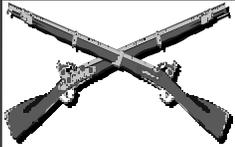


NDIA Conference 2000



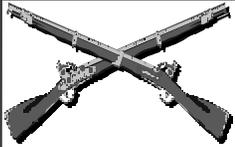
Colonel Jim Stone
Director, Combat Developments
USAIC



The “future” as we saw it in 1982



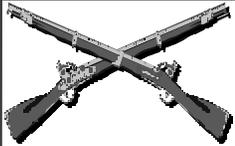
- **The majority of the Infantry [mech infantry] will focus on the Central NATO Front.**
- **The 1990s will require a light force with “flexibility and staying power” as part of a highly deployable, contingency “medium force” for employment in the Third World.**



The Infantry Concerns in 1982



- **“Lack of clearly defined Light Infantry missions.”**
- **“Too much emphasis on the European mechanized battle.”**
- **“Not enough emphasis on MOUT, counter-terrorism...”**
- **“The lack of a concept of ‘whole infantry’ ...**



Intent of the CSA ...

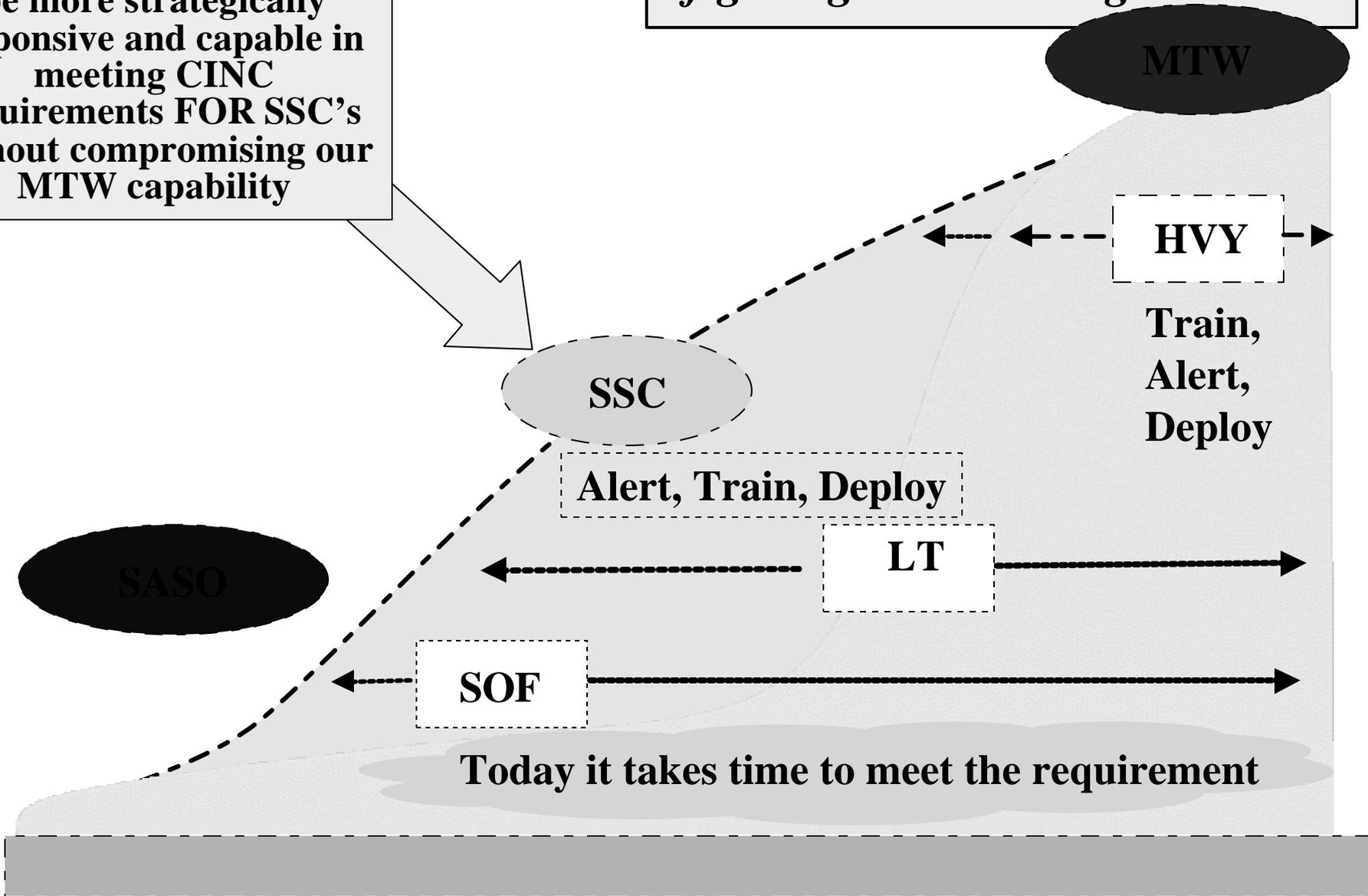
23 June 1999



“We intend to transform the Army, all components, into a standard design with internettted C4ISR packages that allow us to put a combat capable brigade anywhere in the world in 96 hours once we have received execute liftoff . . . To this end, we will begin immediately to turn the entire Army into a full spectrum force which is strategically responsive and dominant at every point on the spectrum of operations . . . As quickly as we can, we will acquire vehicle prototypes, in order to stand up the first units at Fort Lewis, Washington . . .”

...Risk: Potential adversaries [and perhaps allies] will perceive our actions as a reduction in US focus on fighting and winning MTW...

Satisfy current needs - to be more strategically responsive and capable in meeting CINC requirements FOR SSC's without compromising our MTW capability



SSC

Alert, Train, Deploy

LT

SOF

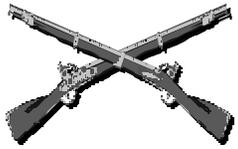
HVY

Train, Alert, Deploy

SASO

MTW

Today it takes time to meet the requirement

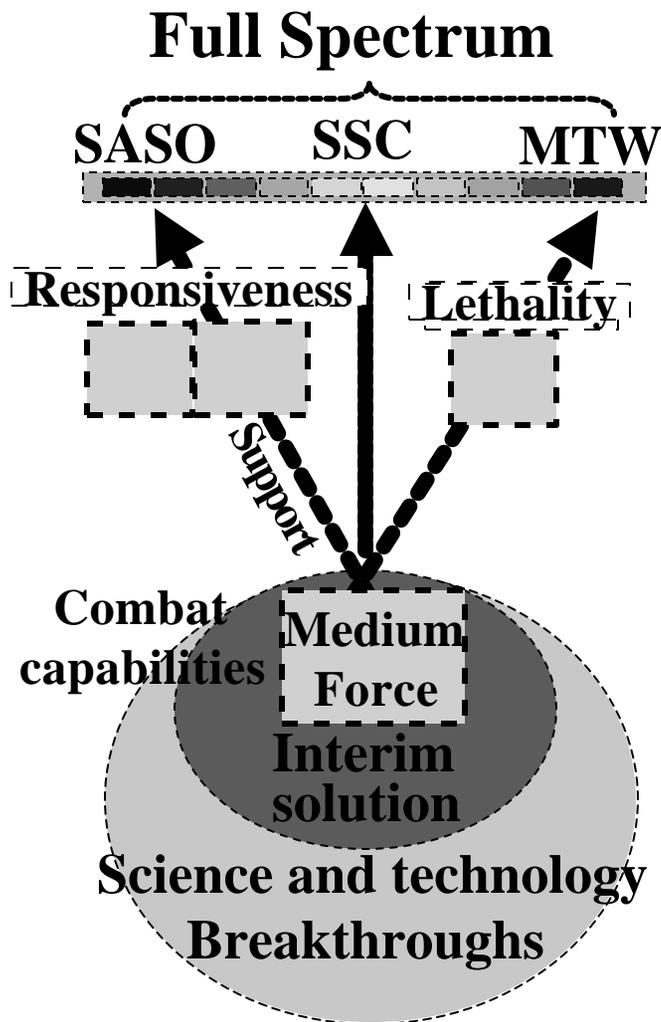


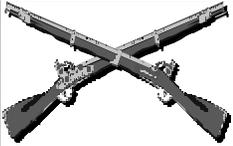
Bridging the Full Spectrum Gap

Mission Analysis



- Medium Brigade is a rapidly deployable *combat* brigade
- In Small Scale contingencies:
 - Rapidly deploys to prevent, contain, stabilize or terminate crisis
 - Land force capable of determining the outcome
- In Stability and Support Operations:
 - The Brigade is the guarantor combat force
 - It protects joint and coalition PK/PE forces
 - It may be the initial force deployed to separate belligerents
- Major Theater Wars - with augmentation, fights as part of the Division:
 - Conducts Supporting Attacks
 - Fights as one of the brigades in the Division's Main Attack or Main reserve with augmentation
 - Conducts Economy of Force, Reconnaissance, Screening, and limited Guarding actions





Full Spectrum Threat



Forces

- Paramilitary forces
- Special Police
- Terrorists
- Militia
- Motorized Infantry
- Mechanized Forces

**Potential to
Escalate into
MTW**

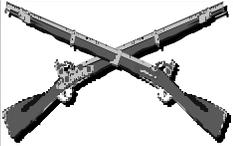
Tactics

- Unconventional, terrorist and guerrilla operations
- Use of sanctuaries
- Dispersed, decentralized, distributed operations
- High-tempo, limited duration combat
- Sophisticated ambushes
- Exploit constraints of US cultural biases

Equipment

- | | |
|-----------------------------------|-------------------|
| • Small arms | • Mortars |
| • Automatic arms | • Mines |
| • ATGMs | • Info technology |
| • Light-, Medium Armored Vehicles | • Night Vision |
| • Early Gen Tanks → | • WMD |
| | • "Black Eagle" |

Major Theater War Risk remains and is enhanced even as SSC's become more frequent and challenging



Where we are going



Two key tenets will be central. . . It must be trained and ready, decisive in all aspects of warfighting . . . Meets CINC requirements [and] committed to no fair fights . . . Resolutely ensure the development and commitment of Army forces in overmatch conditions.

The Army Transformation Strategy

Operational Environment

Full Spectrum Warfighting Dominance

OBJ FORCE

Today's Light Force Deployability

Mech

Transformation

Lethality and Mobility for Decisive Outcomes

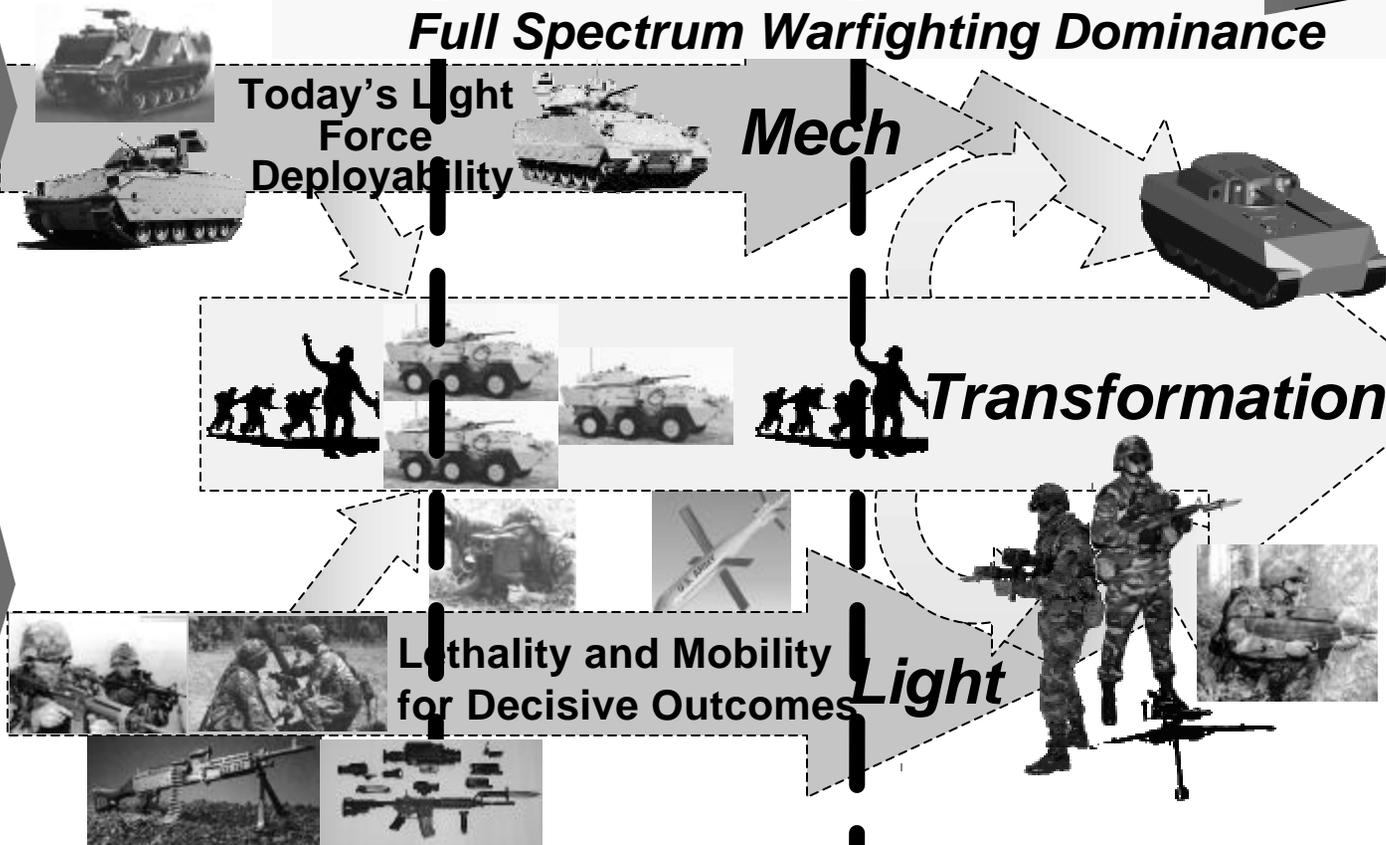
Light

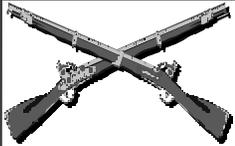
- Responsive
- Deployable
- Agile
- Versatile
- Lethal
- Survivable
- Sustainable

2005

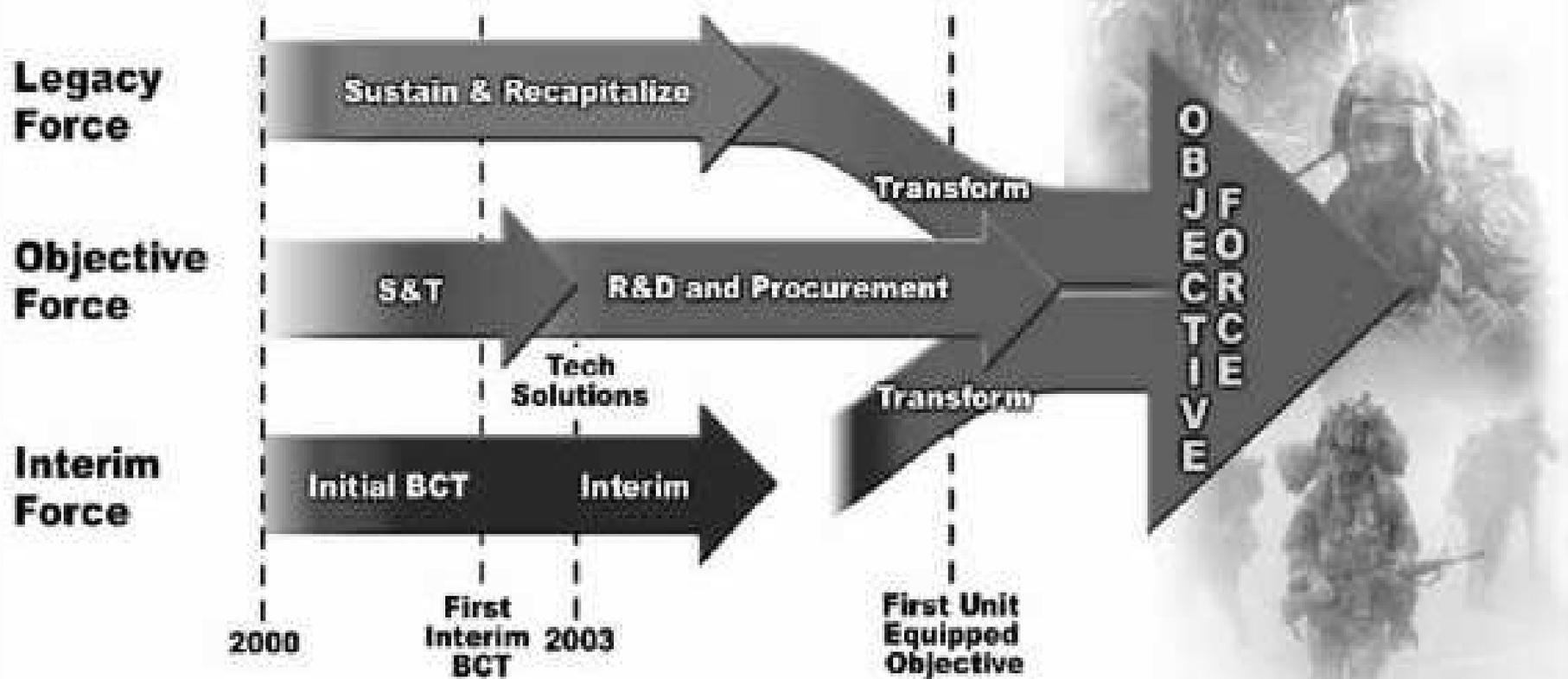
2010

2015

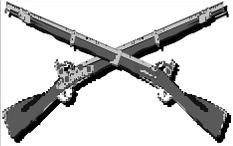




Transformation



Responsive, Deployable, Agile, Versatile, Lethal, Survivable, and Sustainable



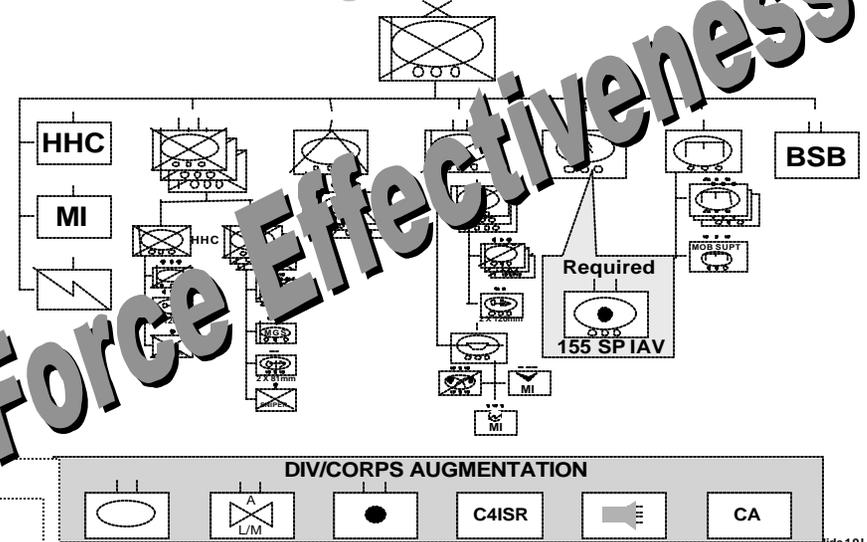
Building the Brigade Combat Team



Base Case --- Serbia

- Weak infrastructure
- Complex & urban terrain
- Asymmetric threat
- Some Tier I/Mostly Tier II threats and technologies
- Confused political situation
- Volumes of Lessons Learned

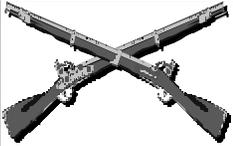
Initial Brigade Combat Team



Analytical + Warfighting Analysis

TRAC: VIC, ModSAF, JANUS;
 CAC, Ft Knox, Ft Benning:
 JANUS, ModSAF & Small
 Group Instructors

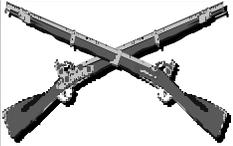
=DTLOMS



BCT Operational & Organizational Concept



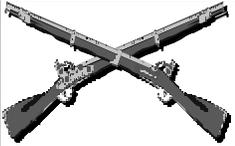
- **“[The Brigade’s] two core qualities are high mobility (strategic, operational and tactical) and its ability to achieve decisive action through dismounted Infantry assault.” (page 7)**
- **“Its core operational capabilities rest upon excellent operational and tactical mobility, enhanced situational understanding, combined arms integration down to company level, and high [Infantry] strengths for close combat in urban and complex terrain.” (page 8)**
- **“The first two capabilities...mobility and dismounted assault centric close combat...are the Brigade's distinct, core qualities. They define the fundamental competencies of the Brigade . . .” (page 13)**
- **“ . . . given its likely operational environment, the Brigade achieves decisive action by means of dismounted [Infantry] assault . . .” (page 14)**



BCT Operational & Organizational Concept



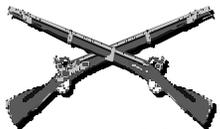
- **“Direct fire support to dismounted assault infantrymen focuses on defeating hardened/fortified positions. Mortars are embedded within maneuver elements down to company level to facilitate non-contiguous and distributed operations and enhance responsiveness . . . essential to effective engagement in urban and complex terrain.” (page 15)**
- **“The primary mode of operations is centered on dismounted assault by Infantry, supported by organic vehicle direct fire weapons, integrated combined arms, and joint force effects.” (page 33)**
- **“. . . decisive action is achieved through the conduct of deliberate assaults by motorized infantry platoons employing their Infantry dismounted.” (page 34)**
- **“In the close fight, platoons and squads execute traditional fire and maneuver tactics.” (page 35)**



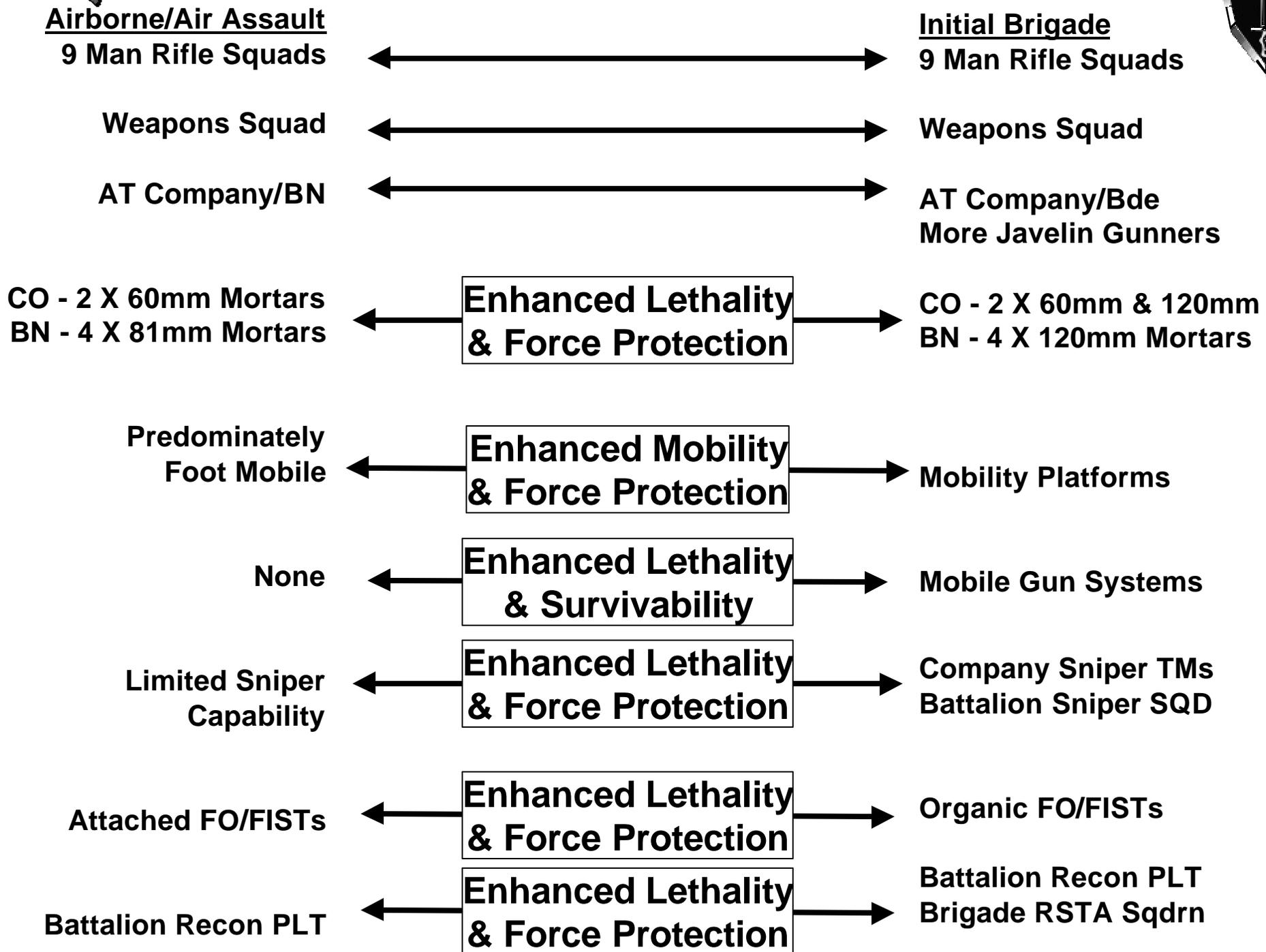
Infantry Battalion O&O Concept



- **Infantry as we have always known it: “meat & potatoes”**
 - **Organized, equipped, & trained to accomplish all Infantry missions across the entire spectrum of conflict**
- **Rapidly deployable by air**
- **Optimized for small scale contingencies in close, urban terrain**
- **Tactically mobile**
- **Fights deliberately when in contact**
- **Fights with armored formations in MTW**
- **Self sustaining for 72 hours (CL I, III, V, M & M)**



What's the Difference and Why?



**Enhanced Lethality
& Force Protection**

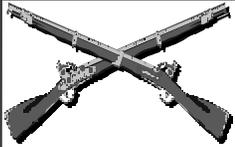
**Enhanced Mobility
& Force Protection**

**Enhanced Lethality
& Survivability**

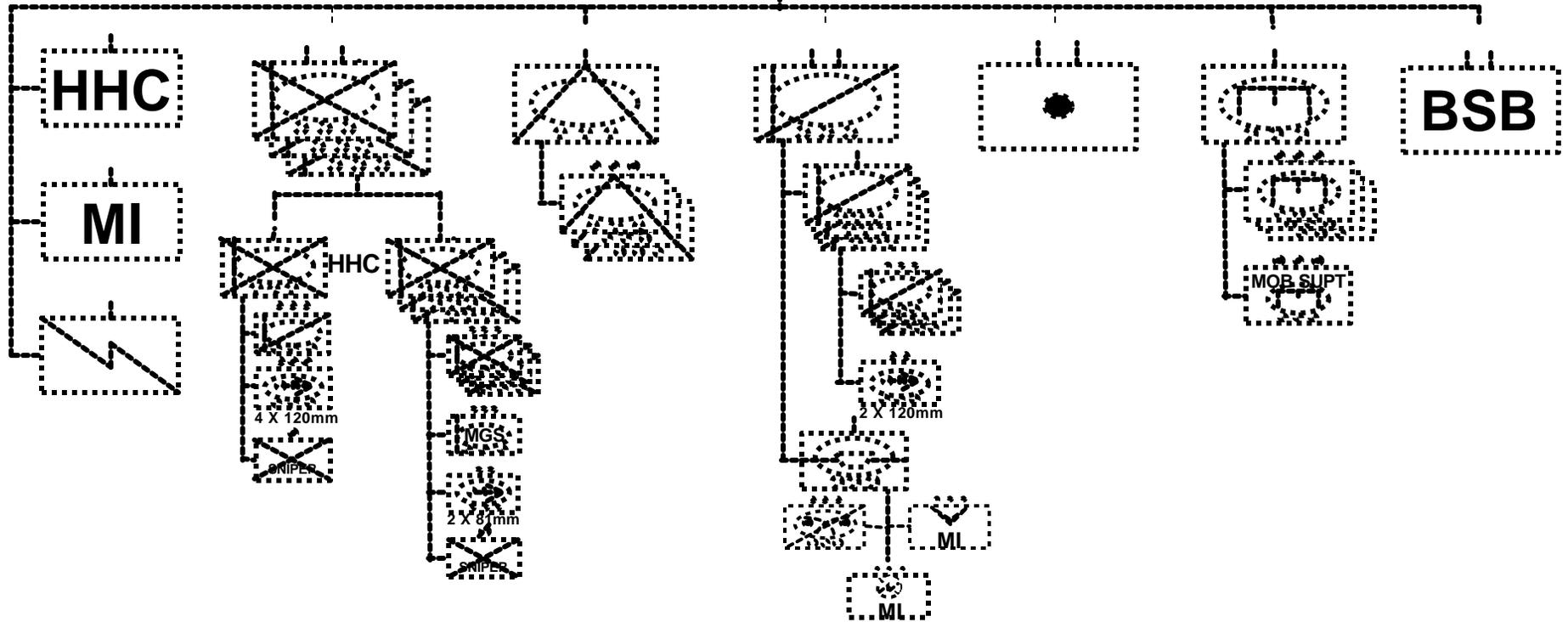
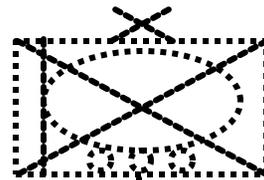
**Enhanced Lethality
& Force Protection**

**Enhanced Lethality
& Force Protection**

**Enhanced Lethality
& Force Protection**

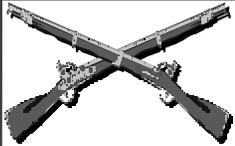


Brigade Concept Team



DIV/CORPS AUGMENTATION





Objective Individual Combat Weapon (OICW) System



Lethality

- HE Airbursting 20mm (1000m)
- KE 5.56 Projectile (550m)
- Full Solution Fire Control

Sustainability

- 6-8 rd mag (HE) (40 Rds basic load)
- 30 rd mag (5.56mm)

Mobility

- Weighs -14lbs

Who gets it

• Replacement for the M4/M16 Family Weapons in Selected Units



C2

- Land Warrior Interface w/ common symbology

Training

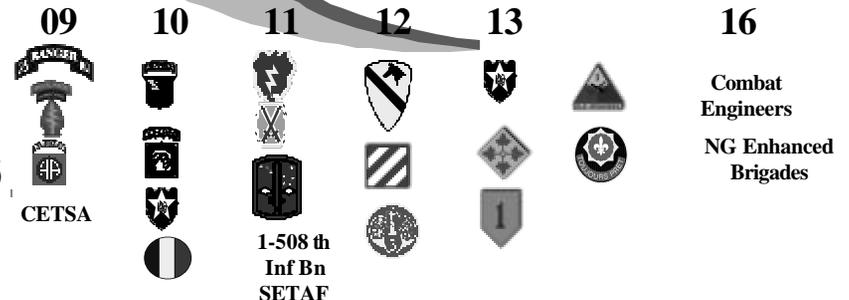
Integral Embedded Training

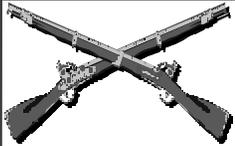
Simulation Based Training

Survivability

- Ability to defeat Tgts in Defilade

Fielding Plan





Objective Crew Served Weapon (OCSW) System



Lethality

- HE Airbursting 25mm (2000m)/Armor-Piercing

- Full solution Fire Control
- ## Sustainability

* OSCW will require less ammunition to obtain the same level of stowed kills over systems it is programmed to replace

Mobility

- Total System Weight: 36lbs
- Ammo Weight: 48 rd container - 21.6lbs

Who gets it

- Replacement for the M2 HMG and MK19 GMG,
- Selected M240B MMG at company level



C2

- Land Warrior Interface w/common symbology

Training

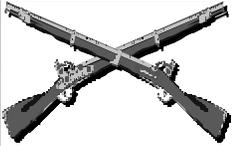
- Simulations Based Training
- Integral Embedded Training

Survivability

- Ability to defeat Tgts in Defilade 2000m

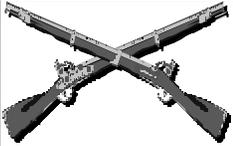
Fielding Plan

08	09	10	11	12	13	17
						Combat Engineers
CETSA						NG Enhanced Brigades
						Other Combat Support Units
		1-508 th Inf Bn SETAF				Selected Service Support Units



Challenges

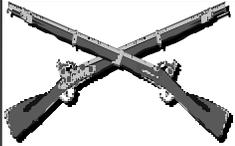
- **Lethality overmatch**
Leap-ahead technology
- **Weight**
Reduce bulkiness
Tactical mobility
- **Integration and Synchronization**
Embedded training
- **Continuous Modernization**
- **Cost**



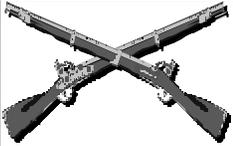
Conclusion

- **Increase Lethality and Survivability**
- **Increase ability to operate under adverse conditions**
- **Enhance flexibility of individual equipment to mission requirements**
- **Committed to improving today's weapons and focusing on producing the best for the Future**





BACK-UP SLIDES



Future Combat Vehicle (Infantry)



Lethality

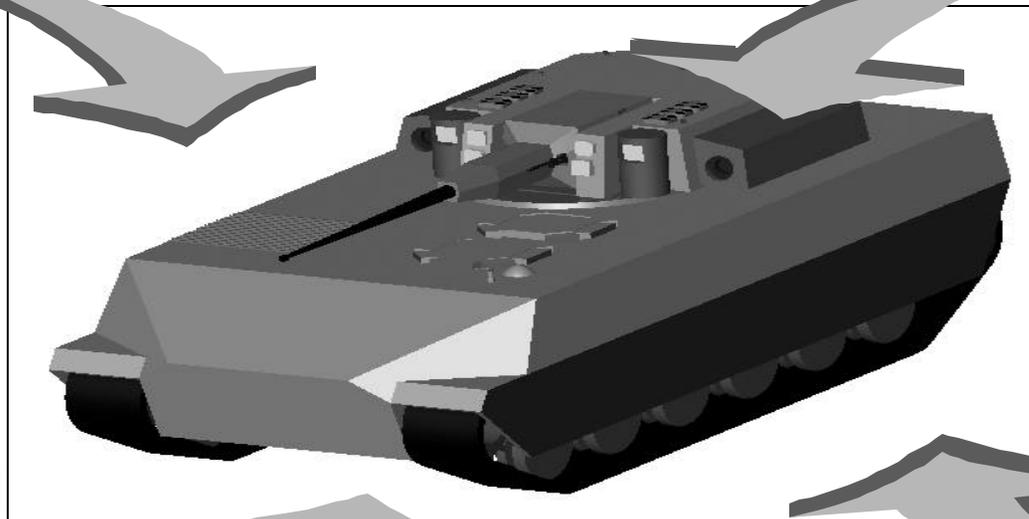
- MULTIPURPOSE MUNITION
- SIMULTANEOUS ENGAGEMENTS

Sustainability

- DECREASED LOGISTIC BURDEN
- EMBEDDED DIAGNOSTICS/PROGNOSTICS

Mobility

- AIR TRANSPORTABLE
22T (T), 15-20T (W)
- IMPROVED TACTICAL MOBILITY



C2

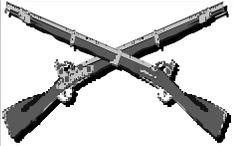
- VOICE RECOGNITION

Training

- EMBEDDED TRAINING

Survivability

- INTEGRATED DEFENSE SYSTEM
- UNPRECEDENTED CREW PROTECTION
- PASSIVE/ACTIVE/REACTIVE PROTECTION



What are the Competitors



Israel Military Industries (IMI)

TAVOR Assault Rifles (T.A.R-21)



Heckler & Koch



HK91.com



*G36K, 5.56MM
MWS*

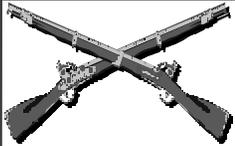


G36E, 5.56MM

Singapore Technologies Kinetics



SAR 21



Infantry Small Arms thru time



The Objective Individual Combat Weapon (OICW)

	Revolutionary War	Civil War	WW I	WW II	Korea	Vietnam	Desert Storm	Land Warrior					
									Weight	Firepower	Fire Control	Day/Night Capability	Defilade Engagements
Kentucky Rifle									9.5 lbs	1 Cartridge	Iron Sights	No	No
1861 Rifle Musket									8.88 lbs	1 Cartridge	Iron Sights	No	No
M 1903 Springfield									8.7 lbs	5-round clip	Iron Sights	No	No
M-1 Garand									9.5 lbs	8-round clip	Iron Sights	No	No
M-16									8.4 lbs	30 Rd Mag	Iron Sights	If Augmented	No
M-79									6.2 lbs	1 Round	Iron Sights	No	No
M16A2/M203									12.0 lbs	30 Rds KE 1 Rd HE	Iron Sights	If Augmented	350 m
MWS									19.5 lbs	30 Rds KE 1 Rd HE	Iron Sights	TWS	350 m
OICW									<14 lbs	30 rds KE 8 rds HE	Fire Control	Yes	1,000 m

