferation Branch Mission & Priorities



- **Mission**: Develop and apply revolutionary bioscience research and technology to increase capability to deliver precision effects and to survive in the battle space.
- **Priorities**:
  - Counter CBRN weapons of mass destruction through the development of techniques such as sensing, neutralization and post strike assessment (*Deliver Precision Effects*)
  - Minimize the impact of WMD attacks and improve capability to restore operations quickly (*Access and Survive in the Battlespace*)



# Counterproliferation Branch Mission Areas



- ***Develop and apply revolutionary research, science, and technology to:***

- Increase and ensure war fighter survival and operability in chemical, biological and radiological (CBR) contaminated battle space
- Increase capability to deliver effective precision effects against CBR targets



- ***Agent Defeat and Precision Engagement***

- Deny use of biological agents through precision delivery & complete neutralization of BSAT targets; reduce collateral damage due to post-plume BSAT contaminants

- ***Sustained Operations through Aircraft Decontamination***

- Aircraft Reconstitution Initiative: Provide cost-effective Aircraft CBR decontamination procedures

- ***WMD Quantification Sciences***

- Provide accurate threat assessment of CBR hazard persistence & operational risk tradeoffs to Commanders (ACC/AMC/JPEO-CBD/DTRA)

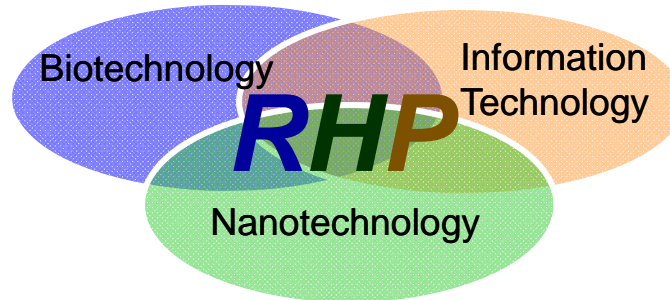
- ***CBR Situational Awareness & Operational Effects Modeling, Simulation & Analysis***

- Model (CBW) attacks and assessing operational effects
- Risk mitigation and consequence management strategies



# Counterproliferation Branch

## Combating Weapons of Mass Destruction



## RHPC

### Counterproliferation

*Find Fix Track Target Engage & Assess*

### Consequence Management

*Situational Awareness, Prediction, & Mgmt*

#### *Brooks*

- Advanced Biological Taggants
- Neutralization of Concealed Threat Agents
- Taggants for Tracking Concealed Threats
- Nanotaggants for CP & National Security
- Bio Threat Neutralization Technology

#### *UC*

- Situational Awareness & OPS Effects MS&A
- Aircraft Reconstitution Initiative
- WMD Quantification & Sciences
- Interactome Science In Genomic High Throughput
- Odorant-Based Biometrics for Advanced Tagging and Tracking Systems

#### *WPAFB*



# Counterproliferation Branch Unique Mission



- **AF's only BSL-3 research lab**
  - Only BSL3 cleared to handle BSATs
  - Enables a safe environment for BSAT work
  - Houses USAF BSAT collection
  - Supports AF unique need for “live agent” testing/validation
  - “*Cradle-to-grave*” accountability while providing a safe & secure environment
- **Roles of military lab techs:**
  - Research technicians: work along side senior scientists
  - Facility managers: coordinate maintenance and contracts
  - Security managers
  - Custodial staff: perform grounds and internal cleaning
- **An AF mandated Biological Personnel Reliability Program (BPRP) is strictly enforced**





# What is BPRP?



- **In August 2008, HQ USAF ordered a top down review of all operations that handle and store BSATs**
- **A result of that review was to institute a BPRP for all government employees certified to handle BSATs**
- **BPRP requires extensive interview process**
  - **Medical records review**
  - **Appropriate security clearance**
  - **FBI background check**
  - **CDC authorization to handle BSAT**
  - **Personnel records review**
  - **Random Urine Drug Testing**
  - **Commander Approval**



# Lab Technician Roles



## FIELD WORK





# Lab Technician Roles



## Mosquito Trapping



## FIELD WORK



## Mice Field Collections



# Questions?

