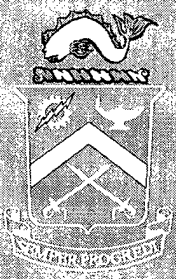
A Concept for Future MOUT

Concepts Division



Future MOUT: Why?

CITIES ARE CENTERS OF GRAVITY

GOVERNMENT

INFORMATION

TRANSPORTATION

POPULATION

WEALTH

INDUSTRY

COMMUNICATIONS

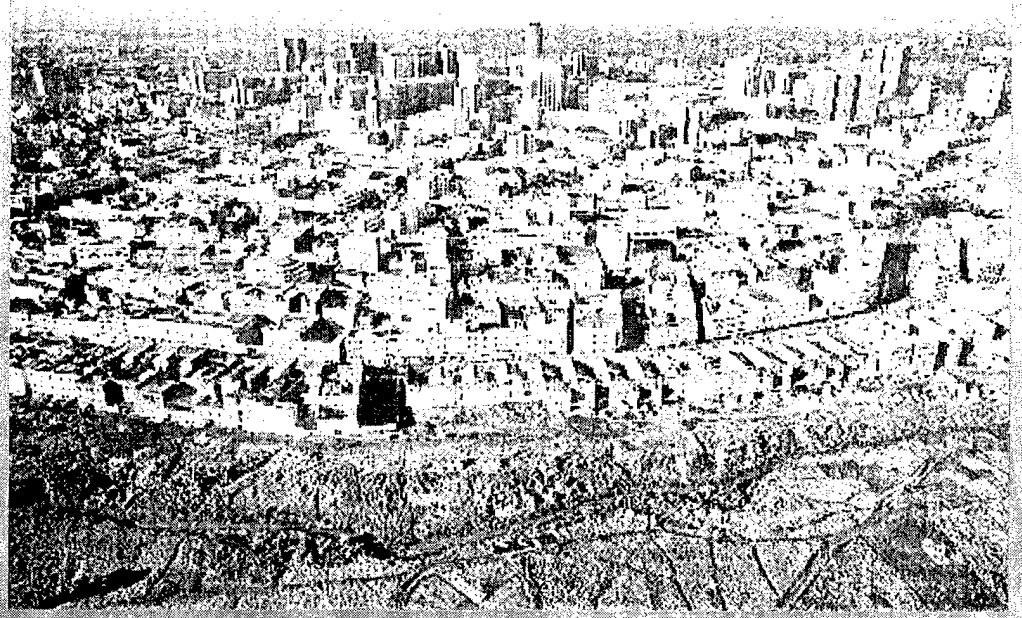
Future MOUT: Why?

. . . because we will DRIVE the enemy into the cities

COVER

CONCEALMENT

NONCOMBATANTS

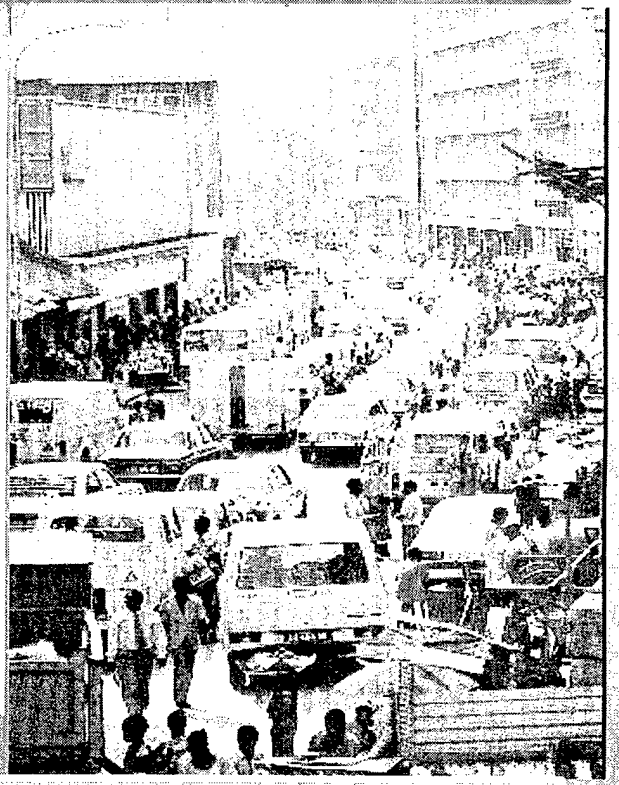


Adaptive opponents will seek to neutralize perceived U.S. technological advantages through asymmetrical tactics

Future MOUT: Urbanization

Trends in Urbanization

- Urban population of developing countries increases by >150,000 people per day
- By 2025, 60% of the world's population will live in urban areas



	1950	1990	
MILLION CITIES [pop. 1 million]	[illegible]	[illegible]	[illegible]
"MEGACITIES" [pop. >8 million]	New York London	Worldwide Developing World [illegible]	Worldwide Developing World

Future MOUT: The Challenge

MOUT Today

ATTRITION WARFARE

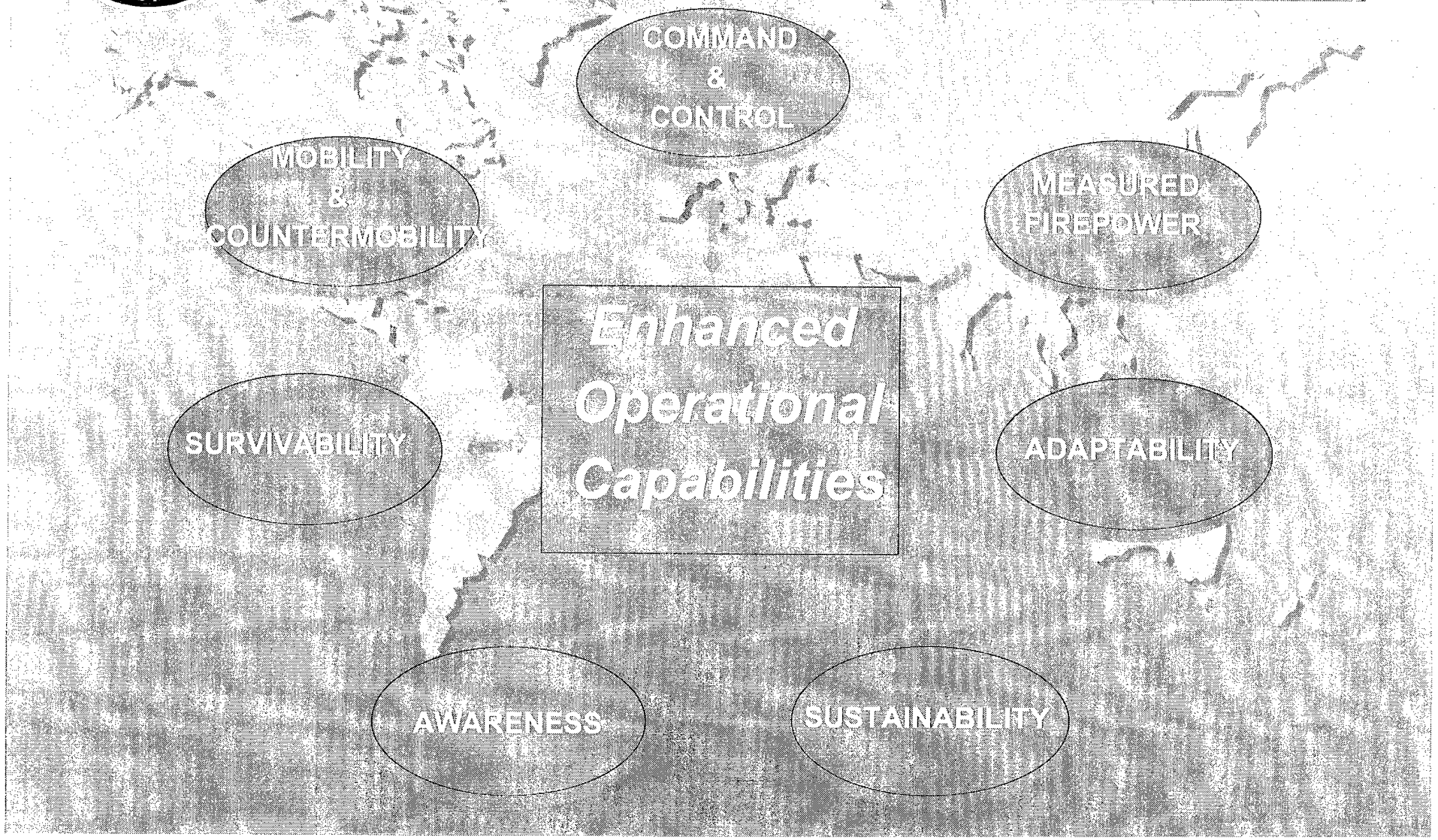
MANEUVER WARFARE

Urban terrain limits

- Command & control
- Observation distance
- Engagement ranges
- Weapons effects
- Mobility

across the range of military operations.

Future MOUT: The Vision



Command and Control

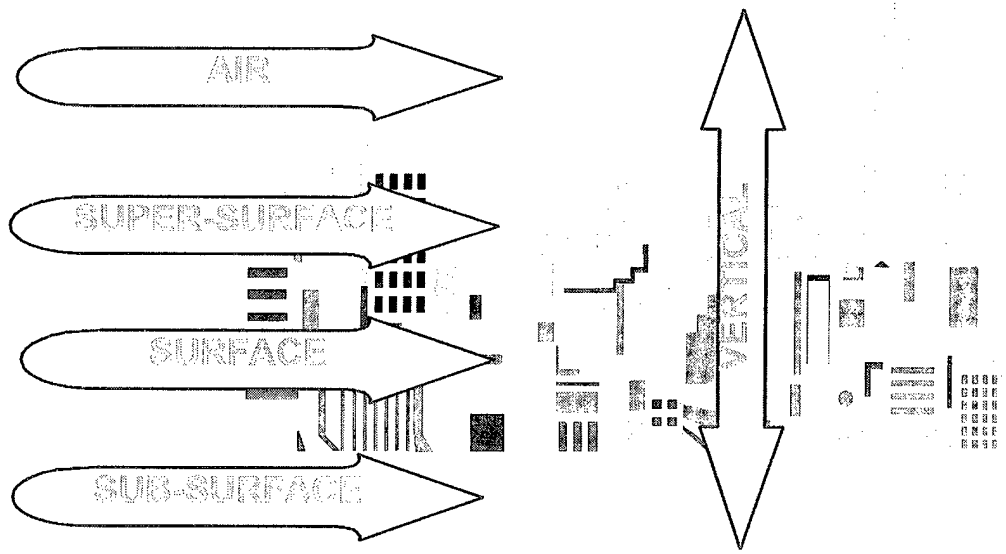
COMM DEVICES

MAP PRODUCTS

"3-D"

PLANNING SYSTEMS

Mobility/Countermobility



- INTERIOR & EXTERIOR VERTICAL MOVEMENT
- RAPID HORIZONTAL & VERTICAL BREACHING
- "3-D" PRECISE NAVIGATION
- DENY ENEMY EXPLOITATION OF TERRAIN

Measured Firepower

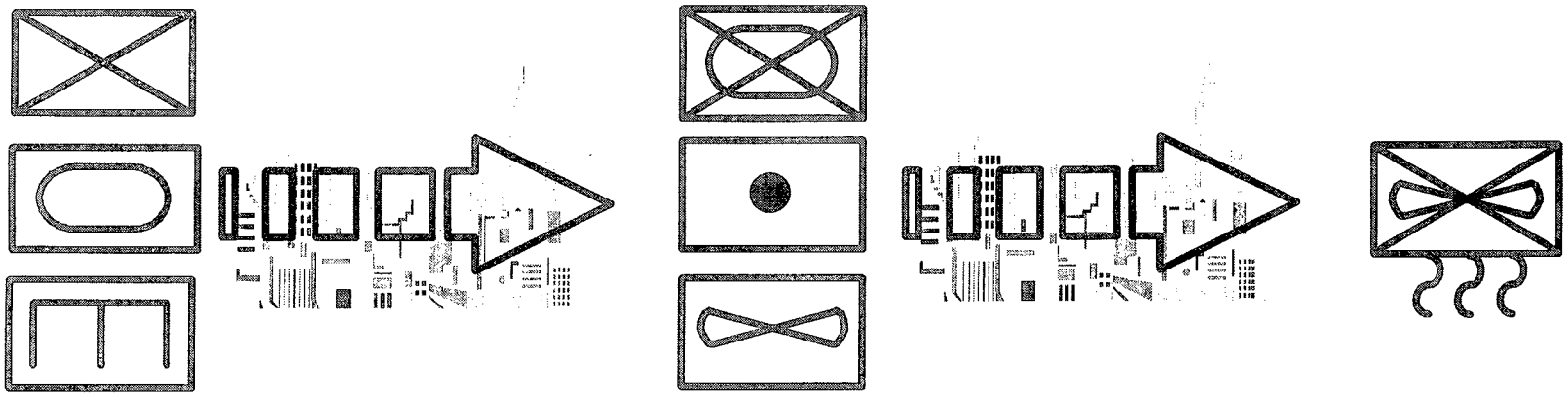
- "3-D" target location & designation
- Extremely precise ordnance delivery
  - Super-surface
  - Surface
  - Sub-surface
- Munitions with variable effects
  - Penetration
  - Explosive
  - Fragmentation
- Nonlethal weapons

Survivability

Individual and collective protection:

- *Body armor optimized for close-range engagement*
- *Concealment*
  - Urban camouflage
  - Signature reduction (mechanical and biological)
- *Enhanced top armor for vehicles*
- *Casualty handling in "3-D"*
- *Protection from exposure to diseases prevalent in urban environments*

Adaptability



Enhanced ability to create task organized combat formations:

SMOOTH TRANSITION FROM ONE TASK ORGANIZATION TO ANOTHER

INDEPENDENT OPS BY VERY SMALL UNITS EMPLOYING SPECIAL CAPABILITIES (SQUAD AND PLATOON MINI-TASK FORCES)

. . . without losing momentum.

Awareness

Sensing the 3-D battlespace to accurately assess information regarding the terrain and the presence of friendly, enemy, and noncombatant personnel:

- "Sense through walls"
- 3-D interior rendering, with capability to display, store and exchange information electronically
- Remote interior sensing

Sustainability

Overcoming the logistics challenge of the urban battlespace:

- CSS must reach dispersed units in complex, 3-D terrain
- Marines will exploit the urban environment
  - Hospitals
  - Vehicle maintenance facilities
  - Communications systems
  - Supplies
  - Talent

Future MOUT: Requirements

- ***Doctrine*** - Change the way we think about MOUT (maneuver, vice attrition).
- ***Organization*** - Do we need special units?
- ***Training/Education*** - More sophisticated MOUT facilities? Train in U.S. cities?
- ***Equipment*** - Leverage emerging technologies in sensing, navigation, comm, etc.
- ***Support*** - Maintenance of sophisticated equipment and training facilities.

Urban Warrior

Fall 1997
to
Fall 1998

Phase One: East Coast

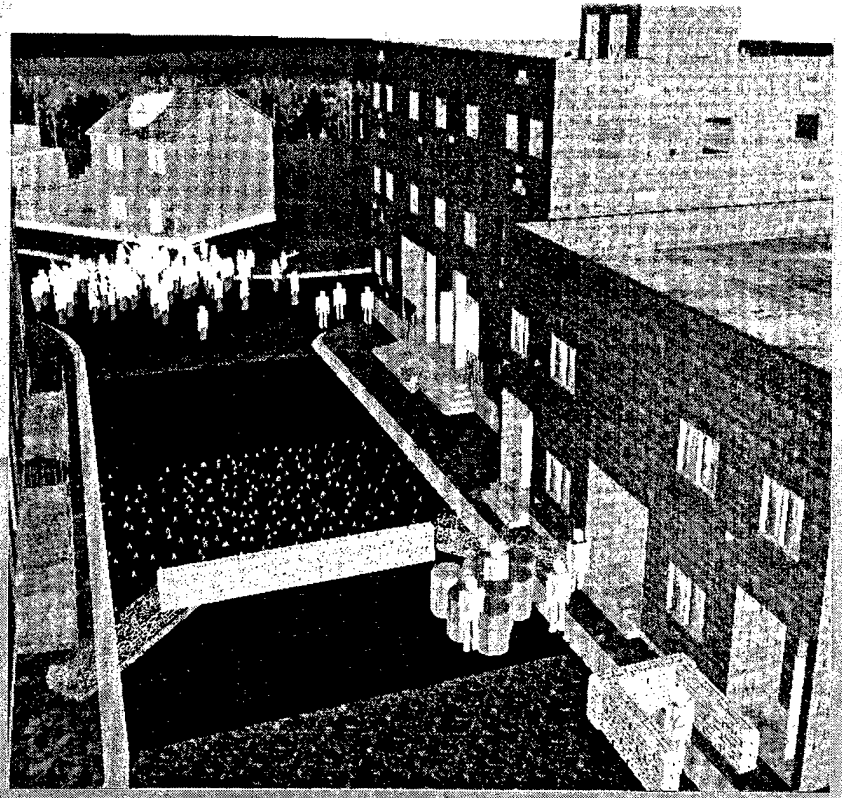
- Develop TTPs
- Develop specialized capabilities
- [illegible] technologies
- LOEs culminating in CPE

[illegible]

- Experiment with refined ECOC
- Apply advanced TTPs
- Seabased urban operations
- LOEs culminating in AWE

Framing Urban Operations

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- Intensive intelligence support
- Extensive use of information ops and non-lethals
- Initiative and opportunism at all levels, especially small unit



Warrior Experiment Themes

Capable Warrior
New and continuing

- Revised urban tactics
- Automated COC decision support
- All source combined arms coordination air/ground/surface
- Shared SA and common tactical picture "foxhole cockpit"

Urban Warrior

- COTS based C4I at fin and below
- Combat squad leader's course
- Enhanced direct fires and non-lethals
- Urban aviation packages and techniques
- Urban CSS packages and techniques

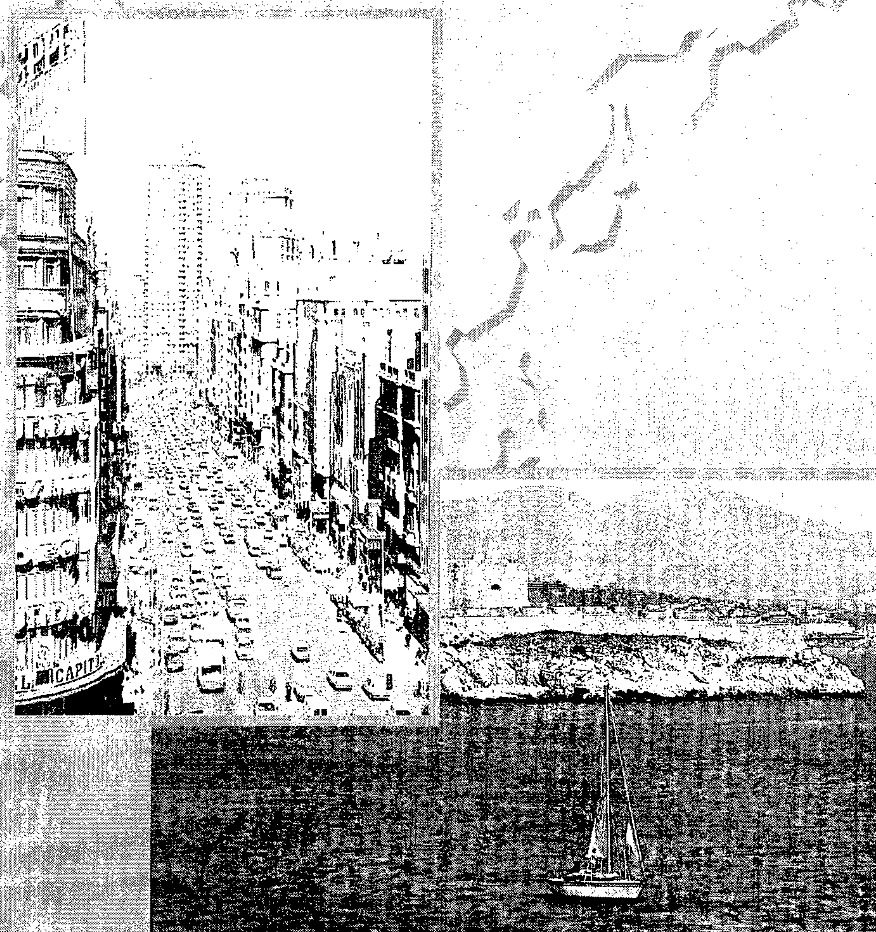
Hunter Warrior

- Redesigned cellular CE
- Enhanced CE decision process
- Shared information environment
- Enhanced CE situation awareness
- Near real-time RSTA integration
- Enhanced detection and targeting by small units and sensors
- Adaptiveprecision indirect fire coordination and application
- Formal small unit leader decision training
- Dispersed small unit operations
- Enhanced small unit digital communications
- Dispersed sustainment on extended battlefield
- Small unit non-lethal applications

Urban Warrior Hypothesis

Urban Warrior Hypothesis (cont)

[illegible] and
[illegible] urban littorals
- Operating in [illegible] areas of the extended battlefield surrounding dense urban areas
  - Dealing with WMD
  - Seabasing the bulk of support capabilities, including C4I and sustainment?"



Experimental Progression

AWE: Determine if we can significantly enhance the ability of forward afloat forces to execute simultaneous, non-contiguous operations in the dense urban battlespace.