US Strategic Nuclear Policy

Part 4

4.1 The Quiet Revolution

Ambassador Linton Brooks, Administrator, National Nuclear Security Administration, US Navy (retired)

“Strategic nuclear policy is inherently presidential, and so in every administration that I am familiar with there has been a formal, highly-classified document that sets forth nuclear policy. One of the things that happened in the ‘80s was that the Omaha process and the guidance process had grown apart, so that decisions were being made in Omaha [SAC headquarters and home of the Joint Strategic Planning Staff] that didn’t belong in Omaha.”

General Lee Butler, Commander 1992-1994, United States Strategic Command

“When we separated that decision authority and the responsibility for target selection, we set the stage for what ultimately happened: a target set that grew beyond any sense of rationality, in my estimation.”

Michael Elliot, Deputy Chief, Combat Plans Division, United States Strategic Command

“The phrase was coined that the high priests of targeting in Omaha were targeting every pot stand on the Trans-Siberian highway and there was a very strong belief outside of the building that that was going on and that the targeteers were out of control, if you will.”

Doug Lawson, Nuclear Policy Analyst, Sandia National Laboratories

“All the warheads were used. There were never any spare warheads and so warheads were being used, probably, against targets that they should not have been used against.”


This targeting was a result of a nuclear strategy which declared that ‘the United States and its allies must prevail’. Issued in October 1981, Ronald Reagan’s nuclear guidance would be refined by the Office of the Secretary of Defense into the nuclear weapons employment policy, or NUWEP-82, and then further elaborated into the nuclear annex of the Joint Strategic Capability Plan, JSCAP, by the Joint Chiefs of Staff. From there, the Joint Strategic Target Planning Staff in Omaha would develop the SIOP.

DOCUMENT: Department of Defense, Policy Guidance for the Employment of Nuclear Weapons (NUWEP), June 1982

DOCUMENT: Joint Strategic Capability Plan, Nuclear Annex

DOCUMENT: The Joint Chiefs of Staff, Single Integrated Operational Plan – 6 (Basic), 1 October, 1983

General Larry Welch, Chief of Staff 1986-1990, United States Air Force

“What the JSTPS does is, from a huge, huge target list, they apply the JSCAP guidance.”
Michael Elliot, Deputy Chief, Combat Plans Division, United States Strategic Command

“We would be given characteristics of damage that we should strive to achieve on a particular target set. An ICBM silo would be given a word-picture description of how severely that silo should be deformed or crushed or whatever the criteria was for that particular thing, and then Damage Expectancy would compute the probability of achieving that criteria. Now Damage Expectancy (DE) is the product of the Probability of Arrival (PA) of the weapon at the target and then, assuming that the weapon gets to the target, the Probability of Damage (PD).”  \[DE = PA \times PD\]

Damage Expectancy was not specified in the guidance, but there was a tacit understanding that the planners should achieve the highest value for this commonly accepted metric of the plan.

Michael Elliot, Deputy Chief, Combat Plans Division, United States Strategic Command

“The logic would be that, if a specific set of targets were selected and that we achieved a specified level of damage on those targets, that we would be meeting the policy objectives stated from the civilian policy community. The issue of what becomes enough really depends on what the response is when you take that Revision Report back each year.”

DOCUMENT: JSTPS Revision Report SIOP-6B, 5 September, 1985

General Larry Welch, Chief of Staff 1986-1990, United States Air Force

“And, of course, the results never satisfied all of the guidance. That is, the civilian leadership and, for a time, the military leadership would look at the fact that the SIOP did not produce the desired levels of DE against all of those target categories, and that was used to declare that we didn’t have enough warheads.”

General Lee Butler, Director for Strategic Plans & Policy, J-5, Office of the Joint Chiefs of Staff 1989-1991

“When I came into this arena, when I was the director of J-5 with responsibility for Annex C of the JSCAP, I was astonished to realise the true extent of the target base, how it was broken down and how the attack went down, and so at that point my awareness began that something was quite wrong here, and that was really the beginning of my deeper relationship with Frank Miller, who was one of those civilians in the room who obviously had a deeper grasp of these things, but I could sense his frustration.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“There was no reason for anybody in Omaha to ever throw a target off the list. There were lots of weapons and there was no analytic scrutiny brought to bear that said, ‘Why are you hitting this instead of that?’.”

General Larry Welch, Chief of Staff 1986-1990, United States Air Force

“Each of these evolutions of the strategy expanded the demands, whereas when we added ‘limited nuclear options’, we didn’t do away with the ‘major attack options’.”

General Lee Butler, Director for Strategic Plans & Policy, J-5, Office of the Joint Chiefs of Staff 1989-1991

“... and that’s where this breakdown, this dissociation of target planning and policy came most immediately into play.”
“And in the period ’85-88, what I did was to lead a small team of people which gradually uncovered tremendous discrepancies between the NSDD-13 guidance and the war plan. There was a young Navy commander named Ed Ohlert who first brought insight into the gross disjuncture between urban-avoidance small options and Secure Reserve Force issues. And, one issue at a time, we changed the war plan so that it in fact it began to resemble and reflect presidential guidance. And what we did was simply bind together all of the solutions that we had created in the three years, ’85, ’86 and ’87, into NUWEP-87, and that for the first time actually put some strictures on the planning process.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“Secretary Cheney was far more knowledgeable about nuclear planning than anybody gave him credit for. Secretary Cheney and I had a relationship, we knew each other professionally before he came into the building, and it was in the context of that relationship that we often talked about nuclear policy and nuclear planning. Secretary Cheney then goes out to Omaha and I’m briefing him on the plane about all the good work we’ve done in the past several years, about how we fixed the gross morphology, and he starts looking at some of the SIOP DE numbers that we have and he says ‘Well, why is this happening and why is that happening?’ So by the fall of ’89 we understand the SIOP needs to be overhauled.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“Are these valid targets and should this number of weapons be used against this kind of targets and the answer in many cases was No.”

Doug Lawson, Nuclear Policy Analyst, Sandia National Laboratories

“And so we start this work and the first phase is to examine and then deconstruct the target base and say, ‘What are we hitting and why?’."

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“But also there was a much more realistic assessment, from a targeting standpoint, of what were the key, critical targets that really mattered and what were reasonable damage expectancies associated with those targets and, to a certain extent, when was enough enough?”

Admiral Richard Mies, Commander 1998-2001, United States Strategic Command

In June 1991, Secretary Cheney sought to formalize the new relationship that had emerged during the target review to forge even stronger links between the policy community and the war planners in Omaha. Cheney established the Nuclear Planning Working Group.
Doug Lawson, Nuclear Policy Analyst, Sandia National Laboratories

“What that new relationship was was that OSD policy now had SIOP clearances, now could look at the details of the war plan and could verify that the policy goals were in fact being implemented in the war plan, and it became more of a collaborative effort between OSD Policy and the folks at Omaha that were developing the war plan.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“So all of this resulted in the kind of dialogue that we would ultimately like to see take place across our defence establishment; where OSD and Joint Staff and a combatant commander staff are engaged in a useful and important dialogue on how policy becomes implemented in war plans.”

The strategic targeting review of the late 1980s was not a one-time effort, but the beginning of a continuing process that resulted in a more collaborative working environment in which to build the SIOP, but this was just one of many changes during this dynamic period. Changes were occurring on several fronts, including technology, with the continued rapid development of US nuclear weapons systems.

DOCUMENT: Single Integrated Operational Plan – 6G (BASIC)

4.2 The Cold War Ends


“During the Cold War, there was a lot of technology push in the sense that innovation kept presenting strategic options. That’s what technology is all about: presenting, in sometimes unexpected ways, new possibilities.”

General Larry Welch, Chief of Staff 1986-1990, United States Air Force

“By the early ‘80s, we really had a fundamentally different set of capabilities. When we began then to introduce yet a new class of nuclear weapons that not only had large yield but had very high accuracy.”

Ambassador Linton Brooks, Administrator, National Nuclear Security Administration, US Navy (retired)

“We then had a significant breakthrough with the deployment of the Trident II missile. The Trident II missile had both throw-weight (effective weight of ballistic missile payload) and accuracy, so with the high-yield W-88 warhead, the Trident II forced the Navy into thinking beyond the notions of counter-value.”

Rear Admiral Robert Wertheim, United States Navy (retired)

“The accuracy of Trident II permitted the planners to plan the employment of that system in exactly the same way as they planned the employment of the intercontinental ballistic missiles.”


“In 15 minutes from launch you had a fair chance of being able to destroy land-based ballistic missile systems as well as bomber bases.”

DOCUMENT: Strategic Forces Modernization Program, October 1, 1981
Reagan’s Modernization Program, which included making significant improvements to command, control and communications, was getting the Kremlin’s attention. In the first week of November 1983, the US tested its command and control systems and nuclear weapons release procedures during a NATO exercise called ‘Able Archer’. The Soviets responded by going on high alert, worried that Reagan was practising for a pre-emptive nuclear attack. For Reagan, the Soviets’ fearful overreaction was sobering.

1984 was a year when Reagan and his advisors would take stock of powerful new offensive weapons systems coming online, the promise of strategic defences, as well as continuing public fears of thermonuclear confrontation. As he prepared for his re-election campaign, Reagan began to soften his language toward the Soviets.


“Those differences are differences in governmental structure and philosophy, the common interests have to do with the things of everyday life for people everywhere.”

Paul Boyer, Professor Emeritus of History, University of Wisconsin

“It was the time when détente was getting back on track, Gorbachev was coming to power in the Soviet Union and dramatic, dramatic changes were unfolding that would ultimately lead to the end of the Cold War.”

General Brent Scowcroft, National Security Advisor, 1989-1993

“Gorbachev was brought in by the old men in the Kremlin, not to overthrow communism, but to revivify, revive the Soviet Union, make it stronger.”

Ambassador Thomas Graham, Special Representative of the President 1994-97, US Arms Control & Disarmament Agency

“Gorbachev was prepared to do things that no Soviet leader ever had even been willing to think about, much less do.”

When Gorbachev and Reagan met for the first time, some 3600 journalists had assembled in Geneva for what many described as the most unpredictable summit in two decades [19 November 1985]. While there was little substantive discussion of arms control, the two leaders set the stage for continued negotiations on intermediate-range nuclear forces in Europe and new talks on reducing strategic arms. Even more importantly, Gorbachev and Reagan agreed to meet again.

Ambassador Thomas Graham, Special Representative of the President 1994-97, US Arms Control & Disarmament Agency

“Geneva was important, I suppose, for the personal relationship between Reagan and Gorbachev, but then Reykjavik [11 October 1986] was the meeting at which Gorbachev agreed to the principle of intrusive, on-site inspection for the INF Treaty, later transposed to START. We couldn’t have had either of those treaties without that decision by the Soviet Union.”

Gorbachev approached Reagan with proposal after proposal for dramatic reduction, and even the elimination, of strategic weapons, but SDI was the price.
Richard Garwin, Senior Fellow for Science & Technology, Council on Foreign Relations

“... and to preserve SDI, Mr Reagan did not agree with Mr Gorbachev on Mr Gorbachev’s willingness to abandon all nuclear weapons. They didn’t come to an agreement there; we didn’t have to reduce our nuclear weapons. SDI, Reagan’s fantasy, was untouched.”


“The SDI programme, and Reagan’s persistence and refusal to back off on it, played a pivotal role in: first, bringing the Soviets back to the table; secondly, getting them to negotiate seriously about offensive reductions; and finally, I think, in deciding that they simply could not compete.”

Michael May, Director, Livermore Laboratory, 1965-1971

“Neither superpower had much luck in trying to push militarily and the real competition, at that point, was economic and political and that’s the competition that the Soviet Union lost. It never lost the military competition; they lost the economic and political competition. They lost the cold peace, really.”

While negotiators met in Geneva and the Soviet economy buckled under the strain of its military build-up, Reagan assailed the very symbol of the Cold War. [12 June 1987]


“Mr Gorbachev, tear down this wall.”

“The maxim is ... trust, but verify.”

Few could imagine what would be called a ‘year of miracles’ — change that would sweep across Eastern Europe and into the Soviet State. [Intermediate-range Nuclear Forces (INF) Agreement, 8 December 1987]. For the people of Western Europe, the end of the Cold War began with the agreement to remove all intermediate-range nuclear forces. The Soviet SS-20s had been deployed to ensure a partitioned Europe; their dismantlement gave rise to what President George Bush would call a ‘new world order’.

Michael May, Director, Livermore Laboratory, 1965-1971

“It seemed to me that the development in the mid-80s, when Gorbachev came into power and basically ended the prime reason for the Cold War, namely the division of Europe, and President Reagan had the wit and the acumen to recognise that the situation had profoundly changed and to say so and to convince the American people that it had done so, which I think was his best contribution.”

4.3 Changing Priorities

General Brent Scowcroft, National Security Advisor, 1989-1993

“When we came into office in 1989, it was a period of significant change or at least changed rhetoric, and so on. So we decided it was time to re-evaluate US policy around the world. We looked around and we saw no change in Eastern Europe; no change other than the rhetoric of Gorbachev and we said, ‘No, that is not enough’.”


At the end of the ‘year of miracles’, in November 1989, change came with the elimination of the seemingly intractable symbol of the Cold War.

Question: Did you ever imagine anything like this happening?

Bush: "We’ve imagined it but I can’t say that I foresaw this development at this stage. Now I didn’t foresee it, but imagining it? Yes."

General Brent Scowcroft, National Security Advisor, 1989-1993

“The wall coming down was partly a surprise; not nearly as much to us as it was to Gorbachev.”


“Gorbachev always intended to reform the system, he didn’t intend to do away with it. It turned out he underestimated the power of the forces he was unleashing.”

Reeling from internal economic reforms, Moscow systematically withdrew military support from the Eastern bloc, unravelling the Warsaw Pact.

Michael Elliot, Deputy Chief, Combat Plans Division, United States Strategic Command

“When the Berlin Wall came down, it presented the first instance for us where targets were rapidly being removed from the plan, as in we would send a message out and delete particular sorties and not have an alternative sortie for those weapons for a period of months at times.”

General Brent Scowcroft, National Security Advisor, 1989-1993

“Especially with the re-unification of Germany, we would want to make changes in our own nuclear posture. Other changes we were prepared to do, but only if the Soviet Union would reciprocate.”

Amid the rapidly changing political landscape, Bush and Gorbachev met to concretize the new orientation in Europe. The ‘Shipboard Summit’ [Malta Summit, December 1989] led to an agreement on reductions in conventional forces and, soon, a new Strategic Arms Reduction Treaty would be complete, with a profound impact on nuclear planning.

Ambassador Linton Brooks, Administrator, National Nuclear Security Administration, US Navy (retired)

“The idea in START was to seek overall equality and to capture real military capability in a way that we had not done before.”


START was significant for the new, complex counting rules it placed on warheads and delivery vehicles, as well as for its intrusive verification regime. But, as Gorbachev was embracing an agreement to ensure peace and stability with the West, he would soon confront a rejection of his own economic and political reforms at home.

The unsuccessful coup attempt of late summer ultimately led to the collapse of the Soviet Union, but the autumn of 1991 would continue to be a dynamic time for arms control.
Ambassador Linton Brooks, Administrator, National Nuclear Security Administration, US Navy (retired)

“We went through a period where it was obvious the Soviet Union was collapsing. That made START I ratification somewhat difficult, but it gave us opportunities to look at things we never looked at before. What President Bush did, under a series of things called Presidential Nuclear Initiatives, he took our bombers off alert, cancelled our mobile ICBM programs, took nuclear weapons off Navy surface ships and submarines, eliminated ground-launched nuclear weapons from Europe and withdrew them to the United States.”

DOCUMENT: Memorandum for Secretaries of the military Departments, Chairman JCS, et al, from the Secretary of Defense, Richard Cheney, Subject: reducing the United States Nuclear Arsenal, September 14, 1991 ... ’strategic bombers shall stand down’ ... ‘mobile portions of the small ICBM program shall be terminated,’ ‘tactical nuclear weapons shall be removed from all surface ships’ ... ‘eliminate its inventory of ground-launched theatre nuclear weapons.’


“Two years ago I began planning cuts in military spending that reflected the changes of the new era. But now, this year, with imperial communism gone, that process can be accelerated...”

In his final State of the Union address, President Bush announced a series of additional nuclear initiatives that would reduce US nuclear forces around the world as well as restructure the nuclear command.

General Brent Scowcroft, National Security Advisor, 1989-1993

“We started the restructuring of strategic forces to make them more resilient and more stable, so that they would not, in themselves, precipitate a war.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“Concomitant with those reductions, it seemed appropriate to reorganise the command to focus on those smaller nuclear forces which would now be used in different ways than one, single superpower confrontation.”

General Lee Butler, Commander 1992-1994, United States Strategic Command

“I was tasked to develop a blue-sky reorganisation of the combatant forces; to rewrite national military strategy, in a draft to be debated by the Chiefs, which removed the Soviet Union as our principal enemy; the first time that had ever been done. So what I could see on the horizon was not just a change in the strategic setting, most importantly, but in addition to that a change in attitudes toward strategic forces, nuclear weapons and the budget.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“Strategic command was actually created through two different impulses. Lee Butler, as he is working for Colin Powell, and he’s the J-5, comes up with a plan for his commander-in-chief strategic [?]. We, up in OSD, looking at the lack of a requirements process and the lack of an individual who puts together war plans and weapons platforms and numbers of warheads and arms control, say this is what we need to make sure this never happens again.”
General Lee Butler, Commander 1992-1994, United States Strategic Command

“One individual had never been given command control and therefore insight, understanding, and the ability to form judgements about how the totality of the force operated. Seeing that for the first time allowed me to have a complete picture of the nuclear forces.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“He was the driving force in planning a new command, a command that would not be as Air Force-focused as was the Strategic Air Command. They elevated the Joint Strategic Target Planning Staff, which had been a joint force, to now become Strategic Command.”

As plans were being made to stand up the United States strategic command, the proud mission of the Strategic Air Command, was coming to a close. In 1992 the Strategic Air Command was dis-established and its missions divided up amongst several Air Force commands and the new Strategic Command.

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“The most important features of the new strategic command were indeed the target planning capabilities, which are unique in the world. Secondly is the ability to guarantee the nuclear command-control system that would configure and operate those forces if they were required. Those missions remained intact as a key part of the new US Strategic Command.”

The ramparts of the Cold War were already anachronisms to most Americans by 1992. The Presidential campaign of that year no longer rang with the rhetoric of geopolitics and geo-strategy, but pivoted on matters of global finance and economics. Bill Clinton’s defeat of George Bush at the polls was widely interpreted as a result of his commitment to a new social agenda and the public’s disaffection with the economic status quo. The new President’s vision for national security policy was not widely understood. The Cold War now seemed long ago and far away.

Bill Clinton, President of the United States,

“This election is a clarion call for our country to face the challenges of the end of the Cold War and the beginning of the next century.”

4.4 Emerging Threats

In one of his last official acts, President Bush put a close on one nuclear era, while a second was just beginning to emerge. Throughout the 1990s, different political imperatives, unforeseen international tensions and disturbing new intelligence would change the nuclear equation.

General Brent Scowcroft, National Security Advisor, 1989-1993

“As we were leaving office, it was clear that the structures of the Cold War were no longer appropriate, and indeed there were a lot of calls from the Congress again: ‘The Cold War is over, what are you going to do with this enormous structure you have?’”

NEWSREEL: Congressman Les Aspin (D) Wisconsin, Chairman, House Armed Services Committee: “The United States is the biggest conventional power in the world. There is no longer any need for the United States to have nuclear weapons as an equalizer against other powers.”

Les Aspin and others in Congress argued that nuclear weapons now had to be considered in light of dramatic advances in conventional weapons systems. The 1991 Persian Gulf war had demonstrated an overwhelming US conventional military superiority, and one which adversaries could not directly challenge in a symmetrical way.
William Perry, Secretary of Defense 1994-1996

“Desert Storm made that absolutely clear. So they would find asymmetrical ways of contending with the United States. The asymmetrical ways, some of them, could be to go to nuclear weapons.”

As he prepared to assume the Presidency, Bill Clinton announced his Cabinet appointees that included Congressman Les Aspin as Secretary of Defense. Aspin’s immediate concerns were those he shared with Senator Sam Nunn and Richard Lugar about the threat of proliferation of so-called ‘loose nukes’ in the former Soviet Union.

William Perry, Secretary of Defense 1994-1996

“The break-up of the Soviet Union, given there were fifteen separate republics and that four of these had nuclear weapons, we wanted to control the proliferation of those weapons, the fissile material and the nuclear know-how.”

Cooperative threat reduction helped to secure fissile materials and consolidate the nuclear arsenal of the former Soviet Union under the control of the new Russian Federation.


“The Nunn-Lugar programme, the ‘loose nukes’ issue, that was the problem of the day, not our own nuclear weapons posture, not arms control.”

In the spring of 1993, with an eye on the budget, Aspin initiated the Bottom-up Review, evaluating US conventional force requirements. Later that fall, Aspin would charge his assistant, Ashton Carter, with the task of conducting and internal Department of Defense review of the role of nuclear forces.

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“They decided the nuclear part should be split off. It was actually split off and performed later, nearly as an afterthought, I believe, mostly because of how difficult those issues were.”


“Well, Les Aspin started off the Nuclear Posture Review and he believed that the world had fundamentally changed, the wall had come down and we should re-think the role of nuclear weapons.”

William Perry, Secretary of Defense 1994-1996

“Our thinking at that time was that, first of all, the importance of nuclear weapons was dramatically downgraded.”

NEWSREEL: 22 September 1994: “The Nuclear Posture Review dealt with two great issues. The first issue was how to achieve the proper balance between what I would call ‘leading’ and ‘hedging’.”
“The US would try and lead the way to lower numbers of offensive strategic nuclear weapons. At the same time we would hedge by keeping in reserve a certain number of weapons which could be brought back into the active stockpile if they were required.”

In a briefing to President Clinton, the 1994 Nuclear Posture Review reaffirmed the viability of nuclear deterrence, while ensuring a continued dialogue with the new Russian Federation.

DOCUMENT: Nuclear Posture Review, Briefing to President Clinton.

“We shaped our programmes in both Russia and the United States based on the limits set forth in START II. It was never ratified, but it became part of our programme planning.”

Expectations for the ratification of START II remained high, however, and effectively constrained US and Russian nuclear forces throughout the decade. In the US, the START II force levels were also adopted in the face of a dwindling defence budget and a contracting nuclear weapons production complex.

In 1988, responding to environmental problems and the need for consolidation, the Department of Energy began closing down some of its production facilities. By the mid-1990s, a complex which had produced more than 50,000 nuclear weapons had shuttered many of its ageing production plants and ceased the assembly of new warheads altogether.

More than three decades of underground testing came to an end in September 1992 when Congress imposed a 9-month moratorium on testing, which was subsequently extended by the Clinton Administration. The following year, the Department of Energy launched the Stockpile Stewardship Program.

“Doing our best to try and simulate the performance of weapons without actually setting off a nuclear weapon.”

“Weapons were designed to last, say, a nominal twenty years. The basic nuclear components seemed to be holding up very well. Though clearly, whether they’ll last thirty years, forty years, fifty years, nobody knows and hopefully by then we will have a capability for manufacturing.”
In 1994, when William Perry succeeded Les Aspin as Secretary of Defense, the process of securing the former Soviet nuclear arsenal was well underway. Early in his tenure, Perry began articulating a policy of ‘preventive defence’.


“So Perry wanted looking out into the future, not becoming complacent just because things were good, we had won the Cold War, nobody could match us. He said, ‘Let’s think about what the future threats could be.’”

For more than forty years, an uneasy armed truce had prevailed on the Korean peninsula. In May of 1994, a crisis would test US policy and plans when the North Koreans ordered UN inspectors to leave the Yong-byon nuclear facility. Now, the potential of a nuclear-armed North Korea threatened this delicate balance.


“The best way to protect ourselves from that kind of a threat is ‘preventive defence’; that is, preventing the terror group from getting the nuclear bombs in the first place, preventing the rogue nation from getting the nuclear capability in the first place.”


**ARTICLE**: ‘Senate Leaders Support Action Against N. Korea: disregard of nuclear conventions cited,’ Associated Press

At first, a strategy of economic sanctions was imposed. When North Korea threatened to turn Seoul into a ‘sea of flames’, US contingency war plans were set in motion. When action appeared imminent, a freeze on nuclear activities was brokered by former President Jimmy Carter, that led to the Agreed Framework.

**NEWSREEL**: Jimmy Carter: “I personally believe that the crisis is over and I personally believe that Kim Il Sung wants to be sure that the crisis is over.”

**NEWSREEL**: President Bill Clinton: “These developments mark, not a solution to the problem, but they do mark a new opportunity to find a solution.”


“The Agreed Framework was a very valuable agreement for United States security. It did not solve the problem of North Korean aspirations for nuclear weapons, but it certainly delayed it.”

As the decade progressed, the expression ‘rogue nation’ was becoming part of the public lexicon, while the threat of proliferation was being realised by so-called ‘nuclear capable states’. And yet, the Presidential guidance for nuclear weapons remained unchanged [since National Security Decision Directive Number 13, NSDD-13].

**Frank Miller**, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“Under the broad rubric of NSDD-13, we were able to completely transform the SIOP in terms of what it hit, what it went after and how it did it. As a result of some conversations between General Shalibashvili and President Clinton, there came down an order that we needed to re-look at the guidance, and that’s how PDD-60 came out. PDD-60 came out and then all the ridiculous rhetoric of NSDD-13 was gone.”

In advance of the 1997 Helsinki Summit with Boris Yeltsin, the Clinton Administration removed all references to being able to ‘prevail’ in a nuclear war, while reasserting the traditional deterrent role for nuclear weapons. But the character of the threat now facing the US and its allies was continuing to change.
Richard Garwin, Senior Fellow for Science & Technology, Council on Foreign Relations

“The Rumsfeld Commission had a very simple mission and the nine of us were asked to assess the ballistic missile threat to the United States. The major problem comes from the three rogue states: North Korea, Iran and Iraq. We said that any of them, if they had sufficient technology support from other countries, and an urgent and well-financed programme, could maintain secrecy and have an ICBM within five years. We judged the strategic threat to be nuclear warhead payloads and biological warfare agent payloads.”

Within six weeks of the report, the North Koreans launched a three-stage missile [Taep'o-dong 1, 31 August, 1998]. The successful test of an ICBM dramatically confirmed the Commission’s findings, prompting Congress to revive national missile defence.

DOCUMENT: National Missile Defense Act of 1999, One Hundred Sixth Congress of the USA: ‘To declare it to be the policy of the United States to deploy a national missile defense.’

By the new millennium, active defences were experiencing a revival as the nation prepared itself for the emergence of a new and, as yet, ill-defined threat. A threat that would be manifestly different and less stable than the Cold War experience of a nuclear-armed Soviet adversary.

4.5 Strategic Redirection

NEWSREEL: President George W Bush, Address at the National Defense University, 1 May, 2001: “Unlike the Cold War, today’s most urgent threat stems not from thousands of ballistic missiles in Soviet hands, but from a small number of missiles in the hands of these states, states for whom terror and blackmail are a way of life. In such a world, Cold War deterrence is no longer enough.”

James Schlesinger, Secretary of Defense, 1973-1975

“We are much less interested in deterring a substantial foe like the Soviet Union and much more interested in deterring lesser powers that gradually may acquire weapons of mass destruction.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“We need to build a relationship with Russia which puts the nuclear adversarial relationship in the past.”

Ambassador Linton Brooks, Administrator, National Nuclear Security Administration, US Navy (retired)

“We’re not worried about arms races any more; we are worried about minimizing the day-to-day size of the forces.”


Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“You know, the President’s inclination was to reduce US forces unilaterally and then call on the Russians to do the same. President Putin wanted a treaty. We have done a treaty but I think that’s the last treaty that will be central to US-Russian relations.”
**Ambassador Linton Brooks**, Administrator, National Nuclear Security Administration, US Navy (retired)

“The Treaty with Moscow limits operationally deployed strategic warheads between 1,700 and 2,200 on each side.”

**Admiral James Ellis**, Commander 2002-2004, United States Strategic Command

“It was directed that we would draw down the operationally deployed nuclear arsenal in accordance with the Presidential Direction and as codified in the Moscow Treaty, but the underpinning of all of that, the assumptions, the other side to that, is the creation of advanced conventional capabilities, of a much more robust infrastructure, of a much better integrated intelligence, surveillance, reconnaissance and planning capability than the nation has ever had before, but it also assumes that over time we will create additional capabilities to supplement the draw-down, and that’s the balance that we are working to maintain available to the nation’s leadership.”

**James Schlesinger**, Secretary of Defense, 1973-1975

“So we must have both conventional and nuclear capabilities and STRATCOM is, of course, planning on having both.”

By the spring of 2001, the new Bush Administration was engaged in a reassessment of defence policy. The Administration’s policy would ultimately be reflected in the Quadrennial Defense Review, the Nuclear Posture Review, the National Security Strategy and the planning guidance for nuclear weapons. Taken together with dramatic changes in strategic planning, this new policy would re-ignite the nuclear debate. What are rogues? What are the threats they pose? Can they be deterred?


**DOCUMENT**: Nuclear Policy Review: Report to the Congress in Response to Sections 1041 (as Amended) and 1042 of the Floyd D. Spence National Defense Authorisation Act for the Fiscal Year 2001, PL 106-398, December 2001


**DOCUMENT**: Presidential Nuclear Guidance

**Ambassador C. Paul Robinson**, President, Sandia National Laboratories, 1995-2005

“The very root of the term ‘rogue state’ is based on the inability to predict what their actions would be.”

**General Lee Butler**, Commander 1992-1994, United States Strategic Command

“What’s rogue are the intentions of the leadership that happens to currently be in power, and that’s changeable, and oftentimes we try and change it in ways that will lead them away from enmity toward friendship, without a war.”

**James Schlesinger**, Secretary of Defense, 1973-1975

“On the other hand, one must recognise that nuclear weapons are spreading, that there may be a degree of anonymity in attack.”
William Perry, Secretary of Defense 1994-1996

“Nations which we have sometimes called ‘rogue nations’ when they say ‘How can we contend with the United States today?’ I think only in terms of asymmetrical warfare, which is going to weapons of mass destruction, going to guerrilla warfare, going to supporting terror.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“As the arsenal in the hands of rogue states, particularly with chem-bio, and now some of them having nuclear weapons, require us to take a different look at how we deter.”

General Lee Butler, Commander 1992-1994, United States Strategic Command

“I don’t think classic deterrence works in these situations because we are dealing with individuals whose thought processes and motivations are very foreign to us.”

Lynne Nolan, Director, International Programs, Eisenhower Institute

“We have never really understood what deters or the degree to which the nuclear stand-off of the Cold War in any way resembles any relationship that we would have with any other country.”

General Brent Scowcroft, National Security Advisor, 1989-1993

“It seems to me that traditional threats still hold against state actors; they control territory, they are in power and most of them don’t want to lose power.”

In the summer of 2001, deterring rogue regimes remained an open question as the Bush Administration began a review of US nuclear forces and strategy. The 2001 Nuclear Posture Review would reaffirm the continued utility of nuclear weapons as the principal deterrent force, but their role would be subsumed within a larger and more flexible strategic posture.

Admiral James Ellis, Commander 2002-2004, United States Strategic Command

“In my personal view it’s misnamed. It should have been called the ‘Strategic Posture Review’ because it addresses things on a much broader scale than just the nuclear element of it.”

The Cold War triad of nuclear land-based, sea-based and bomber forces would become part of a new triad, integrating nuclear with non-nuclear strike capabilities, defences and a responsive infrastructure. But this new construct begged a question: What role will nuclear weapons play in the future?

Robert McNamara, Secretary of Defense, 1961-68

“Nuclear weapons have no military utility other than to deter a nuclear-equipped opponent from utilizing his nuclear weapons.”
**General Larry Welch**, Chief of Staff 1986-1990, United States Air Force

“So long as anyone on the planet has the capability to destroy the United States in thirty minutes, that’s the deterrent job that I know we have to do. And I know that that deterrent job requires that they never be able to believe that they can achieve that.”

**Ambassador C. Paul Robinson**, President, Sandia National Laboratories, 1995-2005

“There is a wider question that we must consider, and that is what are the messages that will be given to history by the use or the non-use of nuclear weapons in a particular conflict.”

**General Lee Butler**, Commander 1992-1994, United States Strategic Command

“There is a half-century long tradition of no-use of nuclear weapons. The only nation to ever use one in anger was the United States; are we going to be the first to do that again?”

**General Larry Welch**, Chief of Staff 1986-1990, United States Air Force

“Eisenhower thought we can deter conventional war. We hung onto that hope in spite of the Korean war, up until the late ’50s.”


“And even the notion of limited nuclear warfare, that was close to preposterous in his view.”

**Robert McNamara**, Secretary of Defense, 1961-68

“I cannot conceive of any responsible President initiating a war-fighting nuclear action.”

**Herb York**, Director, Livermore Laboratory, 1952-1957

“The situation, even today, has not changed. I mean, the main use of nuclear weapons remain to deter the use of nuclear weapons by others. That has wide support within the defence community. Everything else is controversial.”

**Ambassador C. Paul Robinson**, President, Sandia National Laboratories, 1995-2005

“The world has changed a lot over the years of the Cold War. Various nations have been trying to remove their valuable targets from being addressed by conventional weapons, and unless you are holding the targets most valued at risk, deterrence will fail.”
Admiral James Ellis, Commander 2002-2004, United States Strategic Command

“There are an increasing number of types of targets and of types of adversaries for which the current stockpile is ill-suited. There is no doubt about that. And if we are ill-suited or ill-configured to deal with those threats, it might convince potential adversaries that we would never use those capabilities. And whether we like it or not, then it loses its deterrent value.”

General Lee Butler, Commander 1992-1994, United States Strategic Command

“In my view, the development of these kinds of capabilities for the in extremis situation, for that target, is not because we think the developing of weapons is going to deter that target in the first place. I don’t believe that for a minute. I think it is simply having the capability to destroy it in the event we reach a point where the President is convinced that we have no other alternative.”

General Larry Welch, Chief of Staff 1986-1990, United States Air Force

“It’s all tied back to what has been the constant, from 1950 to 2020, that is, the purpose of the deterrent is to be credible enough to convince anyone that can destroy the United States that they can’t possibly win by doing that. That’s the constant.”

The familiar East-West confrontation that once sustained a broad-based consensus supporting nuclear weapons and nuclear deterrence had, by the mid-1990s, given way to an unfamiliar landscape. In a world of uncertain and unpredictable threats, attitudes toward nuclear weapons, and even the efficacy of deterrence, had become widely divergent. But amidst this disagreement, there were shared fears of nuclear proliferation.

An event in late summer of 2001 would suddenly and shockingly re-focus debate.

4.6 A New Context For Deterrence

On September 11th, 2002, the world was surprised. The US was not prepared for an audacious and catastrophically destructive act of terror on its soil. In the aftermath of the attack on the World Trade Center, debate centred on the question: Can non-state actors be deterred?

Scott Sagan, Co-Director, Center for International Security & Cooperation, Stanford University

“It is by no means clear to me that non-state actors have the same set of values that enable us to practise deterrence against them.”


“If you expect to go to heaven in such a situation, you’re not going to be deterred by the threat of going to heaven.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“We all have to recognised that, to the degree that threats present themselves to us like Al-Qaeda, which are stateless, and which come from quasi-governments that don’t possess territory, the nuclear threat becomes almost irrelevant.”


Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“The trouble today is we don’t know how to deter these sub-national and terrorist groups, such as Al-Qaeda, from using these weapons in alliance with these rogue states who have developed the weapons and seem to have few barriers to transferring them.”


“And therefore the idea of pre-emption of such capabilities achieves a significance and becomes an option.”

For more than fifty years, the United States had practised deterrence against adversaries who threatened the nation and its allies with weapons of mass destruction. The political objective of containment was underpinned by the knowledge that the Soviets and the Chinese had something to lose.

David Holloway, Professor of International History, Stanford University

“And I think, in the mid-50s, the unacceptability of all-out nuclear war became common knowledge between the US and the Soviet leaders. But that kind of common knowledge doesn’t exist with potential rogue states or non-state actors. You’re kind of unsure what it is they think about this and, if that’s the case, then it’s very difficult to be sure that deterrence will operate. And if you’re not sure that deterrence will operate, then you become even more afraid of their acquiring these weapons.”

General Lee Butler, Commander 1992-1994, United States Strategic Command

“This, for me, would be my policy nightmare. When the moment comes that we have conclusive evidence that they have, or are about to give, this kind of capability to a terrorist organisation.”

Michael May, Director, Livermore Laboratory, 1965-1971

“The separated plutonium, the weapons plutonium, and the highly-enriched uranium – those materials are the principal danger around the world. If a country or a terror group gets a hold of them, it’s no great trick to make nuclear weapons. It takes some time and some skill, but it’s not an enormous trick to make a primitive weapon.”

Admiral James Ellis, Commander 2002-2004, United States Strategic Command

“There are those that argue that today’s non-state actors can’t be deterred. I don’t believe that. I think everyone has the ability to be deterred and even if they, the zealots, can’t be deterred, the structures, the national elements, the host nations that support them, are susceptible to more classic elements of deterrence.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“This is a much bigger work assignment than has ever been assigned for planning nuclear or non-nuclear attacks in the past and the goal is to try to put that within a single command that can support such operations around the globe.”

Nuclear weapons would remain a key deterrent if there were an emergent China or a resurgent Russia, but they would be given a new emphasis: rogue nations and Islamic terrorists with weapons of mass destruction.
Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“I think nuclear deterrence will continue to play a fairly significant role for the future. The size of that role depends upon a number of factors. One is the degree to which we are in fact successful in bringing Russia into the West, and the degree to which China begins to perceive itself as a status quo power as opposed to an aggressive, upwardly mobile power. A second has to do with whether or not major countries who would make themselves our adversary continue to deploy nuclear weapons, therefore requiring us to have nuclear weapons to deter nuclear attack in the first place.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005

“When you now shift the focus to only a few nuclear weapons being used, it becomes exceedingly important for you to do the calculation: Do I have to use a nuclear weapon for each of those or could I substitute some combination of advance conventional weapons, information operation attacks on those particular targets, rather than only considering a nuclear attack.”

Scott Sagan, Co-Director, Center for International Security & Cooperation, Stanford University

“It’s not a cookie-cutter problem that one size fits all. We need to think through what would deter North Korea, what would deter, potentially, a terrorist organization.”

Admiral James Ellis, Commander 2002-2004, United States Strategic Command

“There is certainly a need for a much wider spectrum of options that are made available to the nation’s civilian leadership, both of the deterrent character and, if the requirement presents itself, for employment.”

Robert McNamara, Secretary of Defense, 1961-68

“Our nuclear policy today, I believe, is based on maintaining a war-fighting capability.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“We reserve the right to use nuclear weapons to respond to, and therefore to deter, chemical or biological use, weapons of mass destruction.”

James Schlesinger, Secretary of Defense, 1973-1975

“You cannot simply say ‘we will deter’ without being able to execute in wartime.”

Michael May, Director, Livermore Laboratory, 1965-1971

“On the other hand, if we introduce nuclear weapons, we won’t be the only ones to do so.”
General Lee Butler, Commander 1992-1994, United States Strategic Command  
“All parties involved, and most especially the President, have to realise the consequences of that act.”

Randall Forsberg, Arms Control Activist, Author of ‘A Call To Halt the Nuclear Arms Race’ 1980  
“You invite proliferation. You’re basically suggesting that it would be a good idea for threatened countries to get nuclear weapons and strike fear in the hearts of other people.”

Robert McNamara, Secretary of Defense, 1961-68  
“And that’s what I think we do when we say ‘We’re going to need these nuclear weapons in perpetuity but you don’t need them’.”

Ambassador Thomas Graham, Special Representative of the President 1994-97, US Arms Control & Disarmament Agency  
“The only role for nuclear weapons should be to deter the use of nuclear weapons by others, which means a No-first-use doctrine.”

General Brent Scowcroft, National Security Advisor, 1989-1993  
“I would never renounce first-use of nuclear weapons because it seems to me that part of maintaining a reasonably stable world is the good part of nuclear weapons and I think, however we say it, however we do it, and most of the world won’t like it, we need to say ‘No more nuclear weapons states, but the nuclear weapons states there are will be guardians of the system.”

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC  
“We need nuclear weapons to convince any potential aggressor not to attack us and to understand that we have the means to retaliate in an overwhelming fashion should we or our allies be attacked.”

Ambassador C. Paul Robinson, President, Sandia National Laboratories, 1995-2005  
“The US has only considered nuclear weapons to be blunt weapons of last resort.”

Admiral James Ellis, Commander 2002-2004, United States Strategic Command  
“But all of us understand the horrific nature of nuclear weapons and the fact that they are not, and will never be, considered as just another kinetic option available to the nation’s leadership.”

Serious debate about the efficacy and relevance of nuclear deterrence began almost with the dawn of the atomic age. The debate was often framed by starkly contrasting views about the dangers and risks posed by nuclear weapons, compared with
the benefits of a stable world. Since 1992, a new formula for deterrence has struggled to emerge from that which was
forged in the context of the Cold War. The terms of the debate have not changed, but the context has. The very existence of
the arsenals and the technologies of nuclear weapons themselves demand a new construct for deterrence.

Frank Miller, Special Assistant to the President, Senior Director for Defense Policy & Arms Control 2001-05, NSC

“What you have to do though, at the end of the day, to have a real nuclear deterrent is you have to
have a policy, and you have to have a plan, and you have to have the forces, and you have to have the
wherewithal to carry out the plan, and the will to do so at the end of the day. If you don’t have all of
that, then you don’t have a nuclear deterrent. If you manifestly make clear that you have a nuclear
capability and would be prepared to use it under certain circumstances, your deterrent is enhanced. It’s
up to succeeding generations as to whether they will be able to meet those tests.”