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Challenges To Our National Security In The 1980's

Dr. Kimball, Ladies and Gentlemen, it is a distinct pleasure and an honor to have been invited to speak to you today. It is important that we in the military take opportunities such as this to inform interested groups of the status of our Armed Forces.

It is particularly appropriate that concerned members of the scientific, professional, and industrial community understand the challenges to our nation and the steps being taken by the defense establishment to meet these challenges. My purpose is to contribute to that understanding.

Historically, we as a nation have reduced our active forces during periods of protracted peace. The oceans bounding North America have served as moats to keep potential adversaries at bay and have provided time for us to mobilize to meet particular threats, such as World Wars I and II, Korea, and Vietnam. Our experience thus far in the Twentieth Century has bred and reinforced a concept that America will always have time to mobilize before committing itself to combat.

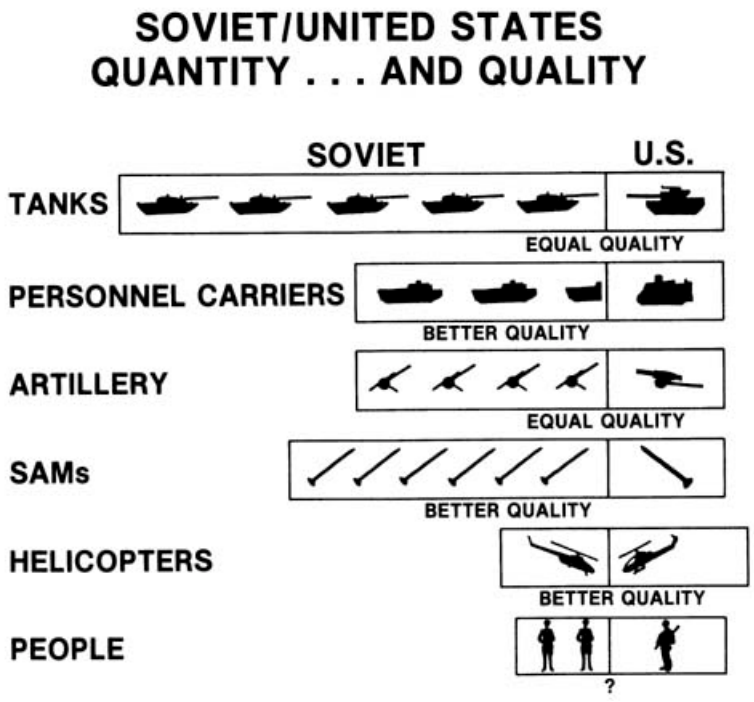
But that belief is no longer valid. The great moats which once protected us are easily spanned by intercontinental ballistic missiles and provide an area of operations for missile-carrying submarines to threaten us. The vast oceanic expanses which formerly inhibited enemy encroachment now act as barriers to our own force deployments, whether we seek to reinforce Europe to fulfill our NATO commitment, or to project power elsewhere in the world to protect American interests.

Since World War II, the United States and the free nations of the world have been faced by a formidable and expanding Soviet war machine. In recent years western intelligence analysts have observed with increasing concern that the Russian armaments buildup has exceeded any possible need for defensive purposes. The invasion of Afghanistan a year ago has dispelled any doubt as to the motive for the Soviet actions and the aggressive nature of their foreign policy. It is clear that the Soviet Union now has the capability and the will to project power beyond its borders and even the borders of the Warsaw Pact. A look at some force comparisons will amplify this:

- On manpower, the Soviets have about twice as many men under arms as we do – about 5 million men, backed up by a trained reserve force of at least another 5 million who have served on active duty within the past five years. Altogether, approximately

25 million men are registered in the Soviet military reserves, about 30 times the number presently in our own reserves.

- The Soviet Army is comprised of 173 ground force divisions of which 97 are available within days to fight in Central Europe. Although our divisions are slightly larger, we have the equivalent of only five divisions in Europe. And even if all NATO forces were counted, the Warsaw Pact would outnumber us 2 to 1 in combat divisions, 3 to 1 in tanks, and 2 to 1 in combat aircraft. Additionally, the Soviets can concentrate at the time and place of attack, while NATO forces are spread from Norway to Turkey.
- The Soviets have been able to achieve that advantage in numbers because their annual budget allocates about $60 billion more to the military than does ours – more than double the percentage of GNP that we spend. In recent years, real growth in the U.S. defense budget has been eroded by inflation, while money spent by the Soviets represents much greater real growth.
- For many years we discounted the Soviets' growing superior numbers with the comforting thesis that the United States possessed overwhelming technological superiority and that Soviet quantity was offset by American quality. There is clear evidence that this is no longer true. In virtually every area of ground combat, the Soviets have fielded major materiel systems which equal or exceed the technological quality of our systems or those of our Allies. This is particularly the case in chemical warfare. The Soviets have greatly outstripped our capabilities to respond in kind, both defensively and offensively. While less so, the same is becoming true of tactical nuclear warfare capabilities. Only in attack and transport helicopters do we have a numerical advantage, and that is being quickly eroded by high rates of Soviet production.



Having laid that before you, I must confess that while a direct confrontation and conflict with the Soviet Union is the most dangerous threat to our national security, it is not necessarily the one our Armed Forces will most likely have to fight. We live in a world which grows ever smaller and more dangerous. It is a world which has seen the emergence of Soviet surrogates and other Third World nation states whose economic and ideological interests run counter to our own – nations whose armed forces have been equipped with highly sophisticated weapons systems made possible by the sale of oil or other scarce natural resources. These weapons in the hands of intractable nations could pose a more immediate and less predictable threat than those of the Warsaw Pact in Central Europe.

In short, the challenges for the 1980's are unprecedented. We face a decade of potential conflict, and we in the Army must be prepared to meet those challenges. Indeed, our pride as a people and our self-worth as a nation demand this of all of us. George Washington recognized this when, more than 200 years ago, he stated,

> *There is a rank due the United States among nations which will be withheld, if not absolutely lost by the reputation of weakness. If we desire to avoid insult, we must be able to repel it; if we desire to secure peace, it must be known that we are at all times ready for war.*

Are we ready? The answer to that question is a qualified "Yes." We have a fine, well trained Army, but there are problems – not problems without solutions, but problems without simple or inexpensive solutions.

To be effective in the decade ahead, we must accomplish four tasks, and they apply to the other Services as well. We must: *man* the force; *modernize* the force; *train* the force; and we must be prepared to *mobilize* for war. I will address each of these tasks in turn.

Manning the force is a major challenge today. As a people we have decided that our nation will be defended by volunteers. The All Volunteer Force was begun with the assumption that if soldiering were to be made competitive with employment in the civilian job market, military pay and benefits would have to be increased and maintained at commensurate levels. Initially such levels were attained – in 1972 the soldier was paid 111 percent of the minimum wage. It is now about 90 percent. We are particularly deficient in providing attractive pay to our senior noncommissioned officers in all the Services. For example, a sergeant major's salary in 1960 was seven times greater than that of a recruit. Now, it is only about three times greater. That bothers many NCO's and they are resigning from the Services in large numbers. While pay inequities are the major concern, other significant recruiting depressants exist.

In 1976 Congress eliminated the GI Bill, an attractive package of education benefits. This was accompanied by an increase in government funded educational programs with no military service obligation. The implication of that legislation is that the nation is doing more for those who do not serve their country than for those who do. Interestingly, 1976 was also the last year in which the Army was able to recruit more than 100,000 high school graduates.

Despite these and other obstacles, recruiting of males did improve last year and the Army was able to fill its quota for active duty males. However, only 55 percent were high school graduates. High school graduates are very important to us, and we need to attract a higher percentage into the Army because they are achievers, have good work habits, and are better motivated than those who have not completed high school.

Although the Active Army has been meeting its recruitment goals, the Army National Guard and Army Reserve face a peacetime shortfall of 94,000. This Reserve shortfall, combined with a standby selective service system, leaves the Army with a marginal capability to fight and win a major war in Europe. Although the recent registration system helps, it will still take months to produce the first trained soldier after call-up. The Active Army will require about 64,000 to come up to wartime authorized levels, and the Selected Reserve units would require an additional 150,000 to reach wartime required levels. Thus, the difference between unit peacetime strength and the wartime required strength is about 214,000. The Individual Ready Reserve is at about 200,000 of whom about 140,000 can be expected to be available for mobilization. The total mobilization manpower problem is the need for nearly 403,000 fillers and replacements through 1990.

We have very serious manning problems in the Army today in our civilian work force. In the past five years our civilian work force has dropped by 57,000 due to budget cuts. This has caused us to use about 15,000 soldiers every day to do the work that civilians should be doing. In terms of numbers those 15,000 soldiers represent the equivalent of a full combat division lost to the Army every duty day.

We know that the issues of recruitment and retention in the Army are problems we must solve, but we cannot do it at bargain basement prices. If we Americans want a volunteer Army we must be willing to pay the cost. Community leaders here and everywhere can help by encouraging young people to at least explore the benefits and challenges of service. We ask that recruiters be allowed access to young people, and we would urge educators to permit recruiting activities in high schools. We need to assist employees who serve as Guardsmen or Reservists in meeting their training obligations. Those steps will help us accomplish our first critical objective, to man the force – a job we can do with your support.

Equal in importance to manning the Army is the critical task of modernizing the force to enable it to fight and win on the battlefield of the 1980's. Earlier I spoke of the alarming buildup of Soviet ground forces and the high quality of their weapons systems. They were modernizing while we were fighting in Southeast Asia.

Only now are we beginning to catch up, as new materiel systems designed in the mid-1970's begin to come into production in the 1980's. The Army is now on the brink of the greatest modernization effort since World War II – the largest in our peacetime history. It is intended to achieve at least technological equivalence with the Soviets in fielded systems by 1985, and superiority by 1990.

Because our most dangerous potential adversaries have predominantly mechanized and armored units, much of our modernization effort has been designed to defeat that threat. I am speaking of such weapons systems as the XM1 Main Battle Tank which has demonstrated high cross-country mobility, the ability to shoot on the move with increased lethality, and superior crew protection. The companion Infantry Fighting Vehicle, which can itself defeat other armored vehicles, has mobility comparable to the XM1 tank and gives infantry the option to fight mounted or in the traditional dismounted role.

The Division Air Defense Gun will replace today's totally inadequate systems. The Advanced Attack Helicopter is an all weather airborne tank-destroyer of unsurpassed quality. And the Blackhawk Utility Helicopter will improve tactical troop lift even in low density air environments like the Middle East.

Improvements in weapons systems are being accompanied by more versatile and lethal munitions for delivery by direct support field artillery. A laser guided projectile can defeat enemy armor at extended ranges. Scatterable mines enable commanders to emplace minefield obstacles in minutes rather than days. Improved conventional munitions, rocket assisted projectiles, and multiple rocket launchers permit attack of a variety of targets over a greater area with increased accuracy and effectiveness.

We have a great potential for improving our battlefield performance through what is called Electronic Warfare. This can be a potent force multiplier. By that I mean an element of warfare which increases the combat effectiveness of a force by several times its normal value. An analogy would be the effect of antibiotics reinforcing the body's immune system in the battle against infection.

We are in an age where command and control of land forces and their tactical air support is conducted electronically by radio and highly sophisticated radars; where much intelligence is gathered, processed, and disseminated by electronic means; and where target acquisition is dependent on electronic sensors. In this modern environment Electronic Warfare can be used to detect and locate enemy emitters; and it can jam their signals, thus denying the enemy his command and control capabilities, as well as protecting our own.

As an adjunct, advanced command and control radio equipment is being introduced into our tactical units. Examples are a new family of radios with greater ranges, wider frequency spectrum and secure voice transmission; new lightweight tactical facsimile transceivers; and tactical satellites for long range communications.

Aerial and ground mounted intelligence gathering and target acquisition sensors have greater accuracy and real-time data outputs. They will be linked to automated processors with the capability to sort thousands of bits of information from many sources and to fuse the results into a coherent intelligence picture. The ground commander will then be able quickly to decide whether to attack these targets by fire or to use his advanced communications and radar jammers to disrupt enemy command control or weapons guidance systems.

These systems exist with today's technology and are part of the Army's acquisition plan for the 1980's. But the emerging technology of today must be translated into a second generation capability. Let me cite a few examples. We would like our precision guided munitions to have a fire-and-forget guidance system so that the gunner is not exposed during the flight of the missile he has fired. Laser technology is being used to guide sophisticated missile warheads onto the target without the limitations of wire guidance. Further exploitation of the laser is necessary for weapon system guidance and as a weapon system in and of itself.

Remotely piloted vehicles represent another enhancement which future technology can give us. Some drone aircraft will be on hand soon as platforms for electronic target acquisition sensors.

As you can imagine, the bill for the modernization program the Army is undertaking will be substantial. Planned procurement for modernization during the 1981-1985 period is about $33 billion, and an additional $50 billion is required for full modernization. Some analysts say that equipment modernization and replacement has been under-funded by 30-50 percent over the last four years. While our strategic forces are relatively well off, our conventional or general purpose forces simply are not. Strategic forces such as the MX missile and POLARIS submarines are

very important for national defense, and they involve substantial funds. But we in the Army are most concerned about fighting the more likely conventional war and hence are concerned about a better balance between strategic and conventional force expenditures.

To attain the best possible battlefield payoff for the dollars we are given, the Army is adopting a strategy of selective modernization. We prioritize scarce procurement dollars into those systems which increase force effectiveness by the greatest amount. In other words, we are assessing which systems provide the best force multiplier effect and buying more of those or accelerating their development and production. This approach has to be complemented by sound business principles. Procurement must be based on economic production rates, and only economic buys should be accelerated. Likewise, attention must be given to trends in business and industry, and the Army acquisition should not compete with the private sector in periods of low production capacity.

In addressing Army modernization to this point I have stressed the need for better materiel systems, but there are other dimensions to modernization. Prior to defining equipment and system requirements, there must be a concept of what is to be accomplished on the future battlefield and how that is to be done. Once that is established, then organizations to accomplish these tasks can be designed and necessary materiel systems can be identified, designed, and procured.

The Combined Arms Center at Fort Leavenworth is in the forefront of the Army's effort to plan for the future battlefield. At Fort Leavenworth we are charged with managing the synthesis of concepts, force designs, and materiel system integration. Recently we have completed an effort of several years' duration to redesign the Army's tactical forces to fight on the battlefields of Europe in the coming decade. This study is entitled Army 86, and it was approved for programming by the Chief of Staff last year.

Because our potential adversaries are strongest in Europe, that war is the most dangerous scenario in which our Army might have to fight. Given America's global interest, however, there are many other places in the world where we may have to fight on short notice. In view of the turbulent political situation in Southwest Asia, and the economic dependency of the United States and our Allies on energy resources from this area, the potential for commitment of U.S. military forces in that region is recognized. Indeed, war could come with little warning. We must, therefore, design flexible forces able to reinforce Europe or to respond to threats outside that area. As in Europe, many of the nations in that region have mechanized forces, mostly supplied with Soviet equipment. Because of the distance from developed U.S. bases, rapid deployment can best be accomplished by air. The urgency of being able to respond to such a contingency has spurred the Army's effort to improve the force effectiveness of our light infantry divisions but still keep them air transportable.

Here again technology is seen as offering the most promise in providing lightweight anti-armor systems, light high mobility vehicles, enhanced survivability, and new electronic warfare opportunities. This must be done without heavily mechanized units, which are difficult to transport quickly over long distances. Advanced concepts and high technology equipment testing is beginning this year in the 9th Infantry Division at Fort Lewis, Washington. As the new ideas are proven, changes will be made to all of our infantry divisions.

Modernization by the accession of new systems must be accompanied by a continuous program of maintenance of existing systems and the training and support facilities needed to

sustain the forces which use them. In addition, we must provide our deployed forces with adequate stocks of ammunition, replacement items or equipment due to combat losses, and an adequate stockage of repair parts. Current levels in all three areas are woefully short today. For years, budget cutbacks have adversely affected these levels. This trend must be reversed and funding increased. Unless this is done, neither the present nor the future Army will be able to sustain itself in combat.

These are some of the highlights of the Army's modernization program. It is ambitious, but achievable. As I have indicated, modernization is expensive. We as a nation must decide whether we want to have a first-rate military establishment, able to answer the call of our National Command Authorities and to deal resolutely with any adversary. If the decision is to have a first-rate fighting force, the price is high. It is for us in the Army to ensure that the American public gets a good return on the investment.

While force modernization through technological advancement is one of the cornerstones of Army improvement for the future, our ability to resolve the problem of interface between man and machine and to train our soldiers up to the potential of these new systems is directly related to our ability to incorporate new technology into the force.

This brings me to the third major task facing our Army: Training the force. The main function of the Army in peacetime is the training of soldiers and units in the skills of combat so that when war comes we will be prepared to fight and win. The training of our soldiers begins on induction. In the Training Centers operated by the U.S. Army Training and Doctrine Command, the new soldier is matched against a skill needed by the Army.

The object is to convert a civilian into a motivated, disciplined, and physically fit soldier equipped with the skills needed to fight and survive in combat. This is where team building begins. The soldier must be shown that military service is an arduous and demanding experience in which success in battle can come only through each individual knowing how to do his job as a member of a team. The new soldier must be challenged to give his best, and higher standards are being required to make basic training tougher. This involves both tougher physical conditioning and more demanding training in military skills over an extended training day.

Upon graduation from the Training Center the soldier is assigned to a fighting unit either here in the United States or overseas. In the unit, individual skills are sharpened and more emphasis is placed on teaching the soldier how those skills must be integrated into the unit's mission as it prepares for combat. It is in our combat units that cohesion and stability become so important.

Training for battle is a continuous process of teaching and evaluation. Distractions caused by individual absences, personnel turnover, and changes in training schedules all directly and adversely affect the capability of the unit to win in battle. The Army is acutely aware of these impediments to training, and command policies are going to the field to ensure that distractions are minimized.

The ambitious modernization program I outlined previously carries with it some potential pitfalls in the area of training. Revolutionary technological advancements often outpace the ability of the human mind to control them. The potential for this exists in tomorrow's Army, where highly sophisticated weapons systems, electronic sensors and jammers, and necessary support equipment will be in the hands of the average soldier, nearly half of whom did not

graduate from high school. Some of this problem can be engineered away. For example, many components subject to frequent wear and tear are being designed for easy removal and replacement. Other steps include rewriting training and maintenance publications in an understandable, easy-to-read language. Still, there remains a substantial training challenge in mating man with machine in a way that allows the machine to be employed to its full effectiveness. We believe we are meeting this challenge quite well.

An associated problem is the expense and cost to the environment involved in unit training. Fuel and vehicular maintenance costs attendant to training have escalated sharply in recent years as has the cost of conventional ammunition. Some of the complex guided missile systems now cost thousands of dollars per missile, and it is rare for a soldier ever to fire a real missile in training.

It is evident that new training techniques are necessary. In addition to instituting improved skill qualification tests for the soldier, the Army is placing greater emphasis on the use of training devices and simulations. At Fort Leavenworth we are responsible for perfecting simulators which maybe as complex as a guided missile trainer or as simple as plastic ammunition which can be used close to troop living areas, thereby saving the cost of moving to remote ranges for small arms qualification. Another example is the laser engagement system involving soldiers and their weapons. By aiming his weapon and pulling the trigger, a soldier can fire a laser beam. If it hits the laser receivers mounted on the target soldier or his equipment, it will signal a hit. This is very useful in teaching soldiers to properly move and conceal themselves.

Simulations for unit commanders and staffs have also been developed. These are generally war games played on a mapboard in which the commander and staff are given a scenario and specific situation and mission. They are then required to perform the necessary estimates, analyses, and decision-making to conduct the battle. Most of these simulations are computer assisted and can provide real-time feedback on the results of tactical, administrative, and logistical decisions. The simulation then determines the probable outcome and rewards success or punishes mistakes.

Even with these advanced techniques, actual field training will still be the ultimate test short of war, and the Army must make the most of field training opportunities. The pinnacle of each mechanized and tank battalion’s field training will be a trip every two years to the National Training Center, currently under development at Fort Irwin, California.

At the National Training Center a battalion task force will be able to draw equipment as though on a NATO deployment, then move into the field to perform tactical missions. There it will fight against a well trained force using Soviet tactics and replicated equipment. In live fire exercises the battalion will be able to maneuver against a moving target array which will also be designed to represent a Soviet force. By 1984 it is anticipated that 42 battalions per year will rotate through the National Training Center.

Our task to train the Army will provide one of our toughest but most exciting challenges. With proper leadership, it can have a big payoff. But an adequately manned force which has been properly trained and equipped with modern weapons is of limited value if it cannot be deployed to a theater of operations in a timely manner and sustained once there. This task is mobilization of the force, the fourth and last of the critical challenges.

Whenever we may be called upon to fight there will be some warning time. In Europe intelligence specialists tell us that Warsaw Pact troop movements and other signs of preparations to attack NATO forces will be detected in advance, but that the warning time could be as little as a few days. In other areas of the world where U.S. interests might have to be protected, there should also be some warning time, but the amount will vary depending on the situation.

Initially, our response to either a reinforcement of NATO or deployment to a contingency area would be met with active forces now stationed in the United States. For example, the 1st Infantry Division stationed nearby at Fort Riley, Kansas is one of the divisions earmarked for Europe. Because of the short warning time, force deployment will be by airlift, with the initial divisions going to Europe and drawing from pre-positioned equipment. If they deploy for actual combat, their home station set of equipment would be reallocated to Reserve units when they are mobilized.

Presently, most of our forward deployed forces have insufficient support structure to sustain themselves while fighting a high intensity war. Consequently, Reserve Component combat service support units must be quickly activated and deployed to provide the necessary wartime sustainment. The National Guard and Army Reserve are now more closely involved in national contingency planning than ever before. Nearly 60 percent of all Army units scheduled for deployment will come from the Reserve Components. To further compound the matter, our Navy and Air Force presently have insufficient assets to support a prolonged ground war in Europe, and recent events in Southwest Asia have aggravated this shortfall.

Because of the absence of pre-positioned stocks and equipment in such areas as the Persian Gulf, increased reliance on airlift and fast shipping will be required to alleviate this problem. This year's defense budget carries a requirement for eight new logistics ships for positioning equipment forward, and consideration is being given to the procurement of additional large, fast container ships. The increases in shipping will help, but because of the extended distances to Southwest Asia and the need to insert and sustain large combat forces rapidly – hours and days, not weeks – this can be achieved only by airlift. To accomplish this the Air Force has developed plans for a long haul plane, the C-X, which will be capable of carrying outsized cargo into small airfields. It is vital that we procure an adequate number of these aircraft so that brigades and divisions can be deployed quickly into an area of operations.

Thus far I have spoken about mobilization in terms of raising and deploying forces. Of equal importance is the mobilization of the industrial base, both the government owned ammunition plants and depots as well as the many privately owned factories and ancillary service organizations which are necessary to meet wartime demands.

The Soviets maintain an active production base by turning out thousands of planes and armored vehicles every year. Ours is considerably less active and does not have the capability to ramp up quickly. Many of our plants have gone to multiple shifts for peacetime needs, thereby eliminating the planned shifts for mobilization and reducing reserve capacity from about 50 percent to less than 16 percent. A collateral problem is the aging of the Army's industrial plant equipment, where metal cutting and forming tools are exceeding their useful service life. Limited suppliers for large forgings and castings, the shortage of components such as bearings and integrated circuits, and a scarcity of critical raw materials all detract from what little industrial capacity exists.

The nation's transportation system must be revitalized in order to quickly move troops and materiel to sea and aerial ports of debarkation. This involves the major U.S. air carriers which comprise the Civil Reserve Air Fleet, as well as our land transportation systems. The Interstate Commerce Act provides that rail carriers give priority to shipments of military urgency in time of war, and legislation is being proposed to provide similar emergency powers regarding motor carriers.

Mobilization plans are regularly exercised by the armed forces and involve many government and private agencies. MOBEX 80 was conducted earlier this year and validated changes to mobilization plans made after MOBEX 78 revealed significant mobilization deficiencies. These biannual exercises will continue as a primary vehicle to test and evaluate where we are and what remains to be done.

These, then, are the four major tasks which must be accomplished in this decade if we are to have an Army capable of defending this nation's interests throughout the world. We are a proud Army willing to face the challenges ahead, but these challenges are not the private domain of the armed forces. They are challenges which demand a national consensus.

As George F. Will has said, "Armies don't fight wars, nations fight wars." A fighting force with a will to win springs from a collective national will. Successful competition in sports has certain parallels with victory in battle, and I am reminded of a response made by Indiana's basketball coach, Bobby Knight, when asked how he instilled the will to win in his team. Knight replied, "Everyone has the will to win. Not everyone has the will to prepare to win."

The preparation needed to win future conflicts will demand a sense of national purpose and a willingness by our citizens to make sacrifices for the betterment of our collective security. I have served in the Midwest on three different occasions, and I know the goodness and strength of the people in this region. The national will I described is present in Mid-America.

In closing, I would like to put our defense needs in sharper perspective. The Soviet Union is an ominous and growing threat to our national well-being, not only in Eastern Europe, but in its proximity to and potential dominance over major oil-producing regions upon which we and our Allies depend. This has been underscored during the past year by the invasion of Afghanistan and the recent attempted intimidation of Poland. The United States claims the role of leader of the West, but to make the claim credible both our adversaries and Allies must see evidence of a politically and economically strong nation backed up by military forces capable of protecting our national objectives. To maintain a strong defense requires expenditure of public resources. The alternative is to risk an inevitable decline in American stature throughout the world. This decline could ultimately lead to a loss of influence in the community of nations and eventual political and economic debilitation.

You and I and our government must be willing to sacrifice something today to ensure our security tomorrow. British Air Marshal, Sir John Slesser, put it best some years ago when he said,

> *It is customary in the democratic countries to deplore expenditures on armaments as conflicting with the requirements of social services. There is a tendency to forget that the most important social service a government can do for its people is to keep them alive and free.*

Thank you.

QUESTIONS AND ANSWERS

QUESTION: General Richardson, you have indicated a shortfall in the quality of the enlisted personnel. Could you expand on that? There have been many articles in the papers recently about the low quality of the soldier and his inability to be trained to the required level.

ANSWER: If we were able to recruit a high proportion of high school graduates we would be quite satisfied. Our efforts in all the services are to recruit high school graduates because they are achievers, are self-disciplined, and are self-motivated. Our experience shows they will do well. Their attitude is very good, and their intelligence is such that they can deal with the demanding requirements of soldiering. We are simply not able to recruit them as well as we would like. As a result, we have no choice but to fill the ranks with non-high school graduates. Our task then is to ensure that we are doing a satisfactory job in training each soldier for his or her particular skill. We are also trying to relate a soldier's abilities to the equipment that requires those abilities. I must say that even in the combat arms it is important for the Army to get a soldier who can do the many tasks demanded of him. So, in the final analysis, if we can attract more volunteers, we can be more selective on whom we take in. That's why a GI Bill is so necessary. It will provide an incentive for young men and women to enter the Army.

QUESTION: You spoke largely in terms of conventional warfare. What is the status of our nuclear capabilities? Are we perhaps leaving the era of big bombs and looking more and more to conventional military capabilities for our defense?

ANSWER: The strategic requirement is still a very valid one, and the Air Force and the Navy are the principal players in our strategic forces. Because of the high costs involved, there is some debate in Congress and the press on whether the MX is necessary, or whether the B-1 or its replacement is the right item to give us that leg up to maintain our strategic capability. I don't believe we will let the Soviets surpass us in the strategic arena. Strategic weapons have demanded very high funding levels over the last ten years. Our conventional forces – not just the Army but also conventional forces in the Navy and the Air Force – have been degraded to the point that the possibility of war in Southwest Asia causes us concern, because that would involve conventional forces. We are trying to ensure that we have the proper strategic force level, but also to raise the level of our conventional forces to the point where they are adequate. They are not adequate now.

QUESTION: One of the great assets we have is the high technology that we have developed in recent years. What means do we have in protecting it and not giving it away rather promiscuously, as it appears to the civilian population?

ANSWER: I wish I knew the answer to that question. In our free and open society, most of our literature is available to the Soviet Union and anyone else who wants to use it. Trade magazines do give a lot of technical information out to potential adversaries. I don't think our society is going to close itself to the point that we would reduce our ability to market freely whatever technological ideas we have, such as our R&D experience.

QUESTION: General, the converse of that question, then, is how much do we know about what they are not disclosing in the same way?

ANSWER: It is very difficult for us to acquire technical information on them. We generally know troop strengths, dispositions, and equipment numbers; but technical information is very difficult to get. For example, it took us a long time to learn what they were doing with the

capabilities of their tank fleet, and what we did learn caused us to improve our anti-tank systems. Technical information is the most difficult for us to acquire.

QUESTION: General, I understand that Russia and China have mandatory military service. What is the extent of a citizen's military obligation in those countries?

ANSWER: For the Soviet Union, it is two to three years depending on the branch of service, with additional time in a reserve capacity. There are similar conscription requirements in China.

QUESTION: Our most recent effort to use military force was in Iran. Could you tell us what a post-event analysis may have shown as weaknesses in that operation?

ANSWER: I have not been privy to the review of the Iran raid. My sensing, and what I have read in the papers as well, is that perhaps the preparation in selected areas was not as extensive as it could have been. Perhaps not enough attention was given to the desert environment that the helicopters would have to operate in. Rehearsals are also very important to success in such an operation. From my knowledge and assessment, the plan was workable. Had the equipment not faltered or had they been able to overcome those difficulties, they could have pulled off a success. But luck always has a lot to do with combat success.

QUESTION: Even if we were to equalize our equipment and buy all of the things you itemized, from manpower to tank strength, how do we ever overcome those two great oceans? We have to get our forces there. Does that mean that we may have a greater dependency on our Allies in the future?

ANSWER: We certainly want to get our Allies to participate in the common defense. But our perceptions and those of our Allies often differ on the nature and extent of the threat and appropriate defense responses. Additionally, their domestic political situations often cause them to accomplish less than they desire. That leaves it up to us, with or without Allies, to project power when we have to in the protection of our national interests. We have a couple of ways of projecting power. We can pre-position equipment and forces around the world, such as in Southwest Asia, Saudi Arabia, or Egypt. Or, alternatively we can design forces, concepts, and new doctrine for using light, strategically mobile forces. That is something we are doing at Fort Leavenworth now. If we had to go into Southwest Asia, could we fight a different war than we would fight in Europe? The answer is "Yes," we certainly would, because of the mountains and deserts. Therefore, by using different doctrine and different types of combat units and equipment, there is a way to lighten the strategic lift requirements and therefore be able to move more quickly. We think we will get some strategic warning, and if we are properly prepared, we can move troops and equipment rapidly by sea and airlift.

QUESTION: Would you comment on the comparative hardening of the industrial base and military installations in Russia versus that in the United States?

ANSWER: I know that their anti-ballistic missile defense capability surpasses ours by a very large margin, both in terms of their radar systems to detect our incoming missiles and their ability to harden their attack systems. Their military anti-missile attack systems are fairly significant. We have yet to field one. That is purely from the military side. I can only speculate on the industrial base, but my guess is that those in the Ural Mountains and elsewhere are fairly well protected. Some of their better ammunition or tank plants are probably in pretty good

condition too because they have taken anti-ballistic missile defense seriously for a number of years.

QUESTION: In view of your comments on light forces and the Rapid Deployment Force, do you have any comment on the possible merger of the Marine Corps with the Army in the coming decade?

ANSWER: No, I don't think that will happen. The Marines and the Army need to work together. Marines are capable of quick deployment from the seaborne pre-positioning. They can get to an area and secure a lodgment, but they cannot engage in prolonged land combat particularly against tank and mechanized forces, simply due to the design of their lightweight, mobile force. The Army has generally a larger, heavier force with a much larger combat and support structure; and it is, therefore, able to fight in extended combat for long periods of time. The Army has everything from more artillery support to more logistical support, as well as just a larger force size. The two have separate missions, and to merge the two would be detrimental to both missions.

QUESTION: The expenditures that the Soviet Union has put forth in terms of military equipment and hardware must present a tremendous strain on the country's economy and resources, to a point of diminishing returns. Would you comment on what adverse effects one can anticipate from this massive expenditure?

ANSWER: My guess is that if they continue at their present pace, it will have an adverse effect on their economy. We note the possibility, in perhaps another ten years, of the depletion of their own oil reserves. This would cause them great difficulties in being able to meet the needs of their defense forces without having to import oil. That is the only shortage that I can think of that is fairly severe because they have a substantial amount of other raw materials, such as bauxite and cobalt.

QUESTION: There has been some talk in recent years about a single military service, not a separate Navy, Army, and Air Force. Would you care to comment on that?

ANSWER: I wouldn't give it any serious consideration. We have watched the Canadian experience; and, although that is a very small armed force, even they seem to have some reservations about unification. The loss of identity of those parts that are associated with ground combat, or naval warfare, or air power has been a concern to some. I don't think that the U.S. defense forces will move in that direction.

QUESTION: General, we all read about the Chrysler motor car company, perhaps more than we want to. What we don't read is the amount of financial intertwining between military hardware divisions of that corporation and the commercial car divisions. Could you comment from your knowledge on what would happen to Chrysler Corporation's ability to produce tanks if the automobile portion of it went down?

ANSWER: I can't comment from any detailed knowledge because I don't deal in that area but I do know that the military division, which is building our XM-J tank, is a fairly viable division in itself. To the best of my knowledge it is not associated with the problems that the commercial car division of Chrysler is having. Whether the government does or does not subsidize Chrysler again should not have an impact on Chrysler's ability to turn out the XM-1 tank.

QUESTION: From the standpoint of time requirements for mobilization, how important is the Draft Registration?

ANSWER: Very important. It would save us over ten weeks in getting the first inductees into the reception stations, so we feel very strongly about keeping the Registration. In fact, our Chief of Staff has already pointed out to the Transition Team that Mr. Reagan needs to reexamine what he has said about eliminating Registration. We believe that it is very important to continue that Registration, not only for the sake of the mechanism and the time it would save, but also as a signal to the Soviet Union. The Soviets need to know that we are not going to fall off the necessary preparation of our defense forces.

QUESTION: What has been the experience in the last few years with women in the Armed Forces, including women at the service academies?

ANSWER: Generally speaking, women have done well. When we initially increased the percentage of females, we accepted only those with high school diplomas. Those women were really quite good, though we had some high attrition, about 33 percent early on. For various reasons we have now been accepting female soldiers, as well as males, who have less than a high school education, and the trainability and retainability of the women have been less successful than before. Pregnancy does cause some problems. I think some 10 percent are pregnant at any particular time and that causes the person to be away from duty for several weeks.

A second point that needs to be made is that initially we have allowed women into all but the combat military occupational specialties. We in the Army, and I think the other services are probably doing this too, are determining those jobs for which we now have found women are better suited for meeting the physical requirements. We are drawing back from some of those jobs that we went fairly heavy into with women about two or three years ago.

As for women in the Service Academies, some recent West Point faculty members told me they were very impressed with the women that were graduating from West Point. They said that except for physical standards there has been no drop off. But there is a physical double standard. Other standards, such as discipline, academic excellence, and all the rest at West Point, were maintained and held. They commented very favorably on the women that they saw graduate in the last two years. The women that I have seen at Fort Leavenworth in the officer corps and in the enlisted ranks are good. But we have to decide what proportion of the Army should be female.

QUESTION: Would you care to comment on the character and quality of the foreign student coming to the Command General Staff College with regard to the country of origin? Do we have an equal opportunity to attend other countries' schools?

ANSWER: We send some of our officers to the Canadian, British, Australian, German, French, Italian, and the Indian Staff Colleges. In fact, I did not go to the U.S. Command and Staff College. I attended the Canadian Staff College in 1959. Out at Leavenworth right now, we have 100 foreign officers from 45 countries. Generally speaking, they are the cream of the crop from their countries. Most of them have been carefully screened on a highly selective basis. The Allied Hall of Fame contains pictures of those who have graduated and risen to the topmost positions, either in their armed forces or even as the President of their country. We are very impressed with these officers. They have fought in various wars and in areas that we have little experience in. They have well thought out economic and political views with respect to their

countries and geographic regions. Many of them are a little older, more senior, and more experienced than our American officers, and they mesh very well with our student body. Many of them are going to eventually lead the armed forces of their countries. They have a great association and affection for the people in this part of America. Overall, it is a good program, and the United States gains a lot from it.

QUESTION: General, would you please comment on developments in the areas of chemical and biological warfare capabilities?

ANSWER: The Soviet Union is way out in front of us in chemical warfare, both offensively and defensively. We are playing catch-up in defensive protection and are not too bad off. But we are not where we want to be with our offensive capability. We have tried to get a facility built to produce binary chemical munitions. It was in the President's Budget and was set back a year. We hope that President Carter will include it in his proposed 1982 Budget, because after the Afghanistan invasion, Soviet aggressive tendencies are all too clear. If we do not have a capability to employ chemical munitions, then we do not have a deterrent and the other side knows that. On the nuclear side, we need to improve our tactical nuclear weapon capability on the European battlefield to give us a balance with what the Soviets have in their rocket and missile systems in Europe today. At the end of 1979, most NATO countries agreed to the United States modernizing its tactical nuclear force in Europe. That was a great step forward, but we are not where we ought to be in this area. Increased capabilities are required.

QUESTION: You mentioned the difficulty of paying an adequate salary to the non-com's; how about the officers?

ANSWER: That is a problem. I am concerned with the number of West Point graduates who are getting out, as young captains, after their five-year commitment. But pay is not the only dissatisfaction influencing the officers. Working wives no doubt cause many resignations because they do not want to reestablish themselves each time their officer husband is required to move. But I would have to say some pay comparability increase for the officers would make a difference.

QUESTION: General, are there efforts to increase positive communication between the U.S. Army leadership and the Mainland Chinese military leadership?

ANSWER: Yes. Army representatives in logistics and in the research and development fields have met with them and discussed how we organize our defense forces, how we conduct our materiel development programs, and how we organize logistically for combat. To my knowledge, we have not sent any combat officers to China to talk about how we fight. But that may come before too long. So, dialogue with the Chinese has already started; I know two people who have already been over there on visits.

QUESTION: General, there is increasing concern that Russia is little by little cornering a very large list of strategic materials and that a national strategic materials policy needs to be implemented. Does the Army have a position on that? Is there something that we as political beings should be doing? That might be just as important in the long run.

ANSWER: The Army is quite concerned about the strategic materials for war-making capabilities. I have mentioned a few already. Our concern is where those are located today, in the parts of the world to which we have access such as the area south of the Sahara, South Africa in particular, and in Latin America. The Army has stated its view to the Office of the Secretary of

Defense that we must guard against Soviet encroachment in areas for which we would have a significant strategic interest five or ten years from now, for just the reason you state – strategic materials.

QUESTION: May I ask, General, if there is a possibility that the Russians would rescue our people from Iran?

ANSWER: I think that possibility is remote. They would probably just as soon see us stewing with the hostages there for some time.

Dr. Kimball, I want to say that I truly appreciate the opportunity to talk to such a distinguished group as those present. Like many others in uniform, I appreciate the opportunity to talk about what is important to us in the Armed Services. We are interested in informing the private sector of those elements that comprise our current defense posture, the areas of concern, and our efforts to work out those problems. I am sure I speak for all my cohorts in uniform when I say that we recognize the importance of a continuing dialogue with the citizenry of this country. It has been a great pleasure being with you.

MIDCONTINENT PERSPECTIVES was a lecture series sponsored by the Midwest Research Institute as a public service to the midcontinent region. Its purpose was to present new viewpoints on economic, political, social, and scientific issues that affect the Midwest and the nation.

Midcontinent Perspectives was financed by the Kimball Fund, named for Charles N. Kimball, President of MRI from 1950 to 1975, Chairman of its Board of Trustees from 1975 to 1979, and President Emeritus until his death in 1994. Initiated in 1970, the Fund has been supported by annual contributions from individuals, corporations, and foundations. Today it is the primary source of endowment income for MRI. It provides “front-end” money to start high-quality projects that might generate future research contracts of importance. It also funds public-interest projects focusing on civic or regional matters of interest.

Initiated in 1974 and continuing until 1994, the sessions of the Midcontinent Perspectives were arranged and convened by Dr. Kimball at four- to six-week intervals. Attendance was by invitation, and the audience consisted of leaders in the Kansas City metropolitan area. The lectures, in monograph form, were later distributed to several thousand individuals and institutions throughout the country who were interested in MRI and in the topics addressed.

The Western Historical Manuscript Collection-Kansas City, in cooperation with MRI, has reissued the Midcontinent Perspectives Lectures in electronic format in order to make the valuable information which they contain newly accessible and to honor the creator of the series, Dr. Charles N. Kimball.

LIEUTENANT GENERAL WILLIAM R. RICHARDSON has had a distinguished and varied career following graduation from the U.S. Military Academy in 1951. His first assignment was as an infantry platoon leader in Korea. He then served at the Infantry School, Fort Benning, Georgia, and with the 28th Infantry at Fort Riley, Kansas. He returned to West Point for three years with the Department of Tactics. This was followed by a return to Korea in the Office of the G3 (Operations), 8th U.S. Army.

In 1966 he activated the 3rd Battalion, 39th Infantry at Fort Riley and deployed with that unit to Vietnam, where he also served as G3 of the 9th Infantry Division. He served in the Office of the Chief of Staff in 1969 and then returned to Vietnam to command the 198th Infantry Brigade and serve as Chief of Staff, American Division.

More recent positions have been Deputy Commanding General of the Training Center at Fort Leonard Wood, Missouri; Assistant Commandant of the Infantry School at Fort Benning; Commander of the 193rd Infantry Brigade in Panama; and Director of Requirements in Headquarters, Department of the Army.

General Richardson graduated from George Washington University with a Master's Degree in Business Administration. He has attended numerous military schools including the Canadian Army Staff College and the U.S. Industrial College of the Armed Forces.

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