SPECIAL ADDRESS BY THE PRESIDENT

CAPITOL HILL, SEPTEMBER 1ST, 2001

Members of Congress and My Fellow Americans:

I have decided to speak to you this evening because we have important decisions to make about our national defense. These decisions may very well affect the security of our nation for decades to come. As such, we will shape the security not only of our generation but that of our children and grandchildren.

War today wears many faces, from the sophisticated technician preparing the electronic guidance of advanced missiles to the fanatic in the streets armed with dime-store explosives. War in the future may be the silent action of weapons in space, the hum of computers selecting targets, and the surprise of a technological strike against satellites or computers when one side discovers itself blinded and unable either to locate the enemy or to communicate with its own forces.

The future military threat to the United States will most likely not be that posed by Saddam Hussein, when he foolishly arrayed his forces against us in an open desert. Potential adversaries, like terrorist leader Osama bin Laden, will seek to exploit their strengths against American weaknesses: they will attempt to deny the United States bases overseas by attacking them with chemical or biological weapons; they will prevent the long buildup of large American ground forces by hitting supply areas and transportation hubs with cheap ballistic missiles; they will attack our aircraft carriers with inexpensive antiship cruise missiles and cheap sea mines; they will combat our multi-million dollar aircraft with ground-to-air missiles that cost only a few thousand dollars; and they will attempt to disrupt our communications and intelligence networks that rely so heavily on advanced automation and computerization.

To combat these new tactics, the United States must create a technologically advanced

Excerpted from Reshaping America's Defenses: Four Options by Lawrence Korb and John Hillen, published October 2001 by the Council on Foreign Relations as part of its Policy Initiative program. The speech is one of four outlining possible approaches to future U.S. defense policy, including revolutionary transformation, evolutionary transformation, enhanced defense and cooperative defense. The Council itself takes no position on the issue.

force that is mobile, stealthy, and agile and that can attack targets from great distances. Such a force will not need huge forward bases or bulky supply lines, as it will be able to attack targets anywhere with a variety of sea, space, air or ground-based weapons.

This is a very different force from the lethal, yet ponderous, military we have today.

When the Cold War ended, we possessed the world's most powerful military. The war in the Persian Gulf showed what we could do. Since then, we have reduced our military overall by one-third. I fully subscribe to that decision, which reflected both lesser threats and America's need to put its fiscal house in order. But that still leaves us with forces designed thirty years ago primarily for a Cold War conflict in Europe that ended more than ten years ago. As a result, we are poorly prepared for the next wave of technological innovation. Too much of our defense policy is mere tinkering with an increasingly obsolete structure that we cannot afford and do not need. By attempting to keep in readiness a military intended to meet the least likely event-a conventional war-we are courting instead a more likely disaster: a technological Pearl Harbor from a terrorist group or adversarial state using high technology or weapons of mass destruction. That is because the military-technical revolution is available to everyone who seeks to take advantage of it, including our potential adversaries.

I will try to define this Revolution in Military Affairs for you.

Until recently, all military efforts concentrated on creating ever greater masses of force and ever greater explosive power, the most spectacular example being the nuclear weapon. This required the mobilization of whole societies and, throughout the Cold War, the danger of nuclear holocaust.

But what if much of this is no longer necessary? What if we could locate the enemy precisely, strike him accurately from a very long distance, and do so with a minimum of force? What if a network of sensors deployed on the ground, in the sea, in the air, and in space could pinpoint enemy movements with unerring accuracy? What then if computers could instantaneously process this information and relay it to a network of weapons that could launch and guide precision-munitions toward the enemy

targets -with little danger to American forces who will no longer have to engage face-to-face with an enemy? That is what the military-technical revolution is all about: increasingly precise knowledge of the target's location and increasingly accurate fire that can be brought against it from long range.

The technological revolution that has given us unprecedented access to information can also give our defense forces unparalleled precision in finding and hitting the target.

This "what if" world is already with us. Let me give you a few examples:

- The World War I telegraph, the fastest transmitter of data in its day, sent 30 words a minute; this increased through Teletype to 66 words a minute by the early 1970s. Desert Storm computers, by comparison, processed 192,000 bits of information a minute. We can look forward to processing millions, even trillions, of bits of information as computers become even faster and smaller.
- During the Gulf War, F-117 fighters with laser-guided bombs destroyed the same type of targets that took 1,500 B-17 missions in World War II and 176 F-4 missions in Vietnam.
- Those same F-117s struck 40 percent of Iraq's strategic targets with only 2 percent of our total aircraft sorties.
- · Tomahawk cruise missiles were able to find their marks with no risk to our forces.
- · Also during the Gulf War, our space-based navigation satellites enabled allied forces to maneuver precisely across trackless desert.

These new ways to locate the enemy precisely, to react rapidly, and to strike accurately are already transforming warfare as we know it. And this works both ways. The key to battle is not only the possession and use of this information but the denial of it to others.

And that is why I used the phrase "a technological Pearl Harbor." We are not the only ones exploring these frontiers.

Already the accuracy of even inexpensive missiles can threaten \$100 million aircraft and billion dollar ships. Systems already exist that would deny our forces some of the advantages that made the Gulf War and the Kosovo air war such massive successes. An adversary need not build a huge and expensive military to challenge the United States today. A modest investment in weapons of mass destruction, short range ballistic missiles, and many high-technology weapons can deny American forces access to areas such as the Persian Gulf or the Taiwan Straits. If our forces are not prepared to combat these threats with information-age technology, they could suffer many casualties against a relatively unsophisticated enemy.

The long, sad history of warfare gives many examples of how victorious nations became complacent, with catastrophic results.

I am therefore proposing the transformation of our defense through a revolutionary six-step program:

1. Accelerate Research and Development.

Our objective is to bring the new technologies of location, reaction, and accuracy online as fast as possible. I propose, therefore, that R&D spending rise over the next decade. This will represent a \$500 billion investment focused on emerging technologies such as:

- · Weapon systems that can strike more precisely and at greater ranges;
- · Increasingly smaller, more mobile computers and communications systems to make better and faster decisions:
- · Information warfare technologies to cripple an adversary's command, control, communications, and computer facilities as well as protect our own;
- Stealth technologies and techniques to make all our forces harder to see and therefore less vulnerable to attack;
- Unmanned vehicles and robots to reduce the risk to our forces;
- · New platforms for submerged power projection and undersea warfare;
- Space-based systems that not only support ground, sea, and air forces with better intelligence, communications, navigation, and weather forecasting but that are also capable of delivering firepower anywhere in the world on a moment's notice, including against ballistic missiles launched against the United States.

2. Take Special Measures to Protect the Key Elements of the Military Revolution—Communications and Computers.

America's defenses will also be protected by a capability to deploy robust space-warfare capabilities and independent and integrated information-warfare capabilities. This will ensure that our nation never suffers a space or information strike like a crippling computer virus for which we are not prepared.

3. Reduce Our Force Structure.

The purpose of this is both to free up resources and to create the new defense we need. We will gradually eliminate some Army

divisions, tactical fighter wings, carrier battle groups, and the Air Force's older B-1 and B-52 bombers and nuclear missiles. Systems and units that were originally fielded to fight the massive campaigns of the Cold War will be phased out. We will also reopen with Congress the issue of reducing the size of the Marine Corps below its congressionally-mandated level of three divisions and three air wings. The reorganization of our remaining forces into new units that fully exploit advanced technologies and new war-fighting concepts will more than offset their reduction in size.

As a result of these and other changes, the armed forces will be gradually reduced over the next decade to about 1 million people, versus the 1.39 million we have today. The reserve forces will be cut by a commensurate amount. To ease the strain on the remaining forces, our forward forces in Europe will be reduced from 100,000 to 40,000. The reduction in force structure will free up the money we will need to revolutionize our military and to pay the troops that remain a wage sufficient to compete with the private sector and provide them with the quality of life they deserve.

4. Develop a New Strategic Framework.

Just as there is a revolution in military affairs, there must also be a revolution in our strategic nuclear affairs. With the end of the Cold War, the doctrine of Mutually Assured Destruction and the Anti-Ballistic Missile Treaty (ABM) are outmoded. We are no longer threatened by Russian missiles but by missiles in the hands of outlaw states. It is time to make a grand bargain with the Russians. That will enable us to move beyond MAD and the constraints of the ABM Treaty. In return for an agreement on reducing our strategic offensive nuclear weapons from 6,000 to between 1,500 and 2,500, the restrictions on testing missile defense systems will be lifted.

This will enable us to actually have the first stage of a robust National Missile Defense system in place by 2004. If the Russians are not willing to work with us on moving beyond an offense-dominated structure, the United States will have no choice but to withdraw from the ABM Treaty. I hope this will not happen, but as President of the United States I have a moral obligation not to leave our citizens unprotected.

5. Maintain Superiority In Space.

In the Gulf War and Kosovo, we were able to achieve our objectives quickly and decisively with a minimum of casualties because of our ability to use our orbiting satellites to guide our weapons to their targets. But we cannot assume that capability will not be challenged. At the current time there are 1,000 active satellites orbiting the earth. About 125 belong to the U.S. military. Within a decade, the percentage controlled by the U.S. military will diminish as the number of satellites in space will double, As the Space Commission report of January 2001 noted, "Every medium - air, land and sea- has seen conflict. Reality indicates space will be no different."

To ensure that we maintain our dominance in space, we are expanding our offensive and defensive space assets expenditures significantly. These increased funds will go for space sensors, space-based radars, and antisatellite weaponry.

6. Refocus Our Forces Towards Asia.

The relative importance of Asia to our security is growing, particularly as the risk of major war in Europe shrinks to practically zero. Several flashpoints across Asia are of particular concern to us: the Korean Peninsula, where the North Korean regime continues to be unpredictable; the conflict between India and Pakistan, which has become even more dangerous with those countries' acquisition of nuclear weapons; the question of Taiwan and China; and the contested claims by several countries on the Spratly Islands. We must be prepared to protect our interests and security should any of these potential conflicts deteriorate further. To do this, we will rely on our European allies to do more on their continent with less American involvement.

Once the transformation of our forces is complete, the United States will field the most advanced and effective military in the world.

For strategic missions, we will rely on a nuclear deterrent that will have 1,500-2,500 warheads rather than the current level of 6,000, and we will work with Russia to see if we can bring that number even lower. These strategic weapons will be bolstered by two other elements: first, our ability to carry out multidimensional, long-range precision strikes; and second, our capacity to wage information warfare. Together, these will comprise a new strategic triad that replaces the old, purely nuclear arsenal. As work progresses on the first two parts of this triad, we will be able to reduce our nuclear weapons gradually, without any danger to the United States or without losing the effectiveness of our deterrent.

Our conventional forces will also be much changed. The Army and Marine Corps should include no more than 30 information-intensive regiments and brigades. These smaller and more lethal units will also be mobile and stealthy, and will use robots and other advanced technologies to minimize casualties. The Army's ground forces will be deployed principally by air, and be able to conduct decisive close-combat and land-based deep-strike operations anywhere in the world. Forward-deployed forces will be reduced substantially, and the marines will rely on smaller sea-based forces that emphasize stand-off weapons and unmanned aerial vehicles. This force will be capable of operating anywhere in the world without need of local bases.

Our air force will evolve into a Space and Air Force. Aircraft of the future will be stealthier, have more lethal weapons and longer ranges, and increasingly become unmanned—a move that decreases cost and increases performance over piloted aircraft. Our navy will begin to shift away from a carrier-based force to one that provides the same sort of mobile sea power through craft such as the arsenal ship, the stealth battleship, the distributed capital ship, and the small street-fighter ship. All these concepts use advances in information technology, stealth, and precision munitions to spread increased naval firepower among many different and smaller ships. The large aircraft carrier is a magnificent vessel, but is expensive to operate, increasingly easy to find, and vulnerable to cheap anti-ship missiles and torpedoes. I am afraid the day of the carrier will soon be over.

Finally, our reserve forces will operate unmanned aerial vehicles, micro robots, and satellites; pilot transport aircraft; perform information warfare, network-management, and distributed logistics functions in direct support of our active forces; and reinforce in other combat and combat support areas. As the NSSG report of March 2001 recommended, the National Guard will be given Homeland Security as its primary mission. Its heavy Cold War combat divisions will be eliminated.

We cannot have a revolutionary change in our field forces without some similar change in the Pentagon itself. Our current organizational structure for national defense is over fifty years old. I have directed the secretary of defense to apply the same kind of innovative thinking to our defense bureaucracy as he plans for our fighting forces. Because technological innovation obscures the traditional boundaries between air, sea, and ground, perhaps we no longer need services organized along those traditional lines. In an era when a stealth submarine can engage enemy tanks, or when an army might have many assets based in space, does it

make sense to separate the training of our services or count our strength in ground divisions, air wings, and navy carrier battle groups? In the digital age, when corporations are flattening hierarchies and sharing information across work groups, cannot the Pentagon afford to trim its unwieldy organizational structure? Is our government, split as it is into various agencies with their separate responsibilities, organized in the right way for information warfare? These are some of the issues I would like to pursue with the same energy that we will use to remake our fighting units.

And here is some good news. We can acquire this revolutionary military force within a defense budget of approximately \$350 billion per year, using the reductions in force structure to give us the extra increments we need for both the new procurements and the additional R&D.

My fellow Americans, I realize that this plan contains its share of risks. Technological innovation is a gamble. A program of such magnitude usually takes more time and often costs more than we expect. I am also aware that revolutions upset traditional structures and discard time-tested arrangements that have served us well. The real impediments to change are often more psychological than physical.

Three of these difficulties deserve special attention:

1. The current "Cold War lite" force structure will not go quietly into the night. We have managed to reduce our operating forces very successfully since the early 1990s, only to discover that various peacekeeping duties have imposed considerable strain.

Yet while less than 130, 000 sailors run the entire Atlantic Fleet, about 150, 000 military and civilian personnel are assigned to Washington, D. C., to manage the military. I was astonished by that figure, and I know you are too. We are going to use a heavy hand to eliminate unnecessary layers of command and management.

2. The education of our military still reflects the older emphasis on hierarchies and separate services. We have taken great strides toward joint operations, but we still need greater emphasis on functional frameworks. Joint operations should be the first, not the last, choice.

3. The United States and its allies are entering this revolution together. It is high time that we begin to plan as coalitions, not wait until a crisis forces us to look at a problem together. Our allies are not launching into the military-technological revolution with the same

enthusiasm we are. In order to keep systems compatible so that we can work together on the battlefield, I will redouble our efforts to bring our partners, particularly our NATO allies, along in this endeavor, particularly in the area of missile defense.

As we work to overcome these problems, we can be sure of no end of controversy. Some will argue that the risks are too great, others that the obstacles cannot be overcome. There will be honest differences of opinion over whether the technologies can work.

To those critics I say: yes, we will still need some contingency capabilities; we will still be sending some old-fashioned forces to deal with some old-fashioned problems. And yes, American soldiers, marines, sailors, and airmen will still be going in harm's way.

There is no avoiding the hard and brutal fact that war is about death. As one young officer said, "This modernization debate is only about budgets and bureaucratic turf if you don't have to go to war; for people who actually have to go to war, it's about living or dying." We can do our best to deter; but deterrence may still fail, and we must still prevail. We will prevail because we are and will remain far superior to any potential adversary.

Ultimately, the defense of the United States is in the hands of those who volunteer to defend us. You who have studied war know better than I that the revolution in military affairs is not an option but a fast-dawning reality. And it is because of my confidence in your capacity to make the changes that I have decided upon such a revolutionary defense policy.

We know our own history. Like many nations, we have been alerted to our deficiencies in defense only after suffering disaster. In the absence of a clear and present danger, it remains easier to drift along, secure in the memories of past triumphs. And this, and this alone, is in fact the clear and present danger.

I ask you tonight, therefore, to apply to our national security the same sense of alertness and adventure that distinguishes our civilian society. From the beginning of this republic, observers have been struck by America's eagerness to embrace change, our pride in revolutionary advances, our ability to remake our world even in the absence of any pressing need to do so. This is the high confidence that has made the United States the leader. And that is why I am so confident that with your support, we can embrace this revolution in military affairs and, by doing so, secure our future.