



# JOCOTAS Briefing 3 May 2005

Frank Kostka

508-233-5257

[frank.kostka@natick.army.mil](mailto:frank.kostka@natick.army.mil)

Collective Protection Directorate

Natick Soldier Center



# JOCOTAS

## Agenda

- Welcome to Attendees
- Quick Overview of JOCOTAS
- Emerging Shelter Requirements



# JOCOTAS



## VOTING SERVICE REPRESENTATIVES

Steve Rann  
Army – ASAALT  
Dennis Fawson

Will Hartzell  
Darell Jones

Terry Holland  
AF Shelter Prod  
Group Manager

Robert Harding  
DLA HQ  
Jim Vitrano DSCP

MAJ Butts  
PM Navy/Marine  
Aviation

Natick Soldier Ctr.  
PM FSS  
PM TOCS  
Edgewood  
TACOM ILSC  
Ft. Lee DCD  
AMMED CTR  
Depots  
ATC  
Trans Eng Agcy

MCCDC  
MCSC

3

Tyndall AFB  
Eglin AFB  
Bare Base Syst  
Hill AFB  
Wright-Pat AFB  
Warner Robbins  
Holloman AFB  
Brooks

DSCP

Fleet Hospital  
Seabees  
JPM CBR  
PM Amphib. WF  
Air Systems Cmd.  
Surface Warfare



# JOCOTAS



## DOD Committee Established in 1975

- Reduce And Eliminate Duplication Of Shelter RDT&E <sup>a</sup>
  - Advance The State Of The Art In Shelter Design
  - Search For Common Solutions To Identified User Needs
- Create A Standard Shelter Family
- Share Information And Expertise To Solve Shelter Problems
  - Promote Evolutionary Change In Development Processes
  - Procure Shelters In The Most Streamlined Way
  - Assure Shelters Are Compatible With Transportation System
- Forum For Interaction Between DOD and Industry

<sup>a</sup> Reduced from ~ 250 Different Rigid Wall Shelters to 17 Types



# JPM COLPRO

Joint Expeditionary  
Collective Protection  
(JECP)



# Joint Expeditionary Collective Protection (JECP)

- What is Collective Protection (cp)
- Protecting Enclosed Groups & Systems From Identified Threats
  - Environmental
  - Detection
  - Human Factors
  - NBC Agents
  - Ballistic
- How Does the Military Deliver cp to the User?
- It depends on the System
  - Add on Kits
  - Integrated into the System



# Joint Expeditionary Collective Protection (JECOP)

- JRO identified Expeditionary Collective Protection as highest priority within Shield capability area
- Initial Capability Document (ICD) approved 15 April 2004
  - DOTMLPF does not resolve capability gap
  - Materiel solution required
  - Broad capabilities identified
- New acquisition program funded to start in FY06



# Required Capabilities per ICD

- Operational in all environments and climates
- Easily transportable in a single HMMWV
- Quick erect and strike
- Rapid ingress and egress
- Minimized power requirements and maintenance
- Support Rest & Relief (R2), Command & Control (C2) and Medical Ops
- Allow for technology insertion
- Full range of protection against traditional CB agents, NTAs and TIC/TIMs



# JECP Acquisition Strategy

- Evolutionary Acquisition approach using incremental development
- Capability Development Document (CDD) anticipated 1QFY06
  - JRO has promulgated a ConOps survey to services via Joint Staff Action Processing Form
- Increment 1 initiation - 4QFY06
  - Possible materiel solutions
    - Stand alone system
    - Transportable shelter kit
    - Fixed site structure kit
  - Emphasis likely to be
    - Reduced weight and cube
    - Reduced power consumption
    - Improved erect/strike over current ColPro



# Input Requested

The JRO is actively seeking input on ConOps and system employment information for a JECF capability.

JPM COLPRO POC: Stan Enatsky/Mike Abaie/Mike Borouch  
AbaieMS@NSWC.NAVY.MIL

The Action Officer Organizations are as follows:

- Navy - OPNAV N767
- Army - G-8
- Air Force - ILEX
- Marine Corps – MCCDC



# Ballistic Protection

## Rapid Equipping Force Request

- Large Scale Ballistic Protection @ UL 752 Level III
- Available Within 90 Days

## Proposed Three Approaches

- Use Standard Tent Frames with Ballistic Panels
- Use Concepts from Modular Furniture Partition Walls
- Use Mobile Structures from the Construction Industry

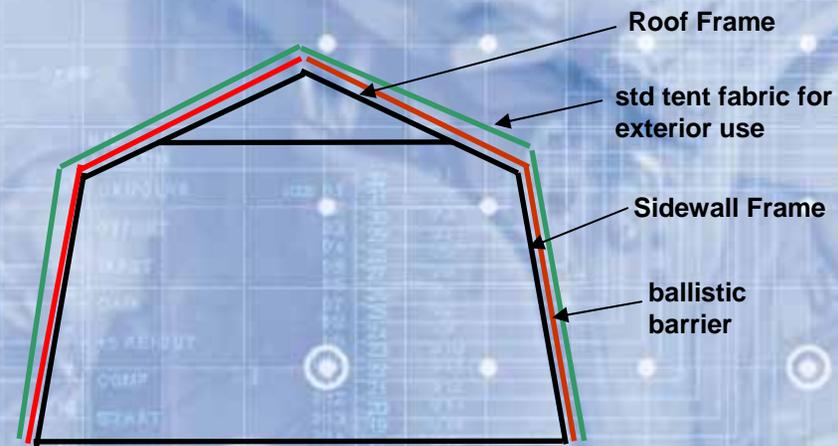
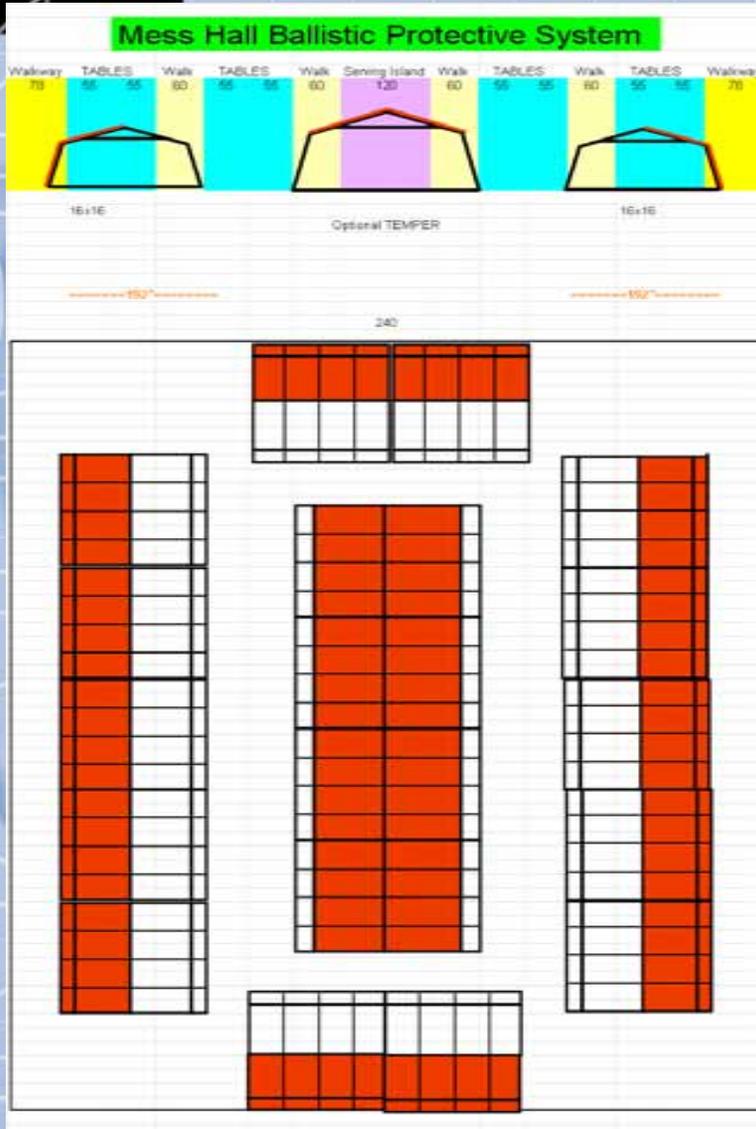
Provided a Synopsis of Options and POCs at COE

## Status

- Synopsis Used as Basis for RPI
- NSC Approach Funded Internally with CPI \$
- REF Teams with COE



# Modular Ballistic Protection Shelter (MBPS)



Section



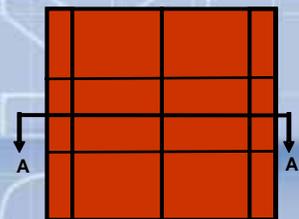
# Modular Ballistic Protection Shelter (MBPS)



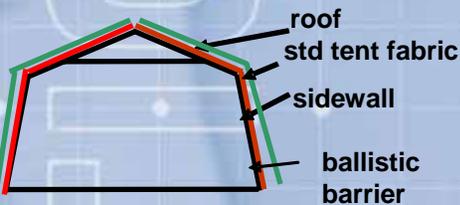
16 x16 Frame Tent

## Description

- A quickly erectable Modular Ballistic Protective Shelter System suitable for use in OEF/OIF Missions.
- Will integrate ballistic and environmental protection into a single system.
- Main building block will be a standard shelter frames augmented by drop in ballistic protection.
- Insures that no "signature" issues assist belligerents in identifying high value targets.
- Will be C-130 Transportable and the components will fit in the back of a HMMWV.
- Goal is to erect the MBPS in 30 minutes with 6 soldiers.
- Warfighter Benefit: Will protect soldiers from mortar fragments to a UL level of II or III depending on the final selection of ballistic materials.



ballistic barrier



Sect A-A

## Variables to Consider

- Weight (lbs)
- Human factors
- Level of Protection
- Flexibility of Use
- Cost (\$ per linear ft)

## Prototype Cost Estimates

	Unit cost	unit	qty	tot
ballistic panels *	\$14	sf	768	\$10,752
16 ' frame Tent	\$2,800	ea	1	\$2,800
1 side wall frame	\$1,000	ea	2	\$2,000
1 roof frame	\$1,000	ea	2	\$2,000
1 end frame	\$1,000	ea	2	\$2,000
engineering	\$100	hr	80	\$8,000
			<b>total</b>	<b>\$27,552</b>
Notes:				
prototype mod-\$/lf			\$1,722	\$27,552
bal of mods-\$/lf			\$1,503	\$24,052

	Unit cost	unit	qty	tot
ballistic blankets^	\$42	sf	768	\$32,256
balance of syst	\$16,800	ea	1	\$16,800
			<b>total</b>	<b>\$49,056</b>
Notes:				
prototype mod-\$/lf			\$3,066	\$49,056
bal of mods-\$/lf			\$2,847	\$45,556

Ballistic Rating Level IIA

Ballistic Rating UL 752 –  
Level III

POC: Frank Kostka; DSN 256-5257; [frank.kostka@natick.army.mil](mailto:frank.kostka@natick.army.mil)



# Ballistic Protection

## University Of Maine / Natick Alliance

- Ballistic Composites
- Advanced Wood Engineered Composites Systems

## DARPA

- Active Measures
- Passive Hard
- Passive Soft