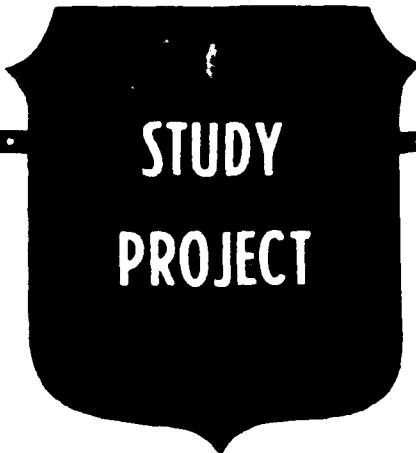
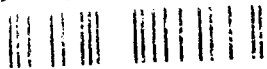


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THE UTILITY OF TACTICAL NUCLEAR WEAPONS
FOLLOWING 1990 CONVENTIONAL FORCES EUROPE
REDUCTION AGREEMENT

BY

LIEUTENANT COLONEL ARTHUR "SKIP" KEATING
United States Army

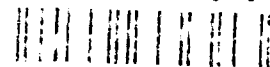
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USAWC MILITARY STUDIES PROGRAM PAPER

THE UTILITY OF
TACTICAL NUCLEAR WEAPONS FOLLOWING
1990 CONVENTIONAL FORCES EUROPE REDUCTION AGREEMENT

by

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ABSTRACT

AUTHOR: Arthur "Skip" Keating, LTC, USA
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Not so long ago, the world was changing rapidly and America was coming out the winner. The Berlin Wall fell, the Iron Curtain vanished, the Cold War faded and Germany was united again. At least one arms agreement, the Intermediate Nuclear Forces (INF) Treaty, which reduced the U.S. Pershing II and the Russian SS-21's missiles in the European theater, was in place.

Then the euphoria evaporated. The Kremlin hardliners regained power and balked at signing a Conventional Forces Europe (CFE) agreement - a treaty which only a year ago would have reduced to approximate parity the size of United States and Soviet Forces in Europe. Was America ready for this new Soviet challenge? Thankfully the answer is still yes. The United States continues to maintain its Nuclear Triad -- land, sea and air deliverable nuclear weapons systems. On the European battlefield the U.S. maintains the ability to deliver tactical nuclear weapons to overcome the Russian Army's numerical advantage and remain responsive to the ground commander. All of this should give Kremlin hardliners (strict communist power brokers, primarily in the military and KGB) reason to pause.

Given the reemergence of hostile Soviet leaders, this paper addresses the future need for land based Theater Army delivered tactical nuclear weapons in the European Theater and within Regional Theaters. It also, analyzes regional powers, indicating how they might influence nuclear strategy in a world where the Soviet Union may well be moving away from us again.

INTRODUCTION

Now that the Cold War is over, public opinion supports a denuclearized Europe. But the reemergence of the old Soviet Military and KGB hardliners in the Kremlin, resulting in a new cooling off period in the U.S. Soviet relations, raises serious questions regarding the wisdom of a denuclearized Europe. The West has seen the Soviet Hierarchy move from the Cold War to Perestroika and now back to a cooling off period of mistrust between the East and West. At a minimum, the future of Europe and the USSR is extremely uncertain. Given this troubling new reality, wouldn't it be prudent to continue what in the past has proven to be successful? Without doubt, the longest period of peace in Europe would not have occurred without the positive deterrence of strategic and Theater Army nuclear weapons. For a period of 45 years (1945-1990), Europe has grown and prospered without the threat of war due to the nuclear deterrence. Contrast this picture of a war free Europe with the millions of Asians, Africans and Latin Americans dying or wounded in regional (third world) wars. Then it follows that selected future battles will take place in emerging, third world nations.

Tactical nuclear weapons provide deterrence against the unpredictability of the Kremlin hardliners. Their preference for a stronger Soviet military machine may well include a nuclear buildup. If so, this increasingly plausible scenario could lead to nuclear proliferation between the superpowers in Europe and in the third world. Given this new hostile environment, the U.S. must retain the will and ability to deliver tactical nuclear weapons in a variety of scenarios. To do less may mean the eventual downfall of freedom as we know it today. This paper examines the future utility of tactical nuclear weapons on the European and third world regional battlefields.

NATO'S NUCLEAR POSITION FOLLOWING WW II

The democratic countries of Europe understood in the early 1950's that the newly formed North Atlantic Treaty Organization (NATO) was unlikely to raise its conventional forces to a level necessary to meet a massive Soviet ground challenge. There was an initial interest in using tactical nuclear weapons to compensate for conventional military deficiencies. Eventually it became less costly in political and economic terms to use nuclear systems to counterbalance the conventional military superiority of the Soviet Union and its Warsaw Pact Allies.

At first, the United States possessed a monopoly on nuclear weapons throughout the world, supported by a doctrine of first use of nuclear weapons. The threat of first use served as a strong deterrent when U.S. Secretary of State, John Foster Dulles stated in January, 1954:

"The United States intended in the future to deter aggression by depending primarily upon a great capacity to retaliate, instantly, by means and at ¹ places of our own choosing."

But this strategy of massive retaliation was replaced by a strategy of assured destruction and later replaced by the strategy of flexible response. When NATO adopted the flexible response strategy in 1967 it was designed to keep us well clear of the nuclear threshold; we stipulated that there would no longer be an automatic nuclear response to conventional Soviet-Warsaw Pact aggression. By then, the NATO governments were willing to use all available conventional means to preserve NATO territory. Should that fail, then the prospects of using tactical nuclear weapons would greatly increase. If tactical nuclear weapons did not work, then the next option would be the U.S. use of strategic nuclear weapons. These responses were subjected to political con-

control and designed to deter aggression and preserve peace. They were also planned to sustain the security of the North Atlantic Treaty area within the framework of Forward Defense.

United States nuclear presence has provided a continued long term balance in Europe and protected our own national interests. There is no need to re-learn the lessons of history. Rather, we should continue to observe the strategic principles that have led to this period of peace:

- U.S. nuclear and conventional presence means deterrence.
- The U.S. must maintain a modern nuclear deterrent force in Europe.
- The U.S. will respond appropriately to any attack with a mix of conventional and, if necessary as a last resort, nuclear weapons.
- The U.S. nuclear triad is even more essential now with the reduction of NATO conventional forces and the formation of multinational corps.
- Nuclear forces provide insurance against rapid changes, which may cause the new Kremlin handliners to order the Soviet military to pursue an adversarial posture.
- The U.S. will continue to seek international agreements which limit conventional and nuclear weapons in Europe.
- Most of all, U.S. and European security are linked.

Editorial Note: Due to the tremendous number of world changes that have occurred in the past year, the author stopped including updates in March 1991.

NUCLEAR WEAPONS. INSURANCE POLICY FOR THE WEST

During the spring 1990 summit, Presidents' Bush and Gorbachev decided to reduce the lingering threat of global war and build greater security for Europe. They also decided to schedule future talks aimed at reducing short range nuclear weapon systems. However, the Bush administration had no intention of getting rid of nuclear weapons in Europe altogether because they have been the West's insurance policy for peace. Secretary of State James Baker, addressing the Conference on Security and Cooperation in Europe (CSCE) held in Copenhagen in June 1990, stated that "NATO will remain as a defensive alliance with an appropriate mix of nuclear and conventional forces designed to preserve peace and security and not start a war. It will also serve as an indispensable guarantor of peace." In other words, nuclear weapons will continue to provide the leverage for insuring future peace in Europe. Likewise, the U.S. would continue to pursue arms control agreements as a long-range mechanism for peace.

Through arms control, the U.S. seeks to enhance strategic cooperation and to preserve reduced levels of conventional armament, while reducing the risk of misunderstanding or miscalculation. During an earlier summit, an accord was signed in which both the United States and the Soviet Union agreed to destroy most of its chemical weapons stockpiles. Each nation agreed to stop production, to reduce warheads to an equal level and to develop appropriate inspection procedures to view each others sites. Next the U.S and Soviet Union seek to agree to future talks aimed at reducing short range nuclear systems (SNF) and Strategic Arms Reduction Treaty (START).

But in view of the sudden rise of Kremlin hardliners and their crack-down in the Baltics, these new nuclear arms reduction treaties now appear remote.

Two years ago tactical nuclear weapons in Europe appeared to be destined for a reduced role however, they have now become a prudent insurance policy for the West, not only as a weapon of last resort. Nuclear weapons thus continue to fulfill an essential role in the overall strategy of the NATO Alliance: they serve to prevent war by ensuring that no circumstances arise in which nuclear retaliation in response to military action is needed. In fact, NATO has decided to update its strategy following the decisions taken during the London Conference in July 1990. The conference protocol stated that the alliance will maintain an appropriate mix of nuclear and conventional forces, based in Europe. It went on to say that the nuclear weapons would be used only in self defense, thereby justifying maintaining the lowest and most stable level of nuclear forces necessary to prevent war.

SOVIET THREAT IN EUROPE

The return of the Soviet hardliners has increased the threat of their use of force in Europe to secure the historic goals of the Soviet Union. Their desire to retain buffer states around the Soviet Union, secure warm water ports and project communist domination throughout the world would fulfill several of their goals. But the West has seen the Soviet Hierarchy move to a cooling off period, which has led to a renewal of mistrust. For the West, this mistrust was triggered by the Soviet's use of force to control the Balkan States as they attempt to secede from the Union of Soviet Socialist Republics; the sudden retirement of Soviet Foreign Minister Shevardnadze, who was supposedly supporting President Gorbachev; and finally the possible demise of the Conventional Forces Europe (CFE) Treaty based on the cunning Soviet tactic of transferring three Soviet Infantry Divisions to Naval Divisions. The troop transfer will be discussed in greater detail later in this paper. While these are outward signs of a political strategy change, they may as well be viewed as a tactical bid for power by the military, which may be attempting to regain some of the power lost during the recent changes.

In December 1988, Soviet President Gorbachev announced the beginning of reductions in European Soviet troop strength and selected weapon systems while simultaneously restructuring certain Soviet Divisions. Following the Soviet lead, similar decisions were taken by other eastern European nations. The reductions, to be fully implemented by 1995, will reduce overall Soviet troop strength including tanks, artillery pieces and combat aircraft from former Soviet military strongholds in eastern Europe and the western Soviet Union. The net result appears to be that primarily older and less capable equipment is being removed from the Soviet Forces, while newer equipment will be distrib-

uted to other Russian based combat units. The result will be greater mechanization and firepower for newly equipped units. In fact, they will remain as a formidable threat to the NATO alliance.⁸ As a result, the Soviet military threat continues to exist in Europe, even though the Soviets have ordered some forces to return to the Soviet homeland.

The Soviet Union remains a formidable opponent for several reasons: First, Soviet military doctrine continues to follow a principle of dealing with the Western Alliances from a position of strength. Second, much of the excess military equipment brought about by Conventional Forces Treaty has been shipped east of the Ural Mountains, which protects it from the CFE counting process. This sheltering of equipment will allow the Soviet Union to maintain numerical superiority over the forces of NATO.⁹ Third, the retention of newer equipment will allow the Soviet Union to redistribute the equipment and modernize other units with first class equipment. Fourth, the Soviet Army remains the largest modern army in the world (the Chinese are not modernized), it is doubly capable of striking NATO with conventional and nuclear systems.¹⁰ The Soviet Union remains formidable even without their former allies.

The Warsaw Treaty Organization (WTO) was dissolved in April 1991, formalizing the collapse of the Communist Military Empire.¹¹ The demise of the WTO presents a mixed blessing to the Soviet Union. It denies the Motherland of buffer states to protect it from the West. On the other hand, Russia will not be expected to give away billions of rubles in arms and equipment to satellite states. It also means that the cost savings can be reinvested in the homeland thereby improving the economy. But the loss of buffer states has made the Soviet Hardliners very uneasy. In the hardliners' eyes, the Soviet Union has become vulnerable to land or air invasion.

Soviet allies in the fallen Warsaw Pact (Poland, Hungary, East Germany,

Czechoslovakia and Bulgaria) have also declared their intentions to reduce troop strength and eliminate tanks, artillery pieces, armored vehicles and combat aircraft.¹² These countries are currently on their own and expected to join the Conference on Security and Cooperation in Europe (CSCE) and eventually to become democratic states. History has shown that the risk of war with these countries will thus be minimized, since democracies have never fought each other (except during the U.S. Civil War).¹³

Soviets have also announced that they are restructuring their remaining ground forces, which pleases the old traditional communist hardliners. Soviet Divisions are losing tank strength, yet they are gaining more armored combat vehicles air defense systems, anti-tank systems, engineer and artillery equipment.¹⁴ These upgraded divisions will be capable of maneuver oriented, combined arms, offensive operations. They will also receive a higher portion of modernized equipment than currently provided to Soviet Divisions. The result will be a modernized design which will be more efficient and will allow them to tackle a modern enemy force on equal terms.

Thus the Soviet conventional threat still exists, even though the Soviet Armies are further away from their old adversaries. This translates into greater warning time for NATO Nations. Conversely, the Russians have not announced a similar reduction in tactical nuclear weapons. They have, however, agreed to participate in future bilateral discussions with the United States to negotiate the reduction of short-range nuclear systems. But this discussion has been put on hold due to the lukewarm attitude displayed by the Soviets in implementing basic parts of CFE Treaty.¹⁵ Thus the uncertainty in Europe does not preclude that a modernized Russian Force will not return in the future with military power to occupy their former garrisons in a free Europe.

REGIONAL CONFLICTS - THREAT OF NUCLEAR WAR

The Cold War brought about a clash between the superpowers (U.S. - Soviet) while many regional nations throughout the world fought regional wars for ethnic, economic and geographical reasons. The world has seen many dramatic changes during the past year: the fall of the Liberian Government; tribal wars in South Africa; and the invasion of Kuwait by Iraq in the Middle East. The world is rapidly changing as regionally developing nations gain the ability to build nuclear weapons. Figure 1 specifies those countries that are moving towards nuclear capability.

Sixteen regional nations are currently developing the ability to build a nuclear weapon to achieve their political, military and economic aims. Iraq immediately comes to mind as a country that was working to achieve such a goal. Their efforts have been stymied by the Israeli Air Force in the early 1980's and recently by the U.S. and Allied Air Forces during bombing raids into Iraq. So the United States is certainly concerned about emerging regional powers and their ability to threaten other nations with nuclear weapons. This concern is heightened by the lack of political stability and the emergence of less than sophisticated leaders like Mohamar Kadaffy and Saddam Hussein. Neighboring countries justifiably fear the nearby, hostile development of nuclear weapons and their intended use. The United States also looks carefully at each emerging nuclear nation in terms of their future use of nuclear weapons. The question is: will they eventually end up being a friend or enemy in their respective region? If it turns out that they are against the aims of democracy and the United States then, their newly created weapons become a negative factor. For example, Israel would fall on the positive side, while Iraq would fall on the negative side.

COUNTRIES CAPABLE OF NUCLEAR WEAPONS BY YEAR 2000

HAVE OR ARE SUSPECTED

CHINA, INDIA, ISRAEL
and SOUTH AFRICA

POSSIBLE BY YEAR 2000

ARGENTINA, BRAZIL and PAKISTAN

POSSIBLE BEYOND YEAR 2000

EGYPT, IRAN, IRAQ
LIBYA, SYRIA, TAIWAN
SAUDI ARABIA, SOUTH KOREA, NORTH KOREA

FIGURE 1

The recent war in the Gulf indicates that only rapid and decisive U.S. military action and chemical warfare training averted the probable Iraqi use of chemical weapons. Moreover, in five years Iraq might have fully developed the resources and the technological skill to field a wide range of nuclear weapons. Furthermore, we need to keep in mind that fifteen other nations throughout the world may possess a similar future nuclear potential. How many of these emerging powers will threaten to use their tactical nuclear weapons?

The world is different today as it faces challenges to peace and freedom and thus represents new and uncertain challenges in 1991. The United States must be capable of meeting all contingencies and bearing up to its grave world wide responsibilities. United States contingency forces must be allowed to deploy (as required) with a low yield nuclear package capable of working as a deterrent against regional powers. This same tactic has worked extremely well in Europe for 45 years. Therefore, the same deterrent options will bring about peace in the emerging regional world, when properly employed.

THE DENISE OF CONVENTIONAL FORCES IN EUROPE (CFE) AGREEMENT

As described earlier, the United States, Soviet Union and twenty other European Nations signed a landmark treaty - the Conventional Forces in Europe (CFE) agreement, which established numerical equipment parity in conventional forces between NATO and Soviet led Warsaw Pact forces. Figure 2 depicts the large imbalance that existed in the late 1980's between the U.S. and USSR.¹⁹ The CFE treaty, signed on 19 November 1990 in Paris, France, was a monumental achievement. But to date it has not been confirmed by either the U.S. or the Soviet government. Ratification at one time seemed assured; however, the recent shift in Soviet interpretation of the CFE counting process (three Soviet Army Divisions to Naval Divisions) has set the process back, if not killed it completely.

The Soviet hardliners felt that President Gorbachev and Foreign Minister Shevardnadze have given parts of the Soviet Empire away. The CFE reduction process began with both sides sharing the supportive atmosphere that existed in the late 1980's. But, this spirit of cooperation has slowly drained with the emergence of the hardliners. The force drawdown has caused the NATO countries to rethink their defensive strategy and force alignments. They have decided to reduce their force levels and adopt an improved military strategy of forward presence. Thus they seek to cover the same area with less troops and under the colors of a multinational corps.²⁰ The outcome may mean that while NATO democracies reduce their troops and equipment the Soviet Union will retain the best equipment and accelerate modernization for a future showdown. However, the primary deterrent force has always been the threat of nuclear weapons to balance off conventional force advantages and maintain peace.

The original objective of the Conventional Forces Europe Treaty was to pro-

COMPARATIVE SUPERPOWER MILITARY CAPABILITIES

TOTAL REGULAR ARMED FORCES

U.S.	USSR
2,143,250	4,258,000

MAIN BATTLE TANKS

U.S.	USSR
15,992	53,350

ARMORED PERSONNEL CARRIERS

U.S.	USSR
31,363	58,500

FIELD ARTILLERY

U.S.	USSR
5,597	31,500

FIGURE 2

vide stability and security for Europe's future by reducing and balancing NATO and the Warsaw Pact's conventional forces and equipment. Furthermore, it was intended to reduce the likelihood of a surprise attack by moving the Soviet Forces to garrisons east of the Ural Mountains. The hardliners disagreed with Gorbachev's actions and apparently stepped into the process and altered the original treaty levels, thereby shifting the balance in favor of the Soviets.

In December 1988 Gorbachev announced he would begin the force reduction initiative by a unilateral reduction of 500,000 Soviet Forces. He also pledged to withdraw the remaining Soviet troops from Germany by 1994 as part of the overall withdrawal from Western Europe. Figures 3 and 4 show the imbalance that existed in 1989 between the NATO and WTO alliances and the proposed CFE ²¹ equipment ceilings for both sides.

The CFE talks did not finalize the remaining personnel force levels to be stationed in Central Europe. Yet another decision was reached between Germany and Russia to limit the newly unified German Forces to no more than 370,000 ²² soldiers, 350,000 of whom were to be ground forces. It was expected that a new round of talks would take place in 1991 to reach agreement on troop ceilings in Central Europe. However, this discussion has not taken place due to the unprecedented Soviet troop transfers and the return of the hardliners.

President Bush's proposal in February 1990 to reduce U.S. troop levels to 195,000 in Central Europe is a national decision designed to provide the minimum force necessary to carry out NATO's plan to defend itself against attack. A force this size would enable the Army to maintain one corps size element in Germany to implement the alliance strategy. The overall drop in U.S. troop strength of 80,000 to 195,000 may not be the last reduction. European Allies and the U.S. Congress, sensing the reduced Soviet threat, may tell the U.S. ²³ military to reduce its forces to even lower levels. When the final decision

1989 NATO - WARSAW PACT COMPARISON

	<u>NATO</u>	<u>Warsaw Pact</u>
Tanks	16,424	51,500
A C V's	23,340	55,100
Artillery	14,458	43,000
Planes	3,977	8,250
Helicopters	2,419	3,700
Ground Forces	2,213,593	3,090,000

FIGURE 3

CFE EQUIPMENT CEILINGS

Tanks	20,000
Armored Combat Vehicles	30,000
Artillery	18,000
Helicopters	1,900
Aircraft	6,200

FIGURE 4

is made, a force of 100,000 troops may be our leveling off point. Further reductions may be negotiated in the follow-on (CFE-2) talks, which may see the U.S. reducing to as low as 50,000 troops in Europe. At that level, we could maintain only one division with support personnel and a U.S. Multinational Theater Headquarters, perhaps in Heidelberg, Germany. With a force level that small, we would not be capable of fulfilling our NATO mission without tactical nuclear weapons to balance the force levels. Tactical nuclear weapons would allow the small U.S. and NATO Multinational force to deter war by merely possessing the capability of delivering the equalizer, Tactical Nuclear Weapons.

Thus, the NATO strategy for the defense of Europe will no longer strictly follow the framework of forward defense along the inter-German border. While this strategy has aided the peace process in Europe, it will no longer be the focal point for defense planning. In its place will be a policy of forward presence where U.S. and NATO troops will be separated by hundreds of miles from their Russian adversaries east of the Urals. The new, reduced NATO force structure will employ a mobile force to react to massing hostile troops along the eastern most approaches to a unified Germany. This force will have a mission to intercept, engage, and deny access or penetration into Germany territory. It will be forced to trade space for time against a superior Soviet attacking force or employ tactical nuclear weapons to stop the penetration.

The proposed NATO operational strategy calls for the formation of multinational corps. This force will be composed of several nations in peace as well as in war. For example, the U.S. and German forces may provide a mechanized and armored division to fill out the corps combat strength. The corps covering force may consist of forces from Holland or Belgium to seek out the enemy and determine his intentions. The command challenges of fighting a multinational corps are significant. In fact, the same historical flaws found

in the Soviet - Warsaw Pact combat formations may soon plague the NATO Multi-national Corps: uncertain communications between different nations, different tactics and organizations; and less than desirable equipment interoperability. The U.S. forces are expected to be OPCON to the NATO Commander. They must provide their own logistical support, but army-level command and control will come from NATO. The challenges of interoperability will play a heavy hand in determining the strengths and weaknesses of such an alignment. A final consideration is the possibility that a complete U.S. division may be temporarily removed from the multinational force to fight an out-of-sector battle perhaps in the Middle East. The division should deploy with the ability to employ chemical or nuclear weapons as a last resort.

CFE RECOMMENDATIONS

As a result of the CFE discussions, certain things must take place on both sides to insure a lasting peace in Europe. First, the U.S. must retain the ability to generate a highly capable and balanced ground, air and naval conventional/nuclear force. Army tactical nuclear weapons are the basic building block, which provide the framework to support the smaller force. This is necessary to show United States resolve to support the NATO Allies and to signal their intent to use nuclear weapons as a last resort. ²⁵ Second, the U.S. must rely on a forward presence in Europe to deter a crisis, while still maintaining regional stability and global influence. Third, the U.S./NATO conventional force must be capable of being employed without waiting for newly conscripted soldiers to round out the Army or new equipment production lines to be mobilized. The European based units should not be a hollow army consisting of unit flags and only 60% of the soldiers required to man the equipment and defend the NATO Alliance. Fourth, conventional and nuclear equipment modernization must continue so that our soldiers are provided with state-of-the-art

equipment capable of winning on the battlefield. Fifth, the U.S. and NATO reserve force must be easily deployable and fully capable of providing the sustainment necessary to insure the defeat of enemy forces during a protracted war. Sixth, the multinational force must be fully trained and interoperable before the guns begin to fire. Finally, the CFE Treaty must be verifiable on both sides. Freedom for observers to watch military activities on both sides will prevent large scale force generation or pre-attack configuration. The United States secured victory in the Cold War through nuclear deterrence backed by solid action. To lay down our swords now may mean defeat in the future.

WHY WE NEED AN ORGANIC U.S. ARMY NUCLEAR CAPABILITY

U.S. Army tactical nuclear weapons have provided the foundation for European security for decades. They have served as deterrents in Europe as well as in other regional theaters. Thus they have prevented war. They have an even greater place in a small, independent multinational corps because they offer Army Commanders a flexible, easily deployable, tactical theater warfighting capability. In contrast, Air Force and Naval air systems have some difficulty flying pin-point nuclear missions during periods of severe weather conditions, which limits their employment. U.S. Army systems are also more survivable than dual capable aircraft and sea based aircraft systems since they are able to hide and be dispersed across the battlefield. In addition, they remain an excellent defensive option to respond to an aggressor's use of nuclear or chemical weapons in world wide regional contingency operations, because each medium-heavy howitzer and missile system represents a potential nuclear delivery system. Army nuclear weapon systems are responsive to the Theater Commander while providing a variety of options and a myriad of planning considerations for the opposing commander to consider.

Aircraft and sea based systems are designed to strike fixed targets (airfields, bridges), whereas Army systems are best suited to attack mobile battlefield targets that appear quickly and must be dealt with quickly. Navy and Air Force nuclear systems are not as responsive to battlefield needs as Army systems are. The command and control required to commit a dual capable (conventional-nuclear) Air Force aircraft or sea-based Navy aircraft to attack a massed enemy tank formation is lengthy and cumbersome. The forecast must be submitted 96 hours prior to launch time; then there are lengthy targeting procedures. The ground commander would prefer to utilize assets he is familiar

with. He knows they will work and be responsive to his immediate needs. Both air and sea delivered systems provoke detailed consideration by an adversary because they may suggest a strategic employment or nuclear escalation (Nagasaki, Hiroshima). But tactical delivery systems are already deployed in theater for conventional purposes therefore army assets offer ground commanders a more flexible option for limited nuclear use in Europe as well as in third world regional conflicts.

Operationally, the army generally prefers greater flexibility against a large array of potential aggressors. This supports continued fielding of a mixed force of Army nuclear systems, missiles and cannons possessing dual capable (nuclear and conventional) delivery systems. This same option provides greater flexibility to the newly formed NATO Multinational Corps as they prepare to fight on a nonlinear battlefield.

The preferred option of using Army nuclear systems offers a flexible response to a variety of targets. Low-yield surface-to-surface missiles are best suited for attack against heavily armored formations, nuclear delivery units, tactical headquarters and fixed targets. Artillery-fired atomic projectiles (AFAPS) continue to provide low-yield, accurate and responsive attack capability for use against close-in targets that would place enemy forces at high risk when massed for an attack. Organic Army Nuclear assets provide a battlefield mix of delivery systems which reduces the potential of catastrophic failure of a single delivery system.

Army systems provide a critical link between battlefield contingency planning and the threatened employment of U.S. strategic systems. The potential use of U.S. Army organic nuclear systems deployed as an element of U.S. Multinational forces symbolizes for U.S. and NATO - more than any other nuclear employment option - a direct and believable tie between European security and

that of the United States.

Army tactical nuclear weapons provide a positive indicator of American intent to restore a balance of power in a variety of conflicts. Army weapons by themselves have never been construed as possible strategic systems. But the Navy and Air Force systems are subject to strategic interpretation. U.S. allies in Europe have understood for decades that the U.S. Army nuclear assets remain the clearest, most visible confirmation of a continuing and believable coupling...the American nuclear guarantee.

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WHERE SHOULD WE GO WITH NUCLEAR WEAPONS IN THE 1990'S

The future role of nuclear weapons should be based on the foundation of their success in deterring war in Europe. The United States and Soviet Union will continue to determine their global and European military strength on their respective nuclear forces. They both realize that they have the capability to inflict unacceptable destruction upon one another.

The threat of tactical nuclear weapons remains as part of the U.S. - NATO deterrent capability. The U.S. should retain the ability to deliver tactical nuclear weapons in all types of weather against a variety of targets to destroy a superior enemy force.

The U.S. also has a relatively new tactical nuclear weapon called an enhanced radiation (ER) weapon also known as the neutron bomb. This device yields a high concentration of radiation with little blast and heat effects.³¹ This clean weapon eliminates most residual radiation; it has thus become a leading candidate weapon to be used in future support of our ground troops. For tactical targets, it increases military efficiency and reduces collateral damage through the use of enhanced radiation weapons.³²

This weapon system has tremendous advantages when employed against a fortified enemy in a place like Kuwait City. In such situations, the enemy uses all of the cover and concealment a city has to offer. The system does not rely on the blast over-pressure or intense heat generated by older type tactical nuclear weapons.³³ This system gives off radiation which kills personnel in combat vehicles and tank crews waiting in ambush. It does not destroy buildings or vehicles, in stark contrast to the atom bombs detonated in Nagasaki and Hiroshima to end World War II. This system offers a new dimension to tactical nuclear warfare. It offers the opportunity to attack enemy personnel

without inflicting high levels of physical damage. The controlled effects of this system would seem to make future use of enhanced radiation, tactical nuclear weapons more politically attractive. Thus the system could enhance deterrence. They provide a powerful tool for the battlefield commander to neutralize superior enemy forces. This system is far less destructive than other small tactical nuclear weapons already stockpiled in Western Europe. This system is not as lethal as older systems. Therefore it may be politically more acceptable to our European allies. Neutron weapons may make tactical nuclear war more palatable to our NATO partners. A case could be made to retain [X number of] enhanced radiation weapons in the European Theater even if the older tactical nuclear weapons were removed. A limited number would serve the principal purpose of deterring future conflict.

RECOMMENDED FUTURE USE

In the 1990's we should retain a limited number of enhanced radiation Tactical Nuclear Weapons to insure the continued peace in Europe and in other regional arenas throughout the world. However, one day both sides may be satisfied that the risk of war is low enough to completely eliminate the tactical nuclear systems. But, for now the world situation is currently too fluid and unpredictable to support that decision before all of the facts are known.

TACTICAL NUCLEAR WEAPONS PROMOTE FUTURE PEACE

CONCLUSION

In many ways, the global interests of the United States and Soviet Union are much more secure today than they were perhaps a year ago. Many changes have taken place in the Soviet Union and Eastern Europe to remove the tensions of a lingering cold war and nuclear attack. The Warsaw Treaty Organization has failed. These events have caused many leaders to be unduly optimistic about a nuclear-free world. But the rise of Kremlin hardliners and the Soviet crackdown in the Baltics demonstrates the need to maintain a strong U.S. forward presence in Europe. The Soviets continue to move in the wrong direction, away from CFE ratification and slowly towards a new Cold War in Europe. The rest of the world may soon feel the chilling power of the Soviet Union as it attempts to rebuild its power base to appease the returning hardliners. Therefore a credible U.S. tactical nuclear deterrent is necessary to maintain a balance of power. In Europe, the United States and its NATO allies must continue to attain their national security objectives, in the light of renewed suspicions regarding the Soviets, albeit with a reduced level of tactical nuclear weapons.

While the United States pursues its stated national goals and objectives, it must consider the associated costs of maintaining a relatively large conventional force or securing a smaller, less costly nuclear force. Similar decisions in Europe for the past 45 years have consistently favored continued deterrence based on the threat of nuclear weapons. Therefore tactical nuclear weapons, including enhanced radiation weapons, should form the future systems to preserve a balance of power and secure peace throughout the world.

The United States must continue to provide its Nuclear TRIAD in support of

continued world peace. Tactical nuclear weapons are essential as a part of the deterrent force supporting the NATO policy of Flexible Response.

Finally, the United States must stand ready to add deterrence to regional conflict through means of a deployable tactical nuclear force. No price is too high to pay for continued peace in the world.

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