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<th>01 NOV 2006</th>
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<td>4. TITLE AND SUBTITLE</td>
<td>Future War Fighting Capabilities</td>
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<td>5a. CONTRACT NUMBER</td>
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<td>5b. GRANT NUMBER</td>
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<td>6. AUTHOR(S)</td>
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<tr>
<td>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</td>
<td>U.S. Marine Corps</td>
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<tr>
<td>8. PERFORMING ORGANIZATION REPORT NUMBER</td>
<td></td>
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<tr>
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<td>10. SPONSOR/MONITOR’S ACRONYM(S)</td>
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<td>11. SPONSOR/MONITOR’S REPORT NUMBER(S)</td>
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<tr>
<td>12. DISTRIBUTION/AVAILABILITY STATEMENT</td>
<td>Approved for public release, distribution unlimited</td>
</tr>
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<td>13. SUPPLEMENTARY NOTES</td>
<td>See also ADM002075., The original document contains color images.</td>
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<td>14. ABSTRACT</td>
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<td>a. REPORT</td>
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<td>b. ABSTRACT</td>
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<td>17. LIMITATION OF ABSTRACT</td>
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<td>18. NUMBER OF PAGES</td>
<td>38</td>
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Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
How Should Joint Forces Fight in the Future?

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How Should Joint Forces Operate in the Future?

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Presentation

I. Determining Capabilities - The Process

II. Thinking About Future War - Seriously

III. Needed Capabilities - My Top Five
Determining Capabilities

The Process
Determining Capabilities

Ends

Ways

Means
Determining Capabilities

Ends

Methods or Concepts

Technologies & Organizations
Clausewitz’s Two Natures of War

**Objective**
- Instrument of policy
- Duel to impose will on enemy by force
- Danger, exertion, uncertainty, and chance
- “Remarkable trinity”

**Subjective (Capabilities)**
- Concepts
- Organization
- Technology
Capabilities Development (Ideal)

Concept $\rightarrow$ Organization $\rightarrow$ Technology
Capabilities Development  
(Ideal)

Concept -> Organization -> Technology

$ -> $$$$ -> $$$$$$$$

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Capabilities Development
(Reality)

Concept

Organization  Technology
Concept Development Over the Past Century and a Half

1860-1914
(Concepts were wrong)

1918-1939
(Concepts were partially right)

1945-1960
(Concepts were wrong)

1975-1991
(Concepts were basically right)

1995-2006
(Concepts were wrong)
Thinking About Future War

Seriously
The Way We *Think* About War Is Important To Determining Future War Fighting Capabilities
“War is war!”

- Professor Colin Gray
U.S. Army War College
13 April 2005
In war more than in any other subject we must begin by looking at the nature of the whole, for here more than elsewhere the part and the whole must always be thought of together.

- Carl von Clausewitz
High-intensity conflict
Major regional contingency
Major theater war
Conventional war
Regular war
Traditional war
Low-intensity conflict
Lesser regional contingency
Small-scale contingency
Small War
Minor War
Insurgency
Unconventional war
Irregular war
Nontraditional war
Asymmetrical war
Network-centric war
Cyber war
“War is more than a chameleon that slightly adapts its characteristics to the given case.”

- Carl von Clausewitz
“We can thus only say that the aims a belligerent adopts, and the resources he employs . . . will also conform to the spirit of the age and to its general character.”

- Carl von Clausewitz
Wars of *Fire and Maneuver*

Wars of *Insurgency*
Leaders *cannot mandate* innovation or transformation; successful change or adaptation results only when there is a clear and specific geo-strategic, operational, or technical problem that a nation or military needs to solve.
“A number of factors contributed to successful innovation. The one that occurred in virtually every case was the presence of specific military problems the solution of which offered significant advantages to furthering the achievement of national strategy.”

- Professor Williamson Murray in *Military Innovation in the Interwar Period*
“Attempts to change warfare through an inwardly focused transformation, looking only at one’s own capabilities and programs, are unlikely to succeed—and have never done so in the past.”

“States have most commonly revolutionized their own militaries, or even war itself, not by setting out to do so but by trying to solve concrete technical, procedural, and strategic problems they faced.”

- Frederick Kagan in *Finding the Target: The Transformation of American Military Policy*
III

Needed Capabilities

My Top Five
What are the Likely Capabilities Needed for Tomorrow’s Conflicts?

1. Design solutions to complex security and military problems
2. Counter Insurgencies
3. Maximize effectiveness of infantry
4. Operate on a nuclear battlefield
5. Counter enemy’s use of precision weapons
Statement of the Problem (1)

Current U.S. military operational design and planning processes do not promote the degree of imagination, creativity, and adaptability needed in the emerging security environment.
Operational Design

Designing  Planning
“Sponsor”

Architect

Engineers

Craftsmen & Artisans
Operational Design ‘Team’

- “Sponsor”
- Architect
- Engineers
- Craftsmen & Artisans

- National Leadership
- Combatant Commander
- Planners
- Tactical Commanders
Statement of the Problem (2)

The U.S. military has mastered the art of combined-arms operations writ large—air, ground, and naval forces working together as a coherent team—in regular or conventional operations and has demonstrated that mastery in Operation Desert Storm and in the attack on Baghdad in Operation Iraqi Freedom. The U.S. military has been less successful when operating against irregular or unconventional enemies such as insurgents, guerrillas, militias, and terrorists.
The Problem of Insurgency:
Transcendent Logic

Insurgent elite
Ideology (Esoteric)

Cabal
Terrorist
Kook

Transcendent Logic

People(s)
Grievances/Interests (Pragmatic)

Rebellion

Insurgency

Produced by Defense Adaptive Red Team for DUSD (AS&T) – Pre-Decisional
Statement of the Problem (3)

Over the past fifty years the American military significantly enhanced the selection, training, and equipping of its fighter aircraft pilots. As a result, the loss ratios of American aircraft to enemy aircraft improved by orders of magnitude. A similar effort needs to be made for our infantry forces since casualties are the “Achilles Heel” for this nation.
Statement of the Problem (4)

America’s ability to operate on a nuclear battlefield were built upon theories developed by academics in the 1960s, 1970s, and 1980s. Though these theories are outdated and the proliferation of nuclear technology increases the likelihood that such weapons might be used in the future, the American military’s capabilities to operate on a nuclear battlefield have not kept pace.
American military doctrine is based largely on an expectation that the U.S. will have a one-sided advantage with the use of precision-guided munitions. This advantage is likely to lessen over the next decade. The military needs the capability to counter enemy precision weapons.
Summary

- Intellectual rigor counts; slogans do not.

- Only possible to innovate when a problem exists

- Military needs to identify emerging problems