2002 NUCLEAR POSTURE REVIEW STRATEGIC AND LEGAL RAMIFICATIONS

by

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The recent Nuclear Posture Review (NPR) is a deeply disappointing squandering of an historical opportunity that will not remain open indefinitely. The NPR recognizes the revolution in conventional weapons that makes nuclear weapons virtually obsolete; recognizes the outmodedness of our longstanding policies of nuclear deterrence and mutual assured destruction; recognizes the non-deterrability of what are characterized as today's main security threats; recognizes the potential, indeed, the existence of a transformed U.S. security relationship with Russia; recognizes the need for fundamental change—yet adopts a nuclear posture more provocative, more dangerous, than that followed during the darkest days of the Cold War.

The NPR adheres to nuclear deterrence and mutual assured destruction; embraces nuclear weapons as war-fighting weapons constituting part of the regular U.S. arsenal readily to be used based on real time spontaneous decision-making in dealing with disputes throughout the world; espouses the integrating of nuclear weapons with conventional weapons, blurring, even obliterating, any sense of distinction between the two; abandons all sense of restraint in putting volatile or potentially volatile actors—such as North Korea, Iraq, Iran, Syria, and Libya— and even China on notice that the United States is prepared to use nuclear weapons on them, virtually assuring that these States will proceed with weapons of mass destruction programs; rashly threatens that we will use nuclear weapons in response to an Iraqi attack on Israel or its neighbors, a North Korean attack on South Korea, or a military confrontation over the status of Taiwan, without regard to any necessity for resort to such weapons; projects the intent to develop mininukes to be used as regular instruments of war; commits itself to maintaining a robust nuclear weapons manufacturing capability and to training the next generation of nuclear weapons makers, lest the art be lost; signals the intent to put itself at a ready state for resumption of nuclear weapons testing; renders its cut-backs in operational nuclear weapons nugatory by reserving the right to retain virtually all of the cut-back weapons in active "responsive forces" available on short notice for use; espouses a robust nuclear capability to deter not only Russia, whom it purports to recognize as no longer needing deterrence, but also rogue States and terrorist groups whom it recognizes are not deterrable; and adopts a policy of missile defense that limits

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Russia's ability to cut-back its nuclear weapons or take them off hair-trigger alert and incites China to build up its forces.

The central message is unmistakable: Nuclear weapons are OK. They are legitimate weapons of war. We are committed to them. We recognize the existence of a world in which nuclear weapons are a fact of life. We do not object to that fact of life and not only will not lift a finger to change it, we embrace it. Rather than wanting to de-legitimize these weapons, we embrace them as useful weapons of war which we are happy to have and ready to use if any State provokes us, even with conventional weapons let alone chemical or biological ones.

While during the Cold War, nuclear weapons were recognized as a special type of weapon that could not really be used—their only real purpose was deterrence—now we see adopted as policy an approach that had previously been advocated in position papers on the extreme right: Nuclear weapons are for fighting wars. We are going to integrate them with our conventional weapons, give them to our troops, train them to use them and to make split second decisions as to use, communicate to our troops a mindset that these are just normal weapons entirely appropriate for use in the kind of military situations we expect to encounter and in unexpected situations.

This is a world of power, the NPR tells us. We will cut back or build up nuclear weapons at our will, depending upon our perception of our interest at any point in time. Because of the volatility of human events and international relations, we do not want to commit ourselves by treaty to any limitations on our range of options. We are a power, we are the law, onto ourselves, and do not subject ourselves or our actions or intents to any outside force.

Not only do we not want to enter into new treaties, the treaties we entered into during the Cold War are outmoded, the NPR communicates, and we are no longer willing to be bound by them. Not only are we abrogating the 1972 Anti-Ballistic Missile (ABM) Treaty; not only will we not enter into the Comprehensive Test Ban Treaty, we do not recognize any restraints under the Nuclear Nonproliferation Treaty (NPT) which we have entered into and reaffirmed as recently as 2001. The NPT does not deserve mentioning. As a treaty representing a restraint on our unbridled freedom of action, it is of no account.

While, on a rhetorical basis, we are against nuclear proliferation and in favor of less nuclear weapons in the hands of others, we would rather that other States have nuclear weapons or *more* nuclear weapons than that we have *less*.

We recognize the significance of command and control to maintain control of nuclear weapons. Hence, we are greatly enhancing our command and control. The volatility inherent in the fact that other present and future nuclear powers will not have such refined command and control is something not of our concern. Our concern is establishing our unilateral power. Our security is in our own power without regard to anyone or anything else.

Ultimately, our policy is based on one thing: *Terror*. We believe in the terror represented by nuclear weapons; we believe that by broadly brandishing the big nuclear stick, we can control and contain conflict.

Deterrence requires the communication of the intent to do the irrational, as reflected in the July 1995 U.S. STRATCOM report "Essentials of Post-Cold War Deterrence," recommending that the United States project an "out of control," irrational, and vindictive willingness to use nuclear weapons in certain circumstances:

If "some elements ... appear potentially 'out of control," it would create and reinforce fears and doubts within the minds of an adversary's decision-makers. "That the U.S. may become irrational and vindictive if its vital interests are attacked should be a part of the national persona we project."¹

The NPT may be the best instrument of deterrence ever released. Or it may represent the MADness it projects. Either way, it succeeds in credibly communicating a mindset of readiness to use the weapons.

The essential view of the NPR is that security is individual. Our security is in being paramount, able to destroy any enemy, whether it is deterrable or not, with nuclear weapons. The fact that adversary states may feel themselves threatened by our declared preparedness and willingness to use nuclear weapons against them is not our concern. We will only do what we believe is right and there is no reason they should be provoked by our sense of right. If they are not doing anything which we may ever come to see as wrong, they have nothing to fear from us. They should trust in our sense of where we will either now or in the future draw the line, and should feel no need to upgrade and modernize their own potential for wreaking terror to counter our nuclear plans.

We expect other States to act with restraint and not to threaten us or our friends. We would rather restrain by extreme threat than by communicating and reaching out to bridge gaps.

In an increasingly polarized world, this approach seems a formula for disaster.

According to the NPR, legal restraints on our use or threat of use of nuclear weapons do not exist. The NPR does not mention or seem to recognize any such restrains; they are not part of the analysis.

I intend to go through the NPR and identify what I regard as questionable portions of it and then will review the regime fostered by the Nuclear Posture Review under applicable rules of international law.

¹ Hans Kristensen, *Targets of Opportunity: How Nuclear Planners Found New Targets for Old Weapons*, BULL. OF ATOMIC SCIENTISTS, vol.55, no. 5, Sep./Oct. 1997, quoting U.S. Strategic Command, *Essentials of Post–Cold War Deterrence*, [n.d., probably April 1995], at 3, 4 (partly declassified and released under the Freedom of Information Act).

As expressed by Henry Kissinger, "The dilemma never resolved [by the doctrine of assured destruction] was psychological. It was all very well to threaten mutual suicide for purposes of deterrence, particularly in case of a direct threat to national survival. But no President could make such a threat credible except by constructing a diplomacy that suggested a high irrationality—and that in turn was precluded by our political system, which requires us to project an image of calculability and moderation." HENRY KISSINGER, WHITE HOUSE YEARS 215–220, 216 (Little, Brown 1979).

Scope of the NPR

Secretary of Defense Donald H. Rumsfeld in his foreword to the Congress dated 8 January 2002 states that the NPR was designed to be "comprehensive":

- "The Congress directed the Defense Department to conduct a comprehensive Nuclear Posture Review to lay out the direction for American nuclear forces over the next five to ten years. The Department has completed that review and prepared the attached report."²

Yet the NPR is not comprehensive. Notwithstanding the increased focus on international law and the elaboration of international law by the International Court of Justice in its 1996 Nuclear Weapons Advisory Opinion, the NPR does not appear to have included consideration of the implications of applicable law in its analysis.

Major Change in Approach

Secretary Rumsfeld stated that the NPR represents a "major change in approach":

- "Early on, we recognized that the new security environment demanded that the Department go beyond the Congressional mandate in developing a strategic posture for the 21st century. President Bush had already directed the Defense Department to transform America's military and prepare it for the new, unpredictable world in which we will be living. The result of his direction is the Quadrennial Defense Review (QDR). Building on the (QDR) this Nuclear Posture Review puts in motion a major change in our approach to the role of nuclear offensive forces in our deterrent strategy and presents the blueprint for transforming our strategic posture."³

The charts accompanying the January 9, 2002 Findings of the Nuclear Posture Review presentation of J. D. Crouch, the Assistant Secretary of Defense for International Security Policy, in the section titled Conclusions, stated that "NPR charts the path for the first step in military transformation."⁴

The New Triad

Secretary Rumsfeld in his foreword to the Congress states that the NPR "establishes a New Triad, composed of:

- Offensive strike systems (both nuclear and non-nuclear);

² Donald H. Rumsfeld, Nuclear Posture Review [Excerpts] Submitted to Congress on 31 December 2001, Jan. 8, 2002 at pg. 1 (Apr. 15, 2002) http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm. This document is published online. Page numbers given are to my printed pagination.

 $[\]frac{3}{2}$ Id.

⁴ "Findings of the Nuclear Posture Review," Charts accompanying the January 9, 2002 United States Department of Defense Special Briefing on the Nuclear Posture Review, Chart 15 (Apr. 15, 2002) http://www.defenselink.mil/news/Jan2002/020109-D-6570C-001.pdf. (hereinafter "Nuclear Posture Review Briefing Charts").

- Defenses (both active and passive); and
- A revitalized defense infrastructure that will provide new capabilities in a timely fashion to meet emerging threats.⁵

He further states that this New Triad is bound together by enhanced command and control (C2) and intelligence systems.⁶

Secretary Rumsfeld defines the purpose of the New Triad as "reduc[ing] our dependence on nuclear weapons and improv[ing] our ability to deter attack in the face of proliferating WMD capabilities."⁷

Offensive strike systems (both nuclear and non-nuclear)

As to offensive strike systems, Secretary Rumsfeld's overview emphasizes a major new focus on modern high tech conventional weapons for deterrence and on the *integration* of nuclear weapons with conventional weapons:

- "The addition of non-nuclear strike forces—including conventional strike and information operations—means that the U.S. will be less dependent than it has been in the past on nuclear forces to provide its offensive deterrent capability."⁸
- "To meet the nation's defense goals in the 21st century, the first leg of the New Triad, the offensive strike leg, will go beyond the Cold War triad of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and long-range nuclear-armed bombers. ICBMs, SLBMs, bombers and nuclear weapons will, of course, continue to play a vital role. However, they will be just part of the first leg of the New Triad, *integrated* with new non-nuclear strategic capabilities that strengthen the credibility of our offensive deterrence."⁹
- "Constructing the New Triad, reducing our deployed nuclear weapons, and increasing flexibility in our strategic posture has resource implications. It costs money to retire old weapons systems and create new capabilities. Restoring the defense infrastructure, developing and deploying strategic defenses, improving our command and control, intelligence, planning, and non-nuclear strike capabilities require new defense initiatives and investments. However, these investments can make the U.S. more secure while reducing our dependence on nuclear weapons."¹⁰

A chart at the January 9, 2002 Findings of the Nuclear Posture Review briefing stated, "Non-nuclear strike forces (conventional strike and information operations) reduce dependency on nuclear forces to provide offensive deterrent)."¹¹

⁵ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 1.

⁶ Id.

⁷ Id.

 $^{^{8}}_{9}$ Id.

⁹*Id.* at pg. 2 [emphasis supplied].

 $^{^{10}}$ *Id.* at pg. 3.

¹¹ Nuclear Posture Review Briefing Charts, *supra* note 4, Chart 9.

The NPR stated:

- "DEFEAT" "Composed of both non-nuclear systems and nuclear weapons, the strike element of the New Triad can provide greater flexibility in the design and conduct of military campaigns to defeat opponents decisively. Non-nuclear strike capabilities may be particularly useful to limit collateral damage and conflict escalation. Nuclear weapons could be employed against targets able to withstand nonnuclear attack, (for example, deep underground bunkers or bio-weapon facilities)." (p. $(12-13)^{12}$
- "Accurate and timely targeting information can increase both the lethality of strike capabilities and the possibilities for non-nuclear strike capabilities to substitute for nuclear weapons or provide for the timely positioning of missile defense assets." (p. $(15)^{13}$

J.D. Crouch, Assistant Secretary of Defense for International Security Affairs, stated on this point in his briefing on NPR:

- _ We also believed it was very important to include new components or new kinds of capabilities in this approach, including active and passive defenses and non-nuclear capabilities. The non-nuclear strike forces, we believe, have the potential, if fully exploited, fully developed, to reduce our dependency on nuclear forces for the offensive-strike leg of the -- of the component. And even defenses give us more options and will allow us to do the same.¹⁴
- Just in concluding, I want to hit a couple of high points that I think were reflected in _ the review. First, this new triad concept, we think, can both reduce in the long run our dependence on nuclear weapons and improve our ability to deter attack in the face of a proliferating WMD capability. We think the combination of these new capabilities along with a smaller nuclear capability is more appropriate to the kind of security environment that the United States will enter -- has entered and will see over the next 10 to 20 years. And so in that context, I also think it's important to point out that this new triad concept really was also a way for us to draw down the force by lowering -- and lowering risk as we did -- as we draw down the force, reducing that dependence on nuclear weapons, but making the force -- the nuclear force that we retained as safe, reliable, and effective as it can be.¹⁵
- Crouch: Well, I think that what we want from the standpoint of dissuasion is to be in a position where other -- countries that might try to challenge the United States or might try to find sort of asymmetrical ways of attacking the United States are going to

¹² Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 5.

¹³ *Id.* at pg. 6.

¹⁴ United States Department of Defense Special Briefing on the Nuclear Posture Review, News Transcript, Presenter: J.D. Crouch, ASD ISP Wednesday, Jan. 9, 2002 - 3:05 p.m. EST at pg. 5 (Apr. 15, 2002) http://www.defenselink.mil/news/Jan2002/t01092002 t0109npr.html [emphasis supplied]. This document is published online. Page numbers given are to my printed pagination. ¹⁵ *Id.* at pg. 8 [emphasis supplied].

find it very difficult for two reasons. One is we will maintain sufficient nuclear forces to put us, in effect, beyond their reach in terms of being able to develop themselves as a peer competitor to the United States. But secondly, and I think this is more important for -- is that there are going to be a lot of cases where offensive retaliatory deterrence may not be appropriate *or we may need other capabilities in the event deterrence fails, and that's where non-nuclear strike capabilities* and our defensive capabilities would come into play and hopefully being able to shape -- so, for example, limited but effective defenses could well help us along with other tools to dissuade countries from investing in large numbers of ballistic missiles that might threaten the United States or our allies and friends.¹⁶

William Arkin in an article, "Nuclear Warfare; Secret Plan Outlines the Unthinkable," reported:

In addition to the new weapons systems, the review calls for incorporation of "nuclear capability" into many of the conventional systems now under development. An extended-range conventional cruise missile in the works for the U.S. Air Force "would have to be modified to carry nuclear warheads if necessary." Similarly, the F- 35 Joint Strike Fighter should be modified to carry nuclear weapons "at an affordable price."

The review calls for research to begin next month on fitting an existing nuclear warhead into a new 5,000-pound "earth penetrating" munition.¹⁷

Although the report states that [t]here is no current program to design a new or modified HDBT Defeat nuclear weapon, nevertheless DoD and DOE have formed a joint Nuclear Planning Group to define the appropriate scope and option selection criteria for a possible feasibility and cost study. (p.18) Indeed, a classified study called Project SAND DUNE was conducted in 1997 that addressed nuclear solutions for holding the most challenging HDBTs at risk. (p. 11) Currently DoD and DOE are investigating potential options and costs. (p. 17) Moreover, [f]or destruction of more deeply buried facilities, DoD and DOE are studying the sensitivities and synergies of nuclear weapon yield, penetration, accuracy and tactics. (p. 21) This in large part refers to the further development of earthpenetrating nuclear weapons that can burrow underground, thereby multiplying exponentially their destructive force. This is also focussed on the development of new low yield nuclear weapons (or the modification of existing weapons to lower their yield). Low yield nuclear weapons would be inherently more dangerous because they would be more usable. One U.S. congressman has already called for the use of low yield nuclear weapons in Afghanistan.

¹⁶ *Id.* at pg. 11-12 [emphasis supplied].

¹⁷ William M. Arkin, Nuclear Warfare; Secret Plan Outlines the Unthinkable, THE LOS ANGELES TIMES, Mar. 10, 2002.

A Nuclear Watch of New Mexico report stated:

The national nonprofit organization Physicians for Social Responsibility has made available a Department of Defense (DoD) and DOE Report to Congress on the Defeat of Hard and Deeply Buried Targets (HDBTs). HDBTs are underground command and control bunkers, leadership quarters, garrisons, etc., built out of reinforced concrete or tunneled into mountains. Due largely to the Gulf War and the present war in Afghanistan U.S. military planners are particularly keen to find ways to destroy HDBTs. This recent report estimates that there are potentially some 10,000 HDBT s worldwide (report page 8), not all of which can be destroyed by conventional weapons. In response, DoD and DOE have completed initial studies on how existing nuclear weapons can be modified to defeat those HDBTs that cannot be held at risk with conventional high-explosives or current nuclear concepts. Any development and procurement of advanced nuclear capabilities would be considered in the broad context of nuclear stockpile policy, plans, and priorities (p. 4.) On the latter point, DoD will soon be releasing a new Nuclear Posture Review which is likely to include this new focus on destroying hard-to-get HDBTs.

The overarching significance of this report is that it is further evidence (if any more is needed) that the U.S. intends to never disarm its nuclear stockpile. As recently as the May 2000 review conference of the 1970 NonProliferation Treaty (NPT) the U.S. and the other nuclear powers restated their NPT obligation to disarm as an unequivocal commitment. Yet the strong signal is that the American nuclear weapons complex is beginning the process of designing and producing new advanced concepts to destroy HDBT s, contrary to the stated current U.S. policy that there will no production of new-designs. This raises a whole host of questions concerning the future of nuclear weapons, the continuing viability of the international nonproliferation regime and whether the U.S. will be conducting full-scale testing sometime in the future. The Cutting Edge of Future U.S. Nuclear Weapons? NUCLEAR WATCH NEW MEXICO (Apr. 15, 2002)

http://www.nukewatch.org/nwd/NWNMHDBT.pdf.

The Center for Global Security and Health reported:

A Summary of Elements Concerning Nuclear Weapons in the Report to Congress on the Defeat of Hard and Deeply Buried Targets (Transmitted to Congress in October 2001)

It was thought that this report would call for conventional bunker-busting weapons options, and that there was no nuclear element in its requirements. This was based on comments made by Franklin Miller, special assistant to the president and senior director for defense policy and arms control at the National Security Council, who recently told a group from the faith community that there is no current requirement for a mininuke, and that the cuts in strategic forces will not lead to new nuclear weapons development. Indeed, the final sentence of the report reads:

Nuclear Weapon for ADW

DoD has not defined a requirement for a nuclear weapon for WMD Agent Defeat missions. See Section 7 within the classified Annex A for further discussion.

However, the document is full of references that show that nuclear weapons are an intrinsic part of defeating hard and deeply buried targets, and chemical and biological agents. If DoD 'has not defined a requirement' for a nuclear weapon for this purpose, it is only because DoD is *currently* defining such a requirement. This requirement would meet a Mission Needs Assessment (MNA) identified by the Air Force and USSTRATCOM in 1994, for a weapon to defeat Hard and Deeply Buried Targets (HDBT) and WMD. The cuts in strategic forces will not lead to new nuclear weapons development, because that is already underway. The report also describes the intrinsic value of lower-yield nuclear weapons.

A classified study called *Project Sand Dune* started to address the role of nuclear weapons in HDBT defeat in 1997. The study was complete in the first quarter of 1999. This study was undertaken because "..the HDBT Defeat AoA [Analysis of Alternatives] had focused on conventional solutions and highlighted an inability to destroy all HDBTs with current or projected weapons.." This study looked at nuclear weapons that could fulfill the Air Force and USSTRATCOM Mission Needs Analysis (MNA) from 1994 for a HDBT Defeat Weapon.

The current situation on both HDBT Defeat and WMD Agent Defeat is set out in Section 5 of the paper. On nuclear weapons for HDBT it says:

There is no current program to design a new or modified HDBT Defeat nuclear weapon. However, DoD and DOE continue to consider and assess nuclear concepts that could address the validated mission needs and CRD [Capstone Requirements Document]. They have formed a joint Nuclear Planning Group to define the appropriate scope and option selection criteria for a possible design feasibility and cost study. Further information is provided in Classified Annex A -Section3 – Nuclear Weapons.

The paper is even more explicit concerning the role of nuclear weapons in WMD Agent Defeat, they are described as having "a unique ability to destroy both agent containers and CBW agents." Accuracy and penetration are important as, given those characteristics the report says that a lower-yield weapon can be used, with less collateral damage. The report also notes that current weapons are not well adapted for this purpose. Interestingly, seemingly referring to the B61-11, it says that the lower yield version of this earth-penetrating nuclear weapon has not been certified.

..it is possible to employ a much lower-yield weapon to achieve the needed neutralization. The ability to use a lower-yield would reduce weapon-produced collateral effects. The current nuclear weapons stockpile, while possessing some limited ground penetration capability and lower yield options (not yet certified), was not developed with this mission in mind.

This focus on non-nuclear weapons as being able to fulfill military missions for which nuclear weapons might previously have been considered is in my view quite interesting, and, in a sense, the most positive element of the NPR.

While conventional weapons are themselves potentially quite terrible and can wreck whole cities and societies, they do not generally threaten human life and the human environment, certainly not in the way nuclear weapons do.

Thus, while I do not want to foster the notion that the abolition of nuclear weapons would make the world safe for conventional warfare, I do think there is a purpose in separating the problems of warfare in general—which certainly it would be optimistic in the extreme to hope to ban—and nuclear weapons, which, like chemical and biological weapons, I think we do have a potential with much work to ban.

Thus, sad though it may be for the future victims of conventional war, I suggest that we should explore the potential of the idea that the contemporary high tech revolution in conventional weapons has already gone so far as to largely make any perceived need for nuclear weapons obsolete.

In order words, modern conventional weapons can serve the purposes of deterrence. Since the United States can already achieve with conventional weapons the destruction of virtually any military target for which nuclear weapons might have been considered, little of legitimate military significance is added by being able to destroy the targets many additional times over.

Accordingly, I would like to emphasize how major a part of the NPR this concept is that conventional weapons can carry out the function of deterrence. The NPR makes the point over and again.

To fill this gap, Project Sand Dune led to a planning study that is due to report in FY02. As the report says "The overall objective of HDBT and WMD Agent Defeat S&T Programs is to redress shortfalls in current operational capabilities against future threats. Elements include: ... nuclear weapons" and later elaborates "For destruction of more deeply buried facilities, DoD and DOE are studying the sensitivities and synergies of nuclear weapon yield, penetration, accuracy and tactics."

No final decisions have yet been taken. The HDBT Report says "Any development and procurement of advanced nuclear capabilities would be considered in the broad context of nuclear stockpile policy, plans and priorities, as well as future DoD strategic programs." Any such full scale development of a weapon with a yield of less than 5kt would, of course, need to be preceded by the repeal of the Furse- Spratt provisions from the FY94 National Defense Authorization Act of 1993. The lower-yield version of the B61-11 is a complicating factor, if that is the weapon referenced in the HDBT report, as it needs only to be certified, no research and development would be involved.

Final decisions won't taken until after the NPR and the ongoing HDBT nuclear weapon candidate study has been carried out, and both those requirements will have been met in FY02. There is no current requirement for a nuclear weapon, but there is a current mission need and the Air Force, STRATCOM and DOE are working hard to fill it.

Martin Butcher, A Summary of Elements Concerning Nuclear Weapons in the Report to Congress on the Defeat of Hard and Deeply Buried Targets (Transmitted to Congress in October 2001) The Center for Global Security and Health, (Apr. 15, 2002) http://www.nukewatch.org/nwd/A_Summary.pdf [footnotes omitted].

The tragic failure of the NPR is that, having had this insight as to the significance of modern high tech conventional weapons, the NPR fails to take heed of the significance of the point—that it provides a basis for substantially cutting back, in a real way, our arsenal of nuclear weapons and indeed provides a pivotal rationale for abolition of these weapons on the ground that they are no longer necessary, even aside from all the other risk factors.

The NPR approach of integrating nuclear and conventional weapons is further flawed in that it lowers the nuclear threshold, making use of such weapons more likely at the very time when such use could virtually never be justified on military grounds.

The NPR states:

"Desired capabilities for nuclear weapons systems in flexible, adaptable strike plans include options for variable and reduced yields, high accuracy, and timely employment. These capabilities would help deter enemy use of WMD or limit collateral damage, should the United States have to defeat enemy WMD capabilities." (p. 48)¹⁸

Such a focus on useable nuclear weapons is also provocative as lowering the nuclear threshold.

So, too, is the focus on "mininukes," the term often used to describe nuclear weapons designed to defeat hard and deeply buried targets. The Acronym Institute reported in early 2002:

US Keeps Options Open on Low-Yield Nuclear Weapons

On December 19, a *Report to Congress on the Defeat of Hard and Deeply Buried Targets*, submitted by Secretary of Defense Donald Rumsfeld in conjunction with Secretary of Energy Spencer Abraham, was made public by two US NGOs, Nuclear Watch of New Mexico and Physicians for Social Responsibility (PSR). The report was submitted in October 2001, under the terms of the National Defense Authorization Act for FY 2001. It makes clear that no decision has made either to pursue or reject the option of developing new, low-yield nuclear weapons, popularly known as 'mini-nukes' or nuclear 'bunker-busters', specifically to destroy facilities housing weapons of mass destruction or forming a critical component of a WMD programme.

In its Executive Summary, the report notes that the Departments of Defense and Energy "have completed initial studies on how existing nuclear weapons can be modified to defeat those HDBTs [hard and deeply buried targets] that cannot be held at risk with conventional high-explosive weapons or current nuclear weapons. Any development and procurement of advanced nuclear capabilities would be considered in the broad context of nuclear stockpile policy, plans, and priorities, as well as future DOD strategic programs." The report goes on to state that the two Departments, which have "formed a joint Nuclear Planning Group to define the appropriate scope and option selection criteria for a possible feasibility and cost study", conducted a research programme in 1997, entitled *PROJECT SAND DUNE*, which "addressed nuclear solutions for holding

¹⁸ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 21.

the most challenging HDBTs at risk." Presumably on the basis of that research, the two Departments are now "studying the sensitivities and synergies of nuclear weapon yield, penetration, accuracy and tactics" relating to possible new nuclear weapon designs.¹⁹

The Physicians for Social Responsibility in their January 8, 2002 release, "Bush Nuclear Weapons Plan Sets Stage for New Bombs, Resumption of Testing," state:"

In May, the President spoke of the need for the development of a so-called 'flexible' arsenal. Information leaked this week about the classified Nuclear Posture Review confirms that this 'flexible arsenal' is code for the production of war-fighting 'mininukes' designed for use in regional conflicts - especially to counter chemical and biological weapons. This dangerous policy of nuclear brinkmanship brings the reality of a full-scale war into frightening focus.

This is fully reflected in the NPR, which according to leaked statements, calls for the development of new nuclear weapons. Other leaked information revealed that Secretary of Defense Rumsfeld will ask Congress for new bunker busting weapons as those used in Afghanistan have proved inadequate. A recent DoD document entitled Report to Congress on the Defeat of Hard and Deeply Buried Targets called for new nuclear weapons to be developed for this task. It seems the NPR now confirms that.

"The Nuclear Posture Review package put forward by the Bush administration will reshape the nuclear arsenal from one intended primarily for deterrence to a force intended primarily for war-fighting," said Robert K. Musil, Ph.D., Executive Director and CEO of PSR. "The sword of the mini-nuke and the shield of missile defense will be a dangerously destabilizing factor for global security."

Worse, the administration will seek to revive nuclear weapons test explosions at its Nevada Nuclear Test Site. The first President Bush imposed an end to full scale underground nuclear test explosions in 1992 and the moratorium has been maintained ever since. With all America's allies in NATO now signatories to the Comprehensive Test Ban Treaty, any move to restart testing for new nuclear weapons development would cause major international tension.

"The administration has withdrawn from the ABM Treaty, and disrupted the work of the Biological Weapons Convention. Now it seeks to destroy the CTBT, and fatally damage the Non-Proliferation Treaty," said Butcher. "The NPT, which has been fundamental to preventing the spread of nuclear weapons, was only renewed in 1995 on condition of a US promise to end nuclear testing. It seems the Bush administration is intent on destroying this vital Treaty, and dealing a severe blow to US security all to please the nuclear weaponeers at Los Alamos and other labs."²⁰

¹⁹ News Review, DISARMAMENT DIPLOMACY, No. 62, Jan.–Feb 2002.

²⁰ Bush Nuclear Weapons Plan Sets Stage for New Bombs, Resumption of Testing, Physicians for Social Responsibility (Apr. 15, 2002) http://www.psr.org/npr-pr0102.html [emphasis supplied].

Defenses

Secretary Rumsfeld's argument as to missile defense seems to be primarily not that defenses will work but that they will enhance deterrence:

- "The addition of defenses (along with the prospects for timely adjustments to force capabilities and enhanced C2 and intelligence systems) means that the U.S. will no longer be as heavily dependent on offensive strike forces to enforce deterrence as it was during the Cold War."²¹
- "Second, we have concluded that a strategic posture that relies solely on offensive nuclear forces is inappropriate for deterring the potential adversaries we will face in the 21st century. Terrorists or rogue states armed with weapons of mass destruction will likely test America's security commitments to its allies and friends. In response, we will need a range of capabilities to assure friend and foe alike of U.S. resolve. A broader array of capability is needed to dissuade states from undertaking political, military, or technical courses of action that would threaten U.S. and allied security. U.S. forces must pose a credible deterrent to potential adversaries who have access to modern military technology, including NBC weapons and the means to deliver them over long distances. Finally, U.S. strategic forces need to provide the President with a range of options to defeat any aggressor."²²
- "The second leg of the New Triad requires development and deployment of both active and passive defenses--a recognition that offensive capabilities alone may not deter aggression in the new security environment of the 21st century. The events of September 11, 2001 underscore this reality. Active and passive defenses will not be perfect. However, by denying or reducing the effectiveness of limited attacks, defenses can discourage attacks, provide new capabilities for managing crises, and provide insurance against the failure of traditional deterrence."²³

At the January 9, 2002 Briefing, Findings of the Nuclear Posture Review, in the section titled Conclusion, a chart stated that the NPR "replaces dependence on nuclear weapons with synergies between all parts of defense."²⁴

The NPR states:

- "Missile defenses are beginning to emerge as systems that can have an effect on the strategic and operational calculations of potential adversaries. They are now capable of providing, active defense against short- to medium-range threats." (p. 11)²⁵
- "Missile defense systems, like all military systems, can be less than 100-percent effective and still make a significant contribution to security by enhancing deterrence and saving lives if deterrence fails." (p. 25)²⁶

²¹ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 1.

²² *Id.*, at pg. 2.

²³ *Id*.

²⁴ Nuclear Posture Review Briefing Charts, *supra* note 4, Chart 15.

²⁵ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 4.

This focus on national missile defense is misguided in numerous respects:

- First of all, as widely recognized, missile defense is destabilizing to the balance of terror implicit in the policies of nuclear deterrence and mutual assured destruction.
 - To the extent the contemplated enemy is Russia or China, if the United States has defenses, they will have to have counterbalancing offensive capabilities, leading to Russia's not being willing or able to cut back as much as it otherwise might have and its feeling obliged to continue on hair-trigger alert, and China's building up of its nuclear capability.
 - To the extent the contemplated enemy is a "rogue state" or a terrorist group, such states and groups are, by hypothesis, largely undeterrable.
 - -Accordingly, the NPR's premise that missile defenses, even if we were to develop viable systems, would have significant deterrent effect is questionable.
- The argument that defenses need not be 100% effective is only relevant as against attacks by a limited number of small nuclear weapons, a rather limited scenario. The potential usefulness in such a scenario would seem to be outweighed by the losses in terms of precipitating proliferation and undermining arms control.

Infrastructure

The "revitalized defense infrastructure" Secretary Rumsfeld describes contemplates enhanced support of the defense establishment to enable it to be ready more quickly to address military design and manufacturing needs:

- "The third leg of the New Triad is a responsive defense infrastructure. Since the end of the Cold War, the U.S. defense infrastructure has contracted and our nuclear infrastructure has atrophied. New approaches to development and procurement of new capabilities are being designed so that it will not take 20 years or more to field new generations of weapon systems. With respect to the nuclear infrastructure, it needs to be repaired to increase confidence in the deployed forces, eliminate unneeded weapons, and mitigate the risks of technological surprise. Maintaining our ability to respond to large strategic changes can permit us to reduce our nuclear arsenal and, at the same time, dissuade adversaries from starting a competition in nuclear armaments."27
- "The effectiveness of this New Triad depends upon command and control, intelligence, and adaptive planning. "Exquisite" intelligence on the intentions and capabilities of adversaries can permit timely adjustments to the force and improve the precision with which it can strike and defend. The ability to plan the employment of the strike and defense forces flexibly and rapidly will provide the U.S. with a significant advantage in managing crises, deterring attack and conducting military operations."28

²⁶ *Id.*, at pg. 9. ²⁷ *Id.*, at pg. 3.

²⁸ Id.

- "Constructing the New Triad, reducing our deployed nuclear weapons, and increasing flexibility in our strategic posture has resource implications. It costs money to retire old weapons systems and create new capabilities. Restoring the defense infrastructure, developing and deploying strategic defenses, improving our command and control, intelligence, planning, and non-nuclear strike capabilities require new defense initiatives and investments. However, these investments can make the U.S. more secure while reducing our dependence on nuclear weapons."²⁹

William Arkin recently reported:

The vagueness of the NPR with regard to the mission of deterring rogue states will likely encourage the nuclear laboratories to believe that it is a mandate to develop new nuclear weapons. Are new nukes really needed? American conventional precision-guided weapons have now fully matured, and there are newer conventional weapons in development, such as the Northrop-Grumman/Lockheed Martin "Big Blue," a 30,000-lb. earth penetrating guided conventional weapon. Crouch says reassuringly that "there are no recommendations in the report about developing new nuclear weapons." But he also says the U.S. is looking at "a number of initiatives" to attack deeply-buried targets.³⁰

Building up infrastructure, as we well know, becomes self-perpetuating. The implication of the focus on the NPR on building up infrastructure is that we are systematically embarking upon continuing development of nuclear weapons.

The clear import of the NPR is a renewed commitment to nuclear weapons. They are with us to stay and we must continue our capability to sustain the old ones and develop new ones. Rather than striving to de-emphasize and de-legitimize them, we are planning for their continuation.

The illusion of control derived by improvements in command and control is ephemeral since other nuclear States presumably will not be achieving parallel improvements in command and control.

Strategic Vision

The January 9, 2002 charts to the briefing, Findings of the Nuclear Posture Review, stated

New Environment and the President's Direction

- Encourage/facilitate Russian cooperation: "new framework"
- Cold War approach to deterrence no longer appropriate
- End relationship with Russia based on MAD

²⁹ Id.

³⁰ William M. Arkin, *Another Rumsfeld Bomb*, Special to washingtonpost.com, Monday, Jan.14, 2002; 7:38 AM (Apr. 5, 2002) http://www.washingtonpost.com.

- Deploy the lowest number of nuclear weapons consistent with the security requirements of the U.S., its allies and friends
- Achieve reductions without requirement for Cold War-style treaties
- Develop and field missile defenses more capable than the ABM Treaty permits
- Place greater emphasis on advanced conventional weapons³¹

Secretary Rumsfeld recognizes the outmodedness of our Cold War practices:

- "Early on, we recognized that the new security environment demanded that the Department go beyond the Congressional mandate in developing a strategic posture for the 21st century. President Bush had already directed the Defense Department to transform America's military and prepare it for the new, unpredictable world in which we will be living. The result of his direction is the Quadrennial Defense Review (QDR). Building on the (QDR) this Nuclear Posture Review puts in motion a major change in our approach to the role of nuclear offensive forces in our deterrent strategy and presents the blueprint for transforming our strategic posture."³²
- "First and foremost, the Nuclear Posture Review puts the Cold War practices related to planning for strategic forces behind us. In the decade since the collapse of the Soviet Union, planning for the employment of U.S. nuclear forces has undergone only modest revision, despite the new relationship between the U.S. and Russia. Few changes had been made to the size or composition of the strategic nuclear force beyond those required by the START Treaty. At the same time, plans and funding for sustaining some critical elements of that force have been inadequate."³³

Mr. Rumsfeld further states:

- "As a result of this review, the U.S. will no longer plan, size or sustain its forces as though Russia presented merely a smaller version of the threat posed by the former Soviet Union. Following the direction laid down for U.S. defense planning in the Quadrennial Defense Review, the Nuclear Posture Review shifts planning for America's strategic forces from the threat-based approach of the Cold War to a capabilities-based approach. This new approach should provide, over the coming decades, a credible deterrent at the lowest level of nuclear weapons consistent with U.S. and allied security."³⁴

So the strategic vision of the NPR appears to be the Cold War deterrence with the addition of the new elements making up the "New Triad," namely:

- greatly increased reliance on modern high tech conventional weapons;
- missile defense;
- enhanced infrastructure;
- enhanced command and control;

³¹ Nuclear Posture Review Briefing Charts, *supra* note 4, Chart 6.

³² Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 1.

³³ *Id.*, at pg. 2.

³⁴ *Id.*, at pg. 2.

- flexible planning.

The NPR states:

- However, "U.S. nuclear forces, alone are unsuited to most of the contingencies for which the United States prepares. The United States and allied interests may not require nuclear strikes." A "new mix" of nuclear, non-nuclear, and defensive capabilities "is required for the diverse set of potential adversaries and unexpected threats the United States may confront in the coming decades." (p. 7)³⁵

William Arkin recently reported:

"The terrorists who struck us on Sept. 11th were clearly not deterred by doing so from the massive U.S. nuclear arsenal," Rumsfeld told an audience at the National Defense University in late January.³⁶

Mr. Arkin further reported:

Similarly, U.S. Undersecretary of State John R. Bolton said in a recent interview, "We would do whatever is necessary to defend America's innocent civilian population The idea that fine theories of deterrence work against everybody ... has just been disproven by Sept. 11."³⁷

While the NPR bows in the direction of the reality that Cold War deterrence is outmoded, it continues that model, with the addition of the destabilizing element of missile defense.

Rather than genuinely cutting back on the numbers of nuclear weapons, as the logic of its position that Russia is not longer our enemy would seem to compel, the NPR makes only cosmetic changes. It cuts back the numbers of operationally deployed strategic nuclear weapons, while keeping all or some of the ostensibly reduced weapons in a "responsive force" whereby they are not truly eliminated at all, only held in reserve, subject to apparently limited delays in being returned to the operational forces.³⁸

³⁵ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 4.

³⁶ William M. Arkin, *Nuclear Warfare, supra* note 17.

³⁷ Id.

³⁸ See Joseph Cirincione and Jon B. Wolfsthal, *Nuclear Review Retains Old Posture*, The Carnegie Endowment for International Peace, CARNEGIE ANALYSIS, Jan. 17, 2002, (Apr. 15, 2002) http://www.ceip.org/files/nonprolif/templates/article.asp?NewsID=2080:

Under the new posture, initial warhead reductions will track those planned during the previous Bush and Clinton administrations, bringing the U.S. deployed nuclear force down to 3800 by 2007 and to 1700-2200 by 2012. These numbers would be actual, deployed strategic weapons, as opposed to using less accurate counting rules laid out by the START I Treaty - a move hailed by government officials as "truth in advertising." The START II treaty negotiated by former President Bush and signed in January 1993 had called for reductions to 3000 to 3500 warheads by that time, with verified launcher elimination. These cuts will be achieved by removing 500 warheads from the 50 Peacekeeper ICBMs, 800 warheads from the 96 missiles carried on four Trident submarines, and 1,000 from the removal of two warheads from each of 500 Minuteman III ICBMs. All of these cuts were planned under the terms of the START II treaty. The four Trident submarines will be converted to conventional missions, a move not outlined under START II. The total announced reductions down to 1,700 to 2,200 by the year 2012, however,

represents a slower pace of reduction than envisioned by the previous administration. In 1997, President Bill Clinton and Russian President Boris Yeltsin in Helsinki, Finland set a goal for both countries to field 2000 to 2500 strategic warheads by the end of 2007. The new posture does hold open the possibility of further, deeper cuts as international conditions permit, but also could slow the pace of reductions, or reverse them altogether.

Stockpiling Warheads

A critical component of the new posture is the decision to retain a large reserve of nuclear forces. Some warheads removed from delivery vehicles will be dismantled, but the majority will be maintained in the active stockpile for potential return to delivery systems on short notice (weeks or months). This "hedge" reserve of warheads that could be re-deployed, should strategic conditions change for the worse, was originally created by the 1994 Nuclear Posture Review. Officials then feared that a resurgent Russia might present a future threat. By 1997, however, Clinton and Yeltsin openly suggested that future agreements, such as START III, could include the verified elimination of warheads, helping to make future reductions transparent and irreversible. Tactical nuclear weapon controls were also put on the table for future discussions. The new review abandons these goals.

Cold War Triad and Doctrine Retained

U.S. officials have noted that since the end of the Cold War, the United States has reduced the strategic nuclear systems by over 50 percent and non-strategic systems by over 80 percent and reduced spending on strategic forces by almost 70 percent.

There is considerable resistance from some officials to further reductions or policy changes. In the most authoritative public statement on the rationale for maintaining large numbers of deployed forces configured as they were during the Cold War, then-Commander-in-Chief of the Strategic Command Admiral Richard Meis argued in July 2001 that the burden of proof fell on those who advocate reductions to demonstrate exactly how and why such cuts would serve to enhance U.S. security. "There is a tyranny in very deep numerical reductions that inhibits flexibility and induces instability in certain situations, " he said. "We must preserve sufficient deterrent capability to respond to future challenges, to provide a cushion against imperfect intelligence and surprises, and to preserve a reconstitution capability as a hedge against unwelcome political or strategic developments."

These views apparently prevailed in the Nuclear Posture Review. The administration concluded that there will be a need to maintain thousands of deployed nuclear weapons in a triad of bombers, submarines and land-based missiles for the indefinite future. The diversity is required to "complicate any adversary's offensive and defense planning calculations while simultaneously providing protection against the failure of a single leg of the triad," according to Mies. That is, U.S. forces must remain capable of withstanding a first-strike and responding after the attack with an overwhelming and devastating nuclear counter-attack.

Meis explained in his testimony:

* "Intercontinental ballistic missiles continue to provide a reliable, low cost, prompt response capability with a high readiness rate. They also promote stability by ensuring that a potential adversary takes their geographically dispersed capabilities into account if contemplating a disarming first strike...

* "[T]he strategic submarine force is the most survivable leg of the triad, providing the United States with a powerful, assured response capability against any adversary...The United States must preserve a sufficiently large strategic nuclear submarine force to enable two-ocean operations with sufficient assets to ensure an at-sea response force capable of deterring any adversary in a crisis...

* Strategic bombers...allow force dispersal to improve survivability and aircraft recall during mission execution. The low-observable technology of the B-2 bomber enables it to penetrate heavily defended

Ultimately, the NPR does what unbridled power always does: It simply adds to its core of power. Under Secretary of Defense Crouch made it clear that the NPR does not take anything away in terms of the threat of use of nuclear weapons, it simply adds "options" for the President:

Q: Sir, is there a doctrine of retaliation that is now replacing assured destruction, or is it just a doctrine of, you know, more options for the president?

And specifically, when you talk about missile defense, it seems as though you're heading for a potentially very odd scenario. Right now, if somebody were to attack the United States with a ballistic missile and weapon of mass destruction, it's assumed, I think generally, that there would be a severe retaliation, probably nuclear. You seem to be implying that if a future country were to do that, and the missile were intercepted, that country would be, quote, unquote, "rewarded" with a lesser level of retaliation, because there hasn't been actual destruction caused to the United States. That seems to be what you're implying when you're talking about this new menu of options for the president.

Crouch: If that's what you think I was implying, that's certainly not what I was implying. What I was stating is that by providing, in this particular example, an additional capability to the president, a missile defense capability, the president would be in a position to defeat the attack of a weapon of mass destruction on the United States.

The lady earlier mentioned, you know, what's in this for the United States and what's in this for the American people? And it seems to me while deterring an attack of a weapon of mass destruction against the United States is something that we have to continue to have forces and capabilities to do, and we will certainly maintain forces and capabilities to do that, being able to defeat that attack, whether it were to come out of the Middle East or some other place, would be a far more preferable option and does not, in fact, foreclose any other options that the president might have.

So I don't think I'm implying that we would be rewarding a country for shooting a ballistic missile. What we would be doing, hopefully, is -- in the long run, is dissuading them from developing those missiles because to have them would be fruitless because we would have the ability to defeat them -- defeat an attack on the United States. And I think that's a very positive outcome.

areas and hold high-value targets at risk deep inside an adversary's territory...the B-52 bomber can be employed in a standoff role using long-range cruise missile to attack from outside enemy air defenses."

Russia is the only potentially adversary capable of such an attack against the United States. But the review abandons the long-standing military practice of configuring forces based on a concrete threat analysis and moves to a "capability-based" force that no longer requires the force to be sized against any specific threat.

McGraw: One more --

Q: It just seems to me -- if I can follow this -- this clear implication that the macabre business of massive retaliation is being gotten rid of. And yet, your answer just now seems to indicate that it's not, that it's still there; that you would still, in addition to intercepting the missile, retaliate massively against -- is there a doctrine that tells a president, a future president, what do to in circumstances like this?

Crouch: No, the president will have a -- one of the things that will come out of this is the president, hopefully, will have a much wider range of options that he can deal with. And that's why one of the initiatives here was not only to maintain a smaller nuclear force, but also to develop additional non-nuclear strike capabilities that would also be part of a -- sort of this diverse portfolio of options that the president could draw from.

We're certainly not -- there's nothing in the review that talks about what the president's options are or are not are. Those are really up to the president. The main idea was that we feel we need to give the president and future presidents a broader portfolio of responses and options to deal with the kinds of uncertainties. You know, we thought we knew fairly confidently how to deter the Soviet Union during the Cold War. I think one of the reflections here is that we're not as confident that we will be able or we will know how to deter the kinds of attacks that might be presented in the United States in the future. And if September 11th doesn't underscore that, since I don't -- most of us did not expect that, I think nothing else would.³⁹

It's all too clear from the NPR that it intends to continue the policies of nuclear deterrence and mutual assured destruction, and indeed that deterrence is still directed at large scale conventional attack:

- "Nuclear weapons play a critical role in the defense capabilities of the United States, its allies and friends. *They provide credible military options to deter a wide range of threats, including WMD and large-scale conventional military force.* These nuclear capabilities possess unique properties that give the United States options to hold at risk classes of targets [that are] important to achieve strategic and political objectives." (p. 7)⁴⁰
- "Greater flexibility is needed with respect to nuclear forces and planning than was the case during the Cold War. The assets most valued by the spectrum of potential adversaries in the new security environment may be diverse and, in some cases, U.S. understanding of what an adversary values may evolve. Consequently, although the number of weapons needed to hold those assets at risk has declined, U.S. nuclear forces still require the capability to hold at risk a wide range of target types. This capability is key to the role of nuclear forces in supporting an effective deterrence strategy relative to a broad spectrum of potential opponents under a variety of contingencies. Nuclear attack options that vary in scale, scope, and purpose will complement other military capabilities. The combination can provide the range of

³⁹ Department of Defense Special Briefing on the Nuclear Posture Review, *supra* note 14, at ppg. 16–17.

⁴⁰ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 3 [emphasis supplied].

options needed to pose a credible deterrent to adversaries whose values and calculations of risk and of gain and loss may be very different from and more difficult to discern than those of past adversaries." $(p. 7)^{41}$

- "Advances in defensive technologies will allow U.S. non-nuclear and nuclear capabilities to be coupled with active and passive defenses to help provide deterrence and protection against attack, preserve U.S. freedom of action, and strengthen the credibility of U.S. alliance commitments." $(p. 7)^{42}$
- "Based on current projections, an operationally deployed force of 1700-2200 strategic nuclear warheads by 2012 ... will support U.S. deterrence policy to hold at risk what opponents value, including their instruments of political control and military power, and to deny opponents their war aims. The types of targets to be held at risk for deterrence purposes include leadership and military capabilities, particularly WMD, military command facilities and other centers of control and infrastructure that support military forces." $(p. 7)^{43}$

This focus on addressing nuclear weapons against conventional weapons attacks lowers the nuclear threshold and legitimizes nuclear weapons, as does the NPR's policy of integrating and linking nuclear and non-nuclear weapons. This is a major mistake and certainly one contrary to the United States' own interest.

The NPR's apparent contemplation of "mininukes" also is a major mistake in unnecessarily and unproductively lowering the nuclear threshold. The NPR states:

- "Desired capabilities for nuclear weapons systems in flexible, adaptable strike plans include options for variable and reduced yields, high accuracy, and timely employment. These capabilities would help deter enemy use of WMD or limit collateral damage, should the United States have to defeat enemy WMD capabilities." $(p. 48)^{44}$

The NPR goes strikingly far in ostensibly contemplating the actual use of nuclear weapons and in naming States constituting potential targets of U.S. nuclear weapons:

"ASSURE" — "U.S. nuclear forces will continue to provide assurance to security partners, particularly in the presence of known or suspected threats of nuclear, biological, or chemical attacks or in the event of surprising military developments. This assurance can serve to reduce the incentives for friendly countries to acquire nuclear weapons of their own to deter such threats and circumstances. Nuclear capabilities also assure the U.S. public that the United States will not be subject to coercion based on a false perception of U.S. weakness among potential adversaries. $(p. 12)^{45}$

⁴¹ *Id.*, at pg. 3.

⁴² Id.

⁴³ *Id.*, at pg. 8. ⁴⁴ *Id.*, at pg. 21.

⁴⁵ *Id.*, at ppg. 4–5.

"DEFEAT" — "Composed of both non-nuclear systems and nuclear weapons, the strike element of the New Triad can provide greater flexibility in the design and conduct of military campaigns to defeat opponents decisively. Non-nuclear strike capabilities may be particularly useful to limit collateral damage and conflict escalation. Nuclear weapons could be employed against targets able to withstand non-nuclear attack, (for example, deep underground bunkers or bio-weapon facilities)." (p. 12-13)⁴⁶

"In setting requirements for nuclear strike capabilities, distinctions can be made among the contingencies for which the United States must be prepared. Contingencies can be categorized as immediate, potential or unexpected."47

"Immediate contingencies involve well-recognized current dangers... Current examples of immediate contingencies include an Iraqi attack on Israel or its neighbors, a North Korean attack on South Korea, or a military confrontation over the status of Taiwan."⁴⁸

"Potential contingencies are plausible, but not immediate dangers. For example, the emergence of a new, hostile military coalition against the United States or its allies in which one or more members possesses WMD and the means of delivery is a potential contingency that could have major consequences for U.S. defense planning, including plans for nuclear forces." $(p, 16)^{49}$

Unexpected contingencies are "sudden and unpredicted security challenges," like the Cuban Missile Crisis. "Contemporary illustrations might include a sudden regime change by which an existing nuclear arsenal comes into the hands of a new, hostile leadership group, or an opponents surprise unveiling of WMD capabilities." Ibid.⁵⁰

"North Korea, Iraq, Iran, Syria, and Libya are among the countries that could be involved in immediate, potential, or unexpected contingencies. All have longstanding hostility toward the United States and its security partners; North Korea and Iraq in particular have been chronic military concerns. All sponsor or harbor terrorists, and all have active WMD and missile programs." Ibid. ⁵¹

"Due to the combination of China's still developing strategic objectives and its ongoing modernization of its nuclear and non nuclear forces, China is a country that could be involved in an immediate or potential contingency." (p. 16-17)⁵²

"Russia maintains the most formidable nuclear forces, aside from the United States, and substantial, if less impressive, conventional capabilities. There now are, however, no ideological sources of conflict with Moscow, as there were during the Cold War. The United States seeks a more cooperative relationship with Russia and a move away from

⁴⁶ *Id.*, at pg. 5. ⁴⁷ *Id.*, at pg. 6.

⁴⁸ *Id*.

⁴⁹ *Id*.

⁵⁰ *Id*.

⁵¹ *Id.*, at pg. 7. ⁵² *Id*.

the balance-of-terror policy framework, which by definition is an expression of mutual distrust and hostility. As a result, a [nuclear strike] contingency involving Russia, while plausible, is not expected." $(p. 17)^{53}$

As to this U.S. identification of the States against which it may use nuclear weapons, William Arkin reports:

Officials have long acknowledged that they had detailed nuclear plans for an attack on Russia. However, this "Nuclear Posture Review" apparently marks the first time that an official list of potential target countries has come to light, analysts said. Some predicted the disclosure would set off strong reactions from governments of the target countries.⁵⁴

The NPR also lowers the threshold for the use of nuclear weapons by its emphasis on flexible decision making as to the use of nuclear weapons:

Need for Pre-Planned and Spontaneous Targeting of Nuclear Weapons

"The planning process [for the New Triad] not only must produce a variety of flexible, pre-planned non-nuclear and nuclear options, but also incorporate sufficient adaptability to support the timely construction of additional options in a crisis or unexpected conflict." $(p. 11)^{55}$

"To meet the demands of the New Triad, an overhaul of existing capabilities is needed. This includes improving the tools used to build and execute strike plans so that the national leadership can adapt pre-planned options, or construct new options, during highly dynamic crisis situations." $(p. 23)^{56}$

Adaptive Planning (p. 29)

"The current nuclear planning system, including target identification, weapons system assignment, and the nuclear command and control system requirements, is optimized to support large, deliberately planned nuclear strikes. In the future, as the nation moves beyond the concept of a large, Single Integrated Operational Plan (SIOP) and moves toward more flexibility, adaptive planning will play a much larger role."⁵⁷

"Deliberate planning creates executable war plans, prepared in advance, for anticipated contingencies. Adaptive planning is used to generate war plans quickly in time critical-situations. Deliberate planning provides the foundation for adaptive planning by identifying individual weapon/target combinations that could be executed in crises."⁵⁸

"For contingencies for which no adaptive planning has been done, fully adaptive planning will be required. The desire to shorten the time between identifying a target

⁵³ Id.

⁵⁴ William M. Arkin, *Nuclear Warfare*, *supra* note 17.

⁵⁵ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 4.

⁵⁶ *Id.*, at pg. 8.

 $^{^{57}}$ *Id.*, at ppg. 11–12.

⁵⁸ *Id.*, at pg. 12.

and having an option available will place significant stress on the nuclear planning process as it currently exists. Presently 12-48 hours is required to develop a plan to attack a single new target, depending on the weapon system to be employed. A more flexible planning system is needed to address the requirements of adaptive planning."⁵⁹

"To make the Strategic Warfare Planning System (SWPS) more responsive to adaptive planning scenarios, a comprehensive SWPS Transformation Study has been initiated and is being conducted by U.S. Strategic Command. Results will be available in late spring 2002. To meet the requirements of adaptive planning, an upgrade of the existing nuclear C2 architecture is needed."⁶⁰

The NPR also fosters the prolongation of the nuclear weapons regime by its seeming laying the ground work for the resumption of nuclear testing:

"The [Feb. 2001 Foster] Panel recommendation that DOE/NNSA assess the feasibility and cost of reducing the time [to resume testing] to 'well below the Congressionallymandated one year' (sense of the Congress as expressed in the 1996 Resolution of Ratification for the START II Treaty) was addressed as part of the NPR." (p. 35)⁶¹

The NPR is also destabilizing and contradictory to the progress made in the treaties established during the Cold War by its de-emphasis on entering into treaties to regularize and perpetuate nuclear arms reductions. The January 9, 2002 chart, Findings of the Nuclear Posture Review, set forth, inter alia, the following new direction, "Achieve reductions without requirement for Cold War-style treaties."

The Physicians For Social Responsibility in a 2002 "Factsheet," titled "Dr. Strangelove" Meets the Pentagon: The U.S. Nuclear Posture Review," stated:

In the 56 page classified NPR obtained by the LA Times and the New York Times, the Pentagon outlines a list of contingencies and targets where nuclear weapons might be used. Listing seven countries, China, Russia, Iraq, North Korea, Iran, Libya and Syria, as potential nuclear target, the leaked NPR indicates that:

* Nuclear weapons could be used in three types of situations: against targets able to withstand non-nuclear attack; in retaliation for attack with nuclear, biological or chemical weapons; or "in the event of surprising military developments."

* The Pentagon should be prepared to use nuclear weapons during an Arab-Israel conflict, an Iraqi attack on Israel, or its neighbors, a North Korean attack on South Korea or a military confrontation between China and Taiwan (a scenario in which Chinese leaders may try to forcefully integrate Taiwan with the mainland China).

* Countries such as Iran, Syria and Libya could be involved in immediate, potential or unexpected contingencies requiring "nuclear strike capabilities."

⁵⁹ Id.

 $^{^{60}}$ Id.

⁶¹ *Id.*, at pg. 15.

* The United States should be prepared to launch a nuclear strike to destroy stocks of weapons of mass destruction, such as biological and chemical arms.

The NPR also suggests the need for developing a new generation of nuclear devices that could be integrated into U.S. war-fighting strategy for much wider uses than for deterrence. Specifically, it recommends development of new nuclear weapons called Robust Nuclear Earth Penetrator (RNP) to be used against hardened and deeply buried targets such as caves or bunkers and suggests that U.S. may have to resume nuclear testing for development of these weapons.

The Implications of the NPR to U.S. and Global Security:

These are dangerous plans which are not only in violation of U.S. obligations under the Nuclear Nonproliferation Treaty (NPT), and the Comprehensive Test Ban Treaty (CTBT), if left unchecked, are sure to lead to a global nuclear arms race, the resumption of nuclear testing and, most importantly, make the use of nuclear weapons more likely. For instance, the Pentagon's nuclear war plans include contingencies for using nuclear weapons against five non-unclear weapon states that are signatories to the NPT. Iraq, North Korea, Iran, Libya and Syria are all parties to the NPT and, not so far the United States knows, do not possess nuclear weapons. Prior to the 1995 NPT Review Conference the United States or its allies in alliance with a nuclear weapon state. This pledge was further formalized by all nuclear weapon states, including the U.S., in the UN Security Council Resolution 984.

Under the NPT, the United States is also legally obligated to take "effective measures relating to cessation of the nuclear arms race at an early date." Further, at the 2000 NPT Review Conference, the U.S. committed to an "unequivocal undertaking" to eliminate nuclear weapons and to a diminishing role for nuclear weapons in security policies. The current NPR violates each of these commitments by highlighting the role of nuclear weapons in U.S. defense policy, defining new mission and targeting plans for U.S. nuclear forces, and calling for the production and testing of new nuclear weapons.

Most importantly, the NPR attempts to blur the distinction between nuclear and conventional weapons. In the current NPR, use of nuclear weapons is not limited to deterrence, nor is it taboo as the ultimate weapon of horror. This NPR views nuclear weapons as just another weapon available to U.S. forces. Notwithstanding the negative health and environmental consequences associated with the use of a nuclear device, regardless of its yield, the attempts by the world's sole superpower, the United States, to develop and deploy 'usable' nuclear weapons, will only convince other countries of the perceived military utility of these weapons. This will simply encourage other nations to acquire and use atomic weapons.

Equally dangerous is the NPR's suggestion that the U.S. may resume nuclear testing. For a decade, the United States has maintained a voluntary moratorium on nuclear weapons test explosions and, while it has not ratified, the U.S. has signed the CTBT. Resumption of nuclear testing by the United States is sure to cause a domestic outrage and anger our European allies all of whom have ratified the Treaty. Such action will also encourage other countries, including Russia, China, India, Pakistan, and many others, to follow the U.S. lead igniting a nuclear arms race of a global scale.

The plans and recommendations outlined in the current NPR are truly dangerous for U.S. and global security. The U.S. plans for developing battle-ready nuclear weapons, resumption of nuclear testing, and war planning to use nuclear weapons in conventional warfare can only lead to other nations ultimately following a similar path. This, most certainly, will lead us into a world ever more dangerous than that witnessed during the Cold War. Such plans will reduce, not enhance, U.S. security and could bring nuclear war out of the theoretical realm into reality.⁶²

Just the opposite of the sensible nuclear posture proposed by the Federation of American Scientists (FAS),⁶³ the NPR does not:

- "Declare that the sole purpose of US nuclear weapons is to deter and, if necessary, respond to the use of nuclear weapons by another country."⁶⁴ Instead, it espouses the war-fighting role of nuclear weapons, in integrated use with conventional weapons.
- "Reject rapid-launch options, and change its deployment practices to provide for the launch of US nuclear forces in hours or days rather than minutes."⁶⁵ The NPR offers no such restraints, even in the face of Russia's apparent readiness to reciprocate and its deteriorating controls making hair-trigger readiness more dangerous than ever before.
- "Unilaterally reduce its nuclear arsenal to a total of 1,000 warheads, including deployed, spare, and reserve warheads. To encourage Russia to reciprocate, the United States could make the endpoint of its dismantlement process dependent on Russia's response."⁶⁶ The reductions the NPR sets forth are more limited, fully hedged, explicitly reversible, and ignore Russia's stated willingness to go further and on a transparent and irreversible basis.⁶⁷
- "Promptly and unilaterally retire all US tactical nuclear weapons, dismantling them in a transparent manner. In addition, the United States would take steps to induce Russia to do the same."⁶⁸ The NPR proposes no restraints on tactical nuclear weapons and instead seems to support development of mininukes and the integration of them with conventional weapons.

⁶⁷ *Id.* It has been reported:

⁶² "Dr. Strangelove" Meets the Pentagon: The U.S. Nuclear Posture Review, Physicians For Social Responsibility (Apr. 15, 2002) http://www.psr.org/NPRfactsheet.html.

⁶³ TOWARD TRUE SECURITY: A US NUCLEAR POSTURE FOR THE NEXT DECADE. Center for Defense Information, Federation of American Scientists, Natural Resources Defense Council, Union of Concerned Scientists (Apr. 15, 2002) http://www.fas.org/ssp/docs/010600-posture.pdf

⁶⁴ Id. at 3.

 $^{^{65}}$ Id.

⁶⁶ *Id*.

Aleksandr Yakovenko, the spokesman for Russia's Foreign Ministry, stated, in responding to the NPR, "We hold that Russian American agreements on further reductions of the nuclear arsenals must be, first, radical -- down to 1,500 - 2,200 warheads; second, verifiable; and third, irreversible so that strategic defensive arms will be reduced not only 'on paper.' "

Patrick E. Tyler, Russia Rejects U.S. Plan to Store Warheads, N.Y. TIMES, Jan. 11, 2002.

⁶⁸ TOWARD TRUE SECURITY, *supra* note 63, at 3.

- "Announce its commitment to further reductions in the number of nuclear weapons, on a negotiated and verified multilateral basis."⁶⁹ As noted, the NPR limits the projected reductions, hedges them fully, and seemingly requires that they be optional and reversible.
- "Commit to not resume testing and to ratify the Comprehensive Test Ban Treaty."⁷⁰ To the contrary, the NPR espouses preparing our infrastructure for prompt resumption of testing.
- "Reaffirm its commitment to pursue nuclear disarmament and present a specific plan for moving toward this goal, in recognition that the universal and verifiable prohibition of nuclear weapons would be in the US national security interest."71 *There is no hint of openness to disarmament in the NPR; the espoused nuclear* posture seems to be one of total commitment to the projection of nuclear weapons as an instrumentality of national policy.
- "Recognize that deployment of a US missile defense system that Russia or China believed could intercept a significant portion of its survivable long-range forces would trigger reactions by these countries that could result in a net decrease in US security. The United States should therefore commit to not deploy any missile defense system that would decrease its overall security in this way."⁷² The NPR ignores these risks.

The one FAS proposal the NPR seems to espouse is the following:

"Replace its reliance on pre-set targeting plans with the capability to promptly develop a response tailored to the situation if nuclear weapons are used against the United States, its armed forces, or its allies.⁷³ The NPR expresses the desire to get beyond pre-planned options, although the NPR's focus on integration of nuclear and non-nuclear weapons seems to counteract tailored decision making.⁷⁴ "Flexible" use of nuclear weapons, presumably of mininukes and other relatively accurate low yield nuclear weapons seems to lower rather than raise the threshold for use of nuclear weapons.

*In its June 2001 report, Toward True Security,*⁷⁵ *the Union of Concerned Scientists* stated, in analysis applicable to the NPR:

Last month President Bush signaled his approach to nuclear policy by suggesting that the most urgent threat to US security comes from a small number of missiles in hostile states. The new report, Toward True Security: A US Nuclear Posture for the Next Decade, reaches a sharply different conclusion -- that over a thousand nuclear weapons

⁶⁹ Id. ⁷⁰ Id.

⁷¹ *Id*.

⁷² Id.

⁷³ Id.

 ⁷⁴ See Nuclear Posture Review [Excerpts], supra note 2, at pg. 4.
 ⁷⁵ Report Warns of Russian Threat and Offers New Nuclear Vision, Union of Concerned Scientists, Releases, June 5, 2001 (Apr. 15, 2002) http://www.ucsusa.org/releases/06-05-01.html.

in Russia on hair-trigger alert, combined with Russia's decaying early-warning system, pose an immediate risk of mistaken Russian attack against the US. As the most urgent threat to US security, the report argues that reducing this danger should be the primary focus of US policy.

"By focusing on the wrong problem, the Bush administration is heading toward the wrong solution," said Tom Z. Collina, Director of Global Security at the Union of Concerned Scientists. "Missile programs in developing states are a cause for concern, but they pale in comparison to the dangers we face from Russia. The president's focus on the so-called rogue threat not only leaves the greater dangers from Russia unsolved, it makes them worse."

According to the report, the deployment of a National Missile Defense (NMD) system would undermine Russia's confidence that it could retaliate in the unlikely event of a US attack, and thus forces Moscow to maintain its readiness for quick launch. NMD also threatens US–Russian cooperation in general, and with it the future of US–funded efforts to help Russia control its nuclear weapons, materials, and scientists. US deployment of NMD is also expected to spur the build up of Chinese long-range missiles.

The Council for a Liveable World, in a January 9, 2002 release,⁷⁶ identified some of the questions that remain open as to the NPR:

* What will be the final number of U.S. strategic nuclear weapons? Thus far, the Administration has revealed only a range of 1,700 - 2,200.

- * Will the Russians and the U.S. reach a written agreement on nuclear reductions?
- * What, if any, verification or transparency procedures will be included?

* Will the Russians and the U.S. have agreed rules for counting each side's nuclear weapons?

* Will the U.S. permit Moscow to retain retired nuclear weapons in storage so it can reverse cuts in nuclear weapons?

* Why will it take 10 years to carry out the nuclear reductions when the warheads will simply be taken off the missiles rather than dismantled?

* Will any nuclear weapons be taken off alert to reduce the risk of accidental or unauthorized launch of nuclear missiles?

* Under what conditions will the U.S. resume nuclear testing?

⁷⁶ Administration Releases Nuclear Posture Review: Major Questions Remain, Council for a Liveable World, January 9, 2002, (Apr. 15, 2002) http://www.clw.org/control/nukereview02press.html

* How can the Administration reject the previous policy of nuclear weapons deterrence when it has nothing to replace it?

John Isaacs, Council for a Livable World president, stated:

"The true test for the Bush Administration's revised nuclear weapons policy is whether it leaves the U.S. more or less secure," added Isaacs. "With so much uncertainty -- and there is nothing the military hates worse than uncertainty -- the Administration is leading us into a troubling period," he concluded.⁷⁷

He further stated, "retaining the option of rebuilding the U.S. nuclear weapons force after cutting it goes counter to the need to de-emphasize nuclear weapons in the post-Cold War environment."⁷⁸

The failures of the NPR represent the President's failures in leadership. As Janne E. Nolan wrote in November 2000 in an article entitled, "Preparing for the 2001 Nuclear Posture Review," in Arms Control Today:

One central reason for the absence of post-Cold War change in the nuclear force posture has been the failure of the president to challenge the assumptions driving nuclear planning, a sphere that has traditionally eluded presidential attention. Nuclear targeting and attack planning have evolved over the last 50 years into a highly specialized occupation, based on specific skills, computer models, and databases to which only very few could have access, let alone oversight. The extreme political sensitivity of nuclear operations—the guts of deterrence—required that authority for war plans be delegated to a decision-making apparatus designed specifically to avoid excessive political intrusion or publicity. The sheer complexity of the nuclear architecture, in turn, assures a certain degree of autonomy from less expert officials. And, as has been demonstrated in countless episodes, this is not a sphere in which amateurs are welcome, no matter what formal titles they hold.

The president has ultimate authority for launching nuclear weapons and is responsible for drafting the nuclear guidance given planners to draw up war plans. Most presidents, senior White House aides, and even secretaries of defense, however, would be hard pressed to describe how various "options" would be executed in a war, with what weapons, and to what end. As summarized by an officer charged with carrying the "football"—the briefcase the president would use to get at nuclear launch codes in a crisis—"Not one President in my time [from Johnson to Carter] ever had more than one briefing on the contents of the football, and that was before each one took office, when it was one briefing among dozens" even though the material "changed constantly." No president ever had the combination: "If the guy with the football has a heart attack, they'd have to blow the whole thing open."

⁷⁷ Id.

⁷⁸ Id.

Not surprisingly, planning objectives-targets to be covered, with estimated damage expectancies—have influenced the structure and level of forces thought to be required far more than political debates about whether the United States can ever commit to the goal of eliminating nuclear weapons. As was true throughout the Cold War and remains true today, the determination of what numbers of weapons are desirable, at what levels of alert, against which targets, is not only up to the president or his political advisers. This tradition of delegated authority is likely to be a significant factor in determining the outcome of any future review.⁷⁹

Fundamental Premise of NPR

The January 9, 2002 charts in support of the DoD briefing, Findings of the Nuclear Posture Review, set forth, inter alia, the following underlying premise, "Second-to-none nuclear capability assures allies and public."80

This seems a questionable premise.

International Law Considerations

In recognizing the United States' general inability reliably to deliver nuclear weapons to their intended targets with precision, the NPR makes an admission that is striking to lawyers who have been involved in legality issues as to the use or threat of use of nuclear weapons. Striking because this is an admission that essentially concedes the unlawfulness of the U.S. policy of nuclear deterrence and the unlawfulness of the United States' potential use of virtually all of the weapons making up its nuclear arsenal.

Both the defenders, including the United States, and the opponents of the nuclear weapons regime agree that the international law rules of discrimination, proportionality, and necessity apply to nuclear weapons:

- The rule of discrimination makes it unlawful to use weapons whose likely or foreseeable effects cannot discriminate between military and civilian targets.
- The rule of proportionality makes it unlawful to use weapons whose probable effects upon combatant or non-combatant persons or objects would likely be disproportionate to the value of the military objective.
- The rule of necessity makes it unlawful to use weapons involving a level of force not necessary in the circumstances to achieve the military objective.

Both the United States and the opponents of the nuclear weapons regime further agree that it is unlawful under these rules to use weapons whose effects will be uncontrollable.

That weapons whose effects are not controllable cannot lawfully be used under international law is recognized in the military manuals of the U.S. armed services, manuals used

⁷⁹ Janne E. Nolan, *Preparing for the 2001 Nuclear Posture Review*, ARMS CONTROL TODAY, Nov. 2000, (Apr. 15, 2002) http://www.armscontrol.org/act/2000_11/Nolan.asp. ⁸⁰ Nuclear Posture Review Briefing Charts, *supra* note 4, Chart 6.

for training and disciplining of U.S. personnel and often cited by the United States as reliable statements of international law.

Uncontrollability under Rule of Discrimination

The Air Force Commander's Handbook states that weapons that are "incapable of being controlled enough to direct them against a military objective" are unlawful.⁸¹ The Air Force Manual on International Law defines indiscriminate weapons as those "incapable of being controlled, through design or function," such that they "cannot, with any degree of certainty, be directed at military objectives."82

In its military manuals the United States has acknowledged that the scope of this prohibition extends to the effects of the use of a weapon. The Air Force Manual on International Law states that indiscriminate weapons include those which, while subject to being directed at military objectives, "may have otherwise uncontrollable effects so as to cause disproportionate civilian injuries or damage."⁸³ The manual states that "uncontrollable" refers to effects "which escape in time or space from the control of the user as to necessarily create risks to civilian persons or objects excessive in relation to the military advantage anticipated.⁸⁴ It is noteworthy that this prohibition encompasses the causing of risks, not just injury.

As a "universally agreed illustration of ... an indiscriminate weapon," The Air Force Manual on International Law cites biological weapons, noting that the uncontrollable effects from such weapons "may include injury to the civilian population of other states as well as injury to an enemy's civilian population."⁸⁵ The Naval/Marine Commander's Handbook states that such weapons are "inherently indiscriminate and uncontrollable."86

The Air Force Manual on International Law further cites Germany's World War II V-1 rockets, with their "extremely primitive guidance systems" and Japanese incendiary balloons, without any guidance systems.⁸⁷ The manual states that the term "indiscriminate" refers to the "inherent characteristics of the weapon, when used, which renders (sic) it incapable of being directed at specific military objectives or of a nature to necessarily cause disproportionate injury to civilians or damage to civilian objects."88

⁸⁸ *Id.* at 6-9 n.7.

⁸¹ UNITED STATES DEPARTMENT OF THE AIR FORCE, COMMANDER'S HANDBOOK ON THE LAW OF ARMED CONFLICT 6-2 (Air Force Pamphlet 110-34, 25 July 1980) [hereinafter THE AIR FORCE COMMANDER'S HANDBOOK].

⁸² THE UNITED STATES DEPARTMENT OF THE AIR FORCE, INTERNATIONAL LAW—THE CONDUCT OF ARMED CONFLICT AND AIR OPERATIONS 6-3 (Air Force Pamphlet 110-31, 19 November 1976) [hereinafter THE AIR FORCE MANUAL ON INTERNATIONAL LAW].

⁸³ Id.

⁸⁴ *Id.* ⁸⁵ *Id.*

⁸⁶ United States Department of the Navy Annotated Supplement to the Commander's Handbook on THE LAW OF NAVAL OPERATIONS 10-21 (Naval Warfare Publication 9, 1987) (With Revision A (5 October 1989), this handbook was adopted by the U.S. Marine Corps as FLEET MARINE FORCE MANUAL (FM FM) 1-10) [hereinafter THE NAVAL/MARINE COMMANDER'S HANDBOOK].

⁷ See THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 6-3.

As an example of an indiscriminate weapon, *The Air Force Commander's Handbook* similarly cites the use of unpowered and uncontrolled balloons to carry bombs, since such weapons are "incapable of being directed against a military objective."⁸⁹

Uncontrollability under Rule of Necessity

The requirement that the level of force implicit in the use of a weapon be controllable and controlled by the user is a natural implication of the necessity requirement. If a State cannot control the level of destructiveness of a weapon, it cannot assure that the use of the weapon will involve only such a level of destructiveness as is necessary in the circumstances.

The Air Force Manual on International Law recognizes as a basic requirement of necessity "that the force used is capable of being and is in fact regulated by the user."⁹⁰

Uncontrollability under Rule of Proportionality

So also, if the State using a weapon is unable to control the effects of the weapon, it is unable to evaluate whether the effects would satisfy the requirement of being proportionate to the concrete and direct military advantage anticipated from the attack or to assure such limitation of effects.

The Air Force Manual on International Law notes that the requirement of proportionality prohibits "uncontrollable effects against one's own combatants, civilians or property."⁹¹

U.S. Position

It is the formal U.S. position that under these rules of discrimination, proportionality, and necessity some uses of nuclear weapons would be lawful that and others unlawful—and that the lawfulness of any potential use is something that has to be evaluated in the context of that use. The U.S. position is that the effects of nuclear weapons, or at least of the smaller, ostensibly tactical nuclear weapons, are controllable.

In its written and oral presentations to the International Court of Justice (ICJ) in the recent Nuclear Weapons Advisory Case,⁹² defending nuclear weapons, the United States argued that, even if nuclear attacks directed at significant numbers of large urban area targets or at a substantial number of military targets would be unlawful, a small number of accurate attacks by low-yield weapons against an equally small number of military targets in non-urban areas would

⁸⁹ THE AIR FORCE COMMANDER'S HANDBOOK, *supra* note 81, at 6-1.

⁹⁰ THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 1-6.

⁹¹ *Id.* at 6-2. *See also id.* at 5-10.

⁹² Legality of the Threat or Use of Nuclear Weapons, International Court of Justice, Advisory Opinion, General List (July 8, 1996) [hereinafter Nuclear Weapons Advisory Opinion]. All but five of the fifteen ICJ opinions, including the holding of the Court, are available at 35 I.L.M. 809 (1996). The remaining five, the declarations of Judges Bedjaoui, Herczegh and Bravo and the individual opinions of Judges Guillaume and Ranjeva, appear at 35 I.L.M. 1343 (1996). The opinions and various of the submissions to the Court are also available at the Court's own website at http://www.icj-cij.org/> (visited November 18, 2001), and at http://www.law.cornell.edu/world/> (visited November 18, 2001). Some of the same materials are also available in THE CASE AGAINST THE Bomb (Roger S. Clark & Madeleine Sanns eds., 1996).

not be. The United States further argued that nuclear weapons can reliably be targeted at specific military objectives.

Noting that it has been argued that nuclear weapons are inherently indiscriminate in their effect and cannot reliably be targeted at specific military objectives, attorney McNeill, on behalf of the United States, stated to the ICJ:

This argument is simply contrary to fact. Modern nuclear weapon delivery systems are, indeed, capable of precisely engaging discrete military objectives.⁹³

In its memorandum to the ICJ, the United States, again in the context of the discrimination rule, presented to the Court this same picture that the effects of nuclear weapons—of which radioactive fallout is obviously the most grave—are essentially controllable, and not a real problem. The United States stated that, through the technological expertise of "modern weapon designers," it is now able to control the effects of nuclear weapons—specifically, "to tailor the effects of a nuclear weapon to deal with various types of military objectives:"

It has been argued that nuclear weapons are unlawful because they cannot be directed at a military objective. This argument ignores the ability of modern delivery systems to target specific military objectives with nuclear weapons, and the ability of modern weapons designers to tailor the effects of a nuclear weapon to deal with various types of military objectives. Since nuclear weapons can be directed at a military objective, they can be used in a discriminate manner and are not inherently indiscriminate.⁹⁴

The facts which the Court found to be missing ostensibly had to do with the likely effects of the use of low-yield tactical nuclear weapons and the risk of escalation. The Court first noted the view expressed by the United Kingdom in its written submission to the Court, and the United States in its oral argument:

91. ... The reality ... is that nuclear weapons might be used in a wide variety of circumstances with very different results in terms of likely civilian casualties. In some cases, such as the use of a low yield nuclear weapon against warships on the High Seas or troops in sparsely populated areas, it is possible to envisage a nuclear attack which caused comparatively few civilian casualties. It is by no means the case that every use of nuclear weapons against a military objective would inevitably cause very great collateral civilian casualties.⁹⁵

The Court then noted the contrasting view of other States:

92. ... [R]ecourse to nuclear weapons could never be compatible with the principles and rules of humanitarian law and is therefore prohibited. In the event of their use, nuclear weapons would in all circumstances be unable to draw any distinction between the civilian population and combatants, or between civilian objects and military objectives, and their effects, largely uncontrollable, could not be restricted, either in

⁹³ *Id.* at 88.

⁹⁴ U.S. ICJ Memorandum/GA App at 23 (citing UNITED STATES DEPARTMENT OF THE ARMY, THE LAW OF LAND WARFARE 5 (FM27-10/18 July 1956) with Change No. 1 (15 July 1976)).

⁹⁵ Nuclear Weapons Advisory Opinion ¶ 91 at 31, 35 I.L.M. at 829 (citing United Kingdom, Written Statement ¶ 3.70 at 53, and United States of America, Oral Statement, CR 95/34 at 89–90).

time or in space, to lawful military targets. Such weapons would kill and destroy in a necessarily indiscriminate manner, on account of the blast, heat and radiation occasioned by the nuclear explosion and the effects induced; and the number of casualties which would ensue would be enormous. The use of nuclear weapons would therefore be prohibited in any circumstance, notwithstanding the absence of any explicit conventional prohibition.⁹⁶

While concluding that it was unable to resolve these polar factual positions, the Court noted that the proponents of legality had failed to substantiate their position as to the possibility of limited use, without escalation, of low level nuclear weapons or even of the potential utility of such use if it were possible:

95. ... [N]one of the States advocating the legality of the use of nuclear weapons under certain circumstances, including the "clean" use of smaller, low yield tactical nuclear weapons, has indicated what, supposing such limited use were feasible, would be the precise circumstances justifying such use; nor whether such limited use would not tend to escalate into the all-out use of high yield nuclear weapons. This being so, the Court does not consider that it has a sufficient basis for a determination of the validity of this view.⁹⁷

Yet in the NPR, the Pentagon states that "[t]oday's nuclear arsenal continues to reflect its Cold War origin, characterized by moderate delivery accuracy ...".⁹⁸

The NPR further states, in context of defeating hard and deeply buried targets:

"In general, current conventional weapons can only 'deny' or 'disrupt' the functioning of HDBTs and require highly accurate intelligence and precise weapon delivery - a degree of accuracy and precision frequently missing under actual combat conditions, Similarly, current conventional weapons are not effective for the long term physical destruction of deep, underground facilities. (p. 47)⁹⁹

Weapons whose delivery cannot be controlled are weapons whose effects cannot be controlled—and hence are weapons which, under established principles of international law recognized by the United States, whose use and threat of use is unlawful.

Defense of Small-Scale Use:

Let's take first the U.S. defense of small scale use. If you look at the U.S. nuclear arsenal, you will see that it is predominately made up of large strategic nuclear weapons, not the small-scale ostensibly tactical nuclear weapons the U.S. defended. The NPR does nothing to change this. The vast bulk of our nuclear weapons will continue to be large strategic nuclear weapons.

⁹⁶ Nuclear Weapons Advisory Opinion ¶ 92, at 32, 35 I.L.M. at 829.

⁹⁷ *Id.* ¶ 94 at 32.

⁹⁸ Nuclear Posture Review [Excerpts], *supra* note 2, at pg. 19.

⁹⁹ *Id.*, at pg. 20.

Precision Targeting

The U.S. position on its ability to control the effects of nuclear weapons through precision targeting also does not withstand analysis.

First of all, as noted, it is belied by the admission in the NPR that today's nuclear arsenal is characterized by only moderate delivery accuracy and that accuracy and precision are frequently missing under actual combat conditions.

In addition, our ability to hit specific targets with precision, to the extent it exists, is only statistical. We can deliver a warhead to a particular target with startlingly high probability, but where any particular warhead will end up is far from certain.

Even more importantly, even if we deliver the nuclear warhead with precision to the intended target, we cannot control the radiation effects. They are subject to natural forces of the environment, wind and weather. This applies to even the use of a so-called small-scale nuclear weapon.

The most cogent argument the proponents of nuclear weapons make is that under certain circumstances the effects of nuclear weapons might be controllable because of the remote area of use and the limited nature of the weapons used.

Michael Matheson, one of the chief lawyers representing the United States before the ICJ in the Nuclear Weapons Advisory Case, has pointed in his writings to an example given by the U.S. judge on the court, Judge Schwebel, now the President of the court, in his opinion in the Nuclear Weapons Advisory Case—the use of a nuclear depth charge to destroy a submarine that is about to fire nuclear-armed missiles.

It seems to me that that kind of argument fundamentally misses the point as to the risks of nuclear weapons use and as to nature of the challenge to the rule of law that nuclear weapons present.

Mr. Matheson and Judge Schwebel are correct that if one hypothesizes a laboratory type circumstance in which there are no other factors, just the submarine about to launch nuclear weapons and our ability to take the submarine out before the use, and assumes a remote environment where civilians will not be at risk, such a use sounds as if it must be lawful.

But is it not clear that such a scenario is unrealistic to the point of not being a legitimate basis upon which to ground the legal analysis?

For if the adversary State has one submarine with nuclear weapons, it most likely has other submarines carrying nuclear weapons; if the adversary State has nuclear weapons in submarines, it most likely has other nuclear weapons which it is capable of delivering by land and sea-based missile, by aircraft, and otherwise; if the adversary State has such nuclear weapons and the means to delivery them, it may well have chemical and biological weapons and the means to deliver *them*; and if the adversary State has nuclear weapons, it will likely have allies or potential allies who have nuclear, chemical, and/or biological weapons. In addition, in the real

world, any use of nuclear weapons, in the types of circumstances in which we might resort to such weapons, would likely carry with it a high risk of escalation; our adversaries would likely respond with nuclear, biological, or chemical weapons.

So in the real world, this hypothesized strike on the submarine will likely not be as limited as it at first appeared. In real terms, this scenario will potentially put us right in the middle of widescale use by us and our adversaries of nuclear, chemical, and biological weapons. The kind of situation that threatens effects of a apocalyptic nature.

Outside the courtroom, the United States recognizes the potential uncontrollability of the effects of nuclear weapons. This can be seen from the Chairman of the Joint Chief's *Joint Pub 3-12, Doctrine for Joint Nuclear Operations*, setting forth the current operational planning for the integrated use by U.S. forces of nuclear weapons in conjunction with conventional weapons:¹⁰⁰

[T]here can be no assurances that a conflict involving weapons of mass destruction could be controllable or would be of short duration.¹⁰¹

Outside the courtroom, the United States has also recognized the disproportionate nature of the damage U.S. nuclear policy threatens. The Joint Chief of Staff's *Nuclear Weapons Joint Operations* manual states:

US nuclear forces serve to deter the use of WMD ["weapons of mass destruction," including chemical, biological, and nuclear weapons] across the spectrum of military operations. From a massive exchange of nuclear weapons to limited use on a regional battlefield, US nuclear capabilities must confront an enemy with risks of unacceptable damage and disproportionate loss should the enemy choose to introduce WMD into a conflict.¹⁰²

I submit that virtually any use of nuclear weapons would be unlawful under these rules, such that the use of nuclear weapons is *per se* unlawful. I submit that it's clear that the effects of nuclear weapons are uncontrollable and hence that the use of such weapons would be unlawful.

I further submit that, by our defense of the potential lawfulness of our limited use of small-scale tactical nuclear weapons against remote targets, we are not only justifying a huge arsenal of strategic nuclear weapons not addressed by our legal theory but also raising the level of risk of possible widescale use of nuclear weapons.

Rather than recognizing that the scale of the effects of these weapons exceeds what could be unlawful under any view of the law, we are *legitimizing* the possession, threat of use, and the potential actual use of these weapons.

¹⁰⁰ JOINT CHIEFS OF STAFF, JOINT PUB 3-12, DOCTRINE FOR JOINT NUCLEAR OPERATIONS i, (Dec. 15, 1995), available at http://www.dtic.mil/doctrine/jel/new_pubs/jp3_12.pdf (visited November 7, 2001). See CHARLES J. MOXLEY, NUCLEAR WEAPONS AND INTERNATIONAL LAW IN THE POST COLD WAR WORLD Chapters 26, 27; Chapter 2, note 75, Chapter 17, notes 38–53, Chapter 18, note 56, and accompanying text (2000).

¹⁰¹ DOCTRINE FOR JOINT NUCLEAR OPERATIONS, *supra* note 100, at i, I-6–7 (emphasis omitted).

¹⁰² *Id.* at I-2 (emphasis omitted).

To the argument, again made by Mr. Matheson, that the threat of use of these weapons can itself protect us against some other State's use of nuclear, chemical, and biological weapons, I submit that, while the point may valid in limited circumstances, the potential gain from such deterrence is substantially outweighed by the risks created by our legitimization of these weapons.

Mr. Matheson's support of threats is also inconsistent with the legal rule that it is unlawful to threaten that which it is unlawful to do. As the ICJ stated, "If an envisaged use of weapons would not meet the requirements of humanitarian law, a threat to engage in such use would also be contrary to that law."¹⁰³ The Court noted that "[N]o State--whether or not it defended the policy of deterrence--suggested to the Court that it would be lawful to threaten to use force if the use of force contemplated would be illegal."¹⁰⁴ The United States, as well as not disputing the unlawfulness of a threat to commit an unlawful act, stated to the Court:

[E]ach of the Permanent Members of the Security Council has made an immense commitment of human and material resources to acquire and maintain stocks of nuclear weapons and their delivery systems, and many other States have decided to rely for their security on these nuclear capabilities. *If these weapons could not lawfully be used in individual or collective self-defense under any circumstances, there would be no credible threat of such use in response to aggression and deterrent policies would be futile and meaningless.* In this sense, it is impossible to separate the policy of deterrence from the legality of the use of the means of deterrence.¹⁰⁵

Our legitimization of these weapons has innumerable effects of the most dire sort:

- We develop, purchase, and maintain such weapons for use, often on a fast trigger;
- We threaten that we will use the weapons, causing other States to develop, purchase, and maintain their own nuclear, chemical, and biological weapons, often on even more of a hair trigger;
- We foster proliferation;
- By training our personnel and setting contingency plans in place for use of these weapons, we raise the likelihood of intentional, unintentional, and mistaken use, and, by emphasizing nuclear weapons, we may even hold back from developing conventional capabilities, or stockpiles, that would both better serve our military needs, and provide the means for the lawful conducting of armed conflict.

With the dread events of September 11, we have now seen the effects of weapons of mass destruction or something approximating them, at first hand, have looked them in the face,

¹⁰³ Nuclear Weapons Advisory Opinion, at pt. VI, 35–36, No. 95, ¶ 78, at 28, 35 I.L.M. at 827. *See also id.* at ¶ 47, at 19, 35 I.L.M. at 823.

¹⁰⁴ See *id.* at pt. VI, 35–36, No. 95, ¶ 47, at 19, 35 I.L.M. at 823.

¹⁰⁵ See ICJ Hearing for the Nuclear Weapons Advisory Opinion, November 15, 1995, at 78 (emphasis added) available at the Court's own website at under decisions-advisory decisions-Legality">http://www.icj-cij.org/>under decisions-advisory decisions-Legality of the Threat or Use of Nuclear Weapons-Oral Pleadings, or http://www.icj-cij.org/>under decisions-advisory decisions-Legality of the Threat or Use of Nuclear Weapons-Oral Pleadings, or http://www.icj-cij.org/>under decisions-advisory decisions-Legality of the Threat or Use of Nuclear Weapons-Oral Pleadings, or http://www.icj-cij.org/icjwww/icases/iunan/iunan_cr/ iUNAN_iCR9534_19951115.PDF> (visited November 27, 2001).

breathed the air. And what we have seen are effects, sickeningly horrific as they are, that are far less than the destruction to civilians and civilian society that could result from uses of nuclear weapons we are threatening every day and have for over fifty years by our polices of nuclear deterrence and mutual assured destruction.

Indeed, to the extent our policy is or at times has been mutual assured destruction, we threaten or have threatened just this kind of thing. The very reason given by the Bush Administration pre-September 11, for national missile defense—that our policy of mutual assured destruction, which the Administration seemed to be assuming is our current policy, is immoral and unacceptable—makes the point. Mutual assured destruction is a policy of terror.

I don't mean to suggest that we would ever intentionally conduct a nuclear strike against large civilian buildings in the middle of an urban area, but the effects of these weapons are so vast and so uncontrollable and so many military targets are located in the vicinity of urban areas, that, under our current policies, military personnel training, and contingency plans, we could end up causing such effects in the course of strikes aimed at military targets.

By our legitimization of the potential use of nuclear weapons, we are fostering proliferation and the other types of effects I alluded to earlier-and increasing the likelihood that at some time, under some set of circumstances, intentional or not, these weapons will be used on a broadscale and escalatory basis by combatants in war, causing catastrophic damage that could make the survivors nostalgic for the limited strikes of September 11 and the limited nature of the current anthrax attacks. Our current policies contribute to the risk that eventually some states will use nuclear weapons against major urban centers.

Here is the U.S. Joint Chiefs of Staff setting forth our potential uses of nuclear weapons:

The Joint Chief of Staff's Doctrine for Joint Theater Nuclear Operations, issued as recently as February 1996, states:

Nuclear operations can be successful in achieving US military objectives if they are used in the appropriate situation and administered properly.¹⁰⁶ ***

Nuclear weapons have many purposes, but should only be used after deterrence has failed.¹⁰⁷

The purpose of using nuclear weapons can range from producing a political decision to influencing an operation.¹⁰⁸

¹⁰⁶ JOINT CHIEFS OF STAFF, JOINT PUB 3-12.1 DOCTRINE FOR JOINT THEATER NUCLEAR OPERATIONS v (Feb. 9, 1996), as set forth at http://www.dtic.mil/doctrine/jel/new-pubs/jp3-12-1.pdf (viewed November 7, 2001) (emphasis omitted). ¹⁰⁷ *Id.* at vi (emphasis omitted).

 $^{^{108}}$ Id.

The manual identifies types of situations where the use of nuclear weapons may be "favored over a conventional attack" or otherwise preferred:

• Level of effort required for conventional targeting. If the target is heavily defended such that heavy losses are expected, a nuclear weapon may be favored over a conventional attack.

• Length of time that a target must be kept out of action. A nuclear weapon attack will likely put a target out of action for a longer period of time than a conventional weapon attack.

• Logistic support and anticipation of delays caused by the "fog and friction" of war. Such delays are unpredictable and may range from several hours to a number of davs.¹⁰⁹

As to the purpose for using nuclear weapons, the manual states:

The purpose of using nuclear weapons can range from producing a political decision at the strategic level of war to being used to influence an operation in some segment of the theater. Operations employing nuclear weapons will have a greater impact on a conflict than operations involving only conventional weapons.¹¹⁰

The manual identifies "enemy combat forces and facilities that may be likely targets for nuclear strikes:"

• WMD ["weapons of mass destruction," including chemical, biological, and nuclear weapons] and their delivery systems, as well as associated command and control, production, and logistical support units

• Ground combat units and their associated command and control and support units

• Air defense facilities and support installations

• Naval installations, combat vessels, and associated support facilities and command and control capabilities.

• Nonstate actors (facilities and operation centers) that possess WMD

• Underground facilities¹¹¹

Additional Issues

There are some other legal issues implicated in this overall question which I do not have time to go into in detail but which I believe deserve much more attention than they have gotten, and which I would like to address briefly.

In its written and oral presentations to the International Court of Justice (ICJ) in the recent Nuclear Weapons Advisory Case, defending nuclear weapons, the United States expressed or assumed the following positions:

The United States contended that the anticipated effects from the use of nuclear weapons would have to necessarily and inevitably be unlawful before the use would be unlawful.¹¹²

¹⁰⁹ *Id.* at III-4 (emphasis omitted).¹¹⁰ *Id.* at I-2 (emphasis omitted).

¹¹¹ *Id.* at III-6–7.

¹¹² See MOXLEY, supra note 100, at Chapter 2 notes 58–62, 74, 88, and accompanying text.

- The United States ignored the *mens rea* issues as the lawfulness of the use of nuclear weapons, ignoring the potential for unlawfulness based upon less than strict intentionality.¹¹³
- The United States argued that unlawfulness could only arise from conventional or _ customary international law and not from general principles of international law.¹¹⁴
- The United States assumed that 100% applicability is necessary before per se unlawfulness may incept.¹¹⁵
- The United States assumed that the principles of risk analysis are irrelevant to the lawfulness of the use of nuclear weapons.¹¹⁶
- The United States argued that the use of nuclear weapons could be lawful as _ reprisals.¹¹⁷

Unlawful Effects As Not Inevitable

The U.S. argument that unlawful effects would not be *inevitable* begs the question. While the quantum of likelihood that must be present for unlawfulness to incept is not an issue that appears to have been broadly addressed or precisely defined in international law, there seems no basis for imposing a standard of inevitability.¹¹⁸ The rules of discrimination, necessity, and proportionality are rules of reason designed to limit the use of weapons, before their use, based on their likely effects in light of applicable military factors. The rules of international law as to the mens rea or mental state necessary for war crimes culpability are inconsistent with the assumption that inevitability must be present before culpability incepts.

Mens Rea

The lawfulness of our use of nuclear weapons involves issues as to such lawfulness vis- \dot{a} vis the United States as actor and vis-à-vis the U.S. civilian, military, industrial, and other leadership as actors. Ultimately, it is individuals, not States, who are imprisoned or executed.

The law is clear that strict intentionality is not required for criminal culpability for violation of the law of armed conflict. Willfulness, recklessness, gross negligence, and even mere negligence are potential bases for culpability.¹¹⁹ The actor need not have intended the unlawful effects from the use of nuclear weapons; it will potentially be a sufficient ground for war crimes culpability if he used such weapons notwithstanding the known risks-and the risks of nuclear use or certainly known today.

¹¹³ See id. at Chapter 2 notes 104–106, and accompanying text.

¹¹⁴ See id. at Chapter 2 notes 40, 42, 43–46, 50–53, and accompanying text.

¹¹⁵ See id. at Chapter 2 notes 48, 49, 57, 59, 67–69, 74, 88, and accompanying text.

¹¹⁶ See id. at Chapter 2 notes 71–74, 89, and accompanying text.

¹¹⁷ See id. at Chapter 2, notes 57, 129, and accompanying text.

¹¹⁸ See *id.* at Chapter 1 notes 161, 172, 282, 286, Chapter 8, notes 6–53, and accompanying text. ¹¹⁹ See *id.* at Chapter 1 notes 286, 289–295, and accompanying text; Chapter 8 *passim*.

Thus, *The Air Force Manual on International Law* recognizes the sufficiency of gross negligence or deliberate blindness.¹²⁰ The manual quotes Spaight's statement of the rule:

In international law, as in municipal law intention to break the law—*mens rea* or negligence so gross as to be the equivalent of criminal intent is the essence of the offense. A bombing pilot cannot be arraigned for an error of judgment ... it must be one which he or his superiors either knew to be wrong, or which was, *in se*, so palpably and unmistakenly a wrongful act that only gross negligence or deliberate blindness could explain their being unaware of its wrongness.¹²¹

It is also clear that the law of armed conflict generally recognizes recklessness and other mental states less than strict intentionality as a basis for war crimes liability.¹²² The Geneva conventions extensively provide for criminal culpability for violations committed willfully,¹²³ a state of mind broadly recognized as encompassing recklessness.¹²⁴ The law of armed conflict similarly recognizes criminal culpability for acts of wantonness and of wanton destruction, acts also not reaching the level of strict intentionality.¹²⁵

¹²⁰ THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 15-3; 15-8 n.13 (citing SPAIGHT, AIR POWER AND WAR RIGHTS 57, 58 (1947)).

¹²¹ *Id.* at 15-8 n.13.

¹²² See MOXLEY, supra note 100, at Chapter 8 notes 6–15 and accompanying text. See generally id. Chapter 8.

¹²³ See id. at Chapter 8, notes 8–14 and accompanying text; THE AIR FORCE MANUAL ON INTERNATIONAL LAW, supra note 82, at 15-1 to 15-2; 15-8 n.12 (quoting Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, adopted Aug. 12, 1949, 75 U.N.T.S. 31; Geneva Convention for the Amelioration of the Condition of Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea, adopted Aug. 12, 1949, 75 U.N.T.S. 85, and other Geneva Conventions).

¹²⁴ See MOXLEY, supra note 100, at Chapter 8, notes 6–18 and accompanying text. See generally id. Chapter 8. See also GLANVILLE WILLIAMS, CRIMINAL LAW, THE GENERAL PART § 22, 59–62 (1953); ICRC Commentary to Article 85 of Protocol I (para. 3474), quoted in Amnesty International—Report—IOR 40/10/98 May 1998 United Nations (UN), The International Criminal Court Making the Right Choices—Part V Recommendations to the Diplomatic Conference, <<u>http://www.web.amnesty.org/ai.nsf/index/IOR400101998></u> (visited November 7, 2001); Commentary on Protocol Additional (No. I) to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), concluded at Geneva 8 June 1977, Part V: Execution of the conventions and of this protocol: Section II—Repression of breaches of the conventions and of this protocol, Art. 85—Repression of breaches of this Protocol, available at <<u>http://www.icrc.org/ihl.nsf></u>, under Treaties and Commentary, 1949 Conventions and 1977 Protocols <commentary, "Protocol Additional... (Protocol I)", Art 85 (visited November 18, 2001).

¹²⁵ See Art. 3(b), International Criminal Tribunal for the Former Yugoslavia, Statute of the International Tribunal (Adopted 25 May 1993) (as amended 13 May 1998) <<u>http://www.un.org/icty/basic/statut/statute.htm</u>> (visited November 12, 2001); Jordan J. Paust, *International Law Association—American Branch: Committee on a Permanent International Criminal Court: The Preparatory Committee's "Definition of Crimes"—War Crimes*, 8 CRIM. L.F. 431, 438–441 (1997) (emphasis removed) (citing, *inter alia*, U.N. Doc. A/CONF. 95/15 (1980), reprinted in 19 I.L.M. 1523; Report of the Secretary-General pursuant to Paragraph 2 of Security Council Resolution 808 (1993), U.N. Doc. S/25704 & Add. 1 (1993), Annex, arts. 2(d), 3(b); Prosecutor v. Karadzic, Case No. IT-95-5-I (Int'l Trib. for Former Yugo., Indictment, July 24, 1995), PP27, 41, 44; Report of the International Law Commission on Its Second Session, 5 June–29 July 1950, 5 U.N. GAOR, Supp. No. 12, at 11–14, P99, U.N. Doc. A/1316 (1950); 11 TRIALS OF WAR CRIMINALS 757 (1948); Report of Justice Robert H. Jackson to the President of the United States, released June 7, 1945, reprinted in PAUST ET AL. INTERNATIONAL CRIMINAL LAW 1027 (1996); Instructions for the Government of Armies of the United States in the Field, General Orders No. 100, Apr. 24, 1863, arts. 16, 44, [Lieber Code]; Responsibilities Commission of the Paris Peace Conference, List of War Crimes (1919); Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, adopted Aug. 12, 1949, art. 50, 75 U.N.T.S. 31; Geneva Convention for the Amelioration of the Condition of Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea, adopted Aug. 12, 1949, art. 51, 75 U.N.T.S. 85).

Similarly, in imposing war crimes culpability for "an attack which may be expected to cause" certain impermissible effects, as prescribed, for example, in Protocol I to the Geneva Conventions, Article 51(5), or for acts that are "intended, or may be expected, to cause" certain impermissible effects, as prescribed, in Protocol I, Article 35(3), the law again recognizes potential culpability for war crimes committed with a mental element of less than strict intentionality.¹²⁶

So also, the law of armed conflict recognizes an extremely scope of potential commander culpability for war crimes based on what the commander "knew or should have known."¹²⁷

While the ICJ in the Nuclear Weapons Advisory Opinions did not focus on the question of the general *mens rea* requirements under the law of armed conflict, a number of the judges made the point that information as to the potential effects of nuclear weapons is so widely known and available as to provide a basis for war crimes based on the use of such weapons.

Judge Weeramantry in his dissenting opinion stated:

["By-products" or "collateral damage"] are known to be the necessary consequences of the use of the weapon. The author of the act causing these consequences cannot in any coherent legal system avoid legal responsibility for causing them, any less than a man careering in a motor vehicle at a hundred and fifty kilometers per hour through a crowded market street can avoid responsibility for the resulting deaths on the ground that he did not intend to kill the particular person who died.¹²⁸

Judge Weeramantry added, "The plethora of literature on the consequences of the nuclear weapon is so much part of common universal knowledge today that no disclaimer of such knowledge would be credible."¹²⁹

To the argument that the rule of moderation—the prohibition of the use of arms "calculated to cause unnecessary suffering"—requires specific intent, Judge Weeramantry cited the "well-known legal principle that the doer of an act must be taken to have intended its natural and foreseeable consequences."¹³⁰ He also stated that reading into the law a requirement of specific intent would not "take into account the spirit and underlying rationale of the provision— a method of interpretation particularly inappropriate to the construction of a humanitarian instrument."¹³¹

Making a point that, as we saw above, is confirmed by the United States' military manuals, ¹³² Judge Weeramantry added that nuclear weapons "are indeed deployed 'in part with a view of utilizing the destructive effects of radiation and fall-out."¹³³

¹²⁶ Paust, *supra* note 125, at 438–441 (emphasis omitted) (citations omitted).

¹²⁷ Id. (citing, inter alia, 11 TRIALS OF WAR CRIMINALS 757 (1948)).

 ¹²⁸ Dissenting opinion of Judge Weeramantry to the Nuclear Weapons Advisory Opinion, at 43, 35 I.L.M at 901.
 ¹²⁹ Id.

¹³⁰ *Id.* at 48, 35 I.L.M at 904.

¹³¹ See MOXLEY, supra note 100, at Chapter 3, note 313 and accompanying text.

¹³² See id. at Chapter 29, notes 38–40, Chapter 30 notes 14–22, and accompanying text.

¹³³ Dissenting opinion of Judge Weeramantry to the Nuclear Weapons Advisory Opinion, at 48, 35 I.L.M at 904 (citing Ian Brownlie, *Some Legal Aspects of the Use of Nuclear Weapons*, 14 INT'L & COMP. L. Q. 445 (1965)). See

As noted above, Judge Weeramantry reached a similar conclusion with respect to the rights of neutrals: "The launching of a nuclear weapon is a deliberate act. Damage to neutrals is a natural, foreseeable and, indeed, inevitable consequence."¹³⁴

Judge Weeramantry also emphasized the element of intent contained in the policy of deterrence: "Deterrence needs to carry the conviction to other parties that there is a real intention to use those weapons ... it leaves the world of make-believe and enters the field of seriously-intended military threats."¹³⁵

Judge Weeramantry concluded that the policy of deterrence provides the element of intent:

[D]eterrence becomes ... stockpiling with intent to use. If one intends to use them, all the consequences arise which attach to intention in law, whether domestic or international. One intends to cause the damage or devastation that will result. The intention to cause damage or devastation which results in total destruction of one's enemy, or which might indeed wipe it out completely, clearly goes beyond the purposes of war.¹³⁶

The challenging aspect of the evaluation of the lawfulness of the use of nuclear weapons is the fact that—unlike the legal determinations made at Nuremberg or in war crime trials generally—with nuclear weapons it is obviously not a prudently available strategy to wait until after the weapons are used to make the evaluation. While war crimes charges seem to have rarely been brought based on risk taking that did not result in illicit effects, nuclear weapons pose a threat that requires full and effective advance evaluation and compliance if the applicable law is to be given effect.¹³⁷

That is perhaps the best way to conceptualize the nuclear threat: that the rules of the law of war applicable to nuclear weapons will be frustrated—in effect nullified—if they are not applied in advance.

War Crimes Culpability under General Principles of Law

The law is clear that the rules of discrimination, proportionality and necessity are binding as established principles of international law. The United States is bound by these rules; if, under these rules, the use of nuclear weapons would be unlawful, the United States is bound by such unlawfulness. It is not necessary that it independently agree by convention, custom, or

also MICHAEL WALZER, JUST AND UNJUST WARS, A MORAL ARGUMENT WITH HISTORICAL ILLUSTRATIONS 273–283 (New York 1968); DOCTRINE FOR JOINT NUCLEAR OPERATIONS, *supra* note 100, at I-2.

 ¹³⁴ Dissenting opinion of Judge Weeramantry to the Nuclear Weapons Advisory Opinion, at 50, 35 I.L.M. at 905.
 ¹³⁵ Id. at 78, 35 I.L.M. at 919 (citations omitted).

¹³⁶ *Id.*

¹³⁷ The need for prudence in planning in this area goes also to the need for adequate procurement of conventional weapons, so the United States will not find itself in a position of needing to use nuclear weapons. *See* MOXLEY, *supra* note 100, at Chapter 1, notes 91–101, Chapter 17, notes 29–36, 45–50, Chapter 18, note 5, and accompanying text.

otherwise to such unlawfulness or even that it agree with the conclusion that the rules of discrimination, proportionality, or necessity render use unlawful.

The Air Force Manual on International Law thus states that the use of a weapon may be unlawful based not only on "expressed prohibitions contained in specific rules of custom and convention," but also on "those prohibitions laid down in the general principles of the law of war."¹³⁸

Similarly, in discussing how the lawfulness of new weapons and methods of warfare is determined, the manual states that such determination is made based on international treaty or custom, upon "analogy to weapons or methods previously determined to be lawful or unlawful," and upon the evaluation of the compliance of such new weapons or methods with established principles of law, such as the rules of necessity, discrimination and proportionality.¹³⁹

The manual notes that the International Military Tribunal at Nuremberg in the case of the *Major War Criminals* found that international law is contained not only in treaties and custom but also in the "general principles of justice applied by jurists and practiced by military courts."¹⁴⁰

The Army's *Law of Land Warfare* states "[t]he conduct of armed hostilities on land is regulated by the law of land warfare which is both written and unwritten."¹⁴¹

Based on the foregoing, it seems clear that the use of nuclear weapons can be unlawful *per se* regardless of whether there is a treaty or custom establishing such unlawfulness.

Prerequisites for a *Per Se* Rule

The question also arises as to what level or extent of unlawfulness must be present for a *per se* rule to arise. The United States contended,¹⁴² in a position that the ICJ ostensibly accepted *sub silentio*,¹⁴³ that 100% illegality—the unlawfulness of all uses of nuclear weapons—would be necessary before a rule of *per se* illegality could arise. To the extent one concludes, as

¹³⁸ THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 6-1, 6-9 n.3 *See* MOXLEY, *supra* note 100, at Chapter 1, notes 14–18, 24, Chapter 2, notes 42–49, and accompanying text.

¹³⁹ See THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 6-7; MOXLEY, *supra* note 100, at Chapter 1, note 25 and accompanying text.

¹⁴⁰ THE AIR FORCE MANUAL ON INTERNATIONAL LAW, *supra* note 82, at 1-6. *See* MOXLEY, *supra* note 100, at Chapter 1, note 26 and accompanying text.

¹⁴¹ UNITED STATES DEPARTMENT OF THE ARMY, THE LAW OF LAND WARFARE 3 (FM27-10/18 July 1956) with Change No. 1 (15 July 1976) [hereinafter THE LAW OF LAND WARFARE]. *See* MOXLEY, *supra* note 100, at Chapter 1, note 3 and accompanying text.

¹⁴² See MOXLEY, supra note 100, at Chapter 1, notes 314–320, Chapter 2, note 26, and accompanying text; THE AIR FORCE MANUAL ON INTERNATIONAL LAW, supra note 82, at 6-3; THE NAVAL/MARINE COMMANDER'S HANDBOOK, supra note 86, at 10-2; ICJ Hearing for the Nuclear Weapons Advisory Opinion, November 15, 1995, supra note 105, at 90.

¹⁴³ See MOXLEY, supra note 100, Chapter 3, notes 237–245 and accompanying text; Nuclear Weapons Advisory Opinion ¶¶ 42, 48, 95, at 32, 35 I.L.M. at 822, 823, 829; dissenting opinion of Judge Higgins to the Nuclear Weapons Advisory Opinion, at 5, 35 I.L.M. 809, 937; dissenting opinion of Judge Weeramantry to the Nuclear Weapons Advisory Opinion, at 70, 35 I.L.M. at 915.

I have, that all or "virtually all" uses of nuclear weapons would be unlawful, either because the resultant effects, particularly radiation and escalation, would be uncontrollable, or because any such use would be likely to precipitate impermissible effects, or would involve the risk of precipitating extreme impermissible effects, the issue of whether unlawfulness in 100% or virtually 100% of cases is required is not reached.

If one concludes, however, that the U.S. position—that some uses could potentially be lawful—has merit, one reaches the question of the prerequisites for a *per se* rule.

The ICJ ostensibly assumed that the use of nuclear weapons could be held *per se* unlawful only if all uses would be unlawful in all circumstances. This appears, for example, from the Court's conclusions that it does not have sufficient facts to determine that nuclear weapons would be unlawful "in any circumstance,"¹⁴⁴ that the proportionality principle may not in itself exclude the use of nuclear weapons in self-defense "in all circumstances,"¹⁴⁵ and that, for the threat to use nuclear weapons implicit in the policy of deterrence to be unlawful, it would have to be the case that such use would "necessarily violate the principles of necessity and proportionality."¹⁴⁶ However, the Court's approach may have been affected by the wording of the question referred to it by the General Assembly: "Is the threat or use of nuclear weapons in any circumstance permitted under international law?"¹⁴⁷

This issue deserves more attention. There are numerous bases for inferring that, under widely accepted principles of law, a *per se* rule can arise under circumstances of less than 100% applicability,¹⁴⁸ and that this is particularly appropriate where unlawfulness would exist in the vast majority of cases and the potential benefits of avoiding the repercussions of unlawful uses exceed the benefits of using such weapons in instances of putative lawfulness.¹⁴⁹ A number of the judges of the ICJ, in their individual opinions, addressed the issue. Judge Shahabuddeen stated, "[I]n judging of the admissibility of a particular means of warfare, it is necessary, in my opinion, to consider what the means can do in the ordinary course of warfare, even if it may not do it in all circumstances."¹⁵⁰

Judge Weeramantry, addressing the issue from the perspective of nuclear decisionmaking, concluded that nuclear weapons should be declared illegal in all circumstances, with the proviso that if such use would be lawful "in some circumstances, however improbable, those circumstances need to be specified."¹⁵¹ Judge Weeramantry stated:

¹⁴⁴ Nuclear Weapons Advisory Opinion ¶ 95, at 32, 35 I.L.M. at 829. *See* MOXLEY, *supra* note 100, Chapter 3, notes 9, 30, 43, 237, 245, 249, and accompanying text.

¹⁴⁵ Nuclear Weapons Advisory Opinion ¶ 42, at 18, 35 I.L.M. at 822. See MOXLEY, supra note 100, Chapter 3, notes 30, 62, 237–242, 303 and accompanying text.

¹⁴⁶ Nuclear Weapons Advisory Opinion ¶ 48, at 19, 35 I.L.M. at 823.

¹⁴⁷ Id. ¶ 1, at 4, 35 I.L.M. at 811 (question presented to the Court by U.N. General Assembly resolution 49/75 K, adopted on December 15, 1994).

¹⁴⁸ See, e.g., MOXLEY, supra note 100, Chapter 4, notes 3–13 and accompanying text.

¹⁴⁹ See Christopher H. Schroeder, *Rights Against Risks*, at 503–506 (citing R. SARTORIUS, INDIVIDUAL CONDUCT AND SOCIAL NORMS 59–68 (1975)) ("In general prophylaxis is a plausible strategy whenever; (1) most, but not all, acts belonging to the class are wrong, and (2) attempts to pick right acts in the class from wrong ones are unreliable."). *See also* MOXLEY, *supra* note 100, Chapter 4, notes 3–5, 10, 25–31, 37–39, and accompanying text. ¹⁵⁰ Dissenting opinion of Judge Shahabuddeen to the Nuclear Weapons Advisory Opinion, at 17, 35 I.L.M. at 869.

¹⁵¹ Dissenting opinion of Judge Weeramantry to the Nuclear Weapons Advisory Opinion, at 70, 35 I.L.M. at 915.

A factor to be taken into account in determining the legality of the use of nuclear weapons, having regard to their enormous potential for global devastation, is the process of decision-making in regard to the use of nuclear weapons.

A decision to use nuclear weapons would tend to be taken, if taken at all, in circumstances which do not admit of fine legal evaluations. It will, in all probability, be taken at a time when passions run high, time is short and the facts are unclear. It will not be a carefully measured decision taken after a detailed and detached evaluation of all relevant circumstances of fact. It would be taken under extreme pressure and stress. Legal matters requiring considered evaluation may have to be determined within minutes, perhaps even by military rather than legally trained personnel, when they are in fact so complex as to have engaged this Court's attention for months. The fate of humanity cannot fairly be made to depend on such a decision.

Studies have indeed been made of the process of nuclear decision-making and they identify four characteristics of a nuclear crisis. These characteristics are:

1. The shortage of time for making crucial decisions. This is the fundamental aspect of all crises.

2. The high stakes involved and, in particular, the expectation of severe loss to the national interest.

3. The high uncertainty resulting from the inadequacy of clear information, *e.g.*, what is going on?, What is the intent of the enemy?; and

4. The leaders are often constrained by political considerations, restricting their options.¹⁵²

Judge Weeramantry further concluded that, even if there were a nuclear weapon that totally eliminated the dissemination of radiation and was not a weapon of mass destruction, the Court, because of the technical difficulties involved, would not be able "to define those nuclear weapons which are lawful and those which are unlawful," and accordingly that the Court must "speak of legality in general terms."¹⁵³

Even using the U.S. formulation of requiring 100% unanimity, there is room for "subclasses" of *per se* unlawfulness. Based on the Court's decision, there is a basis for concluding that the use of strategic nuclear weapons and the wide scale use of tactical nuclear weapons or their use in urban areas, would be *per se* unlawful.¹⁵⁴ As far as equipment is concerned, this would ostensibly render unlawful the use of something on the order of 80% of the nuclear weapons in the United States' active arsenal. As far as circumstances are concerned, this would

¹⁵² *Id.* (citing Conn Nugent, *How a Nuclear War Might Begin, in* PROCEEDINGS OF THE SIXTH WORLD CONGRESS OF THE INTERNATIONAL PHYSICIANS FOR THE PREVENTION OF NUCLEAR WAR 117).

¹⁵³ *Id.* at 84, 35 I.L.M. at 922.

It is unclear whether Judge Koroma in his dissenting opinion, in concluding that the use of nuclear weapons would be unlawful "in any circumstance," was assuming that *per se* illegality required every possible use be unlawful. *See* dissenting opinion of Judge Koroma to the Nuclear Weapons Advisory Opinion, at 1, 35 I.L.M. at 925.

¹⁵⁴ See MOXLEY, supra note 100, Chapter 3, notes 10–11 and accompanying text. See, e.g., Nuclear Weapons Advisory Opinion ¶¶ 95, 105. E., at 36, 35 I.L.M. at 829, 835.

ostensibly render unlawful a very large portion of the instances in which the United States might use such weapons.

To the objection that such piecemeal illegalization would be incomplete or unworkable, the answer is that we already have something analogous in practice and that, in any event, social and political evolution, like chance in catastrophe theory,¹⁵⁵ work in sequential steps as well as jumps. Incrementalism in the right direction is not necessary bad, and can be infinitely better than nothing, particularly if it is the most that is available at a particular point in time.

As to the workability of partial limitations, the United States has already undertaken numerous such limitations. In addition to the pledge not to use nuclear weapons against non-nuclear adversaries,¹⁵⁶ the United States has agreed not to use nuclear weapons, subject to certain conditions:

- in Latin America, pursuant to the Treaty of Tlatelolco of February 14, 1967;¹⁵⁷
in the South Pacific, pursuant to the Treaty of Rarotonga of August 6, 1985;¹⁵⁸
- in Southeast Asia, pursuant to the Southeast Asia Nuclear-Weapon-Free Zone Convention of December 15, 1995;¹⁵⁹

- in Africa, pursuant to the nuclear weapons free zone convention signed on April 1, 1996,¹⁶⁰ and

1. in the Antarctic, pursuant to the Antarctic Treaty of 1959.¹⁶¹

So also, the United States, in its appearance before the ICJ in the Nuclear Weapons Advisory case, strongly reassured the Court that the U.S. doctrine of nuclear deterrence is purely of a defensive nature, such that the United States would never use such other weapons other than in a defensive mode.¹⁶²

It could be said that this issue as to the prerequisites for a *per se* rule is semantic, since many *per se* rules are themselves generally subject to exceptions and qualifications.¹⁶³ Nonetheless, on the assumption that law matters, it seems clear that, were the United States to recognize the *per se* unlawfulness of the use of nuclear weapons, in whole or in part, even if there were qualifications and footnotes to the recognition, a powerful step would have been taken.

¹⁵⁵ See MOXLEY, supra note 100, Chapter 22, notes 46–59 and accompanying text.

¹⁵⁶ See id. Chapter 30 note 75 and accompanying text.

¹⁵⁷ See Nuclear Weapons Advisory Opinion ¶ 59(a), at 22, 35 I.L.M. at 824. Other nuclear States imposed further limitations on their ratification of the Protocol. See MOXLEY, supra note 100, Chapter 3, notes 127–133 and accompanying text.

¹⁵⁸ See Nuclear Weapons Advisory Opinion ¶ 59(b), at 22–23, 35 I.L.M. at 824–25.

¹⁵⁹ See id. ¶ 63, at 25, 35 I.L.M. at 826.

¹⁶⁰ See id.

¹⁶¹ See id. ¶ 60, at 24, 35 I.L.M. at 825.

¹⁶² See ICJ Hearing for the Nuclear Weapons Advisory Opinion, November 15, 1995, *supra* note 105, at 86. See also MOXLEY, *supra* note 100, Chapter 2, notes 130–135 and accompanying text.

¹⁶³ See MOXLEY, supra note 100, at Chapter 4; Chapter 4, notes 3–5, 10–13, 16–30, 41–42, and accompanying text. See also id. Chapter 30 note 151 and accompanying text.

Risk Analysis

To what extent may any one State put protected persons and indeed the whole human venture at risk in an attempt to further the State's own military objectives, even its survival?

In any such circumstance in which these weapons might be used, whether intentionally or by mistake, is it not ineluctably the case that there would be some risk of the occurrence of extreme effects, given the potential destructiveness of the weapons, the inherent uncontrollability of radiation,¹⁶⁴ and the overall potential for escalation, misperception, and loss of command and control?¹⁶⁵

This is clear, I submit, even from Judge Schwebel's example of the use of "tactical nuclear weapons against discrete military or naval targets so situated that substantial civilian casualties would not ensue."¹⁶⁶

The ICJ in its decision referenced similar arguments the United States and Great Britain had made:

91. ... The reality ... is that nuclear weapons might be used in a wide variety of circumstances with very different results in terms of likely civilian casualties. In some cases, such as the use of a low yield nuclear weapon against warships on the High Seas or troops in sparsely populated areas, it is possible to envisage a nuclear attack which caused comparatively few civilian casualties. It is by no means the case that every use of nuclear weapons against a military objective would inevitably cause very great collateral civilian casualties.¹⁶⁷

These examples, and the ones used by the United States and Great Britain before the ICJ, appear to assume one of two things:

- that the submarine in the ocean and the army in the desert or other such remote targets would exist independently of the rest of the world, rather than being affiliated with a State that either itself or with its allies has nuclear, chemical or biological weapons that it is likely to use in response to nuclear attack, and that the State using the nuclear weapons has no other enemies that might find the attack provocative and retaliate; or

¹⁶⁴ See id. Chapter 29, notes 41–124 and accompanying text.

¹⁶⁵ See id. Chapters 15, 25, 26; Chapter 2, notes 63–87, Chapter 15, notes 1–14, 33–43, 58–89, 99, 102–108, Chapter 16, notes 32–38, and accompanying text; NATO HANDBOOK ON THE MEDICAL ASPECTS OF NBC DEFENSIVE OPERATIONS, Part I, Chap. 1, §102(a) (A MedP-6(B) 1996), adopted as Army Field Manual 8-9, Navy Medical Publication 5059, Air Force Joint Manual 44-151; INTERNATIONAL PHYSICIANS FOR THE PREVENTION OF NUCLEAR WAR, BRIEFING BOOK ON NUCLEAR WAR (1992); Carl Sagan, *Nuclear War and Climatic Catastrophe: Some Policy Implications*, 62 FOREIGN AFF. 257, 273 (Winter 1983/1984); U.S. Congress, Office of Technology Assessment, *The Effects of Nuclear War* 16–17 NTIS order no. PB-296946 (Washington, DC: U.S. Government Printing Office, May 1979). *See also* MOXLEY, *supra* note 100, at Chapters 7–9, on weighing risks and the legal relevance of risks.

The escalation risk is particularly extreme, as has been recognized by the civilian and military leadership of the United States and by defense experts throughout the nuclear era. *See* MOXLEY, *supra* note 100, at Chapters 24, 25. ¹⁶⁶ Dissenting opinion of Judge Schwebel to the Nuclear Weapons Advisory Opinion, at 7, 35 I.L.M at 839.

¹⁶⁷ Nuclear Weapons Advisory Opinion ¶ 91 at 31, 35 I.L.M. at 829 (citing United Kingdom, Written Statement ¶ 3.70 at 53, and United States of America, Oral Statement, CR 95/34 at 89–90). See MOXLEY, supra note 100, at Chapter 1, note 29 and accompanying text.

- that the potential escalation by the attacked State or other party is not relevant to the analysis.

Neither assumption seems reasonable. As the United States has recognized, the legality evaluation is to be made in light of all available facts as to potential risk factors.¹⁶⁸ Although it may be possible that there could be a scenario where the submarine or the army in the desert and the related conflict existed independently of the rest of the world, such a prospect seems so remote as to preclude its constituting the basis, on any rational level, for the overall lawfulness of the use of nuclear weapons.

Interestingly, Judge Schwebel recognized the legal point that if a use of nuclear weapons could cause severe effects, it would be unlawful:

At one extreme is the use of strategic nuclear weapons in quantities against enemy cities and industries. This so-called "countervalue" use (as contrasted with "counterforce" uses directly only against enemy nuclear forces and installations) could cause an enormous number of deaths and injuries, running in some cases into the millions; and, in addition to those immediately affected by the heat and blast of those weapons, vast numbers could be affected, many fatally, by spreading radiation. Large-scale "exchanges" of such nuclear weaponry could destroy not only cities but countries and render continents, perhaps the whole of the earth, uninhabitable, if not at once then through longer-range effects of nuclear fallout. It cannot be accepted that the use of nuclear weapons on a scale which would—or *could*—result in the deaths of many millions in indiscriminate inferno and by far-reaching fallout, have profoundly pernicious effects in space and time, and render uninhabitable much or all of the earth, could be lawful.¹⁶⁹

The ICJ, as we have seen, concluded that it had not been given sufficient facts to resolve the issue:

95. ... [N]one of the States advocating the legality of the use of nuclear weapons under certain circumstances, including the "clean" use of smaller, low yield tactical nuclear weapons, has indicated what, supposing such limited use were feasible, would be the precise circumstances justifying such use; nor whether such limited use would not tend to escalate into the all-out use of high yield nuclear weapons. This being so, the Court does not consider that it has a sufficient basis for a determination of the validity of this view.¹⁷⁰

¹⁶⁸ See MOXLEY, supra note 100, at Chapter 1, notes 84–93, 109–120, 161, Chapter 5, notes 3–4, Chapter 6, notes 26–27, Chapter 29, notes 125–127, and accompanying text; THE AIR FORCE MANUAL ON INTERNATIONAL LAW, supra note 82, at 1-8 to 1-9 (citing SPAIGHT, AIR POWER AND WAR RIGHTS 57, 58 (1947)); THE NAVAL/MARINE COMMANDER'S HANDBOOK, supra note 86, at 8-5 to 8-6; THE AIR FORCE COMMANDER'S HANDBOOK, supra note 81, at 3-3, 6-1; THE LAW OF LAND WARFARE, supra note 141, at 23–24. See also Vienna Convention on the Law of Treaties Article 32, May 23, 1969, 1155 U.N.T.S. 331, 8 I.L.M. 679; J.L. BRIERLY, THE LAW OF NATIONS 67 (1963) (1928); XI INT'L ENCYCLOPEDIA OF COMPARATIVE LAW § 2-114 (1983).

¹⁶⁹ Dissenting opinion of Judge Schwebel to the Nuclear Weapons Advisory Opinion, at 7, 35 I.L.M at 839 (emphasis added). *See* MOXLEY, *supra* note 100, Chapter 1, note 38 and accompanying text. ¹⁷⁰ Nuclear Weapons Advisory Opinion ¶ 94, 35 I.L.M. at 829. *See* MOXLEY, *supra* note 100, Chapter 3, note 31

¹⁷⁰ Nuclear Weapons Advisory Opinion ¶ 94, 35 I.L.M. at 829. *See* MOXLEY, *supra* note 100, Chapter 3, note 31 and accompanying text.

The Court declined to engage in risk analysis:

43. Certain States ... contend that the very nature of nuclear weapons, and the high probability of an escalation of nuclear exchanges, mean that there is an extremely strong risk of devastation. The risk factor is said to negate the possibility of the condition of proportionality being complied with. The Court does not find it necessary to embark upon the quantification of such risks; nor does it need to enquire into the question whether tactical nuclear weapons exist which are sufficiently precise to limit those risks: it suffices for the Court to note that the very nature of all nuclear weapons and the profound risks associated therewith are further considerations to be borne in mind by States believing they can exercise a nuclear response in self-defense in accordance with the requirements of proportionality.¹⁷¹

This issue of risk analysis would appear to be the heart of the matter. In a milieu in which the dominant policy of nuclear deterrence is inherently provocative, the question of the extent to which any State may subject the rest of the world, or any appreciable portion of it, to the risk of severe, even apocalyptic, effects would appear to be one that must be addressed if the law in this area is to be meaningful.

The applicability of risk analysis would seem to be recognized by the U.S. statement of the proportionality test to the ICJ:

Whether an attack with nuclear weapons would be disproportionate depends entirely on the circumstances, including the nature of the enemy threat, the importance of destroying the objective, the character, size and likely effects of the device, and the magnitude of the risk to civilians.¹⁷²

Deferred Legal Evaluation as Risking Abnegating the Rule of Law

Our current approach that each potential use of nuclear weapons must be evaluated in the context of the particular use has the effect of largely vitiating the rule of law. In the circumstances of a war where nuclear weapons might be resorted to, the situation will likely be extremely volatile; the fog of war will be thick (maybe even thicker than in wars of the past, given the extent to which we are dependent on computer controls); information will be incomplete and possibly inaccurate; passions will be high; time will be short. The likelihood of reasoned application of the law of armed conflict will be slight.

Our failure to come to grips with these the legal issues of nuclear weapons now puts not just the rule of law but the continuation of human civilization at risk. The United States is the indispensable leader; it alone can start the process of change in this area.

Not by expecting quick success. Not by expecting a situation in which we can quickly rid ourselves of these weapons or expect other nuclear States to do so—but committing

¹⁷¹ Nuclear Weapons Advisory Opinion ¶ 43, 35 I.L.M. at 822. *See* MOXLEY, *supra* note 100, Chapter 6, note 8 and accompanying text. *See also* Nuclear Weapons Advisory Opinion ¶¶ 18, 32, 33, 36, 95, 97, respectively at 35 I.L.M. 819, 821, 821, 822, 829, and 830.

¹⁷² U.S. ICJ Memorandum/GA App. at 23 (citing UNITED STATES DEPARTMENT OF THE ARMY, THE LAW OF LAND WARFARE 5 (FM27-10/18 July 1956) with Change No. 1 (15 July 1976)). *See* MOXLEY, *supra* note 100, Chapter 1, notes 75–108, Chapter 2, notes 88–91, and accompanying text.

ourselves to a process that, in perhaps our children's or grandchildren's time, will see the delegitimization of these weapons and progress on the road to ridding the world of them.

Unlawfulness of Second Use/Reprisals

The concept of reprisal is one of justifying actions that would otherwise be unlawful. But the United States recognizes as a requirement for lawful reprisal that the strike be limited to that necessary to force the adversary to cease its unlawful actions and that it satisfy proportionality.¹⁷³ If my factual conclusion is correct that the effects of nuclear weapons are uncontrollable, it would seem that lawful reprisal would not be possible.

The probabilities are overwhelming that the second use would be designed to punish the enemy and, not incidentally, in the case of a substantial nuclear adversary, to use one's own nuclear assets before they could be preemptively struck by the adversary, and to attempt to preemptively strike the adversary's nuclear assets (many of which would likely be "co-located" with civilian targets) before they could be used. Even assuming adequate command and control, crucial decisions would have to be made within a very short time and would likely be dictated largely by existing war plans contemplating nuclear weapons use. The notion of a second strike as limited to the legitimate objectives of reprisal seems oxymoronic.

In addition, the United States, while it disputes the applicability to nuclear weapons of the limitations upon reprisals imposed by Protocol I,¹⁷⁴ recognizes that the law of armed conflict, including that as to reprisals, is subject to the limitations inherent in the purposes of the law of armed conflict, such as preserving civilization and the possibility of the restoration of the peace, purposes that would likely be exceeded by the use of nuclear weapons.

Even if it were assumed that certain second uses of nuclear weapons, although otherwise unlawful, might be legitimized as reprisals, such legitimization—like the lawfulness of the limited use of a small number low-yield nuclear weapons in remote areas asserted by the United States before the ICJ—would only affect a small portion of the potential uses for nuclear weapons contemplated by U.S. policy and planning. It would leave unaffected the unlawfulness of the vast bulk of potential uses and virtually the totality of *likely* possible uses, including first uses against conventional, chemical and biological weapons targets, second uses intended to defeat and destroy the enemy, disproportionate second uses, and other high-megatonnage nuclear strikes with likely extreme effects.

U.S. National Interest

Paradoxically, the NPR's support of nuclear weapons is not even in the United States' short term interest, let alone its longterm interest or that of the world or of the rule of law. The United States no longer needs these weapons. Not only do they pose more of a risk than a solution to any military threat, the United States can in fact, with its greatly expanded conventional weapons and particularly with the precision with which it can deliver payloads,

¹⁷³ See discussion of the application of the law of reprisal to nuclear weapons in MOXLEY, *supra* note 100, Chapter 29, notes 227–242 and accompanying text.

¹⁷⁴ See id. Chapter 1, notes 274–277 and accompanying text; Chapter 2, notes 127–129 and accompanying text. See also Chapter 3, notes 246–249 and accompanying text.

now achieve with conventional weapons potentially all of the military missions for which it might previously have considered resorting to nuclear weapons.

I submit that virtually any use of nuclear weapons would be unlawful—and that the lessons of September 11 should unify us in a broad determination to the delegitimization of all uses of weapons threatening terroristic effects.

The NPR ignores these realities and should be replaced by a more sensible nuclear posture.