JPACE – MOPP 4

IN THE

AVIATION ENVIRONMENT

Chemical/Biological
Individual Protection
Conference
March 2006
GLOSSARY

• Joint Protective Air Crew Ensemble (JPACE)
• Mission – Oriented Protective Posture (MOPP)
• Chemical/Biological (CB)
• Key Performance Parameter (KPP)
• Joint Service Lightweight Integrated Suit Technology (JSLIST)
• Aircrew Life Support Equipment (ALSE)
• Individual Protective Equipment (IPE)
• Microclimate Cooling Garment (MCG)
• Microclimate cooling Unit (MCU)
• Naval Aviation = Navy & Marine Aviators
• Air Warrior – US Army
JPACE

• One-Piece Chemical Protective Coverall for all services, all platforms

• Backward and forward compatible with all services Chemical/Biological respirators and foot and hand protection

• Backward and forward compatible with all services Aircrew Life Support Equipment, aircraft, and mission essential equipment
KPP’s

• Provide CB protection equal to or better than JSLIST

• Provide CB protection over a 16 hour minimum mission duration

• Not interfere with ejection and continue to meet all CB agent permeation requirements following a survivable ejection and parachute descent

• Resist ignition and if ignited self-extinguish at a rate equal to or faster than the current (non CB) flight garments
# MOPP LEVELS

<table>
<thead>
<tr>
<th>Afloat*</th>
<th>Ashore**</th>
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<tbody>
<tr>
<td><strong>MOPP</strong></td>
<td><strong>Description</strong></td>
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<tr>
<td>MOPP 1</td>
<td>Ensure that IPE is available(^3).</td>
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<tr>
<td>MOPP 2</td>
<td>Activate installed detectors, Carry mask(^4) and post M8/M9 paper.</td>
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<tr>
<td>MOPP 3</td>
<td>Don protective suit, and boots; activate intermittent countermeasures washdown.</td>
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<tr>
<td>MOPP 4</td>
<td>Don protective gloves and mask</td>
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\(^*\)USN, USCG, and MSC vessels. \(^**\)USN, USMC, USA, and USAF personnel.

1. The term "mask" includes any form of respiratory protection against NBC hazards as issued by services.
2. IPE must be available to soldiers and marines within 2 hours. A second set must be available in 6 hours. MOPP ready does not apply to the USAF.
3. IPE must be within arm’s reach of personnel.
HELICOPTER CONFIGURATION
WITH A/P22P-18 & LPU-34

- HGU-68/U/P HELMET ASSY
- LPU-34/P LOW PROFILE FLotation COLLAR (LPTC)
- A/P22P-18 AIRSAVE SURVIVAL VEST AND ARMOR ASSY
- SHU-40/P HELICOPTER AIRCREW BREATHING DEVICE
- CS/FRP-2 FIRE RESISTANT FLYER’S GLOVE
- CWU-27/P FLYER’S SUMMER COVERALL
- MIL-B-21408 FLYER’S BOOT
AIR WARRIOR BLOCK 3

General Dynamics C4 Systems
TACAIR CBR CONFIGURATION
WITH A/P22P-18 & LPU-33/P

- HGU-68(V)/P HELMET ASSY
- A/P22P-18 AIRSARVE SURVIVAL VEST
- PCU-56/P TORSO HARNESS
- CANSER FAN
- CMU-29 A(V)/P OVERVEST
- CANTEEN W/ DRINK FACILITY
- CHEMICAL PROTECTIVE GLOVES WORN UNDER GS/FRP-2 FLYER'S GLOVE
- CSU-13 B/P ANTI-G GARMENT
- CHEMICAL PROTECTIVE SOCKS WORN UNDER FLYER'S BOOTS

- A/P22P-14(V) 2, 3 & 4 RESPIRATOR ASSY
- MCR-38/P MASK
- LPU-58/P LOW PROFILE FLOATATION COLLAR (LPFC)
- BATTERY PACK
- C2 FILTER CANISTER
- CWU-27/P FLYER'S SUMMER COVERALL
- MXU-635/P INTERCOM UNIT
- MK-1 CHARCOAL LINER WORN UNDER FLYER'S SUMMER COVERALL
- MIL-B-21408 FLYER'S BOOT
TESTING

- Flame-Resistance
- Chemical Protection
- Contaminated Doffing
- Survivability
- Human Factors
- Heat Stress
- Durability Field Testing
- Physical Properties
BACKUP SLIDES
Air Warrior Configuration

- **Air Warrior Block 1**
  - Flexible Body Armor
  - Ballistic Upgrade Plates
  - Primary Survival Gear Carrier
  - First Aid Items
  - Universal Holster
  - Aircrew Survival and Egress Knife
  - M45 Protective Mask Blower
  - Microclimate Cooling System (MCS)
    - Microclimate Cooling Garment (MCG)
    - Microclimate Cooling Unit (MCU)
- **Over Water Mission Equipment (SELECT UNITS)**
  - Over Water Gear Carrier
  - Survival Egress Air (SEA)
  - Flotation Collar
- **Accelerated Block 2**
  - Electronic Data Manager (EDM)
Potential Expanded use

- Potential candidate for CVC
- Participating in Side-by-Side tests with JC3 designs and JSLIST Type VII