



*NDIA*

*Small Arms Symposium*

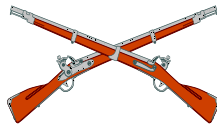
*COL Robert Radcliffe*

*20 May 2008*





# Agenda

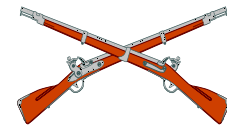


- **Small Arms Capabilities Based Assessment**
- **Soldier lethality**
- **Small arms capability today**
- **Small arms capability tomorrow**
- **Strategic communications**
- **Small arms division organization**



# Small Arms CBA

## Process and Participation



- **Needed to establish the analytical basis for small arms requirements**
- ARCIC initiated in FEB 07
  - Study Team included broad base of knowledge and skills, significant Soldier input
  - Identify tasks, establish conditions and standards, and assess current capability against those standards to identify areas of interest
  - Assess a combination of non-materiel and materiel solutions
  - Prioritize non-materiel and materiel solutions
- ARCIC approved MAR 08

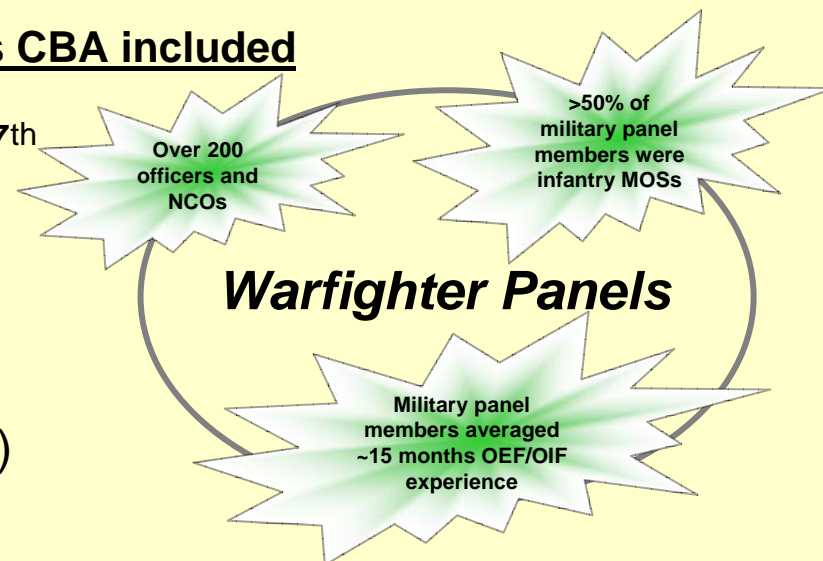
### Participation in each phase of the Small Arms CBA included

**User:** (TRADOC Schools and Centers, 197<sup>th</sup> IN Bde, 82<sup>nd</sup> ABN, 75<sup>th</sup> Ranger )

**Joint:** (JSSAP, USMC, USAF)

**Technical:** (ARL, AMSAA, ARDEC)

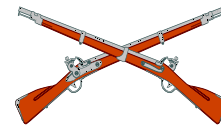
**Programmatic:** (Sensors & Lasers, Soldier Weapons, Maneuver Ammunition Systems )





# Small Arms CBA

## What Soldiers Need



- **See the enemy**

- Beyond weapon ranges for situational awareness
- At weapons ranges for engagement
- All conditions
- Day or night
- Bad guys vs. civilians

- **Kill the enemy**

- Really about effect (or incapacitation)
- Impacts of range versus time
- Noise and light discipline
- Breaching capability
- Maintenance and Reliability

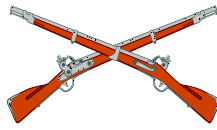
**Not exactly  
a revelation**

**A different approach  
in small Arms**

Soldier + Training + Weapon + Optic + Ammo = Effect



# Soldier Lethality



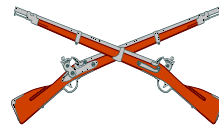
**Lethality isn't just about the weapon.....**

- **Soldier**
- **Training**
- **Weapon**
- **Optic**
- **Ammunition**





# Improving Soldier Lethality



- **Lethality is like real-estate.....location, location, location**

- **Solutions to improve lethality**

- 0-50m: Training, Ammo and Techniques
- 50-500m: Training and Optics/Fire Control

Requires quality hit on the target

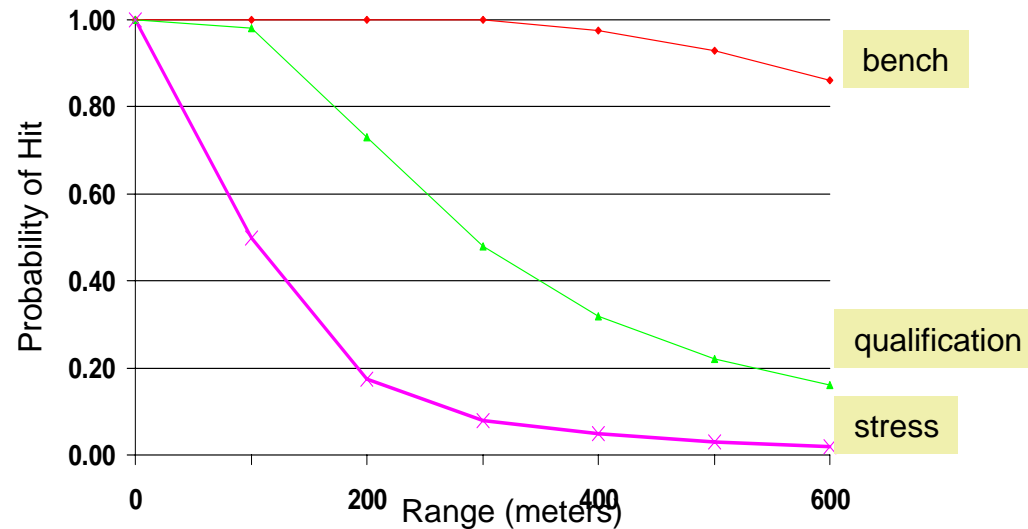
- **Factors for hitting downrange targets**

**#1 Aim point**

**#2 Range Estimation**

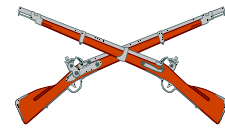
**#3 Environmental**

**#4 Dispersion of weapon**





# Today's Small Arms Capability



- M4 is effective weapon in combat
- Expanded issue of Rail Adapter System
- Unprecedented capability (optics+)



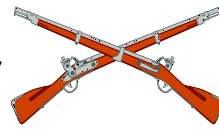
- Enormous field support for all 3 weapons
- Expanded issue of optics on M249 & M240B
- Improved of night capability
- Effective sustainment of M249



- Currently fielding M110 Semi-Auto capability
- Expanded use of precision engagement assets
- Fielding of Advanced Sniper Accessory Kit



# Tomorrow's Small Arms Capability



**Modular Handgun System**



**Subcompact**



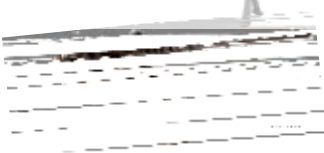
**Expand Carbine Issue**



**M240E6**



**E50**



**Lightweight 50**



**1500m capability**



- Monitor Air Force handgun effort
- Add sub-compact capability to the force
- Optics on every weapon
- Expand precision engagement capability in squads

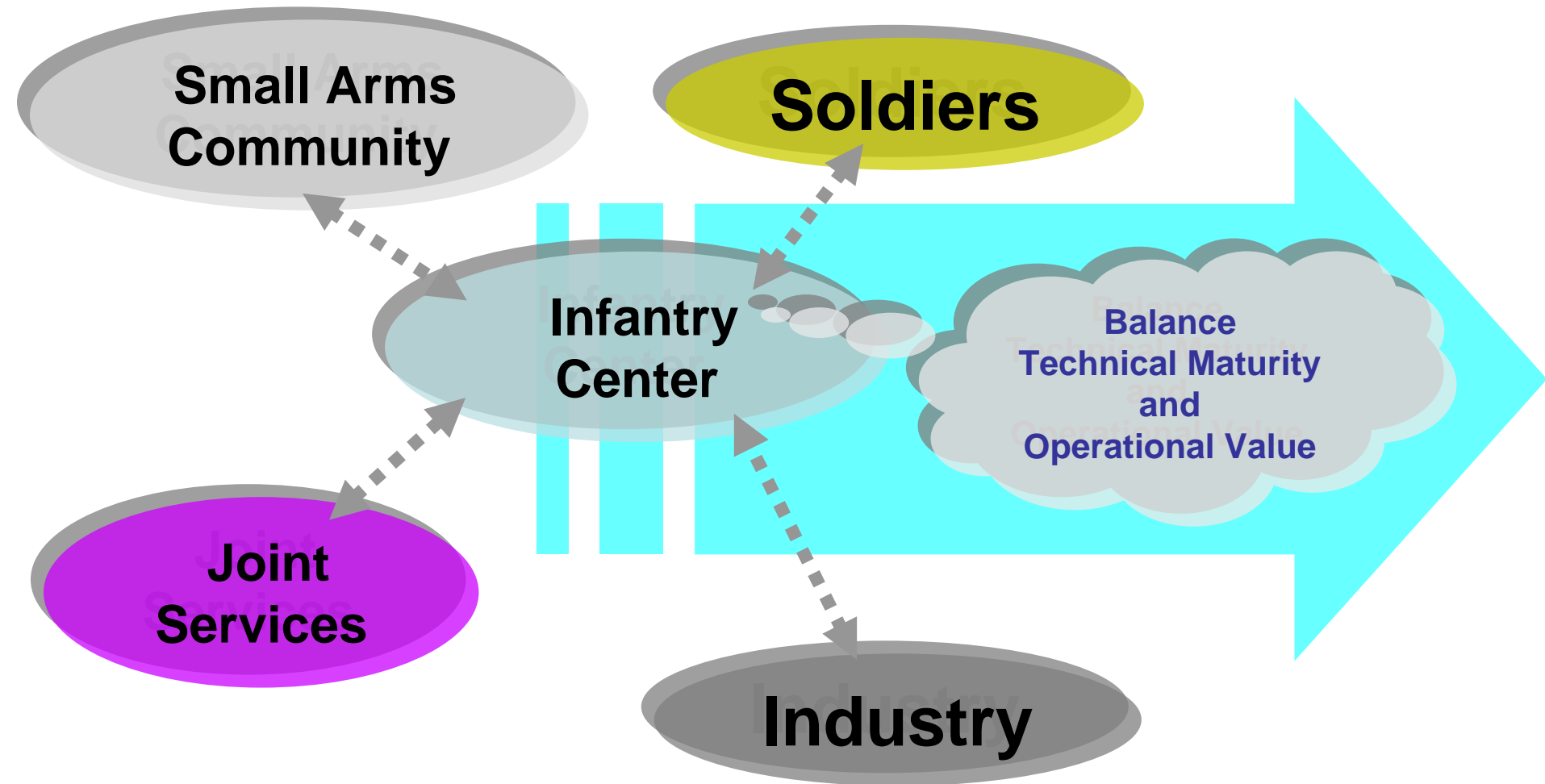
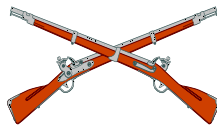
- Performance, Safety, Reliability, Weight
- M240E6 4.5 lb lighter, lighter tripod
- Heavy Machinegun day optic
- E50, Fixed Head-space and timing, quick change barrel

- Expand capability of sniper suite, issue
- Pursue 1500m anti-personnel weapon



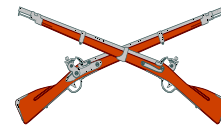


# Strategic Communications





# Small Arms Division



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# Summary



Enable Soldiers to be effective in their operational environment