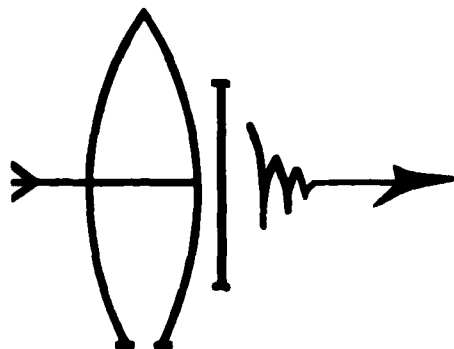
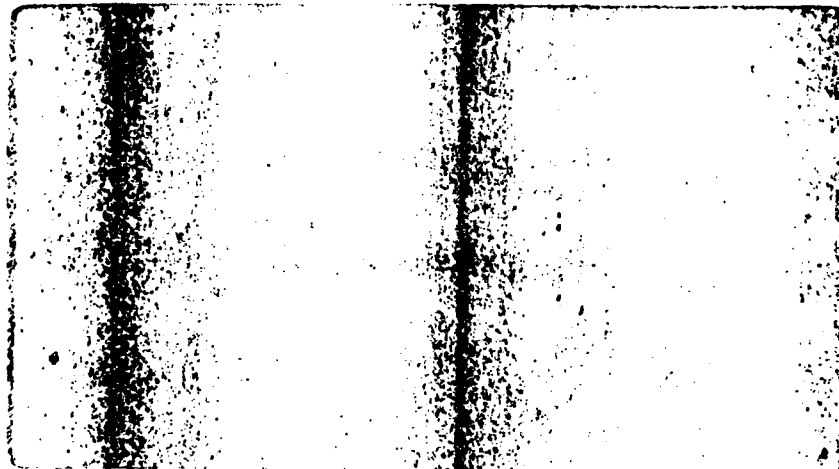


MICROCOPY RESOLUTION TEST CHART
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Historical Compendium of U.S. Nuclear Strategic Forces Policy and Doctrine

by

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September 1981

Prepared for

Department of the Navy
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Arlington, Virginia

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Historical Compendium of U.S. Nuclear Strategic Forces
Policy and Doctrine

→ This compendium contains pertinent historical statements of U.S. strategic force policy. A separate report is planned which will combine these statements of policy with classified documents which trace historical missile procurement and deployment. The purpose of the combined report will be to identify a relationship between targeting policies and the number of weapons required to support these policies.

Requirements for deterrence can never be known with certainty. Enemy perceptions change as technology advances, as his goals develop and as his security in the world community as a whole evolves. The U.S. deterrence policy has changed through the years from the "strategic umbrella" provided by SAC through the mid-50's, to "assured retaliation" as the Soviets achieved a nuclear capability, to the current "countervailing strategy" provided by Presidential Directive No. 59. This is the history of how our strategic deterrence policy "got here from there". In the text which follows, key words have been underlined for emphasis. ←

1945

(1)

The first atomic bomb fell on Hiroshima August 6, 1945. President Truman announced, "it was to spare the Japanese people from utter destruction that the ultimatum of July 26, 1945 was issued at Potsdam. Their leaders promptly rejected that ultimatum. If they do not now accept our terms they may expect a rain of ruin from the air, the like of which has never been seen on this earth." The Nagasaki bomb fell three days later.

(1)

The decision to use nuclear bombs was reached only when it became evident that the war would be shortened and tens of thousands of American lives would be saved. Actually, three devastating new gelatin fire-bomb B-29 attacks in four days struck Japan during the first week in August. These blows, with the atomic bombs to follow, ... and especially Russia actively entering the Pacific war on August 9, 1945, ... quickly drove Japan out of the war and brought World War II to its sudden victorious close.

1948

(2)

The Joint Chiefs of Staff organization was given legislative recognition as a permanent agency by the

"National Security Act of 1947", September 1947. This act established the Air Force, prescribed the responsibilities of the JCS and authorized the establishment of a Joint Staff.

(2) The Key West, Fla. Conference of March 12-14, 1948, which continued in Washington March 20, 1948, clearly assigned to each military service specific "primary" functions for which each service had a clear-cut responsibility. Each service was also charged with collateral functions to support and supplement the other services, i.e., strategic air warfare was assigned as a primary function of the Air Force and the Navy was assigned the primary function of air operations necessary for the accomplishment of objectives in a naval campaign. The Navy was not prohibited from attacking any targets, inland or otherwise, if the attack appeared necessary to accomplish its mission. The Navy was assigned ASW as a primary function, the Air Force was assigned ASW as a collateral function. (3) ICBMs were assigned to the Air Force. The Army was authorized to develop the 1500 nm IRBM JUPITER in competition with the USAF THOR. The Navy at this point had no defined role in ballistic missiles, although a V-2 had been launched from the deck of the aircraft carrier USS Midway in September 1947.

(2) The Newport, R.I. Conference, August 20-22, 1948 assigned the Navy the programming and planning for ASW and the Air Force exclusive responsibility and necessary authority for programming and planning in the field of strategic air warfare. These agreements were materially augmented by President Truman's address to Congress March 17, 1948.

1949

(4) On August 10, 1949, the National Military Establishment became the Department of Defense. Air Force Secretary Symington stated, "One of the reasons why the Berlin airlift was able to proceed unchallenged was the fact the U.S. possessed the air strength to back it up. SAC was, and continues to be, the principal element of strength."

Winston Churchill stated during 1949 that Western Europe would have been communized were it not for the atomic bomb in the hands of the United States.

1950

On June 25, 1950 the Korean War erupted with Truman still President. The Air Force had then acquired the B-36 bomber.

1951

(5) The expansion of facilities for production of fissionable materials was approved October 1950. Nuclear weapons were tested at Las Vegas and Eniwetok Atoll during FY 51. The President authorized research on thermonuclear weapons January 1950, and the Navy requested money in the FY52 budget for a nuclear-powered submarine, Nautilus.

1952

(6) President Truman's message to Congress of March 6, 1952 stated, "The pursuit of mutual security through mutual strength is ... the keystone of the broad foreign policy which the U.S. and other nations have adopted as the surest road to lasting peace. ... Economic, political, and moral as well as military strength is required for success in this far-reaching enterprise, but military strength is a first

necessity, for without a "shield" against aggression the free world would be helpless before the enemy."

(6)

Secretary of the Navy Dan Kimball reported that tactics and techniques for delivery of special weapons for fleet aircraft carriers had been developed, and fleet units had been trained in their use. Secretary of the Air Force Finletter reported, "The priority mission of the Strategic Air Command, in the event of hostilities, is to attack and destroy the enemy's ability to wage war." ... All heavy bombers were now B-36's.

1953

(7)

The armistice in Korea was signed July 27, 1953. B-52 bombers gradually replaced B-36's (by June 1955) as the mainstay of our deterrent power.

1955

(3)

In the summer of 1955, the "Killian Report" (following the earlier National Security Council paper) suggested, and the National Security Council recommended, that part of the IRBM force should be sea-based.

(8)

Consequently, the Navy was directed to design a sea-based

support system for the liquid-fueled JUPITER missiles. The Secretary of Defense directed the Army and Navy to proceed jointly with the development of IRBM No. 2 (JUPITER) and assigned a top priority equal to the ICBM program. (9) On 17 November 1955 the Secretary of the Navy defined the Navy's role and created the Special Projects Office which subsequently was given responsibility for development of the entire sea based system and installation of the JUPITER missile.

(10) Operational numbers of REGULUS for use against surface targets became available. Operational tests of the Nautilus started January 1955. In the atomic weapons field, an extensive series of tests took place at the Nevada Proving Grounds between March and May 1955. An underwater explosion was set off in the eastern Pacific in the spring of 1955.

(10) Secretary of Defense Wilson stated, "While emphasis has been placed on weapons systems best calculated to deter aggression, our Nation is not committed to a single strategy. Flexibility has been retained to meet with the most appropriate weapons whatever situation may arise."

(11) The ICBM was accorded the Nation's highest priority by the President to insure the operational capability of such a weapon at the earliest possible moment. The THOR IRBM was assigned to the Air Force by the Secretary of Defense in October 1955.

(11) Secretary of the Navy Fogler stated, "Nuclear power and guided missiles promise to be a very effective combination in naval tactics, especially so in submarines where together they form practically an entirely new weapon."

1956

(3) The Weapons Planning Group (under Dr. Bothwell) at NOTS, China Lake, did a study which postulated what damage capability would accomplish deterrence (Johnstone) and what characteristics and technologies could be projected for a more efficient second - generation (post JUPITER) missile. Combined with the NOBSKA study that predicted future Soviet submarine (or U.S.) capabilities, a 2-stage solid propellant 30,000 pound submarine launched missile, POLARIS, was identified. (12) The Secretary of Defense terminated Navy

participation in the JUPITER program on 8 December 1956 and instructed the Navy to concentrate its efforts on POLARIS.

(13)

The Air Force started development on ATLAS, the first ICBM. TITAN was also initiated.

(14)

Secretary of Defense Wilson reassigned responsibilities. Point defense of vital land centers to 100 miles radius was assigned to the Army (NIKE, TALOS); "area" defense was assigned to the Air Force. The Army was constrained to 200 mile ranges for surface-to-surface missiles. The Air Force was assigned surface-to-surface missiles with ranges beyond 200 miles. Sole responsibility for land-based IRBM was assigned to the Air Force and responsibility for ship-based IRBMs, such as POLARIS, was assigned to the Navy.

1957

(15)

The "Gaither Report" of 1957 (Top Secret declassified in 1973) was prepared for President Eisenhower. It predicted the "missile gap", as well as a Soviet ASW breakthrough based on linear projection of Soviet technology progress. It implied a nuclear war fighting or limited nuclear war strategy. The report was forwarded to President

Eisenhower and the National Security Council within weeks after the October 1957 launching of the Soviet Sputnik. The report overturned the assumption since 1945 that the strategic balance between the U.S. and U.S.S.R. was inherently stable. The Eisenhower administration did not endorse or implement recommendations of the Gaither report, but the Kennedy administration later did succeed in obtaining greater funding for an array of strategic programs, including many for which the Gaither Committee recommended increases.

1958

(16)

The Army was directed to develop the NIKE-ZEUS on January 16, 1958. MINUTEMAN-I, using solid fuel, was approved for development in February 1958. THOR and JUPITER went into production in 1958

1959

(17)

Secretary of Defense Gates stated, "Within the overall framework of national policy, the defense establishment contributes to meeting two major objectives:

First, to deter the outbreak of major war by defending the home base and striking back decisively against any aggressor; and

Secondly, to prevent or contain local wars by being ready to come to the aid of threatened friendly nations, if necessary."

Further testing of nuclear weapons was suspended on November 1, 1958 pending negotiations with the Soviets.

1960

(18) The Initial Operating Capability (IOC) for the ATLAS missile was September 1959. Five REGULUS (500 nm range) missile submarines were operational. A special staff group to provide centrally directed operational planning for all elements of our strategic retaliatory forces was formed in August 1960. This group, headed by a Director of Strategic Target Planning, was to be responsible, under the policy control and direction of the JCS, for the development and continued review of a "Single Integrated Operational Plan" covering the target assignments of the weapon carriers

of all forces committed by the unified and specified commanders.

The IOC for the POLARIS A1 was November 15, 1960.

1961

(19)

Secretary of Defense McNamara quoted from President Kennedy's Inaugural Address of January 20, 1961, "Only when our arms are sufficient beyond doubt can we be certain beyond doubt that they will never be employed."

President Kennedy's special message on the Defense Budget to Congress on March 28, 1961 included specific measures to improve the readiness and control of strategic forces, to accelerate long-range missile programs, to increase our capability to handle limited wars, and also to eliminate less essential military programs and activities.

In President Kennedy's "Urgent National Needs" message to Congress on May 25, 1961 he asked for funds for an enlarged civil defense program, which subsequently was assigned to the Department of Defense.

In President Kennedy's message to Congress March 28, 1961 he stated basic policies which guided defense programs:

1. The primary purpose of our arms is peace, not war.
2. Our arms will never be used to strike the first blow in any attack.
3. Our arms must be adequate to meet our commitments and insure our security, without being bound by arbitrary budget ceilings.
4. Our arms must be subject to ultimate civilian control and command at all times, in wars as well as peace.
5. Our strategic arms and defense must be adequate to deter any deliberate nuclear attack on the U.S. or our allies.
6. The strength and deployment of our forces in combination with those of our allies should be sufficiently powerful and mobile to prevent the steady erosion of the free world through limited

wars, and it is this role that should constitute the primary mission of our overseas forces.

7. Our defense posture must be both flexible and determined.

8. Our defense posture must be designed to reduce the danger of irrational or unpremeditated general war - the danger of an unnecessary escalation of a small war into a large one, or of miscalculation or misinterpretation of an incident or enemy intention.

Secretary of Defense McNamara stated, "The manned bomber is still the core of our strategic deterrent at the present time, but ballistic missiles are steadily assuming a more important role. A powerful force of manned bombers will, however, be maintained for some time, since a "mix" of weapons systems complicates the defensive problem of a possible aggressor and thereby increases the over-all effectiveness of strategic retaliatory forces."

(19)

Some ATLAS ICBM squadrons became operational. The first three POLARIS SSBNs were on station. It was decided to shift more rapidly from liquid-fueled ATLAS and TITAN to

solid fueled POLARIS and MINUTEMAN. The POLARIS A-3 development was to be accelerated. The POLARIS on the cruiser "Long Beach" was cancelled due to cost.

1962

(3) The Chief of Naval Operations interest in a potential hard target capability was expressed in November 1962. (Based on RADM George Miller's "Damage Limiting Study.")

(20) President Kennedy stated, "Any potential aggressor contemplating an attack on any part of the Free World with any kind of weapon, conventional or nuclear, must know that our response will be suitable, selective, swift and effective."

The Soviet Union had abrogated the nuclear testing agreement and exploded more than 40 nuclear devices, including one with a force of 56 MT and several others high above the earth - - over 100 miles. President Kennedy announced resumption of testing March 2, 1962. Operation DOMINIC started April 25, 1962 and included underwater and high altitude detonations.

More than half of the 13 approved ATLAS squadrons (126 missiles) were operational. Two of 12 TITAN squadrons became operational by October 1963. Nine POLARIS SSBN's were at sea. Eight hundred MINUTEMAN missiles and forty-one POLARIS SSBNs were budgeted. The IOC of POLARIS A-2 was June 26, 1962.

(21) The "Cuban Crisis" occurred between 1 July and 28 October 1962. The Soviets finally agreed on October 28 to dismantle 42 offensive IRBM weapons and 42 IL-28 medium range bombers. They were out of Cuba by December 6, 1962.

The Vietnam threat intensified. There were 14,000 U.S. personnel assisting the Vietnam Government.

(3,20) A POLARIS A-1 (6 May 1963) and an ASROC nuclear weapon were launched, flown and detonated successfully under operational conditions in the Pacific.

1963

(21) On July 25, 1963 a draft treaty banning nuclear tests in the atmosphere, in outer space, and under water was initiated by the U.S., U.K., and U.S.S.R.

(21)

By June 30, 1963, 500 ICBMs and 9 POLARIS SSBNs were operational. IOC of MINUTEMAN I was in February 1963. 126 ATLAS and 108 TITAN were operational by December 1963. 800 MINUTEMAN I and 150 MINUTEMAN II were budgeted.

President Kennedy was assassinated November 22, 1963.

In President Johnson's Address to Congress November 27, 1963, "In this age when there can be no losers in peace and no victors in war, we must recognize the obligation to match national strength with national restraint. We must be prepared at one and the same time for both the confrontation of power and the limitation of power. We must be ready to defend the national interest and to negotiate the common interest. This is the path that we shall continue to pursue."

1964

(22)

Secretary of Defense McNamara said that compared to 1961 Forces we had achieved by June 30, 1964 a 150% increase of nuclear warheads in strategic alert forces and 50% increase in strategic bombers on alert. Phasing out of 126 ATLAS and 108 TITAN missiles began. 160 MINUTEMAN I and 15

POLARIS SSBNs were operational. The IOC for POLARIS A-3 was September 28, 1964.

1965

(23)

Secretary of Defense McNamara stated, "The strategic forces programs, comprising the offensive and defensive forces and civil defense, is designed to provide two basic capabilities:

1. To deter deliberate nuclear attack upon the United States and its allies by maintaining a highly reliable ability to inflict an unacceptable degree of damage upon any single aggressor, or combination of aggressors, even after absorbing a surprise first strike.
2. In the event such a war nevertheless occurred, to limit damage to our population and industrial capacity. The first capability might be called "assured destruction" and the second "damage limitation". The strategic offensive forces - the ICBM's, the submarine-launched ballistic missiles

(SLBMs), and manned bombers, which are usually associated with the first capability - can also contribute to the second. They can do so by attacking enemy delivery vehicles on their bases or launch sites, provided they can reach those vehicles before they are launched at our cities."

On January 18, 1965 President Johnson announced the POSEIDON program. Program Definition was initiated by April 1965.

One billion dollars had been spent through 1965 for pen aids.

(23)
126 ATLAS were phased out, 54 TITAN remained, 800 MINUTEMAN and 29 SSBNs were operational on June 30, 1965. The IOC of MINUTEMAN II was in October 1965.

1967

(24)
On June 30, 1967 there were 1054 ICBM in "hardened silos", 41 SSBNs, 635 B-52's and B-58's. The IOC of MINUTEMAN III was in June 1967.

1968

(25)
Secretary of Defense McNamara testified, "Throughout the 1950s, and indeed since the end of World War II, it has always been our capacity to retaliate with massive nuclear power which was considered to be the deterrent against Soviet attack. It was this tendency to rely on nuclear weapons as the "universal deterrent" that helped contribute to the decline in our non-nuclear limited war forces, first during the late 1940s, and then during the second half of the 1950s. And yet by 1961, it was becoming clear that large scale use of nuclear weapons by the West as a response to Soviet aggression, other than all-out attack, was not desirable. Therefore, other types of forces would have to be provided both to deter and, in the event deterrence failed, to cope with conflicts at the middle and lower end of the spectrum."

(25,p.50)
McNamara continues, "I would judge that a capability on our part to destroy, say, one-fifth to one-fourth of her population and one-half (sic - should be three-quarters to agree with the chart which follows) of her industrial capacity would serve as an effective deterrent."

Such a level of destruction would certainly represent intolerable punishment to any 20th century industrial nation."

(25,p.52)

"Gross megatonnage is not a reliable indicator of the destructive power of an offensive force. Far more important is the surviving number of separately targetable, serviceable, accurate, reliable warheads ... their ability to survive and destroy the target systems they are designed to take under attack."

(25,p.57)

McNamara presented the following chart:

SOVIET POPULATION AND INDUSTRY DESTROYED

(Assumed 1972 Total Population of 247 Million;
Urban Population of 116 Million)

1 MT Equiv. Delivered Warheads	Total Population		Industrial Capacity
	<u>Fatalities</u>		<u>Destroyed</u>
	<u>Million</u>	<u>Percent</u>	<u>Percent</u>
100	37	15	59
200	52	21	72
<u>400</u>	<u>74</u>	<u>30</u>	<u>76</u>
800	96	39	77
1200	109	44	77
1600	116	47	77

"Beyond 400 one-megaton equivalents optimally delivered, further increments would not meaningfully change the amount of damage inflicted because it would bring smaller and smaller cities under attack."

"These results reflect recent decisions:

1. Production and deployment of POSEIDON with MIRVs
2. Production and deployment of pen aids
3. MINUTEMAN IIIs with MIRVs
4. The initiation of development of new small reentry vehicles in order to increase substantially the number of warheads (or penetration aids) which can be carried by a single missile
5. The development and production of SRAMs for our strategic bombers."

"If the Soviets highest level threat now projected by the NIE does not increase, we will have more "Assured Destruction" capability than we will probably need unless the Soviets generate a ballistic missile damage limiting capability."

1969

(26,p.46)

Secretary of Defense Clifford stated, "It is quite apparent that the Soviets are catching up in numbers of strategic missiles. But, they are behind in advanced missile technology."

Since "damage limiting" measures based on present knowledge of military technology are not seen practiced in the '70s, the primary deterrence should continue to be "assured destruction".

1970

(27)

Secretary of Defense Laird, "We plan to go ahead with SAFEGUARD Phase III to enhance prospects for the success of SALT."

"In view of the magnitude of the current Soviet missile threat to the U.S., and the prospects of future growth in quantity and quality, we have concluded that a defense of our population against that threat is not now feasible. Thus, we must rely on the retaliatory power of our strategic forces to deter the Soviet leaders from launching a nuclear attack on our cities."

(27,p.40)

"We are proceeding with the ULMS (long range missile) R and D as a hedge against the Soviets taking a world-wide ASW effort."

1971

The IOC for POSEIDON C3 was in March 1971.

1972

(28,p.24)

Secretary of Defense Laird defined the Strategy of Realistic Deterrence. It is based on a force structure of strategic and theatre nuclear weapons and adequate U.S. and allied conventional defenses. In Europe, for example, our strategic nuclear power, the theatre nuclear forces of the U.S. and its allies, and the conventional forces of all the NATO allies combine to insure that realistic deterrence is effective from the lowest level of conventional conflict to the highest level of nuclear conflict. This provides a "Total Force Approach" with the three elements of adequate strength, true partnership, and a willingness to negotiate.

(28,P.65)

Secretary of Defense Laird quotes President

Nixon's Foreign Policy Report to Congress, 1972, "Our forces must be maintained at a level sufficient to make it clear that even an all-out surprise attack on the United States by the U.S.S.R. would not cripple our capability to retaliate. Our forces must also be capable of flexible application. A simple "assured destruction" doctrine does not meet our present requirements for a flexible range of strategic options. No President should be left with only one strategic course of action, particularly that of ordering the mass destruction of enemy civilians and facilities."

(28,p,65)

Laird then defined "Strategic Sufficiency":

- Maintaining an adequate second-strike capability to deter an all-out surprise attack on our strategic forces.
- Providing no incentive for the Soviet Union to strike the United States first in a crisis.
- Preventing the Soviet Union from gaining the ability to cause considerably greater urban/industrial destruction than the United States could inflict on the Soviets in a nuclear war.
- Defending against damage from small attacks or accidental launches.

(29) Secretary of Defense Laird in his final report to Congress stated that the ABM Treaty and Interim Agreement on Strategic Offensive Arms (SALT I) was concluded in Moscow in May 1972.

1974

(30,p.4) Secretary of Defense Schlesinger stated, "It is true that in addition to retaliatory targeting against urban and industrial centers, our war plans have always included military targets."

"Rather than massive options, we now want to provide the President with a wider set of much more selective targeting options."

(30,p.5) "We want to have the planning flexibility to be able to respond selectively to the attack in such a way as to (1) limit the chances of uncontrolled escalation, and (2) hit meaningful targets with a sufficient accuracy-yield combination to destroy only the intended target and to avoid widespread collateral damage."

(30,p.33)

"Although several targeting options, including military only and military plus urban/industrial variations, have been a part of U.S. Strategic Doctrine for quite some time, the concept that has dominated our rhetoric for most of the era since World War II has been massive retaliation against cities, or what is called assured destruction."

(30,p.39)

"It is worth stressing at this point, however, that targets for nuclear weapons may include not only cities and silos, but also airfields, many other types of military installations, and a variety of other important assets that are not necessarily collocated with urban population."

(30,p.35)

"I can say with confidence that in 1974, even after a more brilliantly executed and devastating attack than we believe our potential adversaries could deliver, the United States would retain the capability to kill more than 30 percent of the Soviet population and destroy more than 75 percent of Soviet industry. At the same time we could hold in reserve a major capability against the PRC."

(30,p.44)

"Not only must our strategic force structure contain a reserve for threatening urban-industrial targets, the ability to execute a number of options, and the command-control necessary to evaluate attacks and order the

appropriate responses; it must exhibit sufficient and dynamic countervailing power so that no potential opponent or combination of opponents can labor under any illusion about the feasibility of gaining diplomatic or military advantage over the United States."

(30,p.44)

Schlesinger identifies the Principal Features of Proposed Strategic Posture:

- "a capability sufficiently large, diversified, and survivable so that it will provide us at all times with high confidence of riding out even a massive surprise attack and of penetrating enemy defenses, and with the ability to withhold an assured destruction reserve for an extended period of time.
- sufficient warning to ensure the survival of our heavy bombers together with the bomb alarm systems and command-control capabilities required by our National Command Authorities to direct the employment of the strategic forces in a controlled, selective, and restrained fashion.
- the forces to execute a wide range of options in response to potential actions by an enemy, including a capability for precise attacks on both

soft and hard targets, while at the same time minimizing unintended collateral damage.

-- The avoidance of any combination of forces that could be taken as an effort to acquire the ability to execute a first-strike disarming attack against the U.S.S.R.

-- an offensive capability of such size and composition that all will perceive it as in overall balance with the strategic forces of any potential opponent.

-- offensive and defensive capabilities and programs that conform with the provisions of current arms control agreements and at the same time facilitate the conclusion of more permanent treaties to control and, if possible, reduce the main nuclear arsenals."

(30,p.40)

"To the extent that we want to minimize unintended civilian damage from attacks on even soft targets, as I believe we should, we will want to emphasize high accuracy, low yields, and airburst weapons."

1975

(31,p.I-11)

Schlesinger stated, "Deterrence is not a

substitute for defense; defense capabilities, representing the potential for effective counteraction, are the essential condition for deterrence. This simple truth becomes especially evident in a crisis, when forces designed only for "deterrence" are increasingly found to be lacking in credibility both to opponents and to their potential users."

(31,p.I-13)

"Credible strategic nuclear deterrence depends on the satisfaction of four major requirements:

1. We must maintain an essential equivalence with the Soviet Union in the basic factors that determine force effectiveness.
2. A highly survivable force that can be withheld at all times and targeted against the economic base of an opponent.
3. A force that, in respect to Soviet action, could implement a variety of limited preplanned options and react rapidly to retargeting orders so as to deter any range of further attacks that a potential enemy might contemplate.
4. A range and magnitude of capabilities such that

everyone -- friend, foe, and domestic audiences alike -- will perceive that we are equal to the strongest competitors."

1976

(32)

Secretary of Defense Rumsfeld stated, "Our basic objectives continue to be credible deterrence and continued strategic stability." He further identified the following required capabilities to:

- contain a highly survivable second strike capability that can, if necessary, retaliate with devastating force against an enemy's basic economic and political assets;
- have the combination of warheads, accuracy, command-control and retargeting capabilities so that, whatever the contingency, they can execute a variety of second-strike attacks on military and other targets of value to an enemy, and that the same time minimizing collateral damage to civilian population;
- be known to be equivalent to the enemy's offensive forces in the important dimensions of military power;

- remain well hedged, through active research and development programs, against future vulnerabilities that an enemy might attempt to exploit.

1977

(33,p.68)

Secretary of Defense Rumsfeld stated, "An important objective of the assured retaliation mission should be to retard significantly the ability of the U.S.S.R. to recover from a nuclear exchange and regain the status of a 20th century military and industrial power more rapidly than the United States."

(33,p.78)

Secretary of Defense Rumsfeld stated, "U.S. policy for some years has been to avoid development of large first-strike forces and major damage-limiting capabilities through active and passive defenses. - - But such restraint cannot long be unilateral; it must be reciprocated. Any effort by the Soviets to erode the U.S. capability, for assured retaliation by means of major damage-limiting measures must lead to adjustments on our part to maintain a credible deterrent."

(33,p.78)

Secretary Rumsfeld identified a Strategy of Flexible Nuclear Response:

- "A high-confidence Triad of second-strike retaliatory forces within the Vladivostok understanding of 2,400 strategic nuclear delivery vehicles;
- Around 8,500 warheads on delivery vehicles for adequate coverage of all relevant mission targets, even after the attrition suffered from an enemy first-strike and from penetration of his defenses;
- A single ABM site on inactive status except for its Perimeter Acquisition Radar (PAR) and a light dedicated air defense to provide surveillance and peacetime control of U.S. airspace and prevent a "free ride" over the North American continent;
- A mobile fighter-interceptor force coupled with AWACs which could be used for continental air defense in an emergency;
- A civil defense program designed to shelter the population against fallout in existing structures, and to develop the capability to evacuate citizens from selected areas during a period of grave crisis;
- A system of multiple, complementary surveillance

and early warning capabilities combined with a survivable comand-control-communications network designed to permit the President to direct the strategic nuclear forces in a deliberate and controlled manner in pursuit of national objectives."

1978

(34,p.5)

Secretary of Defense Brown stated, "Insistence on essential equivalence guards against any danger that the Soviets might be seen as superior --- even if the perception is not technically justified. By essential equivalence, we mean the maintenance of conditions such that:

- Soviet strategic nuclear forces do not become usable instruments of political leverage, diplomatic coercion, or military advantage;
- nuclear stability, especially in a crisis, is maintained;
- any advantages in force characteristics enjoyed by Soviets are offset by U.S. advantages in other characteristics; and
- the U.S. posture is not in fact, and is not seen as, inferior in performance to the strategic nuclear forces of the Soviet Union."

(34,p.55)

Secretary of Defense Brown identified the strategic posture as Assured Destruction, Flexibility, and Essential Equivalence:

- Assured Destruction. "It is essential that we retain the capability at all times to inflict an unacceptable level of damage on the Soviet Union, including destruction of a minimum of 200 major Soviet cities."
- Flexibility. -- "we must have the flexibility to respond at a level appropriate to the type and scale of his attack. -- As part of that flexibility, we must be able to launch controlled counterattacks against a wide range of targets ... including theater nuclear and conventional forces, lines of communications, war-supporting industry, and targets of increasing hardness: from aircraft runways and nuclear storage sites to command bunkers and ICBM silos. It should be added that a great many of these facilities ... including airfields and ICBM silos ... could remain priority targets for a second strike."
- Essential Equivalence. "1. It helps to ensure that political perceptions are in accord with the military realities, and it minimizes the probability that opposing strategic forces will be

used to seek any diplomatic advantage over us.

2. It reduces the chance that one side or the other will become vulnerable to charges of a bomber or missile gap and contributes thereby to strategic stability.

3. It enhances stability in a crisis by reducing the incentives for either side to strike first or preempt.

4. It sets a major objective for current and future SALT negotiations."

1979

(35,p.14)

Secretary of Defense Brown stated, "Our needs -- whatever the needs of the Soviets -- are met if our retaliatory forces can satisfy the following conditions: survive in adequate numbers and types after a well-executed surprise attack on them by the Soviets; penetrate Soviet defenses and destroy a comprehensive set of targets in the U.S.S.R. with whatever proves desirable; if necessary, inflict high levels of damage on Soviet society -- particularly those elements the Soviet leadership values -- regardless of the measures the Soviets might take to limit damage; and retain a reserve capability in the wake of a controlled exchange."

(35,p.55)

Secretary of Defense Brown stated, "Current official doctrine identifies the capability to destroy targets critical to enemy post-war power and recovery (which includes military forces and industry) as a measure of retaliatory strength."

The IOC for the TRIDENT I (C 4) missile on a backfitted SSBN was October 1979.

1980

(36)

President Carter stated, "I firmly believe that SALT II is in our Nation's security interest and that it will add significantly to the control of nuclear weapons. But because of the Soviet invasion of Afghanistan, I do not believe it is advisable to have the Senate consider the treaty now."

(37)

President Carter stated, "In all these actions (negotiations with the Soviet leaders), we have maintained two commitments: to be ready to meet any challenge by Soviet military power, and to develop ways to resolve disputes and to keep the peace."

"SALT I and SALT II have been negotiated. Observing the mutual constraints imposed by the terms of these treaties will be in the best interest of both countries and will help to preserve world peace. Effort to control nuclear weapons will not be abandoned."

"Let our position be absolutely clear. An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force."

(38,p.5,6)

Secretary of Defense Brown stated, "With the growth of Soviet strategic capabilities, we have concluded that credible deterrence depends on our ability:

- first, to maintain the second-strike forces necessary to attack a comprehensive set of targets, including targets of political and military as well as of economic value;
- second, to withhold retaliation against selected targets;

- third, to cover at all times a sizeable percentage of the Soviet economic base, so that these targets could be destroyed, if necessary; and,
- fourth, to hold the elements of a reserve force for a substantial period after a strategic exchange."

1981

(39,P.IV)

Secretary of Defense Brown stated, "For many years, our strategic doctrine had not been explicitly refined and codified to incorporate the effects of evolving elements of Soviet thinking or of the most modern Soviet strategic capabilities. Today, after several years of serious analysis and effort, we have a doctrine -- our countervailing strategy -- that is clear, flexible, and non-provocative, so as to provide deterrent across the full range of possible Soviet nuclear threats."

(39,p.113)

"Although today's sea-based forces provide a highly survivable and enduring capability against most military and industrial targets, they are ineffective against hardened military targets such as command bunkers and missile silos. The TRIDENT II missile is intended to provide SLBM capability against the full spectrum of targets."

(39,p.38)

Brown continues, "A significant achievement in 1980 was the codification of our evolving strategic doctrine, in the form of Presidential Directive No. 59."
The Soviet perspectives are seen as:

1. Possibility of a relatively prolonged war
2. Regard military targets as obvious first targets in a nuclear exchange
3. State power and control have higher value than general population
4. Some Soviet leadership consider Soviet victory in a nuclear war at least a theoretical possibility.

(39,p.40)

Brown continues, "Five basic elements of our force employment policy serve to achieve the objectives of the Countervailing Strategy:"

- A. Flexibility. "Our planning must provide a continuum of options, ranging from use of small numbers of strategic and/or theatre nuclear weapons aimed at narrowly defined targets, to employment of large portions of our nuclear forces against a

broad spectrum of targets. In addition to pre-planned targeting options, we are developing an ability to design other employment plans -- in particular, smaller scale plans -- on short notice in response to changing circumstances."

B. Escalation Control. "Plans for the controlled use of nuclear weapons, along with other appropriate military and political actions, should enable us to provide leverage for a negotiated termination of the fighting --- To do this, we must leave the enemy with sufficient highly valued military, economic, and political resources still surviving but still clearly at risk, so that he has a strong incentive to seek an end to the conflict."

C. Survivability and Endurance. "The key to escalation control is the survivability and endurance of our nuclear forces and supporting communications, command and control, and intelligence (C I) capabilities."³

D. Targeting Objectives.

1. Strategic Nuclear Forces. "It is important -- for the sake of deterrence -- to be able to deny

to the potential aggressor a fundamental and favorable shift in the strategic balance as a result of a nuclear exchange."

2. Other Military Forces. "More effective and more flexible targeting of the full range of military capabilities --- (conventional as well as nuclear)."
 3. Leadership and Control. "Target organs of Soviet political and military leadership and control."
 4. Industrial and Economic Base. "While --- we do not target civilian population per se, heavy civilian fatalities and other casualties would inevitably occur in attacking the Soviet industrial and economic base, which is collocated with the Soviet urban population."
- E. Reserve Forces. "Our planning must provide for the designation and employment of adequate, survivable, and enduring reserve forces and the supporting C I systems both during and after a protracted conflict. At a minimum, we will preserve such a dedicated force of strategic weapon systems."

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