

Seminar C
April 8
C. 1

NATIONAL DEFENSE UNIVERSITY

NATIONAL WAR COLLEGE

DETERRENCE AND THE NEW NUCLEAR THREATS

CORE COURSE ESSAY

LT COL MACE MACELHANEY/CLASS OF 94
CORE COURSE 5 - MILITARY STRATEGY AND
OPERATIONS

SEMINAR C
DR KEANEY - FACULTY SEMINAR LEADER
COL HUGHES - FACULTY ADVISOR

NATIONAL DEFENSE UNIVERSITY
LIBRARY
SPECIAL COLLECTIONS

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 1994		2. REPORT TYPE		3. DATES COVERED 00-00-1994 to 00-00-1994	
4. TITLE AND SUBTITLE Deterrence and the New Nuclear Threats				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National War College, 300 5th Avenue, Fort Lesley J. McNair, Washington, DC, 20319-6000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 13	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

For over forty years US defense policy centered on the prevention of nuclear war with the Soviet Union. During this period, the primary focus of US military strategy was to deter the use or threatened use of Soviet nuclear weapons against the US, our allies, or our interests. The end of the Cold War and the breakup of the Soviet Union unmistakably altered US and Soviet threat perceptions and led to new agreements designed to lessen the risks of nuclear war. Concurrent with these developments, however, new nuclear threats appeared with potentially ominous consequences for the United States.

The emergence of new nuclear states, some of which are hostile to the US, has brought into question the future applicability of the nuclear deterrence concept. This paper addresses this fundamental question and its implications on future defense planning. It first discusses the dangers of the newly emerging nuclear states and the threats they pose to US interests. It then analyzes the declining utility of US nuclear weapons as a deterrent to the emerging threat. Finally, it recommends some options for dealing with the threat and enhancing overall deterrent capabilities.

BACKGROUND

In the years immediately following World War II, the US and the international community attempted to prevent nuclear proliferation and ban nuclear weapons altogether. Despite these noble efforts, the Soviet Union, Great Britain, France, and China soon joined the "nuclear club." The rationale for developing

nuclear capability varied among the four countries and included improved security, enhanced prestige, and perceptions of power. Additional efforts to control the spread of nuclear weapons led to the Nuclear Non-Proliferation Treaty (NPT) in 1967.

Since its inception, the NPT has had little success in preventing proliferation of nuclear weapons. Besides the five acknowledged nuclear powers, India is the only other known country to have tested a nuclear device. However, it has not acknowledged production of any nuclear weapons. South Africa recently declared it had produced nuclear weapons but only after it had destroyed them. In addition to these two known capabilities, Israel and Pakistan most likely already possess nuclear weapons or can assemble weapons quickly. Experts acknowledge that North Korea has sufficient nuclear material for at least one weapon. Iraq had an extensive nuclear weapons development program, and UN inspections after the Persian Gulf War revealed that it may have been within a year of developing its first weapon. The breakup of the former Soviet Union led to three additional "instant" nuclear powers - Belarus, Kazakhstan, and Ukraine.¹ Many analysts also believe that Iran, Libya, Syria, and Algeria are actively pursuing nuclear capability. Additionally, Germany, most of Western Europe, Japan, Taiwan, South Korea, Argentina, and Brazil have the infrastructure and technical ability to construct nuclear weapons quickly. In fact, any advanced industrial country with sophisticated nuclear power industries could theoretically acquire a nuclear weapon within six to twelve months.² Still other countries have the

financial resources to purchase these capabilities or possibly the weapons themselves.

THE DANGERS

The spread of nuclear weapons to those countries willing to bear the risks and costs appears inevitable. Emerging nuclear states face political, economic, and military risks that could evolve into possible worldwide condemnation, economic sanctions, or preemptive military strikes. Financial costs can run into billions of dollars. The significant risks explain why none of the emerging nuclear states openly acknowledges nuclear capabilities. Despite the risks and costs, the technology and scientific knowledge are becoming increasingly easier to attain, and proliferation could become even more widespread in the future. As the number of countries possessing nuclear weapons increases, the probability of an accident, unauthorized release, or eventual use also increases. A small crisis involving nuclear armed states could escalate out of control and lead to a "war that nobody wanted." The risk that these wars would involve nuclear weapons increases as more countries acquire that capability.

Whatever origin or purpose, any use of a nuclear device threatens international peace and security, world order, and stability. Nuclear weapons use could have serious consequences for an ever more economically interdependent and democratically developing world. Any use would greatly increase the pressure on other countries to start or complete their own nuclear programs. For example, recent events in North Korea have caused concern in

Japan about the possibility of their own nuclear future. A nuclear armed Japan would in turn cause others to arm themselves likewise. "An atomic burst - of whatever size - fired in anger anywhere on earth would turn the world's most economically dynamic and populous quarter into a pressure cooker heated by ancient enmities and the most powerful instruments of modern destruction."³

Many emerging nuclear powers are openly hostile to the US and threaten US interests. Some that are not openly hostile jeopardize stability in regions very important to the US. The US faces increased dangers from these countries for many reasons. Some or all of the following factors characterize the new nuclear nations: a high degree of instability, different beliefs concerning the military utility of nuclear weapons, few remaining superpower constraints, and inexperience in dealing with nuclear weapons.⁴

North Korea, Iran, and Iraq pose the most serious threats to US interests. All three are openly hostile to the United States in regions that are politically and economically important to this country. The US has committed military forces to combat in the Persian Gulf and Northeast Asia, and significant military forces remain in both regions.

The possession of nuclear weapons by any of these countries could severely limit US freedom of action. General K. Sundarji, the Indian Army Chief of Staff, said that one lesson of the Persian Gulf War was "Never fight the US without nuclear weapons."⁵ The threat to use nuclear weapons complicates military deployment and employment planning, undermines regional and global coalition

...ing efforts, and brings into question previously assumed basing and overflight rights. Further, the possibility of nuclear weapons use could result in an erosion of US public support for military intervention thus creating uncertainties of US resolve and deterring any US action.

More nations have access to nuclear weapons than ever. The dangers are evident and increasing. The challenge for the US is to prevent their use.

DETERRENCE

Deterrence exists when an adversary perceives that his opponent can inflict unacceptable damage on the things he values most and that his opponent also has the resolve to use that capability under some circumstances. Thus, the calculus of deterrence includes both a capability component and a will to use component. If an opponent perceives a lack in either component, the result is an ineffective deterrent.

During the years of the Cold War, the United States and the Soviet Union built massive nuclear arsenals and eventually developed a stable deterrent relationship. Either country could retaliate effectively even after absorbing a first strike. Nuclear doctrine developed differently for the two countries, but each recognized that victory in a nuclear war was not attainable and therefore must not be fought. Although neither will renounce the possible use of nuclear weapons, both have "come to regard such use as a last resort, to be threatened under strictly restricted conditions, and with no expectation of political benefit should

that threat have to be carried out."

Because of the successful role of nuclear deterrence over the years, many believe that the US can similarly deter any of the newly emerging nuclear states. The general belief is that these countries "wouldn't dare" use their nuclear weapons. The US has unquestionable superiority in nuclear capabilities. It can hold at risk virtually any target except possibly those that are constantly moving, are not identifiable, or are deeply buried in superhardened structures. Despite these impressive capabilities and advantages over any emerging nuclear power, there is reason to believe that traditional nuclear deterrence may not work.

The US is unwilling to resort to nuclear weapons except under the most dire circumstances. The US remains the only country to have used nuclear weapons in anger, and political leaders have traditionally disdained even the suggestion of their use. Even when allied forces were near defeat twice in the Korean war, the US did not use its nuclear capability. When French and US military leaders considered the possibility of using the US nuclear capability at Dien Bien Phu, President Eisenhower responded "You boys must be crazy. We can't use those awful things against Asians for a second time in less than ten years. My God."⁷ Future presidents are likely to be equally reluctant to go down in history as the second US president to resort to nuclear weapons unless the physical security of the country is in peril.

A US nuclear retaliation against a newly emerging nuclear state violates the just war criteria of proportionality. The US

with its superior conventional capabilities has no military reason to respond with a nuclear strike when its military objectives are attainable with nonnuclear weapons. Even a nuclear response in-kind is not morally justifiable. Domestic public opinion and pressures from allies and countries near the target area are also sure to influence a president's decision not to take an eye for an eye. Other self deterring factors include concerns for regional environmental degradation, extensive collateral damage, and possible large scale harm to noncombatants.

A hostile new nuclear state still might not be deterred even if it thought that the US would respond with its nuclear capability. A US nuclear response in-kind to an attack may be a tolerable price for some. The dictators of many hostile new nuclear powers are not worried about sacrificing their citizenry, especially if it results in regional dominance and frustrating or humiliating the US.⁸ Cost/benefit calculations by these leaders are certain to be different from those associated with the traditional US/Soviet relationship.

US arms control agreements over the years may also influence the newly emerging nuclear states' perceptions of US unwillingness to use nuclear weapons. The many agreements limiting and reducing strategic nuclear arsenals (SALT I/II, START I/II), the treaty to totally eliminate intermediate range nuclear forces (INF), and President Bush's 1991 decision to eliminate ground launched short range nuclear weapons and remove tactical weapons from navy ships and submarines may give some nuclear states the impression of a

lessening of US resolve to use nuclear weapons. The subsequent decision to remove all nuclear weapons from South Korea only reinforces this impression.

US credibility to use its nuclear forces in retaliation to a nuclear attack by a newly emerging nuclear state is questionable. This undermines deterrence, encourages regional nuclear hegemony, and threatens international stability. Future US deterrent capabilities against this new threat must emphasize prompt and assured retaliation using nonnuclear means.

ENHANCING DETERRENCE

The US must punish any hostile state that resorts to the use of nuclear weapons. The punishment must be swift and sure and demonstrate to all that the use of nuclear weapons does not pay. To do otherwise encourages further use and stimulates greater proliferation. Once a country crosses the nuclear threshold, the US response should be geared toward restoring the global taboo against nuclear use as soon as possible. Thus, the US should refrain from nuclear retaliation to prevent the perception of the "routine" use of such weaponry.

A prompt, assured conventional response to nuclear aggression enhances deterrence because of the certainty of the retaliation. The Persian Gulf War displayed the pinpoint accuracy of modern conventional weapons. While approaching the destructive capability of nuclear weapons against a wide variety of targets, these weapons do not carry the associated disadvantages. They have no severe environmental consequences and cause little collateral damage.

Additionally, a US president does not face the tough moral and ethical choices in ordering their use.

An effective nonnuclear response can hold at risk those assets that hostile leaders value most. These leaders usually have little regard for the well being of their populations. Instead, they are likely to most value their own safety and that of their regime. Other important targets would include their military capability especially the nuclear component and the command and control apparatus.

The US should explicitly state that our response to nuclear attack will be directed against these high value assets. Some despotic leaders such as Saddam Hussein and Kim Jong Il may believe that they could survive a US nuclear counterattack even if it devastated their country. Saddam's survival from the Gulf War experience reinforces this view.⁹ The US should put these leaders on notice that they will not survive if they resort to nuclear use. Many believe that Iraq refrained from using its chemical weapons in the Gulf War because of President Bush's personalized warning to Saddam that such use would cause a strong US response and "you and your country will pay a terrible price."¹⁰

The US requires improvements in a variety of areas to be able to hold the full spectrum of targets at risk. Advancements in conventional munitions technology and systems will greatly increase lethality against a variety of the important targets such as leadership command bunkers, headquarters, and nuclear weapons production and storage sites.¹¹ Future earth penetrating weapons

may attack deep underground bunkers. Improvements in near real time intelligence will allow targeting updates and tracking of mobile targets such as leadership and military assets. New concepts that rely on nonexplosive kinetic energy projectiles such as magnetic rail guns and hypersonic glide vehicles will improve the timeliness of retaliation.¹²

Diplomatic efforts need to augment the military initiatives and enhance overall deterrent capabilities. US leadership in the United Nations has already resulted in a Security Council Resolution declaring the proliferation of nuclear weapons a threat to international peace and security. Similar resolutions might declare that first use of nuclear weapons would automatically mean swift punishment, international condemnation, and isolation. Other efforts should focus on strengthening the NPT and the International Atomic Energy Agency. Finally, it is time to seriously revisit some ideas that were unthinkable during the Cold War. Some of these include: no first use declarations, comprehensive test bans, nuclear free zones, and a global ban on nuclear weapons.

CONCLUSION

Nuclear weapons pose a serious threat to US national interests and international security and stability. The nature of that threat is evolving from a few states with many nuclear weapons to many countries each with a few weapons. Some newly emerging nuclear powers are hostile to the US, have regional power aspirations, have little experience with nuclear weaponry, and may not perceive a credible US nuclear deterrent. US nuclear weapons

have declining utility in this environment and must be augmented with a more credible retaliatory threat. A prompt and assured nonnuclear response capability accompanied with explicit declaratory policy will enhance deterrence and influence more responsible behavior in an increasingly dangerous world.

1. Lewis A. Dunn, "Containing Nuclear Proliferation," *Adelphi Papers* 263, p. 6.
2. Robert D. Blackwill and Albert Carnesale, *New Nuclear Nations: Consequences for US Policy* (New York: Council on Foreign Relations Press), 1993, p. 20.
3. Seth Cropsey, "The Only Credible Deterrent," *Foreign Affairs*, Volume 73, Number 2, p. 17.
4. Frederick R. Strain, "Nuclear Proliferation and Deterrence: A Policy Conundrum," *Parameters*, Autumn 1993, p. 85-86.
5. Blackwill, p. 41.
6. Dunn, p. 52.
7. Carl Kaysen, Robert S. McNamara, and George W. Rathjens, "Nuclear Weapons After the Cold War," *Foreign Affairs*, Volume 70, Number 3 (Fall 1991), p. 100.
8. Seth Cropsey, "The Only Credible Deterrent," *Foreign Affairs*, Volume 73, Number 2 (March/April 1994), p. 15.
9. Lewis A. Dunn, "Rethinking the Nuclear Equation: The United States and the New Nuclear Powers," *The Washington Quarterly*, Winter 1994, p. 12.
10. Robert D. Blackwill and Albert Carnesale, *New Nuclear Nations: Consequences for US Policy* (New York: Council on Foreign Relations Press), 1993, p. 192.
11. Dunn, p. 14.
12. Frederick R. Strain, "Nuclear Proliferation and Deterrence: A Policy Conundrum," *Parameters*, Autumn 1993, p. 90.