

Limited Nuclear War: The 21st Century Challenge for the United States

John K. Warden

Institute for Defense Analyses (IDA)

SMA STRATCOM Speaker Series

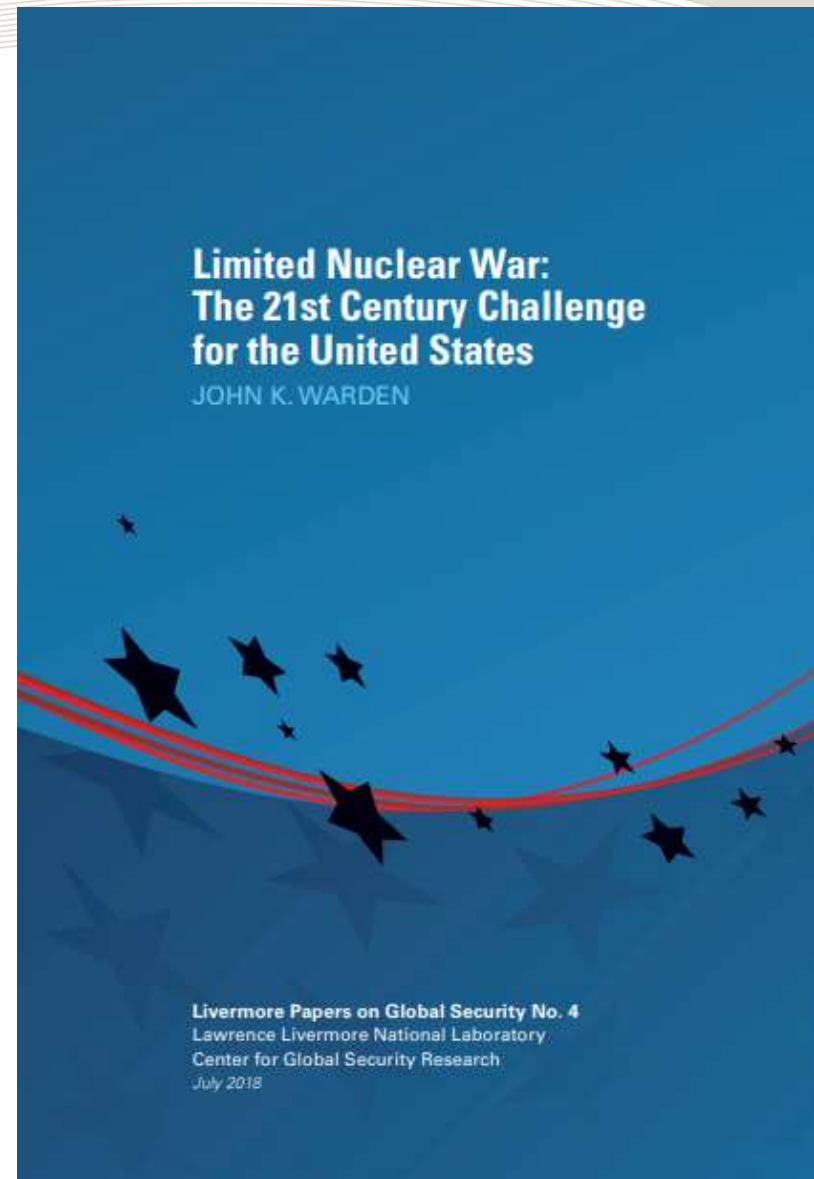
September 12, 2018

IDA | Research focus

- Key issue: a US adversary may come to believe that it can fight and win a limited nuclear war against the United States and its allies
- Focus is on “nuclear strikes,” the employment of nuclear weapons against targets of value to an opponent
- Research questions
 - What key factors would shape an adversary’s decision to use nuclear weapons in a conflict with the United States and its allies?
 - What concepts have adversaries developed, or are likely to develop, to employ nuclear weapons to achieve important objectives while mitigating the risk of escalation?
 - How can the United States and its allies better deter nuclear use?

IDA | Outline

1. Historical context:
competition in the nuclear shadow
2. The 21st century challenge:
regional war and the threat of
adversary nuclear escalation
3. Adversary calculations at the
nuclear brink
4. Potential adversary
strategies for favorably
managing nuclear escalation
5. Ways the United States and
its allies can strengthen
deterrence



IDA | 1) Historical context

- Nuclear weapons tend to deter conflict by making the consequences of an unrestrained war between nuclear-armed states too great to justify any potential benefit that a state might gain
 - Both sides must possess sufficient nuclear weapons that each can survive a disarming attempt by the other
- Limited war
 - While nuclear weapons have induced caution, they have not prevented rivalry, competition, and conflict
 - Nuclear-powers engaged in limited war require a theory for the use of military force to achieve objectives while regulating the risk of uncontrolled, large-scale nuclear escalation
 - Limitations signal that the aggression is bounded and are intended to confine the conflict to a low level of violence so that the likely costs are acceptable
- Examples
 - Cold War proxy wars: Korea, Vietnam, Afghanistan
 - Limited wars: China/Soviet Union, India/Pakistan

IDA | US and Soviet planning for limited nuclear war in Europe

- US and Soviet competition centered on Europe; planners searched for political and military advantage
- US nuclear strategy
 - Massive retaliation (1950s): early, across-the-board nuclear escalation
 - Flexible response (1960s/70s): limited nuclear options to make escalation threats credible
- Soviet nuclear planning
 - 1950s/60s: large-scale nuclear escalation inevitable
 - 1970s: developed options for limited nuclear strikes in Europe
- Both US and Soviet planners were skeptical of nuclear escalation strategies
 - McNamara (1983): “In terms of their military utility, NATO has not found it possible to develop plans for the use of nuclear artillery which would both assure a clear advantage to the Alliance and at the same time avoid the very high risk of escalating to all-out nuclear war.”
 - Soviet conclusions: 1) can win conventionally; 2) limited nuclear war would be devastating; 3) unlikely to be able to control nuclear escalation

IDA | 2) The 21st century challenge

- Russia, China, and North Korea are dissatisfied with the U.S.-led international order and are pursuing strategies and capabilities to challenge U.S. influence
- Scenarios for conflict
 - Potential adversary goals: annex a country, seize land, control maritime territory, ensure access to resources, or simply impose political and military costs
 - U.S. intervention: motivated by a desire to uphold specific alliance commitments and maintain the broader credibility of US security guarantees and the liberal order
- Each side's incentive to maximize postwar benefits while minimizing wartime costs means that future wars between nuclear-armed adversaries are likely to be competitions over limits on violence
 - Tacit bargaining: each side will seek to establish a level of military violence below which it can achieve its objectives at the lowest cost, while deterring the other side from escalating
 - Examples: withhold attacks on the other's territory or against space-based capabilities; avoid use of nuclear weapons; avoid regime change

Russian, Chinese, and North Korean nuclear-escalation options

- US wants a firebreak between conventional and nuclear war; adversaries may see an advantage in conducting limited nuclear strikes
- Likelihood of adversary nuclear use can be judged by doctrine, force posture, training and exercises, and situation-specific incentives

	Nuclear Use Doctrine	Nuclear Forces Posture	Nuclear Operations Training & Exercises
Russia	Medium	High	Medium
China	Low	Medium	Low
North Korea	High	Low	Medium

Table 1: Likelihood of Limited Nuclear Employment by Russia, China, and North Korea During a Major Conventional War

- But there is inherent uncertainty: if forced to choose between the potential benefits and risk of nuclear escalation and the certain distastefulness of accommodation or protracted war, what would an adversary leader do?

IDA | 3) Adversary calculations at the nuclear brink

- Relative attractiveness of the alternative path
- Potential benefits of nuclear escalation
- Likely costs and risk of crossing the nuclear threshold

IDA | Relative attractiveness of the alternative path

- Adversary in a strong position
 - Likely to continue the conventional campaign, attempt to consolidate gains
 - May consider employing nuclear weapons to secure a faster or more favorable accord
- Adversary in a weak position
 - More likely to use nuclear weapons in an attempt to improve its bargaining position
 - Does not need a theory of “victory” relative to the pre-conflict status quo, just a belief that taking nuclear risk is preferable to the non-nuclear path

IDA | Potential benefits

- Conduct limited nuclear strikes to suggest the potential for yet further escalation that would be costly to the United States, the targeted country, or other US allies and partners
- Use nuclear weapons to achieve instrumental effects in the conflict, improving the aggressor's military position
 - Hold at risk hard and deeply buried targets
 - Compensate for inaccuracy of weapons or lack of specific targeting information
 - Make up for lack of available conventional firepower

IDA | Likely costs and risk

- The cost of the likely US response
 - What is the likely US reaction? No nuclear response? In-kind? Escalation?
 - How costly would the response be?
 - Would it arrest the adversary's military advantage?
- The risk of escalation
 - What is the likelihood of setting off a spiral that results in a large-scale nuclear exchange against major cities and centers of power?
- Political fallout
 - How would the US and allied publics react? Rally around the flag?
 - How would the adversary's domestic audience react? Turn against the war?
 - How would the international community respond? Join the conflict? Sanctions?

4) Adversary strategies for prevailing in limited nuclear war

- Threaten uncontrollable nuclear escalation
 - Conduct a limited nuclear strike, while threatening uncontrollable escalation should the United States retaliate in kind or continue its conventional campaign
 - Raises the specter of higher cost to encourage accommodation
 - But may not be credible and/or limit the adversary's de-escalation options
- Limited-nuclear-war control
 - Set conditions for nuclear use that maximize the instrumental and suggestive value of crossing the nuclear threshold while minimizing the risk of retaliation, counter-escalation, and backlash
 - Implicit rules can be narrow or broad, and are likely to change over time
 - Potential reasons for adversary optimism
 - Asymmetry of stakes: US sees protecting allies as less vital than during the Cold War
 - Reduced risk of uncontrollable escalation: US has fewer nuclear options and decision-making is centralized with political leaders

IDA | Plausible nuclear war control strategies

- Requirements for a viable nuclear war control strategy
 - Tacitly negotiate a limitation on nuclear war that provides a net advantage
 - Establish limitations that clearly distinguish between the type of nuclear strikes the adversary plans to conduct and other nuclear operations
 - A viable strategy for detering US counter-escalation
- Decoupling theater and strategic nuclear war
 - Distinguish between a limited nuclear war within the region of conflict and a large-scale nuclear war involving the continental United States
 - Potential instrumental advantage: prevent the United States from flowing forces to the battlefield; calculate that a kind-for-kind exchange would be favorable
 - Inflict significant pain on allies, while suggesting future strikes against US territory
- Distinguishing types of nuclear strikes
 - Distinguish between nuclear use consistent with Law of Armed Conflict traditions and strikes that are far less discriminating
 - Conduct strikes that would have a significant military impact, while reducing the risk of escalation by 1) reducing backlash and 2) limiting in-kind US retaliation options

5) Ways the United States and its allies can strengthen deterrence

- Promote “nuclear-use stability” during potential limited conflicts
 - Both combatants believe they can achieve an acceptable outcome in the conflict without crossing the nuclear threshold
 - Neither combatant believes it has a reasonable chance of markedly improving its political and military position by crossing the nuclear threshold
- Present an acceptable alternative to crossing the nuclear threshold
 - Give adversary leaders an acceptable offramp
 - Ensure that adversaries see the settlement offer as credible
 - Understand the adversary’s settlement values—what the adversary would fight hardest to keep and what might be negotiated away
- Reduce the benefits of nuclear escalation
 - Make clear that nuclear use would change US stakes in the conflict
 - Reduce the vulnerability of US conventional operations and forces to adversary nuclear strikes
- Increase the likely costs of retaliation and risk of nuclear escalation
 - Threaten significant non-nuclear retaliation
 - Threaten to expand war aims
 - Threaten nuclear retaliation

Options to deter by threatening nuclear escalation

- Increase the risk of escalation beyond the adversary's preferred limitation
 - Signal through declaratory policy and posture that the United States will not respect the adversary's preferred distinctions among levels of nuclear conflict
 - Use declaratory policy, capabilities, and doctrine to link levels of nuclear conflict (ex. Intermediate-range nuclear forces in Europe in the Cold War)
 - Downside: may not be credible
- Threaten deliberate, controlled counter-escalation
 - Threaten to raise nuclear warfare to a level where 1) the United States would have an advantage and 2) the United States could deter escalation to a large-scale nuclear war (ex. threaten to turn a nuclear war at sea into a theater nuclear war)
 - Downsides: 1) resulting limited nuclear war would be costly 2) supports the adversary belief that nuclear war can be controlled
- Counter the adversary's perceived nuclear capability advantage
 - Deploy additional nuclear capabilities, or limit the adversary's capabilities through arms control, to deny the adversary an advantage under its preferred conditions of limited nuclear conflict
 - Downsides: 1) adversary may build up in response 2) nuclear capabilities may force tradeoffs with conventional warfighting capabilities 3) allies may object

IDA | 6) Conclusion

- The United States must account for the important role that nuclear weapons play in adversary strategies for war against the United States and its allies
 - From the US perspective, there is little benefit to introducing nuclear weapons into a conflict, but enormous downside risk
 - US competitors face a different situation: the United States is conventionally superior but fighting far from home over less-than-vital interests
- If limited nuclear war is never to be fought, then the United States and its allies must prevent their adversaries from thinking it can be won
- What is success?
 - When US adversaries are no longer 1) investing in nuclear capabilities optimized for limited nuclear warfare, 2) conducting training and exercises focused on theater nuclear strikes, or 3) issuing public statements and strategy documents that highlight nuclear escalation as a path to victory in regional conflict
 - Partial success if the United States and its allies fail to dissuade adversaries from developing limited nuclear options, but deter the exercise of those options in war