CHAPTER 3

Tailoring U.S. Strategic Deterrent Effects on Russia

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The concept of deterrence is not new. Presenting a potential enemy with major obstacles to achieving his aggressive military objectives by building a strong and credible defensive posture dates back at least to ancient Rome. As the fourth century Roman military writer Vegetius observed: *igitur qui desiderat pacem, praeparet bellum* (therefore, he who wishes peace, should prepare war). Indeed, in the infant United States, President George Washington, in his very first State of the Union Address on Jan. 8, 1790, told Congress (in the context of calling for a sufficient national military establishment and a domestic arms industry): "to be prepared for war is the most effectual mans of preserving peace." And yet, as history has demonstrated again and again, deterrence based on conventional military forces fails to deter military aggression.

Presented with strong defenses, aggressors have employed their military's creative genius to develop and devise plans and capabilities to guarantee—in their own minds—a sufficient chance of success to make the risk of war acceptable. In the 20th century, the Nazi campaign through the Ardennes which negated France's Maginot Line defenses and the Japanese surprise attack on the U.S. Pacific Fleet at Pearl Harbor (which had been forward deployed to demonstrate resolve in what we would call today a "flexible deterrent option") stand out.

All of this changed, however, in 1945. The U.S. development of the atomic bomb, the onset of the Cold War, and the U.S.S.R.'s subsequent acquisition of atomic weapons ushered in a new era. Nuclear weapons gave a state the ability, even as its conventional military forces were on the verge of defeat, to turn the aggressor's victory to ashes: nuclear retaliation could devastate the aggressor's homeland even as his armies won on the battlefield. War had suddenly become too dangerous

for the nuclear-armed great powers. It took several decades, however, for this new reality to be absorbed by political and military leaders.

Deterring the Soviet Union: the Early Years

In the early years of the Cold War the United States adopted a relatively simple approach to deterring Soviet aggression. The U.S. government viewed nuclear weapons as more powerful versions of their conventional predecessors. At first, given the relatively small number of U.S. atomic weapons and our lack of intelligence information on the Soviet Union, the U.S. deterrent was conceived as an extension of the massive bombing raids against German and Japanese cities. We knew where Soviet cities were located, and, in the event of war, those cities and the political leadership, social infrastructure and industrial capacity which resided in them were targeted. When the United States joined with our European Allies to create NATO, we also planned to use nuclear weapons to defeat invading Soviet armies. And when, in August 1949, Russia demonstrated it too had developed an atomic weapon, destroying that nuclear capability became a priority U.S. goal.[1]

The Eisenhower administration, on entering office, was convinced one of the U.S.S.R.'s goals was to bankrupt the West by forcing it to spend enormous sums on building conventional forces; in response, the administration adopted a defense policy known as "the New Look" in which nuclear weapons would provide a cheaper alternative to building the massive conventional capabilities deemed necessary to defeat the Red Army.

The scientific prowess of U.S. nuclear weapons scientists allowed the Defense Department to field nuclear weapons to meet every need of the military. The Army even re-organized its force structure into "Pentomic Divisions" optimized to employ nuclear firepower and deployed nuclear artillery shells, nuclear landmines, nuclear-tipped short-range missiles, and nuclear surface-to-air missiles. The Navy had ship launched, submarine launched and air-dropped tactical nuclear anti-submarine warfare weapons, nuclear surface-to-air missiles, nuclear bombs for use by carrier air wings, and even nuclear shells for 16-inch

battleship guns; the Air Force deployed nuclear bombs for use by strategic and tactical aircraft as well as nuclear-tipped air-to-air missiles.

As Henry Kissinger famously observed in his 1957 book *Nuclear Weapons and Foreign Policy*, "We added the atomic bomb to our arsenal without integrating its implications into our thinking."[2] U.S. deterrence policy was neither particularly sophisticated nor was it tailored. As annunciated by Secretary of State John Foster Dulles: "…there is no local defense which alone can contain the mighty land power of the Communist world. … [The United States therefore has decided] to depend primarily upon a great capacity to retaliate instantly by means and at places of our own choosing"[3]

The challenge to the Soviet leadership was straightforward: attack the United States or our allies, and we will immediately launch an all-out nuclear response against the Soviet homeland and on its forward deployed military forces using all elements of our nuclear arsenal. As noted, this was neither tailored nor subtle.

As the U.S.S.R. began to mirror the United States' creation of a widely deployed nuclear arsenal, American strategists worried about two issues:

- Did the Soviet leadership, in the time-honored tradition of warfare, believe its military and scientific genius could devise a way to preemptively attack and destroy the U.S. capability to strike the Soviet homeland? Could the deterrent be negated?
- Would the Soviet leadership truly believe that in a crisis the United States would respond to any act of military aggression by initiating all-out nuclear war? In other words, was the deterrent threat in fact credible in Soviet eyes?

Tailoring U.S. Strategic Deterrence: the First Steps

The Kennedy administration leaders entered office convinced the answers to those two fundamental questions were (1) yes, and (2) possibly no. Accordingly, it quickly made major changes to U.S. war-planning policy and force structure.

To increase the survivability of the U.S. strategic deterrent the administration embarked on a major expansion of the Polaris-missile carrying submarine fleet and of the Minuteman ICBM force. The triad combination of (1) submarines designed to be invulnerable once at sea, (2) land-based missiles housed in silos designed to be resistant to nuclear attack by relatively inaccurate Soviet missiles, plus (3) the different strengths of the Strategic Air Command long-range bomber force, was judged sufficient to ensure a survivable and highly lethal U.S retaliatory threat credible to Soviet leaders.

Convinced the Soviet leadership would consider conducting limited conventional attacks unless confronted with tailored (as opposed to all-out) responses, the administration introduced the "Flexible Response" policy, premised on two concepts:

First, the United States and its allies would increase conventional force capabilities so that limited or small-scale Soviet attacks were unlikely to succeed. This would force the Soviet leadership to have to resort to major attacks, which in turn could credibly draw a nuclear response.

Second, the all-out, "one-shot" U.S. nuclear war plan was divided into multiple options so the president was given the choice of having U.S. regional commanders respond with variously-sized nuclear attacks, [4]

More significantly, the U.S. strategic war plan (the Single Integrated Operational Plan or SIOP introduced in 1960) would henceforth provide the president the option of ordering a retaliatory strike against three major target groupings: (1) Soviet military forces including military command and control targets; (2) of those forces and the Soviet political leadership and its command and control structures; (3) or those two target sets plus Soviet cities and industrial capacity. Secretary of Defense Robert McNamara, in a series of highly publicized speeches designed to influence the Kremlin leadership, made clear the United States now had powerful but less than all-out responses available to it.

In the event deterrence failed, the U.S. could exercise these more limited options if it chose not to strike Soviet cities – thereby explicitly suggesting to the Soviets their war plans should include a similar capability to halt a nuclear war short of destroying urban areas.

However, McNamara proceeded to muddy the signal within a relatively short period of time. In 1961 and 1962 he spoke publicly of the United States having both a "counterforce" (or "damage limiting") capability, (the option to strike against Soviet nuclear and conventional military forces) and also a "counter-value" capability, the option which expanded the counterforce strike to include cities and infrastructure. Shortly after the Cuban Missile crisis of October 1962, he ceased discussing counterforce publicly and instead spoke only of counter-value.[5]

This rhetorical shift, if nothing else, has completely confounded American scholarship of nuclear deterrence ever since. Several generations of professors and their students believe the two concepts competed rather than complimented, and the United States maintained a counterforce strategy (viewed by many academics as a "nuclear warfighting strategy") until 1963-1964, when it adopted a counter-value strategy (portrayed in academic circles as a "pure deterrent" approach). Nothing could be less accurate. The United States held at risk the full-target set developed by war-planners in the late 1940s and early 1950s: Soviet nuclear and conventional forces, Soviet political authorities and its control mechanisms, and urban population and industrial capacity.

McNamara was well aware of this, even if he misled Congress and the American public. In February 1966, in a meeting with NATO counterparts, long after "counterforce" had disappeared from his congressional testimony and public statements, McNamara engaged in the following colloquy with a NATO counterpart who asked "if in SIOP options the first launch covered only military targets."[6] McNamara replied:

> This depended on the attack. Only in the event of an all-out Soviet attack would we make a total response. In the event the Soviets did not deliver an all-out attack, we would have the option of making a less than total response. The counterpart continued by "pointing out that a [Soviet] first strike hardly seemed rational…If the Soviets went all out we would have a surviving Assured Destruction capability. The refinements in SIOP options would be relevant only in the unlikely event of a limited Soviet

> nuclear attack." McNamara replied "Our first priority is Assured Destruction. This we have achieved….We have three times the forces needed to achieve Assured Destruction. However this 300 per cent excess is fundamental to the survival of the West…[7]

Tailoring U.S. Strategic Deterrence: One step forward and one back in the early 1970s

As the U.S.S.R.'s strategic arsenal grew throughout the 1960s and early 1970s, first reaching parity with the United States and then surpassing it, U.S. strategic planners sought additional means to influence the Soviet leadership. While McNamara had succeeded in providing options to allow a U.S. president to threaten limited responses, those "limited" options remained quite large. The smallest still involved employing thousands of nuclear weapons. Concern grew in the U.S. strategic community that all of the options were too massive, and therefore not a credible response, to Soviet limited aggression or attack. As a result, Secretary of Defense James Schlesinger directed the creation of a series of smaller strike options which might represent more credible deterrents to limited nuclear or conventional attack. The development of these plans was heralded in a series of speeches and public documents in an effort to ensure the Soviet leadership was aware of them.

U.S. planners also spent considerable time and energy analyzing whether the SIOP — which, as previously noted, was in fact a war plan rather than a plan to deter Soviet actions — presented the Kremlin leadership with sufficient disincentives to aggression. Deciding that it did not, they embarked on a study to determine what would convince the Soviets that the cost of aggression was unacceptable. Focusing unfortunately on American values, they concluded the nation which emerged from a nuclear war with sufficient resources to rebuild its economic infrastructure and economic–industrial capacity would be "the winner." The U.S. government then spent considerable energy in both seeking to convince the Kremlin the United States would "recover" faster

and restructuring SIOP priorities so that Soviet "recovery targets" were covered.

Getting Tailored Deterrence Right

The Soviet build-up of its strategic nuclear forces continued unabated throughout the 1970s. The Soviet efforts emphasized fielding increasingly accurate ICBMs capable of destroying U.S. Minuteman silos. The Soviets also went to great lengths to "super-harden" their own ICBM silos. They were observed conducting exercises in which they re-loaded ICBM silos, thereby suggesting an interest in protracted nuclear war-fighting. Soviet writings and exercises also demonstrated an interest in launching SLBMs in so-called "depressed trajectories," flight-paths sufficiently low to escape detection by U.S. early warning radars. Such attacks, it was feared, were designed to destroy the U.S. bomber force on the ground, and, more importantly, to destroy Washington before the president could issue orders for a retaliatory strike. Additionally, the Soviets were observed to have begun construction covertly of a series of deep-underground command posts for their senior political and military leaders.

All of these developments convinced the U.S. government the Soviets had decided they might in fact "win" a nuclear war by emerging from the conflict with military forces and a command structure which would permit them to dominate the post-war world.

Accordingly, U.S. Defense Secretary Harold Brown ordered the initiation of a "Nuclear Targeting Policy Review" to determine if the focus of American deterrent policy needed to be changed. Based on extensive analysis of Soviet expenditures, force structure, exercises, classified and unclassified writings, and other all-source intelligence information, the study concluded the Soviet leadership had never bought into the "recovery paradigm."

To the contrary, it appeared they had concluded that a combination of pre-emptive capabilities, dispersed, buried and survivable command-and-control facilities, and reconstitutable strategic offensive forces would permit them to dominate a post-war world, and such a position would

allow the U.S.S.R. to obtain the resources necessary to subsequently rebuild the Soviet economy.

This should not have been a major surprise given the Soviet experience in World War II, an experience which the Soviet leaders had lived through. The most important point made by the Nuclear Targeting Policy Review was that deterrence could only be achieved when the United States focused on what the Soviet leadership valued — and then threatened to destroy those assets if war occurred. "Mirror imaging," assuming that the Soviet leadership's outlook reflected US goals and values, was a dangerous self deception.

By 1980 Secretary Defense Harold Brown had brought about changes in U.S. targeting priorities and had put more resources behind programs to reinvigorate U.S. strategic programs which would undercut Soviet confidence in their ability to retain the assets they believed necessary to dominate the post-war world. This advertised to the Kremlin the United States leadership had understood them and was determined to deter them. In a speech at the Naval War College in August 1980 Brown made clear U.S. policy had embarked on a new course. Henceforth the United States would study what the Soviet leadership indicated — through its force developments, defense resource allocations, exercises and writings — what it valued most…and then would proceed to hold those at risk:

- "By definition, successful deterrence means, among other things, shaping Soviet views of what a war would mean…"
- "What we have done … is to look more closely at our capabilities, our choices, our doctrine and our plans in light of what we know about Soviet forces, doctrine and plans. The Soviet leadership appears to contemplate at least the possibility of a relatively [nuclear] prolonged exchange if war comes, and in some circles at least, they seem to take seriously the theoretical possibility of victory in such a war."
- "We cannot afford to ignore these views — even if we think differently, as I do. We need to have … a posture – both forces and doctrine that makes it clear to the Soviets and to

> the world that any notion of victory in nuclear war is unrealistic."[8]

Brown had created the intellectual foundation of tailored deterrence. To deter successfully, the United States must understand an enemy (or potential enemy) leadership's value structure and then make clear, by policy, force structure and exercises, that the value structure would be destroyed — without question — should deterrence fail. Brown re-emphasized the point in his last Annual Report to Congress, sending a signal to the Kremlin as well as to the U.S. defense establishment. His words are worth reviewing carefully because they form the starting point of how the United States has practiced deterrence since 1980. The Secretary of Defense stated that:

> "To the Soviet Union, our strategy makes clear that no course of aggression by them that led to the use of nuclear weapons on any scale of attack and at any stage of the conflict, could lead to victory. Besides our power to devastate the full target system of the U.S.S.R., the United States would have the option for more selective, lesser retaliatory attacks that would exact a prohibitively high price from the things the Soviet leadership prizes most — political and military control, nuclear and conventional military force, and the economic base needed to sustain war. …Our planning must provide a continuum of options, ranging from small numbers of strategic and/or theater nuclear weapons aimed at narrowly defined targets, to employment of large portions of our nuclear forces against a broad spectrum of targets."[9]

Over the ensuing 12 years, the Reagan and George H.W. Bush administrations reinforced the credibility of this tailored approach by reaffirming the deterrent policy set forth by Secretary Brown, by aggressively pursuing a program to modernize U.S. strategic nuclear forces and their command and control backbone and by revising U.S. nuclear targeting plans.

Secretary of Defense Caspar Weinberger, in a widely publicized congressional testimony, made the retaliatory threat clear:

> "To deter successfully, we must be able – and we must be seen to be able – to retaliate against any potential aggressor in such a manner that the costs we will exact will substantially exceed any gains he might hope to achieve through aggression. We, for our part, are no under no illusions about the consequences of a nuclear war: we believe there would be no winners in such a war. But this recognition on our part is not sufficient to ensure effective deterrence or to prevent the outbreak war: it is essential that the Soviet leadership understands this as well. We must make sure that the Soviet leadership, in calculating the risks of aggression, recognizes that because of our retaliatory capability there can be no circumstance where the initiation of a nuclear war at any level or of any duration would make sense. If they recognize that our forces can deny them their objectives at whatever level of conflict they contemplate and, in addition, that such a conflict could lead to the destruction of those political, military and economic assets which they value most highly, then deterrence is enhanced and the risk of war is diminished."[10]

The recapitalization of U.S. strategic forces — largely the product of the Kennedy administration's efforts — was designed demonstrably to offset any advantages the Soviets had sought to achieve through their own programs. The deployment of highly accurate systems such as air-launched cruise missiles, the MX (Peacekeeper) ICBM and, later, the Trident II SLBM offset Soviet silo-hardening efforts.

The U.S. early warning system and nuclear command and control network was upgraded. This made attacks far more survivable, and thereby resistant to pre-emption. The Trident II ensured a survivable hard-target capability invulnerable to pre-emption. Further the United States revealed (in an annual Defense Department publication entitled "Soviet Military Power") the U.S.S.R.'s covert efforts to build deep underground

leadership command bunkers in sufficient detail to signal to Moscow those efforts had been detected, and the bunkers would not escape a retaliatory strikes.

The revision to planning was long overdue. Because, for bureaucratic reasons the link between policy makers and the war planners in Omaha (home to the Strategic Air Command and the Joint Strategic Target Planning Staff) was weak, the latter never fully comprehended the intent behind the smaller strategic options which Secretary Schlesinger had directed in the early 1970s. As a result, the implementation of Schlesinger's policy failed to provide what was needed: the options were still too large and were designed in such a manner the Soviet warning systems — and therefore the Soviet leadership — could not have determined the combined signal of determination and restraint the options were intended to send. By the latter part of the 1980s, these and other targeting issues had been corrected, and the White House had a war plan which was both a deterrent plan and which conformed to the policy requirements set by the United States' political leadership.[11]

The Cold War Ends

In an ironic and not altogether unrelated series of developments, as the United States finally established and deployed a highly credible and tailored deterrence policy against the U.S.S.R., the Soviet Union collapsed. The emergence of Russia and 14 other countries — four of which (Russia, Ukraine, Kazakhstan and Belarus) possessed former Soviet nuclear weapons – created new challenges for the United States. The most pressing task was not deterring Russian attack, since Russia had become inwardly focused and was consumed with establishing its emerging democracy.

The greatest danger was the possibility that former Soviet weapons would fall into the hands of terrorists or other illegal groups. Closely tied to this was the possibility that Ukraine, Kazakhstan or Belarus might decide to retain possession of resident nuclear weapons and become recognized nuclear weapons states. As a result, while Cold War era contingency plans remained in place in Omaha, the United States devoted its main efforts to ensuring Russia would be the only nuclear state to

spring from the ashes of the U.S.S.R. and to helping Russia safeguard or destroy the inherited nuclear weapons.

As Russia's infant democracy battled coup attempts by dissident parliamentarians, as dissatisfaction with Russia's course arose within both the elites and the Russian population more generally, and as the Russian economy threatened to implode, Russian President Boris Yeltsin plucked an obscure former KGB colonel named Putin to serve first as his prime minister and then, in 1999, as his successor.

Russian Nuclear Policy under Putin and Medvedev

As is well known now, Vladimir Putin was not committed to democracy. Rather, he was and remains an authoritarian who has worked to crush democratic reformers and to re-establish state control over most areas of Russian life. As a result, the Russian security services regained much of the authority they had lost during the Yeltsin years. With the Russian government's coffers newly replenished thanks to the dramatic rise in oil and gas prices in the first decade of the 21st century, and Russian petro-diplomacy providing a coercive tool against Russia's neighbors, Putin embarked on an aggressive foreign policy which was, in some respects, reminiscent of Soviet efforts to intimidate nations on its borders.

With his conventional military forces capability greatly reduced from that once possessed by the Soviet armed forces, Putin has engaged from time to time in nuclear saber-rattling. He authorized Russian strategic bombers to violate Norwegian, British, Icelandic, Japanese and American airspace.[12] He stated Poland and the Czech Republic would be subject to nuclear strikes if they hosted elements of a U.S./NATO missile defense shield;[13] and Russian spokesmen announced that Russia could potentially use nuclear weapons in "local or regional wars."[14]

Having served his statutory time as president of Russia, in May 2008 Putin orchestrated a succession arrangement in which his protégé Dmitry Medvedev succeeded him as president while Putin became prime minister. The nuclear saber-rattling has continued unabated. Russian bombers continued to fly near and into Western airspace;[15] the Russian government announced a new nuclear doctrine which asserted the right to

attack preemptively with nuclear weapons those threatening Russian security;[16] and, in the fall of 2009, Russian forces conducted an exercise simulating conventional and nuclear strikes against Poland.[17]

Deterring Russia (and from what)

The question which must confront U.S. policymakers today and in the future is the degree to which the evolution of Russian nuclear policy represents an active threat to be deterred, a latent threat to be watched carefully, or simply the pronouncements of a leadership determined both to warn the West against aggression and to reassure the Russian public the government's failure to modernize Russian conventional forces is compensated for by Russian nuclear forces.

It appears fairly clear at this point in time (2010) that Putin and Medvedev are different from their Soviet predecessors and they do not believe nuclear war is "win-able" as did the Soviet leaders. Yet, it is also clear they still place a very high reliance on nuclear weapons particularly to threaten and intimidate the governments of former Soviet and former Warsaw Pact states.

In the same period of time the Obama administration has reduced the role of nuclear weapons in U.S. national strategy (and aims at a very long-term goal of eventually eliminating nuclear weapons altogether) the two Russian administrations have taken a very different point of view, placing nuclear weapons at the very center of Russian national security policy. Some of this may be attributable to classic Russian paranoia, fueled by the many advantages which U.S. conventional forces today enjoy over their Russian counterparts. But it stretches credulity to believe the Russian leadership seriously fears a U.S. attack.

A more reasonable explanation is the Russian leadership believes its nuclear saber-rattling provides some degree of cover for the aggressive foreign policy for which the Putin-Medvedev team has shown a penchant. Whether cutting off energy supplies to neighbors, assassinating a former KGB official in London, poisoning a Ukrainian presidential candidate or continuing to occupy Georgian territory after the 2008 border conflict, Russia has engaged in activities which would under other circumstances

draw, at minimum, international sanctions and condemnation. So too should the nuclear saber-rattling, so redolent of the Cold War and so seemingly out of place in our view of the 21st Century. The absence of such international reaction suggests the fear with which other nations view Russia and reinforces, therefore, the Russian government's penchant for continuing to play the nuclear card.

Are Putin and Medvedev foolish enough to contemplate military confrontation with the United States? The answer is probably not, but America's NATO allies, particularly the Baltic States but also others whose borders touch Russia's can draw no comfort from the Russian intervention in Ossetia.

Tailoring Deterrence against Russia Today

In the unlikely event the Russian leadership at some point in a crisis contemplated conducting a limited military attack against the United States or against one of the allies over whom we have placed a "nuclear umbrella. U.S. policymakers would do well to recall points made by Caspar Weinberger in his 1982 Senate testimony.

He said, "…in order for our retaliatory threat to be seen as credible, we must be able, and be seen to have the means, to respond appropriately to a wide range of aggressive actions. If our threatened response is perceived as inadequate or inappropriate, it will be seen as a bluff and ignored."

Further Weinberger argued,"…deterrence is a dynamic effort, not a static one. In order to continue to deter successfully, our capabilities must change as the threat changes and as our knowledge of what is necessary to deter improves."[18]

A successful U.S. deterrent policy must have identified in advance those assets the Russian leadership values most, it must make obvious to that Russian leadership the consequences of aggression, and those statements will need to be reinforced by capable nuclear forces and command and control capabilities which we are confident can make the deterrent threat credible in Russian eyes.

As to what the Russian leadership might value, this could change each time the leadership changes hands. Putin/Medvedev presumably

place high value on the nuclear forces they employ to intimidate their neighbors, on the security services which permit them to exercise their authoritarian style of government, on their ability to control Russia, and on the petroleum and gas infrastructure which provides the economic support the Russian government requires.

Their successors may or may not share the same values. To the degree Russia evolves in a democratic manner, as we hope it does, the tools of intimidation of neighbors and of Russian citizens presumably will be of less and less interest to future Russian leaders. To the degree Russia becomes even more authoritarian then those same elements of power and intimidation may be of equal or greater value to the leadership. The U.S. government needs to place considerable emphasis on understanding who the future leaders will be and what they value; scholarship and intelligence need to be brought together to create a coherent and accurate picture. This applies, of course, to the leadership of any nation whom we believe we may need to deter, now or in the future.

Once the United States has identified what it might need to hold at risk, it must ensure it has deployed the appropriate mix of forces to ensure the leaders of the government we seek to deter understand clearly and unequivocally we possess the means necessary to back up our threats. The U.S. nuclear force of 2010 is largely a product of the Reagan-"Bush 41" strategic modernization plan.

The Minuteman force is aging and will require some kind of replacement in the next 10-15 years. The Trident II missiles will continue to be operational for several decades, but the submarines which carry them will need to be replaced beginning in another 15-20 years. The air-launched cruise missiles carried by the B-52 bombers are 30 years old; they need to be replaced soon or the decision needs to be made to remove the B-52s from a nuclear role.

The nuclear weapons infrastructure — and indeed some of the nuclear weapons types in the U.S. inventory — also needs to be modernized. If we lost confidence in the weapons we deploy or the delivery systems that would become known to our potential adversaries, and our deterrent effect would be the weaker for it. And, additionally, in the case of Russia, the United States will need to maintain parity in strategic nuclear capabilities with Moscow in order to prevent

misperceptions from arising in Russian calculations. Finally, the Department of Defense must be a good and faithful steward with respect to our nation's nuclear forces. The department must display the utmost competence in carrying out all aspects of its nuclear responsibilities.

Notes

[1] For an excellent discussion of the origins of U.S. nuclear targeting policy see David Allen Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960 International Security (Spring 1983).
[2] Henry A. Kissinger, *Nuclear Weapons and Foreign Policy* (New York, 1957), 8.
[3] John Foster Dulles, *U.S. Department of State Bulletin*, Volume XXX, No. 761 (Jan. 25, 1954).
[4] While completely overlooked by historians, in November 1957 NATO Commander (and U.S. General) Lauris Norstad delivered a speech which modified Dulles "Massive Retaliation" policy by stating that in the event of a Soviet attack against NATO the first U.S. response would be massive use of nuclear weapons by theater-based forces against the invading Red Army; only if that failed, he suggested there would be a massive attack on the USSR itself. Flexible Response required however that theater commanders develop nuclear war plans which featured multiple options. See David N. Schwartz, NATO's Nuclear Dilemmas (Washington, 1983), 58.
[5] In part, this was a bureaucratic attack against the U.S. military regarding any further expansion of nuclear forces, which McNamara believed were sufficiently sized. Counter-value capability, which he defined as being able to destroy 25 percent of the USSR's population and 50 percent of its industry, was a relatively small target set, and the number of weapons required to meet this goal was easily calculable. Counterforce requirements, on the other hand, were more open-ended, and "damage limitation" called for further investment in an anti-ballistic missile system, with which McNamara had become disenchanted.
[6] From unpublished and declassified minutes from the February 1966 NATO Nuclear Planning Group Ministerial meeting in the author's possession.
[7] Ibid.
[8] Harold Brown, speech at the U.S. Naval College (Newport, R.I., Aug. 20, 1980).
[9] Secretary of Defense Harold Brown, *Annual Report to Congress Fiscal Year 1982* (January 1981), 40-41.
[10] Secretary of Defense Caspar Weinberger's testimony before the Senate Foreign Relations Committee (Dec. 14, 1982).
[11] Because these changes were corrective rather than intended to create new policy, and because they were highly classified at the time, none of this was discussed publicly.
[12] See for example: Richard Norton-Taylor, "Typhoons scrambled to intercept Russian aircraft," *Guardian* (Aug. 22, 2007); Matthew Hickley and David Williams, "RAF fighter jets scrambled to intercept Russian bombers," *Daily Mail* (Aug. 22, 2007); Erik Holmes, "More Russian bombers flying off Alaska," *Air ForceTimes* (April 8, 2008), article notes: 'there have been 16 such [incidents] since July [2007]'; Wojocieh Moskwa, "Russian Bombers fly unusual N. Sea sortie: Norway," *Reuters* (July 20, 2007).
[13] See for example: Bronwen Maddox, "Putin raises spectre of nuclear war in Europe," *Times*, (June 4, 2007); Nicole Winfield, "Putin: Russian missiles will be aimed at U.S. bases," *Independent* (June 4, 2007)**.**
[14] See for example, Nikolai Sokov, "Russian Ministry of Defense's New Policy Paper: The Nuclear Angle," James Martin Center for Nonproliferation Studies, (October 2003).
[15] See for, example, Mike Wade, RAF Intercepts Russian bombers over Stornoway, *The Times* (March 25, 2010). The article notes 20 such violations have occurred since January 2009.
[16] See for example: Fred Weir, "Would Russia really use nuclear weapons against neighbors?," *The Christian Science Monitor* (Nov. 15, 2009); "Russia may revise use of nuclear weapons in new military doctrine," *RIA Novosti* (Oct. 8, 2009); "Russia to Allow Preventative Nuclear Strikes," CBSNews.com (Oct. 14, 2009).
[17] Matthew Day, "Russia Simulates Nuclear Attack on Poland", *Telegraph* (Nov. 1, 2009).
[18] Secretary of Defense Caspar Weinberger's testimony before the Senate Foreign Relations Committee (Dec. 14, 1982).