

Mission Orientated Protective Posture (MOPP)

& CBR defense bill
Lesson topic 4.5



Enabling Objectives

- ⌘ *Describe* the different levels of protection associated with Mission Oriented Protective Posture(MOPP)
- ⌘ *State* the purpose of the Chemical, Biological, and Radiological Defense Bill
- ⌘ *Identify* personnel responsibilities for Chemical, Biological, and Radiological Defense

MOPP



⌘ Purpose

- ☑ Enhance the survivability of ship's crew
- ☑ Sustain shipboard operations critical to fulfilling the mission
- ☑ Management tool which coordinates individual collective protection activities & shipboard systems into effective countermeasures

MOPP



- ⌘ Provides for incremental preparations to defend against CBR attacks
- ⌘ Provides incremental application of increased protection to counter minimum to maximum levels of CBR environments
- ⌘ Implementation of MOPP levels must be the result of threat/risk assessment

Chemical, Biological & Radiological Defense Responsibilities

⌘ Commanding Officer

- ☑ Establishes Maximum Permissible Exposure
- ☑ Direct & coordinate the training of ship's crew & embarked personnel
- ☑ Designate the appropriate MOPP level

Chemical, Biological & Radiological Defense Responsibilities

⌘ Executive Officer

- ☒ Direct & coordinate the training of ship's crew
- ☒ Supervise accomplishment of preparatory measures prior to a CBR attack

⌘ Officer of the Deck

- ☒ Familiar with CBR-D procedures
- ☒ Record avoidance & countermeasures activities

Chemical, Biological & Radiological Defense Responsibilities

⌘ Operations Officer

- ☑ Principal advisor to the CO regarding potential or actual CBR hazards
- ☑ Maintain plots of predicted & actual CBR hazard areas
- ☑ Keep DCA informed

Chemical, Biological & Radiological Defense Responsibilities

✂ Embarked aviation Units

- ☑ Appoint CBR-D officer
- ☑ Assign embarked personnel to decon teams
- ☑ Air-specific decon training

**Embarked units should have their own
CBR personnel protective clothing &
aircraft decon supplies**

Chemical, Biological & Radiological Defense Responsibilities

⌘ Engineering Officer

- ☑ Supervise & direct the DCA
- ☑ Instruct engineering personnel in the use of individual protective equipment
- ☑ Direct decontamination & repair of engineering spaces

Chemical, Biological & Radiological Defense Responsibilities

⌘ Damage Control Assistant

- ☑ Responsible for CBR-D bill
- ☑ Advise the CO on CBR-D
- ☑ Supervise CBR-D training of crew
- ☑ CBR-D coordination with embarked units

⌘ Department Heads

- ☑ Assist DCA on maintaining CBR-D readiness
- ☑ Coordinate assignments of personnel
- ☑ Training of all personnel in department

Chemical, Biological & Radiological Defense Responsibilities

⌘ Division Officer

- ☑ Principal assistants to DCA in division
- ☑ Appoint divisional DCPO for CBR-D training
- ☑ Ensure good hygiene & sanitation

Chemical, Biological and Radiological Defense Bill

- ⌘ Purpose, provide guidance in defense measures prior to a CBR attack
- ⌘ Methods to be used in minimizing damage & personnel casualties
- ⌘ Contains preparatory & active measures

Preparatory measures

- ⌘ Proper inoculations
- ⌘ Cleanliness of the ship
- ⌘ Self/buddy aid procedures
- ⌘ Pre-attack activation of CMWDS
- ⌘ Material condition of readiness
- ⌘ Minimizing exposure



Active measures

- ⌘ Immediately following a CBR attack
 - ☒ Maneuvering of ship
 - ☒ Activation of CMWDS continuously
 - ☒ Decontamination of personnel & equipment
 - ☒ Prompt & accurate detection & prediction of contaminated areas

Risk assessment



- ⌘ Risk is the assessed difference between the threat level & activation of appropriate levels of shipboard countermeasures
- ⌘ Risk analysis begins with intelligence information which describes the threat

Intelligence information



- ⌘ CBR warfare capability in area
- ⌘ Assessment of the political will
- ⌘ Strike ranges of known delivery systems
- ⌘ Threat axis & potential attack patterns
- ⌘ Estimated time of arrival

Risk assessment threat levels

⌘ Level 1 suspected

- ☑ Possession of CBR capabilities by an adversary with delivery systems in the operational area constitutes a suspected threat
- ☑ Implementation of MOPP-1 countermeasures

Risk assessment threat levels

⌘ Level 2 possible

- ☒ Assessed political will of an adversary to utilize CBR warfare increases the threat
- ☒ Implementation of MOPP-2 countermeasures



Risk assessment threat levels

⌘ Level 3 probable

- ☒ Statements of intent to employ CBR warfare
- ☒ Changes to political or military posture of an adversary possessing CBR capabilities
- ☒ Use of CBR warfare within operational area
- ☒ Implementation of MOPP-3 countermeasures

Risk assessment threat levels

⌘ Level 4 imminent

- ☑ Confirmation of increased activity involving delivery systems
- ☑ Recognized platform attack patterns
- ☑ Electronic or visual indication of employment
- ☑ Implementation of MOPP-4 countermeasures

Risk management & implementation of MOPP

- ⌘ Decision to initiate/upgrade ship's MOPP begins with the determining threat level
- ⌘ Increase on threat level doesn't justify immediate implementation of all countermeasures
- ⌘ Next step is determine time which MOPP countermeasures should be implemented

Risk management & implementation of MOPP

- ⌘ Implementing countermeasures too early will degrade the crew's performance
- ⌘ Immediately following attack an assessment of ship's involvement in the CBR hazard is required
- ⌘ Assessment will determine which countermeasures should remain in effect

MOPP level 1

⌘ MOPP level 1 - attack suspected

- ☑ Individual protective equipment & medical supply are issued to shipboard personnel
- ☑ maintained at respective battle stations
- ☑ Protective masks issued & fitted



Attack suspected

⌘ Chemical protection

- ☑ MCU-2P protective mask
- ☑ ACPG suit
- ☑ Personnel decon kit, M-291
- ☑ Operational inspection of detection equipment & monitoring systems
- ☑ Threat is assumed as "worst case scenario"

Attack suspected

⌘ Biological protection

- ☑ Protective measures same as chemical
- ☑ No medical supplies

⌘ Radiological protection

- ☑ Mask only
- ☑ Operational inspection of installed detection equipment monitoring systems

Attack suspected

⌘ Other Actions

- ☑ Set Material condition YOKE
- ☑ Set Readiness Condition III
- ☑ Training
- ☑ Review survival standards for CBR-D environments
- ☑ Assign personnel to CBR defense teams

MOPP level 2

⌘ Attack possible

- ☑ Protective mask worn on person
- ☑ Pre-position CBR-D equipment
- ☑ Operationally test CMWDS
- ☑ Operationally test alarms
- ☑ Radiological only, issue dosimeters
- ☑ Training

Attack possible

⌘ Other Actions

- ☑ Designate primary/secondary CCA & decontamination stations
- ☑ Set Material Condition ZEBRA (modified)
- ☑ Conduct threat brief on enemy capabilities
- ☑ Review shipboard procedures for handling of contaminated casualties

MOPP level 3



⌘ Attack probable

- ☑ Install new canister on MCU-2P
- ☑ Activate CMWDS intermittently
- ☑ Weather deck activities require wet weather gear
- ☑ Activate Collective Protection System (CPS)

Attack probable

⌘ Chemical protection

- ☑ Don ACPG with hood down
- ☑ Initiate NAPP
- ☑ M-291 stowed in mask carrier, medical supplies are stored in jumper cargo pocket

Attack probable

⌘ Biological protection

- ☑ Same as chemical, - medical supplies & NAPP

⌘ Radiological protection

- ☑ Don battle
- ☑ Warm up & test all RADIACSs
- ☑ Ready shelter

Attack probable

⌘ Other Actions

☑ GQ

☑ Set Material Condition ZEBRA

☑ Activate CCA/decon stations

MOPP level 4

⌘ Attack imminent

- ☑ Set Circle WILLIAM
- ☑ Activate CMWDS continuously
- ☑ Chemical/biological, secure jumper hood over head & around mask
- ☑ Don protective glove set

⌘ Radiological

- ☑ Don battle dress
- ☑ Monitor radiation detection equipment

Attack imminent

⌘ Other Actions

- ☑ Set GQ (if not already)
- ☑ Mandatory water drinking regimen
- ☑ Set MPE & casualty dose
- ☑ Ready & deep shelter



Review and Summary

- ⌘ Purpose of MOPP levels
- ⌘ Responsibility of personnel
- ⌘ Risk assessment
- ⌘ Risk management & implementation of MOPP levels



Review and Summary

 CBR Defense Bill

 MOPP levels

 MOPP 1

 MOPP 2

 MOPP 3

 MOPP 4