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A CREDIBLE DETERRENCE IN THE 1980'S. (U)  
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ARMY COMMAND AND GENERAL STAFF COLLEGE

A CREDIBLE DETERRENCE IN THE 1980'S

BY

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LEVEL III

A RESEARCH STUDY SUBMITTED TO THE FACULTY

APRIL 1980

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ARMY COMMAND AND GENERAL STAFF COLLEGE

FORT LEAVENWORTH, KANSAS

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ABSTRACT

The past five years have seen a progressive shift in overall military power from the United States to the Soviet Union. The U.S. appears to be moving toward a military position where the ability to conduct any operations at a lower level of intensity will be minimal if not nonexistent. Will this inability to control conflicts at levels less than a total war result in a potential nuclear confrontation?

This trend points to the apparent lack of credibility in our strategic nuclear policy of Essential Equivalence. Is this policy realistic today? With the Soviet strides in strategic weapons and civil defense, will it be realistic throughout the 1980's? Will our NATO allies continue to support our strategic policy? Will the Soviets allow the U.S. to rebuild its strategic weapons base so there will again be a credible deterrent? These are a few of the questions that must be considered in assessing the credibility of our deterrent policy in the 1980's.

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## EXECUTIVE SUMMARY

TITLE: A CREDIBLE DETERRENCE IN THE 1980'S

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I. PURPOSE: To recommend possible U.S. policies or decisions to improve U.S. deterrent policy.

II. PROBLEM: The U.S. is faced with Soviet improvements in Strategic, theater weapons systems and a massive civil defense program. Given the present U.S. deterrent policy, will the U.S. be able to prosecute a War at a level less than full scale nuclear war?

III. OBJECTIVES: Determine if the Strategic Triad is still a viable alternative and the influence of possible MX deployment upon the Triad. Determine if NATO will be able to deter the USSR with conventional forces or rely increasingly upon theater nuclear forces.

IV. CONCLUSIONS: Based on the authors analysis, the deterrent policy of the United States no longer has the impetus that it has held previously. The increased deployment of Soviet strategic weapons systems and massive civil defense program points to a credible deterrent for the Soviets. Unfortunately we do not have the newer strategic weapon systems (especially ICBMS) and we have no effective civil defense program. These factors are bound to give Soviet leaders encouragement in questioning our resolve throughout the world (i.e., Afghanistan). The Triad is in danger of being totally ineffective. A breakthrough in ASW systems would almost negate the Triad completely. NATO is in a position where they cannot fight a conventional war and must increasingly rely on theater nuclear forces.

V. RECOMMENDATIONS: The U.S. must update its strategic weapons systems and improve the capabilities of our forces supporting NATO to deter Soviet aggression whether it be at a nuclear or conventional level.



## CHAPTER I

### CHARACTERISTICS OF UNITED STATES DETERRENT STRATEGY

The strategic policy of the United States has evolved over the past thirty years and represents a compilation of the views of several administrations. The basic premise continues to be the U.S. ability to absorb a Soviet surprise attack on our strategic forces and the threat of our retaliation in kind.

Our basic national security objective is to preserve the United States as a free nation with its fundamental institutions and values intact.<sup>1</sup> This objective is shared by our National security policy. Our basic national security policy is one of deterrence. Deterrence is explained in Air Force Manual 1-1 as:

" . . . a state of mind brought about by perceived military power that presents an unacceptable risk to any nation planning hostile action. It stems from the perception by other nations of our capability, intent, and will."<sup>2</sup>

Since deterrence has such a high priority in the defense of the US from strategic nuclear attack we must examine the methods utilized to sustain deterrence. Deterrence is accomplished primarily through the dual triad systems: the strategic triad and the theater defense triad.<sup>3</sup>

### The Strategic Triad

This triad consists of three mutually supporting nuclear forces. They are the Intercontinental Ballistic Missile (ICBMS), Manned Bombers and Submarine Launcher Ballistic Missiles (SLBMS). Each of these elements possesses its own unique characteristic and they mutually reinforce our deterrent policy. They also provide the responsiveness, flexibility, command and control, and the restrike capability necessary to deter possible attacks. Some of the advantages of these forces are:<sup>4</sup>

a. They exploit the unique capabilities of highly responsive missile systems and the control of reusable manned bomber aircraft.

b. They avoid the tendency to rely upon one type of offensive system which might experience operational failure or be defeated by an enemy breakthrough in defensive technology.

c. They create additional problems for the enemy's defensive systems by forcing the enemy to defend against different offensive systems.

d. They make the enemy face a variety of diverse strategic systems. An attempt to simultaneously attack all elements of the triad is virtually impossible as one or more elements would survive. Thus, the advantage of an enemy first-strike attack is diminished.

e. They provide options for the selective use of force throughout the spectrum of conflict.

General Bruce K. Holloway in a 1972 speech discussed deterrence and the triad as follows:

" . . . deterrence depends upon the knowledge that our strategic forces will be effective and prevent a first strike by the enemy. Our triad complicates any first strike planning that the enemy might pursue. This applies to the problem of targeting and timing of ICBMS and SLBMS. If the enemy should launch both for simultaneous impact on the United States, we would detect the ICBMS in flight at least fifteen minutes ahead of the SLBM launch--allowing our alert bombers to get airborne. Launch of the SLBMS ahead of the ICBMS would allow them to arrive 15-20 minutes ahead of the ICBMS--allowing retaliation of our SLBMS and ICBMS . . . . In the years ahead--if we short any element of the triad the result will affect our flexibility and lessen the credibility of our deterrent force."5

#### The Theater Defense Triad

This triad is made up of three forces that are also mutually supporting--conventional, theater nuclear, and strategic triad forces. This triad is reinforced by the conventional and theater nuclear forces of our allies. The primary purpose of this triad is to achieve national objectives and limit escalation of theater conflict, if deterrence fails.

Both triad systems provide the National Command Authority (NCA) with the flexibility to deal with any possible military or non-military conflict. Without these two systems the NCA might not have the flexibility required to deal with crisis situations.

#### Historical

Today the most important factor in relation to the U.S. defense posture is the projected vulnerability of the silo-based ICBMS. This possibility is a result of several variables but primarily it has been through the real improvements in the accuracy of the 4th generation of Soviet strategic nuclear missiles (SS-17, SS-18, SS-19). The main basis for the improvement in accuracy is the consistent increases in scope and degree of weapons

technology. With the strides being made in technology, existing concerns over vulnerabilities will no doubt continue to be a very real problem in the future. The history of warfare points to the change in emphasis from defense (WWI) to offense (WWII). The development of nuclear weapons during WWII changed the nature of war. There is little doubt that the development of new weapons such as high energy lasers and charged particle beam systems will profoundly affect strategic employment in the future. These developments could again change the nature of modern warfare.

At the end of World War II the US was the only nation with nuclear weapons. Since only minimal forces were required after the war the US reduced its Army and Air Force to pre-war levels. The policy of the Truman Administration was containment through finite deterrence.<sup>6</sup> Advocates of this policy claimed that the US strategic forces could deter attacks by the use of small scale nuclear forces, who could withstand any possible Soviet attack and inflict unacceptable damage in retaliation. This strategy was based on the fact that the US had the only nuclear weapons and the means to deliver them.<sup>7</sup> With the Soviet development of nuclear weapons and long range bombers to deliver them, the US strategy became one of countervalue. Countervalue is a targeting policy where the United States would respond to any Soviet surprise first-strike with an attack on Soviet population centers and industries.<sup>8</sup> This strategy was termed massive retaliation and under this strategy the US would respond to any overt Soviet threat to our internal or external interests with a nuclear attack.

The basis of finite deterrence and massive retaliation were quite similar. In the event of a war both countries had the ability to strike each other and cause unacceptable damage. These strategies dealt solely with full-scale war and ignored wars at the lower end of the conflict spectrum. The US changed its strategy under President Kennedy so that there would be more responsiveness at the lower levels of conflict. It became more flexible to these lower level conflicts and flexible response became the new strategy. This strategy was based on counterforce where enemy military targets were the primary targets.<sup>9</sup> Flexible response was modified to a strategy of damage limitation with assured destruction. Realistically, this concept has changed little since the early 1960's.

#### Current Strategy

Our current strategy is based on a damage limitation/mutual assured destruction premise. Mutual assured destruction implies the ability to maintain a clear and convincing capability to inflict unacceptable damage upon the attacker. Damage limitation attempts to limit the damage inflicted by an attacker upon the US. The emphasis has been placed on the assured destruction since very little has been done to defend our cities or enhance our defensive systems.<sup>10</sup>

This strategy does provide a degree of flexibility. We are no longer basing our strategy on an all out conflict with the USSR. Due to our worldwide commitments and other defense agreements, our current strategy contains various attack options ranging from full scale war to limited nuclear war. This strategy provides for the capability to deploy conventional weapons to prevent an enemy from escalating a conventional war to a nuclear war.

Whether we have the will to utilize nuclear weapons because of Soviet attacks on an ally or other country, would be difficult to answer at this time.

Since this strategy possesses a great deal of flexibility our weapon systems must also be flexible. The dual triad of forces provide the needed flexibility. Because of this flexibility and the wide-spread location of weapon systems, they make it less probable that the Soviets could destroy all these forces in a surprise attack. While the basis for these forces is assured destruction, they do provide a damage limiting function by their potential to destroy enemy forces.

In 1975 Secretary of Defense Schlesinger stated that the US must maintain essential equivalence with the USSR if we were to maintain the requirements for deterrence.<sup>11</sup> This equivalence was to be in forces, throw-weights, accuracy, etc., and was to include both conventional and nuclear forces. At that time parity existed where both sides had strategic nuclear forces that were approximately equal in size. There has been a change in force levels and a shift in policy from the mutual assured destruction/countervalue policy of the Nixon, Ford administrations to a predominately counterforce policy of the Carter administration.<sup>12</sup>

Today the Soviets appear to be moving ahead of the US and may have a distinct advantage in terms of offensive weapons systems when the newer modifications of the SS-18 and SS-19 missile systems are fully deployed. The Soviets already possess an advantage in defensive missile systems. This advantage in both areas creates a real problem for the US and has fostered

much debate in the US on the subjects of parity or superiority. These advantages coupled with the high cost of strategic weapons systems have placed the US Government in the position of either buying expensive weapons systems (increased defense spending) or utilizing the funds from non-military budget areas to purchase these systems.

The current debate over national defense policy and defense programs ultimately involves the survivability of forces. Large expenditures on systems that will not survive does not seem likely to gain government approval. The crux of the problem comes down to the selection of systems that are required to maintain our nuclear sufficiency. This is a decision the national leadership will have to make or risk our increasing susceptibility to Soviet coercion at all levels of conflict.

## FOOTNOTES

### Chapter I

1. Air Force Manual 1-1, United States Air Force Basic Doctrine (Washington: Department of the Air Force, 14 February 1979), p. 1-1.
2. Ibid., p. 1-7.
3. Ibid., p. 1-7.
4. Ibid., p. 1-8.
5. U.S. Congress, Subcommittee of the Committee on Appropriations, Statement of General Bruce K. Holloway, 92nd Congress, 23 March 1971, pp. 244-252.
6. LT. General Daniel O. Graham, "The Decline of U.S. Strategic Thought," Air Force Magazine, August 1977, p. 27.
7. Jerome H. Kahan, Security in the Nuclear Age (Washington: The Brookings Institute, 1975), p. 33.
8. Robert Sherman, "A Manual of Missile Capability," Air Force Magazine, February 1977, p. 35.
9. Ibid., p. 35.
10. Kahan, pp. 94-95.
11. Roger D. Speed, Strategic Deterrence in the 1980's, (Stanford: Hoover Institution Press, 1979), p. 13.
12. Bernard Weinraub, "Pentagon Seeking Shift in Nuclear Deterrent Policy," The New York Times, 5 January 1979, p. A-5.



## CHAPTER II

### CAPABILITIES AND MISSIONS OF U.S. GENERAL PURPOSE FORCES

The missions and capabilities of the U.S. general purpose forces fall into three primary areas--strategic, theater and strategic airlift/sealift. With the decreased defense spending (real dollars) of the 1970's and the overall lack of concern by Americans for the military services in general, it is essential that the capabilities and missions of these forces be maintained and improved to insure that they can perform their assigned missions efficiently and effectively.

#### Strategic Forces

The U.S. strategy in a full scale conflict is based on the utilization of the Triad of strategic forces. The Triad as mentioned in Chapter I encompasses manned bombers, ICBM's and SLBM's. The complementary characteristics of these systems are designed to provide coverage of critical targets so that no technological breakthrough by an opponent could hinder the accomplishment of strategic objectives. The Triad is characterized by flexibility and the ability to respond quickly in any situation. Some of the characteristics of the Triad that are most commonly mentioned are:<sup>1</sup>

- (1) Survivability--the ability to avoid enemy destruction.
- (2) Penetration ability--the ability to insure that access to the target is available.
- (3) Striking power--the ability to insure destruction of the target.

- (4) Reconnaissance capability--the ability to insure that unforeseen and missed targets are detected.
- (5) Restrike capability--the ability to hit targets or threat them and force a conclusion to hostilities.
- (6) Flexibility--the ability to provide employment options and tailored responses to meet various situations.
- (7) Reliability--the ability to insure the highest degree of confidence from the launch to detonation of the weapon on target.
- (8) Command control--the ability to provide effective precise force management under all possible levels of conflict.

The Triad meets the above mentioned criteria and presents a very real targeting problem for the Soviet Union. It forces them to defend against varied offensive systems so that they are forced to expend valuable resources on systems to counter each leg of the Triad. Without the Triad these resources no doubt would have been expended on further development of Soviet offensive systems.

There is a growing concern over the increased Soviet ability to defend against our manned bombers and more recently our ICBMS. This leaves only the SLBM leg of the Triad as survivable. Should the Soviet Union develop a new anti-submarine defensive system to pinpoint our subs and destroy them then the Triad would be negated. It is imperative that the strategic Triad, upon which we have relied since the early 1960's, be updated and modernized to counter the real Soviet growth in both offensive and defensive systems.

### Manned Bombers

The air-breathing leg of the Triad consists of 315 B-52 D/G/H models in 20 Squadrons and 60 FB-111's in 4 squadrons. We also have an additional 192 B-52 D/F/G/H models either in storage or being utilized for training.<sup>2</sup>

This option provides the most flexibility of the Triad forces. Bombers contribute to deterrence by their versatile capability to carry out a vast number of missions from nuclear and conventional bombing to ocean surveillance and anti-submarine warfare. Currently 30% of our bomber force is on day to day alert.<sup>3</sup> Fully generated this force will carry approximately 50% of our total megatonnage in any nuclear conflict.<sup>4</sup> This force can also be utilized for an awesome show of force in support of our national policy. A recent example of this being the use of B-52H's in a surveillance role over Soviet vessels in the Indian Ocean.<sup>5</sup> Manned bombers can be used for any type of conflict from conventional to nuclear war and any of the areas of intensity along the spectrum of conflict.

The greatest advantage of the bomber is the ability to launch on warning of attack, but not be executed. It can also be launched and recalled if necessary. This command and control provides our NCA with additional time to evaluate a situation prior to making the necessary decision on forces or level of employment required. Once the bomber has been executed, it has the capability to hunt out and destroy targets, provide reconnaissance, damage assessment and invaluable reporting. These co-lateral functions are very important since the bombers will be our primary means of receiving intelligence reports on how our weapons laydown in support of the Single Integrated

Operations Plan (SIOP) is going. We have to assume that the Soviets will neutralize the National Military Command Center (NMCC) and the Alternate National Military Command Center (ANMCC). The destruction of these targets and the associated communications switches will seriously degrade the Joint Chiefs of Staff automated reporting system leaving crew reports as a primary means of determining post attack damage assessment. Soviet research and testing in the areas of anti-satellite and high altitude interceptors would point to a Soviet attempt to degrade our communications and national intelligence collection capabilities. This will leave flight crews on bombers and reconnaissance aircraft as the generators of reports to provide the NCA with the ability to determine how the war is progressing. Even this capability may be severely degraded due to atmospheric problems associated with the detonation of numerous nuclear devices in the atmosphere.

Bombers also have disadvantages. They are not hardened or dispersed. If we fail to receive proper strategic warning of an attack a large percent of the bomber force will be destroyed on the ground. The question also arises as to their penetration ability. The FB-111 has a small radar cross section which would enhance penetration ability while the B-52 has a high radar cross section. This coupled with the lack of supersonic capability would have to be considered a negative factor on any B-52 attack upon the Soviet Union. The age of this system with some nearing 25 years in the inventory would also have to be considered a disadvantage. B-52's also require long and wide runways and bases with vast support facilities to

carry out their operations. They are also slow in responding to any crisis-- since a missile can travel 6000 miles in less than an hour while a bomber may take 8-12 hours to reach the target. If the target is time sensitive then the bomber is at a disadvantage.

Overall the bomber provides the flexibility to be recovered, rearmed and utilized for subsequent restrikes. It still has an important role in the Triad due to its sovereign basing, flexibility, controllability, reconnaissance capability, striking power and reliability.

TABLE 1  
U.S. Strategic Bomber Forces

SYSTEM	NUMBER	MAX. RANGE MI.	BOMB LOAD LBS	<u>Air to Surface Missiles</u>		
				TYPE	YIELD	RANGE
B-52 (D/G/H)	315	10,000-12,500	60-70,000	SRAM	200KT	100NM
FB-111	60	6,000	31,500	SRAM	200KT	100NM

SOURCES: Dr. Harold Brown, Department of Defense Annual Report FY 1980, 25 January 1979, p. 66; "The Military Balance 1979/80," The Air Force Magazine, December 1979, p. 131.

Land Based Missiles

The U.S. ICBM force consists of 1000 Minuteman missiles (450 MMII, 550 MMIII) in 20 squadrons and 54 Titan II missiles in 6 squadrons.<sup>6</sup> These missiles provide the quick response and heavy throw weights necessary to strike hardened targets within the Soviet Union, Peoples Republic of China

and Warsaw Pact countries. ICBM's will carry 39% of our strategic megatonnage in a nuclear war.<sup>7</sup> They are on constant alert and can be launched within minutes upon receipt of a valid execution message from the NCA. Land based missiles are unsurpassed in terms of readiness and reaction capability. These missiles can be rapidly retargeted and can be launched on command through ground based launch crews or from the air through the Airborne Launch Control System (ALCS) aboard EC-135 and E-4B aircraft. The post launch survivability and penetration ability of missile reentry vehicles (RVS) with accuracy is very good.

One of the primary disadvantages of the ICBM is that once launched it cannot be recalled. The ICBM has also become vulnerable to the recent Soviet ICBM improvements in their fourth generation missiles. The SS 18 MOD IV with its full accompaniment of 8-14 RV'S has the accuracy, throw weight and number of RV'S to provide pin point attacks upon our ICBM'S should the Soviets utilize a first strike.<sup>8</sup> This places us in the position of possibly having to launch our missile forces on warning of attack to insure force survival. This is a situation in which no President would like to be placed since there is a definite lack of flexibility with this option. The Soviets by utilizing their SS-18 resources could place 2 RV'S on each of our 1054 ICBM launch facilities and still retain the bulk of their strategic forces for other targets in the U.S. This potential situation is ominous since the Soviets feel they can fight a nuclear war and win it.<sup>9</sup>

In response, to the impending ICBM vulnerability problem, the U.S. has pushed ahead with the plan to build the MX missile. Initial plans call for

200 missiles in 4600 shelters. This plan calls for the use of Multiple Aim Points (MAP) to help confuse Soviet targeting personnel and to insure survivability of our ICBM'S. The final decision on whether the MX will be deployed is questionable due to its high cost (\$30-33 Billion) and environmental problems in the probable deployment area. Even if it is fully developed it will not be deployed until 1986 (fully deployed 1989). A possible alternative would be the use of Minuteman in a MAP configuration. This would allow a survivable ICBM system that could be deployed prior to 1986.<sup>10</sup>

Our current ICBM'S may not be survivable by 1983. There is also a question of their penetration ability vs. Soviet improved Anti-Ballistic Missiles (ABM'S), their inability to be recalled and their lack of ability to provide reconnaissance of targets. These problems have to be weighed against these advantages:<sup>11</sup> sovereign basing, rapid retargeting, quick and responsive striking power against time urgent, hard targets, reliability and extensive command and control system.

The characteristics of our current and projected ICBM systems are shown in Table #2.

TABLE 2

Characteristics of U.S. ICBMS

1st DEPLOYED	SYSTEM	NO. LAUNCHERS	MIRV (EA)	MIRV (TOTAL)	TOTAL WH	YIELD	CEP (NM)	RANGE (NM)
1962	TITAN II	54	0	0	54	5-10 MT	0.5	6300
1966	MINUTEMAN II	450	0	0	450	1 MT	0.3	7000+
1970	MINUTEMAN III	550	3	1650	1650	170 KT	0.2	7000+
1986	MX	200	8-10	1600- 2000	1600- 2000	-----	0.1	-----

SOURCES: "The Military Balance, 1979/80," Air Force Magazine, Dec, 1979, p. 130.

"Missile Specifications," Aviation Week and Space Technology, 3 March 1980, p. 104.

Thomas A. Brown, "Missile Accuracy and Strategic Lethality," Survival (Institute for Strategic Studies/March-April 1976), p. 54.

Sea Launched Ballistic Missiles

The third leg of the Triad consists of the Polaris, Poseidon and the new Trident I Fleet Ballistic Missile (FBM) weapons systems. Our active force consists of 41 SSBN'S (See Table 3) with 656 SLBMS. They deliver 11% of the total deliverable U.S. megatonnage.<sup>12</sup> These systems possess rapid retargeting capabilities and once launched have a near perfect survivability rate. They are mobile with an almost unlimited cruising range and are capable of extended submerged operations in international waters where they remain hidden by utilizing the ocean terrain. Submarines have the lowest



detection probability, are the least vulnerable and the most survivable of our strategic systems. The Soviets currently have no method for locating these systems.

SLBMS are limited by (1) Limited Range Missiles (Polaris A-3, Poseidon C-3), (2) small warheads good for soft targets only, (3) accuracy of missiles are not as good as land based ICBMS, (4) Command, Control and Communications problems, and (5) never more than 55% on alert (patrol) at a given time.<sup>13</sup> These factors have to be matched with the advantages of being immune to detection by any current state of the art systems, mobility, the ability to rapidly launch a large number of missiles and the ability to be kept in reserve for use at any time frame in the war (from hours to days later). The new Trident I with C-4 missile (1980-81) will be quieter, faster, have longer missile ranges, capable of retrofit to Trident II missiles and will replace the Poseidon in the 1988-1992 time frame.

Overall the SLBMS have the advantages of assured penetration, enduring survivability and the ability to survive without tactical warning. They are questionable in the areas of communications, control, flexibility, responsiveness and their lack of sovereign basing.

Improvements in Extra Low Frequency Communications (ELF) ship to shore system in the 1980's will allow for quieter operations and provide a stronger sea-based deterrent. In FY 1981 four Poseidon C-3 boats will be fitted out with the Trident C-4 missile. This will increase the SLBM range by 1500 NM. These improvements will enhance the SLBMS as the most survivable leg of the Triad.

TABLE 3

U.S. SSBN Systems

NUMBER	SSBN SYSTEM	RANGE (NM)	SLBM	LAUNCHERS	TOTAL	MIRV	TOTAL WH	YIELD	CEP	IOC
31	LAFAYETTE CLASS	2500	POSEIDON C-3	16	496	10	4960	40KT	0.25	1971
5	WASHINGTON CLASS	2500	POLARIS A-3	16	80	0	80	200KT	0.50	1964
5	ETHAN ALLAN CLASS	2500	POLARIS A-3	16	80	0	80	200KT	0.50	1964
7	OHIO CLASS (Future)	4000	TRIDENT C-4	24	--	10-24	--	100KT	--	1980-1981

SOURCES: "U.S. Missile Specifications," Aviation Week and Space Technology, 3 March 80, p. 104.

Roger D. Segal, Strategic Deterrence in the 1980's (Hodura Institute Press, 1979), p. 132.

Theater Forces

The U.S. theater forces consist of Army, Navy, and Air Force combined in a team format. Under this format all forces are interdependent upon each other. This has been necessary due to declining defense budgets and our reduced force postures overseas.

Army

The primary mission of the Army is to win the land battle. Army Field Manual 100-5 states: . . . to fight and win in battles, large or small, against--force, whenever we may be sent to war."<sup>14</sup> This objective encompasses some important characteristics:

- (1) Be prepared to fight outnumbered and win.
- (2) Have good weapons and the people trained to use them.
- (3) Train to standards that match the reality of the modern battlefield.
- (4) Fight as an effective combat arms team.
- (5) Units must be ready to fight and feel confident in their ability to win.

The current U.S. Army consists of 24 Divisions (16 Active/8 National Guard).<sup>15</sup> The active strength of the army as of 31 December 1979 was 758,356.<sup>16</sup> This is down from 1,570,000 in 1968. This force is required to counter Soviet and Warsaw Pact forces in Europe as part of NATO. As the only military force capable of holding or taking territory, the army forces are the mainstay of our conventional deterrent and war fighting capability.

Any conflict between NATO and the Warsaw Pact would place a great deal of demand upon our forces and would seriously hinder our capabilities to deal with contingencies in other parts of the world. Secretary of Defense Harold Brown has identified the following key areas where improvement in ground operations is necessary:<sup>17</sup>

- (1) Initial combat capability vs Warsaw Pact threat.
- (2) Ability to respond rapidly to a Warsaw Pact confrontation.
- (3) Improved Air Defense capabilities.
- (4) Ability to sustain combat operations.
- (5) Improved Electronic Warfare and C<sup>3</sup>I Capabilities.
- (6) Capability to withstand a chemical biological warfare attack and retaliate with chemical weapons.

The Army must be able to prevent major conflicts that could lead to nuclear war. Should they fail, they must be able to fight at all levels of intensity.

### Navy

The U.S. Navy has four main roles in supporting national military strategy. These roles are:<sup>18</sup>

(1) To contribute to strategic deterrence. This is accomplished by the use of the Polaris, Poseidon and Trident I Fleet Ballistic Missile Systems. They provide the firepower, mobility and targeting problems necessary to provide a strong deterrent to attack upon the U.S.

(2) To control and defend vital sea lines of communications (SLOCS). The Navy forces must be able to establish and maintain local superiority in the area of naval operations. This is accomplished by the use of attack submarines (we have 80), patrol aircraft (P-3, S-3, E-2, etc.), carriers (we have 13) and other surface vessels.

(3) To project U.S. power ashore. This is accomplished by carrier based aircraft (F-14's, A-6's, AV-8A's, F-4's, etc.) and amphibious ships with the ability to land marine units ashore.

(4) To provide an overseas presence. This ability to "show the flag" throughout the world is an important task and probably the most difficult to accomplish at this time. We have difficulty displaying superiority at sea due to our declining number of vessels. In 1969 we had 976 vessels in the operating force. At the end of FY 1979 we had 479 active and reserve vessels. This creates a real problem in trying to control the Mediterranean

Sea and the Indian Ocean. We are faced with the reality that if we fight in Europe we cannot support a full scale war in the Pacific. At any given time only 30% of our active operating force is deployed overseas in a full operational status. In time of crisis or tension this percent can be increased but would adversely affect the naval forces in other parts of the world. The chart below shows our totals of vessels in the active fleet (end FY 1979).

TABLE 4

Active Naval Vessels

Aircraft Carriers	13	Amphibious Warship	65
Cruisers	28	Mine Ships	3
Destroyers	72	Logistic Ships	56
Frigates	65	Fleet Support	18
Submarines (Attack)	80		
		TOTAL:	<u>400</u>

Source: Dr. Harold Brown, Department of Defense Annual Report FY 1980, 25 January 1979, p. 160.

"The Military Balance, 1979/80," Air Force Magazine, Dec, 1979, p. 66.

Air Force

The missions of the Air Force include controlling friendly air space and supporting the land and sea power in execution of their missions. The ability of tactical air forces to counter attacks of varying degree in widely dispersed locations provide a major element of flexibility in our general purpose force capabilities. Current Air Force missions in support of general purpose forces are:<sup>19</sup>

1. Counter air--These operations are conducted with the ultimate goal of gaining or maintaining air supremacy. This is accomplished by destroying or neutralizing the enemy offensive and defensive air capability. It includes both offensive and defensive counter air operations.

2. Air interdiction--These operations restrict the combat capability of the enemy by delaying, disrupting or destroying their lines of communications, their forces, and their resources. It is used to disrupt enemy plans and time schedules.

3. Close Air Support (CAS)--These operations involve air attacks against hostile targets that are in close proximity to friendly surface forces. These operations provide responsive, flexible, and sustained firepower support to surface forces. CAS may be used to support offensive or defensive operations and may be used during counter-attack or counter-offensive operations by friendly forces.

4. Airlift--Operations to provide rapid, long-range mobility. It can support joint and combined operations, as well as military assistance and civilian relief programs. It allows us to deploy our forces to any part of the world.

5. Reconnaissance--Tactical surveillance and reconnaissance operations support the theater and tactical field commander. The information received may fill both national and strategic requirements. The tactical systems provide intelligence on disposition, composition and movement of enemy forces.

6. Special Operations--Provide support to unified commanders at the direction of NCA. These operations are carried out by specially trained and equipped forces from each service as a team. These operations are undertaken in enemy controlled or sensitive territory and cover a wide spectrum of actions at every level of conflict.

The air force concept is to halt a Warsaw Pact attack or reduce its momentum to allow time for deployment of additional forces (aircraft/personnel) from the U.S. The USAF fighter attack units are organized in wings of 72 aircraft. Attack squadrons are generally equipped with 18-24 aircraft while support aircraft are normally formed into squadrons of 12-24 aircraft. In time of conflict, the Air Force would receive additional manpower and weaponry from bases in the U.S. These forces would come from Tactical Air Command (TAC) which has 43 fighter squadrons and 5 TAC reconnaissance squadrons in CONUS.

In response to any conflict in Europe, the air forces there include:

TABLE 5

U.S. Tactical Air Forces in Europe

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1. Personnel: 74,300

2. Aircraft:

A-10 4SQ - 108 Aircraft  
F-4 11SQ - 204 Aircraft  
F-15 4SQ - 72 Aircraft  
OV-10 2SQ - 24 Aircraft

F-111 7SQ - 156 Aircraft  
RF4C 3SQ - 60 Aircraft  
F5E 1SQ - 20 Aircraft  
C-130 2SQ - 32 Aircraft

Sources: Dr. Harold Brown, Department of Defense Annual Report FY 1980, 25 January 1979, p. 179. "Military Balance FY 1979/80," Air Force Magazine, December 1979, p. 67.

The present inventory of aircraft plus the addition of the F-16 in the future will provide the basis of USAF general purpose forces in Europe. The priority of defense will be NATO and their needs to be an overall improvement in these tactical forces that support NATO. Modernization and improvement programs are vital if we are to maintain a conventional force that will enhance our ability to deal with contingencies on a world-wide basis.

#### Strategic Lift Forces

Since our forces deployed in overseas areas are small and highly dependent upon U.S. based reserves (manpower, logistic support, etc.). Strategic lift forces are of vital importance. By maintaining an effective lift capability, the U.S. is able to display the credible force posture required to further our deterrent policy throughout the world.

#### Airlift

The Military Airlift Command (MAC) is the specified command responsive to the Joint Chiefs of Staff (JCS) for airlift matters and is assigned the responsibility to perform strategic airlift. MAC's primary mission is to provide airlift necessary for the wartime deployment of fighting forces throughout the world.

Our strategic airlift forces currently include 70 C-5A's, 234 C-141's and can be supplemented by 218 C-130 tactical airlift aircraft. MAC's regular forces can be augmented by Air Force Reserve and Air National Guard



forces. These units are comprised of some units that have their own equipment (C-130, C-123, C-7) and associated units that fly, support and maintain the same equipment as the active force.

The Civil Reserve Air Fleet (CRAF) is utilized to increase the U.S. airlift fleet capabilities in time of emergency or during a national crisis. CRAF provides an available source of aircraft from the civilian U.S. air transportation industry, to augment military airlift forces. These aircraft as allotted to the CRAF to fulfill specific airlift requirements by the DOD. These aircraft will be operated; utilizing the civilian air crews and ground support but be under MAC's direction. The CRAF fleet currently numbers 462 aircraft of passenger and cargo type. The number of aircraft available would depend upon the type and scope of operations. There are currently three stages of CRAF. These stages are:<sup>20</sup>

Stage I--Aircraft committed by contract to a call up by CINC-MAC. These aircraft are in addition to those civil aircraft providing day-to-day MAC airlift services. Stage I is sized to provide maximum augmentation to meet DOD needs, while permitting the civil carriers to continue peacetime operations. It consists of 49 long-range international cargo aircraft and 8 long-range international passenger aircraft.

Stage II--Is designed to provide augmentation during an emergency not requiring national mobilization. This stage is activated by the Secretary of Defense after consultation with the Secretary of Transportation. It consists of 36 domestic aircraft, 18 long-range international passenger aircraft and 68 long-range international cargo aircraft.

Stage III--Is activated after the President or Congress declares a national emergency. The Secretary of Defense (after consultation with the Secretary of Transportation) can issue the Stage III order under delegated authority. This stage calls up all the long-range international cargo aircraft owned by U.S. carriers (124), 250 long-range international passenger aircraft, 39 domestic aircraft, 8 Alaskan aircraft and 41 short-range aircraft. As of January 1980, 462 aircraft were available for CRAF Stage III.

TABLE 6  
CRAF Fleet

<u>Segment</u>	<u>Type Aircraft</u>	<u>Stage I</u>	<u>Stage II</u>	<u>Stage III</u>
Domestic	DC-9, C-130, Electras	---	36	39
Alaskan	737, C-46, Electra	---	--	8
Long-Range International (Passenger)	707, 747, L-1011, DC-8, DC-10	8	18	250
Long-Range International (Cargo)	707, 747, DC-8, DC-10	49	68	124
Short-Range	727	---	--	41
TOTAL CRAF		<u>57</u>	<u>122</u>	<u>462</u>

Source: F. Clifton Berry, "The Civil Reserve Air Fleet--National Airlift Asset," Air Force Magazine, February 1980, pp. 56-57.

In a contingency situation we rely upon our airlift to deliver personnel and equipment for the initial rapid response. This is a critical task and our airlift has to meet this challenge whether it be a show of force or a full scale war between NATO and Warsaw Pact forces.

It has been estimated that our existing airlift capability could haul only 1/3 of the cargo needed in the first three weeks of a European War. To meet this shortfall, Deputy Secretary of Defense W. Graham Clayton told the U.S. Senate in November 1979 that four programs were needed to increase our supply of airlift. These programs are:<sup>21</sup>

- (1) Stretching the C-141 (add 10% to our lift capability).
- (2) Initiate reserve associate aircrew program and increased parts stockage for the C-5 (add 10% to lift capability).
- (3) Possible use of commercial aircraft of our NATO allies (add 10% to our lift capability).
- (4) CRAF Enhancement Program (where government defrays some of the cost of new civilian aircraft so they are convertible from passenger to cargo) (add 15% to our lift capability).

With these new programs and the increase in prepositioning critical supplies and equipment in Europe (POMCUS) the capabilities of our lift forces will be improved. The problem still being that we can not carry the amounts required or large tonnage necessary to carry out overseas operations. For this reason we rely heavily on sealift.

#### Sealift

The Military Sealift Command (MSC) of the Navy is responsible for most of our sealift mobility. MSC has the responsibility for accepting and fulfilling any sealift requirements of the DOD. They provide the organization, personnel and resources to insure rapid and responsive sealift capability.

Although we require sealift forces to supply the great majority of our cargo to overseas areas, these forces have been on a steady decline since the end of the Vietnam War. Our present sealift structure is displayed in Table 7.

TABLE 7  
Sealift Forces

Military Sealift Command		U.S. Flag Merchant Fleet	
Government Owned	6	Available Less-Full Mobilization	118
Leased	<u>21</u>	Other	<u>155</u>
TOTAL	<u>27</u>	TOTAL	<u>273</u>
National Defense Reserve Fleet (Including 14 Ready Reserve)		Non-U.S. NATO Vessels	TOTAL
TOTAL	152		192

Source: Dr. Harold Brown, Department of Defense Annual Report FY 1980, 25 January 1979, p. 196.

Our current sealift capability, given the overall Soviet Naval presence in the Atlantic, cannot support a war in Europe. Without improvements in quantity and quality of our sealift forces any combat operations in Europe will have to be fought basically with on-hand equipment or supplies prepositioned to support reinforcing personnel from CONUS (POMCUS).

FOOTNOTES  
CHAPTER II

1. Reference Book 110-1, U.S. Air Force Basic Data (Fort Leavenworth, Kansas: Army Command and General Staff College, July 1978), pp. 2-1-2.
2. Harold Brown, Report of the Secretary of Defense to Congress, Department of Defense Annual Report FY 1980 (Washington: U.S. Government Printing Office, 25 January 1979, p. 66.
3. Ibid., p. 66.
4. Clarence A. Robinson, Jr., "Survivability, Accuracy, Yield Pressed for Minuteman," Aviation Week and Space Technology, 22 October 1979, p. 45.
5. "B-52's Flying Indian Ocean Surveillance," Aviation Week and Space Technology, 28 January 1980, p. 19.
6. "The Military Balance 1979/80," Air Force Magazine, December 1979, p. 66.
7. Robinson, p. 45.
8. Clarence A. Robinson, Jr., "U.S. to TEST ABM System with MX," Aviation Week and Space Technology, March 1979, pp. 20-23.
9. Joseph D. Douglas, Jr. and Amoretta M. Hoerber, Soviet Strategy For Nuclear War. (Stanford: Hoover Institute, 1979), Chapter II.
10. Roger D. Speed, Strategic Deterrence in the 1980's, (Stanford: Hoover Institution Press, 1979), pp. 80-83.
11. Brown, p. 118.
12. Robinson, 22 October 1979, p. 45.
13. Speed, p. 58.
14. U.S. Army Field Manual 100-5, Army Operations (Washington: Department of the Army, 1 July 1976), pp. 1-1 to 1-5.
15. Brown, p. 142.
16. Air Force Times, 11 February 1980, p. 3.
17. Brown, p. 142.

18. Admiral J. L. Holloway, U.S. Naval Institute Proceedings, June 1975, pp. 3-5.

19. AF Manual 1-1, pp. 2-11 to 2-18.

20. F. Clifton Berry, Jr., "The Civil Reserve Air Fleet--National Airlift Asset," Air Force Magazine, February 1980, p. 57.

21. Ibid., p. 56.

## CHAPTER III

### U.S. and NATO Strategy and Forces

The primary objective of NATO forces is to deter armed attacks upon its allies. If this deterrence fails, the objective is to deny the enemy's military objectives and terminate the conflict quickly and at the lowest level of intensity.

To achieve the objective of deterrence, NATO has adopted a flexible response strategy. This strategy provides many alternatives ranging from conventional warfare to the use of nuclear weapons. A potential enemy is faced with uncertainty should he contemplate attacking a NATO country.

#### NATO Forces

NATO's deterrence and defense strategy is based upon a coordinated "NATO Triad" of conventional forces, theater nuclear forces of the U.S. and other nations, and the U.S. strategic nuclear forces. This arrangement of forces contributes to escalation control in warfighting, while demonstrating resolve to defend against aggression in Western Europe with the full force of NATO's combined military power.

With this Triad, NATO not only provides deterrence to aggression, but it also provides an ability to prevent escalation at lower levels of intensity. A strong NATO provides time for political alternatives to be examined and for solutions to be reached; preventing higher escalation of a conflict.

U.S. Forces

Army--U.S. Army forces in Europe total approximately 202,400 combat and combat support personnel. The U.S. Army in Europe (USAREUR) is the largest organization with approximately 193,000 troops. It's combat forces consist of 2 corps that include 2 armored divisions, 2 mechanized infantry divisions, 1 infantry brigade and 2 armored cavalry regiments. Also assigned to USCINCEUR are 2 mechanized brigades, 1 armored brigade and other smaller units based in the United States.<sup>1</sup>

TABLE 8

U.S. NATO Reinforcing Formations (Division Equivalents)

	ARMD	MECH	MARINES	OTHER	ARMD	MECH	MARINES	OTHER
US	2 1/3	3 1/3	2 2/3	5 1/3	3	3	1 1/3	9 1/3
	ACTIVE TOTAL				RESERVE TOTAL			
	<u>13 2/3</u>				<u>16 2/3</u>			

Source: "The Military Balance 1979/80," Air Force Magazine, December 1979, p 21.

In a conflict with the Soviet Union and Warsaw Pact forces the U.S. utilizing its total ground resources, could field 30 1/3 divisions. The USSR alone could field 94 divisions. When considering allies on both sides the west is still outnumbered in total divisions by a margin of at least 2 to 1.<sup>2</sup> It must be remembered that the U.S. will have to face great difficulties in trying to reinforce Europe. Any massive reinforcement by sea or air after an outbreak of hostilities is uncertain.



Navy--The main combat force of the U.S. Navy in Europe (USNAVEUR) is the U.S. 6th fleet operating in the Mediterranean Sea. This force consists of approximately 30 vessels (2 carriers and 16 surface combatants), 25,000 men and 200+ aircraft. The fleet is composed of an attack carrier task force, an amphibious force, and an anti-submarine warfare force.

Air Force--The U.S. Air Force in Europe (USAFE) consists of 34 tactical squadrons plus 14 additional squadrons dual based in the CONUS. Personnel number approximately 74,300. USAFE forces include fighter/interceptors, tactical fighters, tactical reconnaissance aircraft, special operations aircraft and tactical airlift forces.

#### Command and Control

The combined total of U.S. forces in Europe is in excess of 300,000. This total is impressive but they actually form a small percent of NATO's strength. The total strength of NATO forces is 64 divisions and is spread over such a large area, that command and control is vitally important.

All U.S. forces in Europe and the Mediterranean Sea, as well as dual based Air Force units in the U.S. are assigned to USEUCOM. Except for some units placed under command of NATO's Supreme Allied Commander (ACE); these units are under the command of USCINCEUR.

U.S. forces become part of Allied Command Europe (ACE) if war should develop between NATO and the Warsaw Pact. At this time many U.S. commanders would be assigned key functions in ACE. ACE is responsible for the defense of all NATO territory in Europe except Great Britain, France, Iceland, and Portugal. The European Command has some 7000 tactical nuclear warheads in

its arsenal.<sup>3</sup> The number of delivery vehicles (aircraft, missiles, howitzers) is over 3,000 spread among all countries excluding Luxembourg. These nuclear weapons, however, are maintained in U.S. custody, with the exception of certain British weapons (there are French nuclear weapons in France). There are a large number of low yield weapons, but the average yield is about 100 KT. These weapons are under the control of the President of the U.S.

To explain how U.S. forces are organized with NATO forces during the time of war, it is necessary to divide NATO into three geographic areas. North, Central, and Southern. These three areas are under control of ACE.

Allied Forces Northern Europe (AFNORTH) has its headquarters at Kolsaas, Norway and is responsible for the defense of Denmark, Norway and Schlesweig-Holstein. The combined Army, Navy, and Air Forces are under the command of the Commander-in-Chief Allied Forces Northern Europe (CINCNORTH). This position has always been filled by a British General and he is responsible to SACEUR. CINCNORTH's forces include the armed forces of Norway, Denmark and one German division. Aside from NATO exercises and some small unit operations, U.S. forces do not normally operate in this area.

Allied Forces Central Europe (AFCENT) has its headquarters at Brunsum, Netherlands. These forces are under command of CINCCENT, a German General. The forces in Central Europe Command include 26 divisions from Belgium, Britain, Canada, West Germany, Netherlands, and the U.S. AFCENT has approximately 1400 tactical aircraft. AFCENT is divided into two areas: NORTHAG and CENTAG. NORTHAG consists of Belgian, British, Dutch divisions plus 4 German Divisions. It is supported by 2nd ATAF and 1 U.S. brigade.

CENTAG is comprised of U.S. forces, 7 German divisions and a Canadian brigade. 4th ATAF provides air support with American, German and Canadian Air Forces. Its air command is centralized under AAFCE. Although the French do not commit troops to NATO, it is likely that the 36,000 troops (3 Armd Divisions, 1 Lt Arm Regt, 1 Mech Inf Regt) in Germany would be provided to SACEUR.

Allied Forces Southern Europe (AFSOUTH) has its headquarters at Naples. The Commander (CINCSOUTH) is a U.S. Naval Admiral. AFSOUTH's mission is to deter aggression, safeguard the sea lines of communication in the Med, defend the territorial integrity of Greece, Italy, Turkey, and provide air defense for the southern region. Ground forces consist of 43 divisions plus tactical air forces. The land command is split into 2 commands: Italy (LANDSOUTH) and Turkey (LANDSOUTHEAST).

The problems of controlling the diverse NATO forces is indeed a large one. Some of the other areas in which NATO has developed long-range programs for improvement in the 1980's are:<sup>4</sup>

- (1) Readiness
- (2) Reinforcement
- (3) Reserve Mobilization
- (4) Maritime Posture
- (5) Air Defense
- (6) Command, Control, and Communications
- (7) Electronic Warfare
- (8) Rationalization/Standardization

(9) Logistics

(10) Theater Nuclear Force Modernization

General Alexander Haig made the following assessment:

"The NATO environment of flexible response and strategic nuclear equivalence provides an essential framework for NATO deterrence. It also requires: (1) Modernization of western theater nuclear forces in numbers and with the delivery systems and basing modes to maintain credible deterrence at any conflict level. (2) Recognition that modernization is a prerequisite for sound arms control measures and the only way to restrain the continued build up of Soviet forces."<sup>5</sup>

Overall NATO still has problems of: (1) Peacetime Malposition of Forces--of the 67 brigades assigned to NATO defense of the Allied Forces Central Europe 36 of these brigades have to move from 101 to 400+ kilometers to reach their given defense positions against a Warsaw Pact attack. (2) Extreme Air Limitations--Europe provides a real training problem in terms of limited flight hours, limited access to live fire on ranges (weather), and overall crowded airspace conditions that are prevalent in Europe. (3) Numerical Intensity--this can be seen in any comparison of NATO forces vs Warsaw Pact forces in number of troops and the number of weapon systems (i.e., tanks, artillery pieces, etc.). (4) Communications Shortfalls--NATO is faced with inadequate communication systems to maintain command and control in a combat environment. Our current communications systems are old and vulnerable to enemy jamming which would render them useless in a

conflict. (5) Logistics Shortcomings--an example being that we only have 3 days supplies of TOW antitank weapons in Europe. The NATO logistic coordination center is trying to alleviate these problems especially in AMMO and POL. (6) Lack of Standardization--NATO is such a diverse group that their equipment shows little standardization and little interoperability of parts. Today NATO forces operate seven different types of battle tanks, eight different APC's, 31 different antitank weapons, 23 types of combat aircraft, and over 100 types of tactical missile systems.<sup>6</sup>

The only clear advantage for NATO forces is that they plan to fight a defensive war on their own ground. NATO faces a stiff challenge in the 1980's if it is to retain a credible deterrence posture.

FOOTNOTES

CHAPTER III

1. "The Military Balance 1979/80," Air Force Magazine, December 1979, p. 66.
2. Ibid., p. 121.
3. Roger D. Speed, Strategic Deterrence in the 1980's, (Stanford: Hoover Institution Press, 1979), p. 107.
4. Clarence A. Robinson, Jr., "General Haig Warns of Tenuous Strategic Position," Aviation Week and Space Technology, 2 July 1979, p. 25.
5. Ibid., p. 25.
6. John J. Ford, "NATO Standardization and Interoperability--A Time for Involvement," National Defense, January-February 1979, pp. 44-46.

## CHAPTER IV

### CONCLUSIONS

The Soviet Union has proclaimed that they would never start a war, but throughout their doctrine they emphasize the importance and effectiveness of a first strike. They plan on using a preemptive attack if it looks as if war with the U.S. is imminent. This fact alone should be enough to inform the leadership of our country as to the overall Soviet goals. When this is coupled with the fact that the Soviets have:

(1) The most extensive air defense system in the world and continue to improve it.

(2) The only Anti-Ballistic Missile System (ABM) to be deployed in the world and are continuing an extensive ABM research and development program.

(3) The best civil defense program in the world and the capability to protect a large percentage of their populace from attack.

(4) An increasingly expanding Navy that is working hard on ASW projects to counter our SLBMS.

These factors point to the fact that the Soviets advocate deterrence on a war fighting capability and are taking the necessary actions to lend credibility to their deterrent forces.

NATO is currently based on a flexible response strategy. It must be capable of fighting either a conventional or nuclear war. It is questionable whether it can do either. Both the conventional capability and the

theater nuclear capability of NATO forces to fight must be improved. NATO has some major disadvantages: (1) Command and control problems especially those problems with communications in a combat environment, (2) Readiness of forces, (3) Logistical problems, (4) Standardization problems, (5) Malpositioning of units in peacetime with most units over 100 kilometers from their battle positions, (6) Numerical inferiority in troops and equipment (i.e., tanks, artillery, etc.). Unless there is improvement in these areas and others, NATO will not be able to provide the conventional deterrent required to prevent war in Europe in the 1980's. We are left with our theater nuclear deterrent. If we face Soviet nuclear superiority how credible will our deterrent be?

A comparison of the strategic forces of the U.S. and the Soviet Union points to the obvious fact that a serious imbalance in deterrent forces exists today. This imbalance will affect the credibility of our deterrent strategy in the 1980's.

Secretary of Defense Harold Brown has stated, . . . "What counts in deterrence . . . is not only what we may believe but what the Soviet leaders may believe."<sup>1</sup> Given the importance Soviet leadership places on damage limitation as an element of their deterrent posture, the erosion of our strategic forces coupled with the lack of a concentrated program to limit damage to our country should the USSR attack, can only serve to encourage the leadership of the Soviets to question our resolve and encourage them to partake in further adventures throughout the world. If the U.S. does not undertake to improve our deterrent posture the lack of stability will enhance the opportunity for a future crisis situation.



The primary area of destabilization has been in the area of ICBMS. We now find ourselves in a situation where we either immediately upgrade our missiles (MX or improved Minuteman) or become increasingly vulnerable to a Soviet first strike against our ICBMS. This places the Soviets in a position of power where they can ultimately use nuclear blackmail to gain their way in a crisis situation. This is a matter that requires immediate expenditure of money, effort and personnel to maintain a credible deterrent if we are to survive in the 1980's.

Colonel Robert K. Peel in his analysis "Civil Defense: The U.S. vs USSR," made the following observation about our current situation:

"The Russian national sport is chess. To win at chess, it is not necessary to wipe the enemy players off the board. All that is necessary is to hold the opponent in check. It is not the number of pieces on the board that is decisive--indeed it is obligatory to begin with parity--it is the tactical arrangement of the pieces on the board that matters. The present arrangement is frightening."<sup>2</sup>

FOOTNOTES

1. Colonel Robert K. Peel, "Civil Defense: The United States vs the USSR," Congressional Record, 30 January 1980, p. 682.
2. Ibid., p. 682.

## CHAPTER V

### RECOMMENDATIONS

U.S. deterrent strategy has undergone a profound change in the past few years. Until recently the U.S. enjoyed a nuclear advantage over the Soviets. The strategy of mutual assured destruction/damage limitation was based on the premise that the USSR would never start a nuclear war with the U.S. Although the USSR has reached nuclear parity with the U.S. in strategic offensive systems, they have chosen to continue developing offensive systems and defensive systems in even greater numbers. The evidence is clear that any future U.S. deterrent strategy must be well conceived. It is highly questionable as to how long our flexible response strategy will act as a credible deterrent policy. If we are to maintain a credible deterrent we must start to update our strategic weapons systems (both offense and defense). The need for diverse weapons systems is evident. The MX missile system or the Minuteman system utilizing a Multiple Aim Point (MAP) system must be adopted to provide a survivable ICBM system to lessen the chance of a first strike by the Soviets upon our missile fields.

A critical area in which the U.S. must take action is on the SALT II agreement. The time has come for us to view the SALT treaties with caution since they have served as a means by which the Soviets have been allowed to surpass the U.S. in strategic nuclear power. The Soviets will do what is in their best interest regardless of how many treaties they sign. We should

carefully evaluate the SALT II agreement before ratifying it. We must realize that the Soviets will break the agreement if and when it is expedient to do so. Understanding the Soviet thoughts on these matters, we should do all within our power to build the numbers of systems necessary to defend our country. We can no longer afford the policy of unilateral disarmament (ABM, B-1, Neutron Bomb, etc.). The composition of our strategic forces is declining as well as the confidence other free nations have in us.

#### Triad

The Triad is a sound concept as long as the systems in it are maintained. The flexibility and mobility of the Triad are vital to our deterrent policy. The major problem with the Triad is the age and decline in capabilities of the systems we are using to enforce it. The most survivable leg at this time is the SLBM. The production of the Trident I system will provide an increase in the range of our SLBMs in the 1980's. Our ICBMs are vulnerable to Soviet pinpoint attacks from the large accurate Soviet 4th generation ICBMs. The MX or improved Minuteman system is necessary to enhance ICBM survival. We should also consider a follow-on system to replace the older Titan II's and Minuteman II's. These improvements will provide additional flexibility over other forces. To enhance this flexibility, improvements in command and control, retargeting, range accuracy, yield and even conventional options must be considered. A defensive missile system and a reload capability are also improvements that would aid survivability and flexibility. If we fail to make improvements in our land based ICBMs it will have an adverse affect upon the credibility of our deterrence policy. We cannot

afford to risk Soviet misinterpretation of our failure to modernize should we choose to follow that path.

The bomber leg of the the Triad is currently the weakest leg due to the need for a manned penetrating bomber. The cost of this system will be high (as the B-1 was). We cannot continue to rely on 1950's technology of the B-52's to carry the largest percent of our megatonnage in a nuclear war. A new manned penetrating bomber for the 1980's is a necessity.

#### NATO

The strategy upon which NATO is based is no longer a sound one. We do not have the forces to carry out the strategy. We plan to fight a conventional war, but we can only win by utilizing nuclear weapons.

NATO forces are in a poor position. In key weapons such as tanks, armored personnel carriers, artillery, etc., they are badly outnumbered. NATO forces may have a slight advantage in helicopters and tactical nuclear weapons systems. These nuclear weapons are in critical areas making them vulnerable to Warsaw Pact air strikes so their usage may be seriously degraded.

The extended chain of command in NATO makes it necessary for NATO to update its command control procedures. It is imperative that NATO obtain the AWACS (E-3A) and NIMROD Aircraft and integrate them with the ground-air defense system to expedite warning of air attacks and facilitate control of the European air war.

Another weak link is the strategic lift capability of the U.S. We rely too heavily on this capability to resupply our units in Europe. Only immediate materials or personnel are airlifted. The large majority of outsized supplies must come by sealift. For sealift to be successful we must control

the sea lines of communication and have the forces to meet these requirements. The U.S. does not have the capability to meet these requirements unless our strategic airlift capability is increased, air sealift forces updated and expanded or we rely more on prepositioned war stocks (POMCUS). The later appears to be our present plan since we have supplies and equipment prepositioned for 2 1/3 divisions in Europe. This system is costly and inefficient. These supply areas also provide excellent targets for potential enemy strikes.

At a minimum the following must be accomplished to enhance NATO force survival:

- (1) Improved short-term readiness.
- (2) Enhancement of rapid reenforcement by the U.S. utilizing airlift (CX, C-5, C-141), sealift and POMCUS.
- (3) Increased interoperability of major weapon systems in NATO.
- (4) Improved command, control and communications capability.
- (5) Modernized theater nuclear forces (Pershing II).

To have a credible deterrence in the 1980's will require the United States to improve its strategic forces, theater forces, and NATO forces.

## BIBLIOGRAPHY

### Books

- Andrew, Craig Neal. Foreign Policy and the New American Military. Beverly Hills, California: Sage Publications Co., 1974.
- Davis, Lynn Etheridge. Limited Nuclear Options, Deterrence and the New American Doctrine. London, England: Adelphi Press, 1976.
- Douglas, Joseph D. Jr. and Amoretta M. Hoeber. Soviet Strategy for Nuclear War. Stanford, California: Hoover Institute Press, 1979.
- Hartley, A. American Foreign Policy in the Nixon Era. London, England: Adelphi Press, 1974/75.
- Johnson, David T. and Barry R. Schneider (eds.). Current Issues in U.S. Defense Policy. New York, N.Y.: Praeger Publishing, 1976.
- Kahan, Jerome H. Security in the Nuclear Age: Developing U.S. Strategic Arms Policy. Washington D.C.: The Brookings Institute, 1975.
- Moulton, Harland B. From Superiority to Parity: The U.S. and the Strategic Arms Race, 1961-1971. Westport, Connecticut: Greenwood Press Inc., 1973.
- National Security Process. Vol. I, Vol. II. Arlington, VA: Institute for Defense Analysis, 1968.
- Record, Jeffrey. U.S. Nuclear Weapons in Europe. Washington D.C.: The Brookings Institute, 1974.
- Rokke, Ervin J. and Richard G. Head. American Defense Policy. Baltimore, Maryland: Johns Hopkins University Press, 1973.
- Rosecrance, Richard. Strategic Deterrence Reconsidered. London, England: Adelphi Press, 1975.
- Speed, Roger D. Strategic Deterrence in the 1980's. Stanford, California: Hoover Institute Press, 1979.
- Tan, David W. American Strategy in the Nuclear Age. New York, N.Y.: MacMillian Publishing Co., 1966.
- Taylor, Maxwell D. Precarious Security. New York, N.Y.: W. W. Norton & Co. Inc., 1976.

Articles and Periodicals

- Air Force Times. 11 February 1980, p. 3.
- "B-52's Flying Indian Ocean Surveillance," Aviation Week and Space Technology, Vol. 112, No. 4 (28 January 1980), p. 19.
- Berry, F. Clifton. "The Civil Reserve Air Fleet--National Airlift Asset," Air Force Magazine, Volume 63, Number 2 (February 1980), pp. 54-59.
- Brown, Thomas A. "Missile Accuracy and Strategic Lethality," Survival, Volume XVIII, No. 2 (March/April 1976), pp. 52-59.
- Bundy, McGeorge. "The Future of Strategic Deterrence," Survival, Date Not Known, pp. 268-272.
- "Can Billions Buy Survival in Atomic War," U.S. News and World Report, (8 October 1979), pp. 51-52.
- Carter, Barry. "Flexible Strategic Options--No Need for New Strategy," Survival, Date Not Known, pp. 25-32.
- Charles, COL. William M. "Rethinking the Unthinkable--Limited Strategic Nuclear Options--Credible or Dangerous?" Air University Review, Vol. XXVIII, No. 3 (May/June 1977), pp. 60-71.
- Drummond, Dennis M. "Getting Traffic Moving on NATO's Two-Way Street," Air University Review, Vol. XXX, No. 6 (Sep/Oct 1979), pp. 26-34.
- Dunn, Joe P. "Detente, Deterrence, and the Dilemma of National Security," Air University Review, Vol. XXX, No. 6 (Sep/Oct 1979), pp. 61-66.
- Eccles, Rear Admiral Henry E. "Strategy--The Theory and Application," Naval War College Review, Vol. XXXI, No. 3 (May/June 1979), pp. 11-21.
- Ford, John J. "NATO Interoperability--A Time for Involvement," National Defense, January/February 1979, pp. 44-46.
- Graham, Lt. Gen. Daniel O. "The Decline of U.S. Strategic Thought," Air Force Magazine, Vol. 60, No. 8 (August 1977), pp. 24-33.
- Holloway, Admiral J. L. "The Presidents Page," U.S. Naval Institute Proceedings, Vol. 101, No. 6 (June 1975), pp. 3-5.
- Hughes, Peter. "Arms Control and Strategic Stability," Air Force Magazine, Vol. 61, No. 4 (April 1978), pp. 56-64.



- Legvold, Robert. "Strategic Doctrine and SALT: Soviet and American Views," Military Review, Vol. LIX, No. 8 (August 1979), pp. 30-38.
- Luce, Clare Boothe. "Two Doctrines of War," Strategic Review, Vol. 2, No. 2 (Spring 1977), pp. 12-14.
- Nitze, Paul H. "Preserving the ICBM Leg of the Triad," National Defense, (July/August 1979), pp. 30-34.
- Ohlert, Lt. Cdr. Edward J. "Strategic Deterrence and the Cruise Missile," Naval War College Review, Vol. XXX, No. 4 (Winter 1978), pp. 21-32.
- Omalley, Maj. Gen. Jerome F. "JSTPS--The Link Between Strategy and Execution," Air University Review, Vol. XXVIII, No. 4 (May/June 1977), pp. 38-46.
- Peel, Colonel Robert K. "Civil Defense: The U.S. vs USSR," Congressional Record (30 January 1980), pp. 5-679 to 5-683.
- Robinson, Clarence A. Jr. "Defense Readiness Emphasized," Aviation Week and Space Technology, Vol. 112, No. 5 (4 February 1980), pp. 14-19.
- \_\_\_\_\_. "General Haig Warns of Tenuous Strategic Position," Aviation Week and Space Technology, Vol. III, No. 1 (2 July 1979), pp. 24-26.
- \_\_\_\_\_. "Survivability, Accuracy, Yield Pressed for Minuteman," Aviation Week and Space Technology, Vol. III, No. 17 (22 October 1979), pp. 40-48.
- Seybold, Major Calvin C. "Mutual Destruction: A Deterrent to Nuclear War," Military Review, Vol. LIX, No. 9 (September 1979), pp. 22-28.
- Schlitz, William P. "Military Airlift Command: The Prime Mover," Air Force Magazine, Vol. 62, No. 2 (February 1979), pp. 46-52.
- Sherman, Robert. "A Manual of Missile Capability," Air Force Magazine, Vol. 60, No. 2 (February 1977), pp. 35-40.
- Stachurski, Lt. Col. Richard J. "The Nunn-Bartlett Report: A Realistic Prescription for NATO?" Air University Review, Vol. XXIX, No. 5 (July/August 1978), pp. 21-25.
- "The Military Balance 1979/1980," Air Force Magazine, Vol. 62, No. 12 (December 1979), pp. 61-130.
- Ulsamer, Edgar. "New Defense Horizons: Changing Strategies for a Changing World," Air Force Magazine, Vol. 63, No. 2 (February 1980), pp. 60-65.

\_\_\_\_\_. "Toward a New World Strategy," Air Force Magazine,  
Vol. 62, No. 1 (January 1979), pp. 60-67.

\_\_\_\_\_. "Countervailing Strategy," Air Force Magazine,  
Vol. 62, No. 4 (April 1979), pp. 54-59.

U.S. Congress. Subcommittee on Appropriations, Statement of General Bruce K. Holloway, 92nd Congress (23 March 1971), pp. 244-252.

Weinraub, Bernard. "Pentagon Seeking Shift in Nuclear Deterrent Policy,"  
The New York Times, 5 January 1979, p. A-5.

#### Official Documents

Air Force Manual 1-1. United States Air Force Basic Doctrine. Washington:  
Department of the Air Force, 14 February 1979.

Army Field Manual 100-5. Operations. Washington: Department of the Army,  
29 April 1977.

Brown, Harold. Report of the Secretary of Defense to Congress on the FY 1980 Budget. Washington: Department of Defense, 25 January 1979.

Brown, Harold. "Strategic Military Balance," AFRP 190-2: Supplement to Air Force Policy Letter for Commanders. Kelly AFB, Texas: HQ USAF Information Services and News Center, September 1979.

Ellis, General Richard H. "SAC Looks at the 80's," AFRP 190-2: Supplement to Air Force Policy Letter for Commanders. Kelly AFB, Texas: HQ USAF Information Services and News Center, February 1980.

\_\_\_\_\_. "U.S. Military Power in the 1980's," AFRP 190-2: Supplement to Air Force Policy Letter for Commanders. Kelly AFB, Texas: HQ USAF Information Services and News Center, July 1979.

Greenleaf, Lt. Gen. Abbott C. "The Challenge of the 80's," AFRP 190-2: Supplement to Air Force Policy Letter for Commanders. Kelly AFB, Texas: HQ USAF Information Services and News Center, January 1980.

Heflin, Woodford Agee. Aerospace Glossary. Maxwell AFB, Alabama: Air University, 1966.

Reference Book 110-1. U.S. Air Force Basic Data. Fort Leavenworth, Kansas: Army Command and General Staff College, July 1978.

Reference Book 110-2. U.S. Navy and Marine Corps Basic Data. Fort Leavenworth, Kansas: Army Command and General Staff College, July 1978.

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update its strategic weapons systems and improve the overall capabilities of our forces supporting NATO whether it be nuclear or conventional .

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