The Role of U.S. Nuclear Weapons: New Doctrine Falls Short of Bush Pledge

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A nuclear draft doctrine written by the Pentagon calls for maintaining an aggressive nuclear posture with weapons on high alert to strike adversaries armed with weapons of mass destruction (WMD), pre-emptively if necessary.

The doctrine, the first formal update since the Bush administration took office, is entitled “Doctrine for Joint Nuclear Operations”[1] and has been strongly influenced by the Nuclear Posture Review (NPR) and other directives published by the Bush administration since 2001. A final version is expected later this fall.

The draft doctrine and editing comments were freely available on the Internet until recently, providing a rare glimpse into the secret world of nuclear planning in the post-Cold War era.

Foremost among the doctrine’s new features are the incorporation of pre-emption into U.S. nuclear doctrine and the integration of conventional weapons and missile defenses into strategic planning. The Bush administration claims that it is significantly reducing the role of nuclear weapons.

Unfortunately, but perhaps not surprisingly, the updated doctrine falls far short of fulfilling the administration’s claim. Instead of reducing the role of nuclear weapons, the new doctrine reaffirms an aggressive nuclear posture of modernized nuclear weapons maintained on high alert. Conventional forces and missile defenses merely complement—instead of replace—nuclear weapons.

The new doctrine continues the thinking of the previous version from 1995 in its reaffirmation of nuclear deterrence. It differs in three other key elements: the threshold for nuclear use, nuclear targeting and international law, and the role of conventional and defensive forces.

What’s New?

The importance of the new doctrine is less about what it directs the military to do, and more about what it shows U.S. nuclear policy has become. It has changed considerably from the 1995 version. A new chapter has been added on theater nuclear operations, a discussion of the role of conventional and defensive forces, and an expanded discussion on nuclear operations.

The addition of a chapter on theater nuclear operations reflects the post-Cold War preoccupation of U.S. nuclear planners on finding ways of deterring regional aggressors (i.e., rogue states) armed with nuclear, chemical, and biological weapons. It also reflects a decade-old rivalry between the regional combatant commanders and U.S. Strategic Command (STRATCOM) over who “owns“ regional nuclear-strike planning.

Yet, the new doctrine’s approach grants regional nuclear-strike planning an increasingly expeditionary aura that threatens to make nuclear weapons just another tool in the toolbox. The result is nuclear pre-emption, which the new doctrine enshrines into official U.S. joint nuclear doctrine for the first time, where the objective no longer is deterrence through threatened retaliation but battlefield destruction of targets.
Another highly visible change is the incorporation of a discussion of the role of conventional weapons and defensive forces into the sections describing the purpose, planning, and employment of nuclear forces. What is most striking is the extent to which conventional and defensive capabilities are woven into the fabric of nuclear planning.

Reaffirmation of Deterrence

In the foreword to the 2001 NPR report, Secretary of Defense Donald Rumsfeld stated that the review “puts in motion a major change in our approach to the role of nuclear offensive forces in our deterrent strategy.” In Rumsfeld’s testimony to Congress and numerous statements made by other officials, the Bush administration portrayed the NPR as reducing the role of nuclear weapons, lowering the readiness requirement for the nuclear forces, and increasing the role of non-nuclear and missile defense capabilities.

Yet, the “major change” in the role of nuclear weapons is difficult to find in the new doctrine. Instead, the new nuclear doctrine presents an emphatic defense for nuclear deterrence with sustaining and modernizing nuclear forces maintained on high alert. “To maintain their deterrent effect,” the doctrine states, “U.S. nuclear forces must maintain a strong and visible state of readiness...permitting a swift response to any no-notice nuclear attack against the United States, its forces, or allies.”

For the authors of the new doctrine, the logic behind such an aggressive posture is simple: military strength automatically strengthens deterrence. Therefore, stronger nuclear capabilities also benefit national security. Indeed, defending the nation against its enemies is best achieved, the new nuclear doctrine declares, through “a defense posture that makes possible war outcomes so uncertain and dangerous, as calculated by potential adversaries, as to remove all incentives for initiating attack under any circumstances.”

This nuclear dogma is by no means new to deterrence theory, but the new nuclear doctrine fails to explain, even illustrate, why deterrence necessarily requires such an aggressive nuclear posture and cannot be achieved at lower levels without maintaining nuclear forces on high alert. A deterrence posture can also be excessive, with capabilities far beyond what is reasonably needed. Threatening nuclear capabilities may in theory deter potential enemies but may just as well provoke other countries and undercut other vital aspects of U.S. foreign policy. The end result may be decreased security for all.

Nor does the new nuclear doctrine spell out why the Pentagon ultimately settled on the force that it did. It says that the basis of its decision is a vague and unspecific invention called “capability-based planning” that the Pentagon says “focuses on the means and how adversaries may fight; not a fixed set of enemies or threats.” This hardly seems to be a new development, as U.S. military planning has always focused on how adversaries might fight. Even capability-based planning must identify a set of enemies and threats that is, for all intents and purposes, fixed. Still, the new doctrine repeats the NPR’s decision that a force level of 1,700-2,200 operationally deployed strategic warheads is “the lowest possible number” that the United States can maintain while maintaining a credible deterrent. Just how the 1,700-2,200 warhead level was decided remains a mystery.

The mystery is even greater because the Pentagon claims that the force-sizing is “not driven by an immediate contingency involving Russia.” Yet, in 1996 when STRATCOM examined force structure options in preparation for the 1997 Helsinki agreement—when Russia was an immediate contingency—the bottom-line force level was also 2,000 warheads. Keith Payne, who co-chaired the Deterrence Concepts Advisory Group that drafted the NPR and subsequently served as deputy assistant secretary of defense from 2002 to 2003, recently explained:

In general, the NPR’s recommended force structure and number of deployed nuclear warheads was calculated to support not only the immediate requirements for deterrence, but also to contribute to the additional goals of assuring allies and friends, dissuading potential opponents from choosing the route of arms competition or military challenge, and providing a hedge against the possible emergence of more severe, future military threats or severe
The only item on that list that is new, and only partially so, is “dissuading potential opponents from choosing the route of arms competition or military challenge.” Deterring enemies, assuring allies, and hedging are all elements of U.S. nuclear planning that are as old as the post-Cold War era; the first two are even as old as the nuclear age itself.

Even so, under the headline “New Thinking for a New Era,” the new nuclear doctrine describes capability-based planning as “a major break from Cold War thinking” that “allows the United States to take the lead in reducing nuclear stockpiles rather than rely on protracted arms control negotiations.” That claim overlooks the first Bush administration’s Presidential Nuclear Initiatives of 1991 and 1992, both of which took the lead without protracted negotiations well before the current Bush administration presented its “new thinking.” The claim also overlooks that not one of the strategic nuclear reductions announced by the 2001 NPR was conceived by the Bush administration. All, without exception, implemented decisions made in the 1990s.

Lowering the Bar for Nuclear Use

So what does the Pentagon mean when it refers to capability-based planning? One indication comes from the claim made in the new nuclear doctrine and by government officials during the past couple of years that a major break has occurred in nuclear planning. A break does seem to have occurred but is not about reducing the role of nuclear weapons. Granted, the number of weapons have been reduced, but the major break is about transforming nuclear plans and capabilities to enable destruction of targets anywhere in the world more efficiently. In that transformation lays a subtle belief that nuclear deterrence will fail sooner or later, and before it does, U.S. nuclear forces and war plans need to be ready and capable of striking, even pre-emptively.

The signs of this development are evident throughout the new nuclear doctrine in its description of the need for responsive nuclear forces that can “rapidly respond” to threats anywhere. It even defines a new category of nuclear planning, Crisis Action Planning, as “the time-sensitive development of joint operations plans and orders in response to an imminent crisis.” It is different from highly structured Deliberate Planning and flexible Adaptive Planning:

Crisis action planning follows prescribed crisis action procedures to formulate and implement an effective response within the time frame permitted by the crisis. It is distinct from adaptive planning in that emerging targets are likely to have no preexisting plans that could be adapted. Success in engaging these types of targets depends heavily upon the speed with which they are identified, targeted, and attacked.

The basis for this drive for speed and responsiveness is the perception of the threat that faces the United States and its allies in the 21st century. It has become almost a mantra in national security discussions and analysis to portray today’s multipolar security environment as more unpredictable and dangerous than even the Soviet threat during the Cold War. The new nuclear doctrine enshrines that hype into nuclear doctrine.

Although today’s threats from “rogue” states and terrorists are serious indeed, it is healthy to keep in mind, especially when discussing nuclear weapons policy, that they are on a completely different scale than the global nuclear standoff that characterized the Cold War. Then, the human race and life on the planet was held at nuclear gunpoint for four decades, only 30 minutes away from global annihilation. Today’s nuclear strategy often operates on a far different scale: incorporating the far more limited threat from hostile states and even terrorists.

Yet, the new doctrine ignores this distinction and instead lowers the crisis intensity level needed to potentially trigger use of U.S. nuclear weapons by replacing “war” with “conflict.” The change may seem trivial, but its implication is important and deliberate. The change was proposed by STRATCOM, which explained that “[r]eplacing the word ‘war’ with ‘conflict involving the use of’ emphasizes the nature of most conflicts resulting in use of a nuclear weapon. Nuclear war implies the mutual exchange of nuclear weapons between warring parties—not fully representative of the
During the Cold War, a nuclear war between the United States and the Soviet Union would have involved both countries launching nuclear weapons at each other. Yet, in the post-Cold War era a conflict may involve only one or a few nuclear weapons being used and not necessarily by both warring countries in an exchange. The new doctrine predicts that terrorists and “rogue” states armed with weapons of mass destruction “will likely test U.S. security commitments to its allies and friends.”

To be sure, some parts of this approach are not new: the 1995 doctrine also considered a role for nuclear weapons against terrorists despite serious questions about the credibility of such a role. Put together, however, the rhetoric in the new doctrine indicates that military planners anticipate that U.S. nuclear weapons might be used in much less intense crises than envisioned previously.

For example, the new nuclear doctrine states that an adversary might detonate a nuclear weapon high in the atmosphere to damage U.S. military electronic equipment with a high-altitude electromagnetic pulse. Whatever the adversary use might be, the new nuclear doctrine makes it clear that the United States will not necessarily wait for the attack but pre-empt with nuclear weapons if necessary. It identifies four conditions where pre-emptive use might occur:

- An adversary intending to use weapons of mass destruction against U.S., multinational, or allies forces or civilian populations.
- Imminent attack from an adversary’s biological weapons that only effects from nuclear weapons can safely destroy.
- Attacks on adversary installations including weapons of mass destruction; deep, hardened bunkers containing chemical or biological weapons; or the command and control infrastructure required for the adversary to execute a WMD attack against the United States or its friends and allies.
- Demonstration of U.S. intent and capability to use nuclear weapons to deter adversary WMD use.

The previous doctrine from 1995 did not describe specific scenarios where the United States might use nuclear weapons pre-emptively, but the new doctrine enshrines the Bush administration’s pre-emption policy into official U.S. nuclear doctrine. It acknowledges that “the belligerent that initiates nuclear warfare may find itself the target of world condemnation” but adds that “no customary or conventional international law prohibits nations from employing nuclear weapons in armed conflict.” In other words, the Pentagon seems to conclude the United States is legally free to use nuclear weapons pre-emptively if it chooses.

**The End of “Nonstrategic”**

The pre-emptive nuclear options are included in the chapter on theater nuclear operations, which traditionally have been associated with nonstrategic nuclear weapons (those with shorter range). The 1995 doctrine described the theater (local or regional) mission with nonstrategic nuclear weapons as a means of controlling escalation by linking conventional forces to the full nuclear retaliatory capability of the United States. By contrast, strategic weapons historically have included weapons of intercontinental range.

The separation has always been somewhat blurred, but the new nuclear doctrine does away with a separate theater role for nonstrategic nuclear forces. Instead, it assigns all nuclear weapons, whether strategic or nonstrategic, support roles in theater nuclear operations. The theater mission will be further detailed in “Joint Tactics, Techniques, and Procedures for Theater Nuclear Planning” (Joint Pub 3-12.1), a secret subdoctrine scheduled for publication by the Pentagon sometime after the release of the Doctrine for Joint Nuclear Operations.
Military officials have argued for years that there are no nonstrategic nuclear weapons; all nuclear weapons in the post-Cold War era should be seen as strategic because all nuclear use is strategic in nature. Yet, the language in the new doctrine and the elimination of a specific regional role for nonstrategic nuclear weapons hint of a deeper shift: strategic nuclear weapons have increasing regional (theater) roles as nonstrategic nuclear weapons are reduced and guidance and doctrine demand new missions against the capabilities of rogue states and nonstate actors.

The increasing incorporation of strategic weapons from the global-intensity level into smaller regional conflicts means that the operational distinction between strategic and nonstrategic nuclear weapons is being blurred. In a regional deterrence scenario against an adversary armed with nuclear, chemical, or biological weapons, all nuclear weapons can be battlefield weapons or strategic weapons, depending on the circumstances. The U.S. pre-emption or retaliation could utilize a B61 nuclear bomb deployed in Turkey or a strategic warhead launched from a Trident submarine patroling near Japan.

This doctrinal shift has already progressed to the point that STRATCOM has drawn up and implemented a new global strike plan for the use of nuclear and conventional forces in regional scenarios. The new strike plan, called Contingency Plan (CONPLAN) 8022, was first put into effect in late 2003, less than a year after the White House issued National Security Presidential Directive 17, its strategy to combat weapons of mass destruction. CONPLAN 8022 makes operational the Bush administration’s pre-emption policy and the new nuclear doctrine codifies it.

The Role of Conventional Weapons

Another new element of the nuclear doctrine is the role of advanced conventional weapons in strategic planning. This was one of the central pillars of the 2001 NPR, and the new doctrine states that “targets that may have required a nuclear weapon to achieve the needed effects in previous planning may be targeted with conventional weapons.” The doctrine describes how “integrating conventional and nuclear attacks will ensure the most efficient use of force and provide U.S. leaders with a broader range of strike options to address immediate contingencies.”

Yet, in the same breath the document cautions that “some contingencies will remain where the most appropriate response may include the use of U.S. nuclear weapons.” The objective is still assured destruction of facilities, and it seems clear that the conventional capabilities need to evolve considerably before conventional weapons will be capable of significantly replacing nuclear weapons in the war plans. Indeed, in an acknowledgement that “there are few programs to convert the NPR vision to reality,” the Pentagon in April established a task force aimed in part at better integrating the new triad of nuclear, conventional, and defensive capabilities. Four and a half years after the Bush administration announced its “major change” to strategic targeting, the incorporation of conventional weapons still appears marginal at best.

Part of the impediment appears to be the challenge of incorporating sufficient accuracy into the two ballistic missile legs of the nuclear triad. The explosive power of conventional weapons also is inherently inferior to the yield of even the smallest nuclear warheads in the stockpile. “It’s more than just precision,” STRATCOM Commander General James Cartwright told Inside the Pentagon in April 2005. “I can’t generate enough [conventional explosive] energy for some of these targets to destroy them. So I’m not leading you down a path that I can get rid of nuclear weapons.”

Also, there is the issue of command and control for conventional strategic forces. The line of command for nuclear strikes has evolved over many decades, but how will it work when a non-nuclear weapon is used in a strategic strike against an adversary’s nuclear weapons facility? The Air Force, which maintains nuclear ICBMs and bombers, pointed out during the editing of the new nuclear doctrine that, although the president and secretary of defense are required to approve all nuclear targeting, they do not necessarily approve conventional targeting.[4] Presumably, the Bush administration will want to close that hole to ensure 100 percent control of strategic strikes and ensure that other nuclear powers do not misinterpret the intention.

Finally, but equally important, merging nuclear and conventional warheads on ballistic missiles or on
strategic platforms has serious implications for crisis stability. A nuclear-weapon state being attacked by a conventionally armed ballistic missile early in a conflict may conclude that it is under nuclear attack and launch its own nuclear weapons. Merging nuclear and conventional capabilities seems to be a recipe for disaster.

**Missile Defenses**

The second pillar of the 2001 NPR was the role of active defenses in strategic planning, and the new doctrine incorporates the new mission. The previous doctrine from 1995 also described the contribution of missile defense, but this issue is expanded in the new doctrine. Instead of describing how missile defenses can be used to protect people from missile strikes, however, the new doctrine appears to focus on how missile defenses can enhance the survivability of nuclear forces and increase offensive capabilities.

Focusing on protecting nuclear forces rather than people might not seem so cynical if not for the Bush administration’s emphasis on protecting people in its justification for withdrawing from the Anti-Ballistic Missile (ABM) Treaty and securing congressional funding for the multibillion-dollar missile defense program. In December 2001, when preparing to withdraw from the ABM Treaty, President George W. Bush stated:

I have concluded the ABM treaty hinders our government’s ability to develop ways to protect our people from future terrorist or rogue state missile attacks…. Defending the American people is my highest priority as commander in chief, and I cannot and will not allow the United States to remain in a treaty that prevents us from developing effective defenses.[5]

In stark contrast with the president’s priority, the new doctrine describes missile defense as a tool to protect military forces. The doctrine only mentions defense of the population three times and always in a secondary role, after protection of military forces.

Moreover, the doctrine states that one objective of protecting military forces is to enhance U.S. offensive nuclear strike capabilities. STRATCOM planning seeks to integrate U.S. and allied offensive and defensive forces, the doctrine explains, “in order to exploit the full range of characteristics offered by U.S. strategic nuclear forces to support national and regional deterrence objectives.”

In an operational scenario, limited or insufficient missile defense capabilities could force U.S. decision-makers into a corner where they would have to choose between saving Los Angeles or Vandenberg Air Force Base.

**Nuclear Targeting and International Law**

The new nuclear doctrine’s deepening of the commitment to regional targeting beyond nuclear facilities, and lowering the bar for when nuclear weapons could be used—even pre-emptively—raise important questions about nuclear targeting and international law. During the editing process of the new nuclear doctrine, a debate was triggered among the different commands over which term to use for different types of targeting. Of particular concern was the legal status of countervalue targeting, a targeting methodology that was included in the 1995 nuclear doctrine:

Countervalue targeting strategy directs the destruction or neutralization of selected enemy military and military-related activities, such as industries, resources, and/or institutions that contribute to the enemy’s ability to wage war. In general, weapons required to implement this strategy need not be as numerous or accurate as those required to implement a counterforce targeting strategy, because countervalue targets generally tend to be softer and unprotected in relation to counterforce targets.[6]

During the editing of the new doctrine, STRATCOM declared that it had decided that “countervalue
targeting violates” the Law of Armed Conflict. The command therefore suggested changing “countervalue” to “critical infrastructure targeting.” In explaining its decision, STRATCOM stated:

Many operational law attorneys do not believe “countervalue” targeting is a lawful justification for employment of force, much less nuclear force. Countervalue philosophy makes no distinction between purely civilian activities and military related activities and could be used to justify deliberate attacks on civilians and non-military portions of a nation’s economy. It therefore cannot meet the “military necessity” prong of the Law of Armed Conflict. Countervalue targeting also undermines one of the values that underlies Law of Armed Conflict—the reduction of civilian suffering and to foster the ability to maintain the peace after the conflict ends. For example, under the countervalue target philosophy, the attack on the World Trade Center Towers on 9/11 could be justified.[7]

Other military commands did not agree with the name change. The argument from European Command was that countervalue should not be changed to critical infrastructure because countervalue has an institutionalized and broadly understood meaning in the academic literature on nuclear warfare and in international security studies in general. “If in doubt on this point,” European Command argued, “insert the word ‘countervalue’ in any electronic search engine and note how many ‘hits’ appear that are directly relevant to nuclear policy.”[8]

In the end, the commands could not agree and the term “critical infrastructure targeting” was withdrawn to end the discussion. Yet, the term “countervalue” also disappeared and is no longer included in the new nuclear doctrine. The issue was dropped, although targeting appears to continue, and simply changing the terminology obviously does not change the illegal targeting itself.

To be fair, the new nuclear doctrine emphasizes U.S. abhorrence of unrestricted warfare and U.S. adherence to laws of war. Yet, if the intention of mentioning international law is that it matters, then the doctrine notably ignores that the International Court of Justice (ICJ) in its 1996 ruling on the Legality of the Threat or Use of Nuclear Weapons could not reach agreement (it was a split vote) that the threat or use of nuclear weapons is lawful, even in an extreme circumstance of self-defense where the very survival of a state is at stake. The ICJ did agree unanimously that international law does not authorize even the threat of use of nuclear weapons.[9] These important nuances are ignored by the new doctrine.

**Conclusion**

Although there has been extensive public debate on whether to build new or modified nuclear weapons, there has been essentially no debate about the doctrine that guides the use of nuclear weapons and influences future requirements. This is ironic given the considerable interest in the Bush administration’s policy on pre-emption. As a result, the rewriting of the nuclear doctrine has occurred with essentially no public debate.

Still, the doctrine and editing documents reveal a significant contradiction between the Bush administration’s public rhetoric about reducing the role of nuclear weapons and the guidance issued to the nuclear planners. Although the overall number of warheads is being reduced, the new doctrine guiding planning for the remaining arsenal reaffirms an aggressive posture with nuclear forces on high alert, ready to be used in an increasing number of limited-strike scenarios against adversaries anywhere, even pre-emptively. The new doctrine appears to be precipitated by anticipation among military planners that deterrence will fail and U.S. nuclear weapons will be used in a conflict sooner or later.

For the nuclear planners, it seems so simple: deterrence must be credible, and the way to make it more credible is to increase the capabilities and number of strike options against any conceivable scenario. Ironically, a decade and a half after we should have escaped this nuclear deterrence logic.
of the Cold War, the planners cling to these old business practices. Instead of drastically reducing the role of nuclear weapons, as the Bush administration told the public it would do, the proliferation of weapons of mass destruction and terrorism seem to have spooked the administration into continuing and deepening a commitment to some of the most troubling aspects of the nuclear war-fighting mentality that symbolized the Cold War.

### U.S. Nuclear Weapons Guidance, War Plans

The updated Doctrine for Joint Nuclear Operations reflects how combatant commanders have translated the administration’s attempts to reshape U.S. nuclear policy into operational guidance for military forces. It comes nearly five years after the completion of the Bush administration’s Nuclear Posture Review (NPR) in December 2001 and represents the first revision of basic nuclear doctrine in a decade. The list below describes some of the major milestones that led to the new doctrine and their significance. [1]

#### 2001

- May: Secretary of Defense Donald Rumsfeld publishes the Strategic Defense Review. This document, among other things, sets “requirements for the number and types of weapons in the stockpile.”

- December 31: Rumsfeld forwards the NPR report to Congress.

#### 2002


- September 14: The White House issues NSPD 17, “National Strategy to Combat Weapons of Mass Destruction.” The document states that “[t]he United States will make clear that it reserves the right to respond with overwhelming force—including potentially nuclear weapons—to the use of [weapons of mass destruction] against the United States, our forces abroad, and friends and allies.”

- September 17: The White House issues the “National Security Strategy of the United States.” The document provides the first official public articulation of a strategy of pre-emptive action against hostile states and terrorist groups developing weapons of mass destruction.

- October 1: The chairman of the Joint Chiefs of Staff issues a new nuclear supplement to the Joint Strategic Capabilities Plan for fiscal year 2002, which translates White House guidance into specific military plans.


#### 2003:

- January 10: Bush signs Change 2 to the Unified Command Plan, which, in addition to maintaining nuclear strike plans, assigns four additional missions to U.S. Strategic Command: missile defense planning, global strike planning, information operations, and global C4ISR (Command, Control, Computers, Communication, Intelligence, Surveillance, and Reconnaissance).

2004


April 19: Rumsfeld issues the Nuclear Weapons Employment Policy. The document states in part that “U.S. nuclear forces must be capable of, and be seen to be capable of, destroying those critical war-making and war-supporting assets and capabilities that a potential enemy leadership values most and that it would rely on to achieve its own objectives in a post-war world.”


December 31: The chairman of the Joint Chiefs of Staff issues a new nuclear supplement to the Joint Strategic Capabilities Plan for fiscal year 2005, codifying new global strike and theater nuclear operations guidance and implementing the 2004 Nuclear Weapons Employment Policy.

2005

January: In a letter to U.S. Strategic Command, Rumsfeld tasks the command with spearheading the Defense Department’s efforts to combat weapons of mass destruction (WMD).

January 10: The chairman of the Joint Chiefs of Staff issues Global Strike Joint Integrating Concept, Version 1, for conducting global strike operations during the “seize the initiative” phase of a conflict (“seconds to days”). Targets include WMD production, storage, and delivery capabilities, critical command and control facilities, anti-access capabilities (radars, surface-to-air missile sites, theater ballistic missile sites), and adversary leadership.

Fall 2005: The chairman of the Joint Chiefs of Staff is expected to publish Doctrine for Joint Nuclear Operations.

ENDNOTES


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ENDNOTES

1. The draft doctrine might be slightly different from the final doctrine, although at this late stage any changes are expected to be cosmetic. Copies of the new doctrine, previous versions, and editing comments are available at http://www.nukestrat.com.


