

Demystifying Conventional Deterrence

Great-Power Conflict and East Asian Peace

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Current conventional wisdom seems to hold that US options for deterring Chinese aggression in East Asia range from ineffectual to irresponsible. Some assert China's surging theater military capabilities herald the eventual impossibility of securing deterrence through a credible conventional defense of US East Asian allies. This invokes a need to switch to deterrence derived from a latent threat of "mutually assured economic destruction" and/or punishing long-range conventional strikes against the Chinese mainland.¹ Others passionately argue that any such strikes, regardless of their purpose, blindly risk inciting Chinese nuclear retaliation.²

These pessimistic views share a common shortcoming in that they misinterpret, if not ignore, central elements of long-standing, widely accepted conventional deterrence theory. Such oversights should hardly come as a surprise. The US military's conventional dominance over the past two decades, its counterterrorism and counterinsurgency-centric operations of the past decade, and China's restraint from aggressively challenging the East Asian security order have generated little demand from US policymakers for analytical attention to great-power-level conventional deterrence issues. However, these conditions are clearly changing. China's rapidly improving regional military clout, the erosion of US military power due to domestic fiscal pressures and political discord, and the increasing friction between US and Chinese interests in East Asia highlight how critical it has become that US strategists revisit conventional deterrence principles. A US grand strategy for East Asian security that is decoupled from those principles gravely risks cultivating the very conditions that may make a ruinous Sino-US war more likely.

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To understand how conventional deterrence theory can best be applied within this context, one must first review its core elements and prerequisites then assess their immediate implications for US military strategy and operational concept development, particularly in light of publicly available apparent Chinese military doctrine tenets. This article also assesses the implications for a coercive blockading strategy, which is a prime alternative China might employ for aggression or the United States for retaliation. It explores the importance of reassuring an opponent that visible implementation of a deterrence policy reflects defensive and not aggressive aims, as well as the potential utility of Sino-US military-centric confidence-building measures (CBM) toward those ends. The inseparability of nuclear deterrence from the deterrence of great-power conventional war is examined to identify some of the specific dangers that might characterize notional Sino-US confrontations and observe how they might either strengthen or weaken overall deterrence. After dissecting the nature of the East Asian security dilemma and alliance dynamics, the article proposes how a viable and credible US conventional deterrence policy might be configured.

Conventional Deterrence Dynamics

Dating back to the late Cold War, there has been a general consensus among deterrence theorists that conventional deterrence does not necessarily require convincing a potential adversary that any military aggression it might embark upon would be handily repulsed. Though such defensive capacity represents an ideal, defenders can obtain conventional deterrence by denial if an opportunistic antagonist is convinced that the defender possesses conventional forces of sufficient capability, quantity, readiness, and proximity to the contested area to ensure any conceivable conventional offensive by the antagonist stands an unacceptable chance of degenerating into a costly, risky, protracted, and indecisive conflict. The core element of conventional deterrence credibility stems from the prospective aggressor's perceptions of the defender's resiliency in the face of a withering conventional first strike across multiple warfare domains. The defending force must not only be able to absorb this attack, but also quickly reconstitute itself so that it stands a reasonable chance of neutralizing or destroying enough of the aggressor's forces and supporting military infrastructure, even at a potentially painful cost in

troops and materiel, to slow the aggressor's offensive progress and deny it relatively easy, cheap attainment of its political objectives. The defender's posture is predicated on permanently deploying adequate forces within the contested theater, as the prospective aggressor's calculus takes into account the likelihood that reinforcements from outside the theater, not to mention the defender's overall national military-economic potential, cannot be sufficiently mobilized in mass and time—even if it recognized and rapidly acted upon strategic warning of war (a historical rarity)—to prevent the aggressor's first moves from securing either a formidable operational advantage or a *fait accompli* decision.³

This does not mean transoceanic airlift and strike assets cannot play important roles in buttressing the defender's in-theater deterrent, but the tyrannies of distance, fuel, payload volume, and time grant in-theater forces far greater credibility for denying desired spoils. Relatedly, movements of token forces toward the crisis zone to signal resolve, or the use of token "tripwire" forces in the crisis zone for the same purpose, are unlikely to do much to enhance credibility if the potential aggressor perceives at least one conventional option exists that the defender's overall in-theater forces do not appear capable of foreclosing.⁴ Conversely, it is unlikely to be lost on a potential aggressor that a defender possessing in-theater forces with the quantities, capabilities, and other attributes necessary to blunt an offensive campaign by the former is also likely to possess a high relative degree of military self-confidence and therefore be more likely to exhibit political resolve with respect to implementing latent deterrent threats in support of articulated major interests.

Conventional deterrence theory, however, includes several significant caveats. A denial-centric policy may prove insufficient against desperate political leaders who fear their comprehensive power is facing permanent and inevitable decline relative to the defender and that the passage of time is irrevocably diluting any chance of retaining the grand strategic benefits or perceived margin of security granted by the current balance.⁵ Deterrence may also fail if the opponent's decision makers become desperate due to intense domestic political pressures such as surging popular passions, discontent with the leadership, or intra-leadership factional infighting. Yet another failure source is led by paranoid ideologues convinced the defender itself is actually biding time before unleashing decisive aggression. Lastly, deterrence failures may result if the aggressors incorrectly assess the military balance; believe their strategy, doctrine,

operational plans, and capabilities can negate the defender's deterrent; do not accurately dissect the defender's interests and thereby fail to appreciate the stakes and associated degree of commitment; or believe the defender is feckless and will not resist for long or otherwise escalate if attacked.⁶

Policies based on latent threats of conventional punishments offer even less hope for stable deterrence, especially when applied against risk-tolerant opponents.⁷ Such opponents can reasonably conclude any retaliatory conventional punishment will be neither logistically nor politically sustainable over long time frames, might present greater strategic risks for the punisher than for the transgressor, and may not even impose enough pain on the right pressure points to counterbalance their desired political objectives. If the opponent is driven to act against the status quo by desperation or fear, a latent threat of conventional punishment will provide no more of a barrier than a latent threat of denial. It follows that these considerations also apply to latent threats of economic and diplomatic punishments, and deterrence policies centered on these kinds of punishments will likely only prove viable when an opponent assigns a particular political objective, a relatively low value, or its popular passions are not heavily engaged.⁸

These theoretical tenets therefore make it seem extremely unlikely that emerging US conventional-deterrence-supporting concepts such as Air-Sea Battle are intended to implement Cold War-style deterrence, let alone compellence, by punishment. Indeed, the few official pronouncements describing Air-Sea Battle consistently declare its sole purpose is to enable US forces to gain and maintain theater access despite robust opposition-in-depth.⁹ Punitive countervalue strikes against targets such as civil or economic infrastructure would contribute little or nothing at the operational or tactical levels toward helping restore US theater access, let alone arresting an adversary's offensive campaign.

The strong implication is that the core role of long-range conventional strikes in Air-Sea Battle would be to help suppress or destroy theater-level maritime denial capabilities as well as pressure intratheater lines of communication (LOC).¹⁰ Given East Asian geography, these roles would likely be necessary to support timely reestablishment of LOCs between joint and combined forces as well as their relative freedom of maneuver both to and within the Western Pacific in the aftermath of a Chinese war-opening offensive—something that US and allied operations away

from the main contested area could certainly help support but would not be capable of achieving on their own. Electronic warfare (EW) and cyberspace operations would almost certainly augment conventional strikes in attaining these campaign objectives and, under some circumstances, might even be more appropriate and effective for that end.¹¹

Air-Sea Battle's latent threats of conventional as well as nonkinetic strikes should therefore be interpreted as a means of augmenting US conventional deterrence first and foremost by overall credibility of denial, as they directly increase the challenges and uncertainties a potential aggressor must confront. This deterrence might not only be interwar, but also intrawar. For example, if a Chinese offensive campaign began as a blockade or similar limited action rather than a massive first strike against US or allied military infrastructure, credible and survivable long-range conventional strike capabilities held in reserve could be viewed as a tool for deterring Chinese conventional escalation against that infrastructure lest equivalent Chinese military infrastructure become fair game as well.¹² A notional Sino-US conflict might remain limited in size and scope under these circumstances, with both sides enjoying deep operational-strategic rearward sanctuaries unless political objectives of either side eventually compelled escalation. This kind of conflict would stand a fair chance of becoming prolonged, with all of the associated costs and uncertainties—the prospects for which, as perceived during peacetime, might reinforce interwar deterrence in the first place.

Whether and where any US conventional or cyber-electronic warfare counterforce attacks would fall in a notional conflict would depend on US political objectives. It cannot be overemphasized that a central consideration shaping those objectives would be the precedential nature and scope of the aggressor's actions that triggered the US response, especially in how deeply those actions incited the passions of the American and allied publics. In the event of a People's Liberation Army (PLA) conventional first strike against US military forces and resources stationed on regional territories, for example, there is reasonable likelihood the afflicted nations would popularly view the attacks as defense treaty-invoking acts of war. This would be even more likely if US and allied forces were comingled such that it would be incredibly difficult, if not impossible, for the PLA to attack one nation's assets without also damaging the other's. PLA conventional strikes against US forces in Guam, Hawaii, or even at sea would certainly constitute direct attacks against

sovereign US territory.¹³ PLA cyber attacks or offensive EW conducted against US military sensors, networks, or space-based assets would similarly shape the “escalatory precedent” and, if executed prior to open hostilities, might trigger US full-spectrum rules of engagement relaxations. The chief consequences of Chinese attack options, especially if their first strike combined more than one of them, would be to set precedents that politically justify, if not popularly compel, US counterstrikes against equivalent Chinese targets as operationally necessary.

This makes it highly unlikely that notional long-range strike operations as conceived by Air-Sea Battle would be automatically preemptive vice reactive.¹⁴ Any US doctrine predicated upon executing a conventional first strike would severely risk undermining deterrence by incentivizing preemption in a crisis.¹⁵ A reactive doctrine grounded in force resiliency may actually be stronger from a grand strategic perspective, as the political task of justifying the US conventional response or the need for a prolonged conflict to US and international publics is vastly simplified and the risk of political-moral divides within those societies vastly reduced if the United States and its allies are generally viewed as the victims of a first strike.

Regrettably, potential US adversaries often chauvinistically confuse the American people’s decreasing resolve over time during the Vietnam, Afghan, and Iraq conflicts—along with the various 1980s and 1990s interventions—as a cultural “casualty squeamishness” that fails to account for their demonstrated passions, willingness to sacrifice, and political demands for decisive retribution following the Pearl Harbor and 11 September 2001 attacks.¹⁶ As any discerning reader of Thucydides and Clausewitz will note, honor and fear have enormous effects on popular passions in any country. Chinese restraint in potential future crises consequently might be cultivated if China’s leaders and international relations’ elites can be helped via consistent multichannel diplomatic outreach to better comprehend how popular passions have historically influenced US and allied political objectives and resolve. This will be particularly important with respect to the PLA’s apparent doctrinal belief that carefully tailored first strikes using conventionally armed theater-range missiles, special forces, cyber attacks, and electronic warfare have the potential of securing rapid strategic victories with “minimum” force, and may even be able to generate enough damage, shock, confusion, and fear to deter, if not preclude, an opponent’s retaliation or escalation.

In fact, while publicly available PLA doctrine seems to recognize that the military means employed in a contingency must be configured such that they do not generate excessively escalatory and provocative effects that in turn endanger Chinese political objectives, it does not seem to thoroughly dissect the contradiction between careful escalation management and its operational-strategic goal of decisively seizing the initiative.¹⁷

Blockades and Conventional Deterrence

A first strike is not the only gateway to a conventional *fait accompli*. A coercive blockade against a geographically or politically isolated country, once implemented, can be extremely difficult to dislodge quickly without either escalation or concession. As demonstrated by the US naval “quarantine” during the 1962 Cuban missile crisis, this is especially true when the blockade is limited to embargoing only a limited set of items or is targeted against an easily isolated country located close to the blockader’s homeland.

Blockades can be attractive from an escalation management perspective, as they can elevate the sense of danger, inflict tangible yet measured and largely reversible pain, and provide time and space for the involved parties to continue diplomatic negotiations. However, a blockade’s probability of success is likely to be much less certain than that of a traditional military offensive. After all, a blockade cannot achieve its political objectives if the defender maintains strong popular and thus political resolve. This is especially likely if there are sufficient resources within or transportable by third parties into the blockaded area to support prolonged resistance through rationing. The blockader also may not be able to fully surround the defender due to geographic constraints such as border terrain that is difficult to physically control indefinitely, long—thus porous—maritime borders, or adjacent third-party countries that refuse to formally honor the blockade. A defender may also find readily available substitutes for embargoed resources and may even be willing to tolerate extensive deprivations. Most significantly, a blockade does not necessarily place the defender in a situation where it either must fire the precedent-setting “first shot” and gamble on war or otherwise concede to the blockader’s terms. The defender can easily maneuver the blockader into a situation where the latter must choose between firing that precedential shot or compromising the blockade’s integrity.

Consider, for example, the issues discussed by Pres. John F. Kennedy and his advisors during the Cuban missile crisis. Kennedy noted the US Navy might have to fire at Soviet cargo ships to force them to stop, perhaps even sinking them. He also noted the possibility that US Navy crews might need to use deadly force when boarding and inspecting these ships. As the crisis wore on, Kennedy and his advisors went to great lengths to defer the first boarding until “the last possible moment” to avoid the risk of a firing incident, in general, as well as to ensure if one were necessary, it would involve Soviet forces located in Cuba as opposed to merchantmen at sea. Kennedy correctly chose to maximize flexibility on blockade implementation to provide time and space for (coercive) diplomacy.¹⁸ It is not clear similar flexibility would be available in an opponent’s own region thousands of miles from the United States, over different stakes, and involving different conflict characteristics and dynamics.

Any one or more of the above pressures may force the blockader to limit the embargo’s scale and scope such that its only chance at successfully coercing concessions is if it can be protracted to the extent that cumulative pain compensates for its relative inability to inflict severe immediate pain. A blockade’s duration therefore can become increasingly counterproductive in that maintaining enforcers on station is materially expensive and lack of coercive progress in turn can quickly become politically expensive. This is amplified by the immense diplomatic-economic problems of blockade enforcement. If the defender is a major trade partner for neutral countries, the blockader risks damaging the economies of and relations with those countries. The same problem applies if much of the defender’s trade is conveyed using neutral-flagged vessels and the blockader is determined not to grant any exceptions from interdiction. These circumstances may force the blockader to make extensive grand strategic accommodations to ensure affected third party countries remain fully neutral at minimum throughout a protracted embargo or conflict. Further, if a neutral vessel refuses to halt, the blockader must decide whether to forcibly interdict it and thereby risk horizontal escalation. Lastly, if the defender can maintain cross-border overland trade flows with a third party country whose airports and harbors can absorb its rerouted external trade, the blockader must decide whether to horizontally escalate by extending the embargo against the third party country or risk the blockade’s abject failure. Neutrals in a blockade present a

critical strategic issue and if mismanaged threaten to complicate a coercive campaign or war effort, much as the British embargo on US trade with Napoleonic France was one of the prime causes of the War of 1812.

These considerations provide the defender a wide set of countermeasures. Although a blockade is internationally recognized as an act of war, the defender may use diplomatic, economic, and information warfare to politically subvert the cordon, much as Iraq did during the 1990s and early 2000s.¹⁹ The defender may also use plausibly deniable methods of force such as covert action or nonescalatory force such as mine countermeasures to temporarily neutralize, incrementally weaken, or politically subvert the blockade.

A risk-tolerant defender may attempt to maneuver the blockader into a position where the latter must attack a blockade runner (and/or its military escort) and thereby risk triggering an “ill-controlled” escalation. The defender may even employ asymmetric blockade-running methods the blockader cannot easily counter. The 1948–49 Berlin airlift’s mass movement of supplies over a ground blockade while daring Soviet in-flight interdiction exemplifies the combination of these tactics.

A blockade’s final weakness is that it conveys unambiguous warning of war to the defender, thereby triggering mobilization and making it far less likely a later “surprise” conventional first strike could achieve decisive effects. Bottom line, just as the possibility of becoming bogged down in a prolonged war may make an aggressor unwilling to hazard a limited conventional offensive, the possibility that a blockade might take considerable time to achieve its desired coercive effects or that it might risk a broader and protracted war may work as a deterrent. The defender’s ability to field forces that can neutralize a blockade’s coercive effectiveness while preserving latent options for escalation consequently enhances conventional deterrence.

This logic is a double-edged sword. Just as it applies to scenarios in which China might seek to coercively blockade US allies or partners in East Asia, it also applies to any conceptual US or allied deterrence policy that rests primarily on threatening China with a maritime blockade should it intimidate its neighbors.²⁰ Any of the factors that work against blockades, and certainly a combination of them, would render such a deterrence policy noncredible—especially if the political objectives and any pressures driving Beijing to pursue military aggression were weighted greater by Chinese leaders than external economic considerations.

This is not to say such a blockade would not be strategically desirable, useful, or necessary in a notional Sino-US crisis or conflict. It is quite possible that a distant blockade paired with increasing the readiness of in-theater defensive forces might be the most strategically effective and least short-term escalatory military response to a Chinese maritime blockade against a US ally or partner, or perhaps to Chinese seizure of an isolated and unpopulated remote territory, if the PLA does not also directly attack the ally's (or forward-deployed US) forces and bases. Note that if such measures became necessary, the threat of a US blockade as a deterrent would have failed, while the major campaign-fighting credibility of in-theater US and allied forces would still be critical for deterring further Chinese escalation. A peripheral blockading campaign in a protracted major war likewise might meaningfully contribute toward pressuring China's war economy, but rolling back any PLA forces bombarding or occupying allied territories would inherently require conventional sequential campaigns. It therefore is difficult to envision how blockading could ever meet its advocates' claims of a credible core for deterrence, let alone a strategic panacea.

Balancing Deterrence with Confidence-Building

One of the greatest challenges for any deterrent is that it can be interpreted as equally useful for aggressive as for defensive operations. An aggressor may interpret reinforcement of a deterrent as proof a conflict is diplomatically irreconcilable.²¹ Assets necessary for defense often have direct offensive applications or can be used to support offensive operations.²² Even purely defensive assets are often interpreted by one side as means by which the other seeks to reduce its vulnerability to deterrence. An opponent may also be provoked if it perceives it is less able to successfully threaten or employ military force for grand strategic compellence due to the defender's improved denial or punishment capabilities. Inadequate geographic buffering between the two sides further reduces any "margin for error."²³ It is simply impossible for deterrence to avoid arousing some degree of fear or resentment in a potential adversary.

A deterrent can appear quite provocative from Western perspectives without triggering further instability during peacetime or even escalation within a war. If a deterrence policy is deemed excessively provocative by political leaders, opinion elites, or the general public within the

defender's or allied states, this may affect its political viability or sustainability; however, the only perspectives that matter are those of the opponent's leadership.²⁴ Complicating this, opposition leaders may or may not openly, clearly, and accurately articulate their perceptions of the deterrence policy. In fact, they have every incentive to attempt to weaken the defender's deterrence by propagandizing it as highly destabilizing to the peace. Deterrence policy must therefore be designed to allow the defender's government to clearly and convincingly articulate its justification to its own citizens as well as to friendly and neutral foreign audiences to build a critical mass of popular and elite support for—or at least tacit acceptance of—the policy.

The continuous crafting and updating of a deterrence policy inherently demands the deterrent's military credibility and manipulation of the opponent's risk tolerances be balanced with reassuring the opponent that it will not be used to support offensive purposes. The defender must identify key opponent strategic decision makers and understand their calculus sufficiently well to calibrate the deterrence policy. This requires attaining a deep and reasonably confident understanding of their unique geostrategic and domestic-political circumstances, including how they define their national and their personal interests and objectives, and likewise how they perceive the defender's interests and objectives.²⁵ Their ideology, strategic culture, perceptions, personalities, mind-sets, and decision processes also must be understood with confidence.²⁶ Based on these assessments, the defender must articulate what opponent actions or behaviors are to be deterred, provide a tailored mix of clarity and ambiguity regarding how the latent deterrent threat might be enforced, convey an appropriate degree of political resolve regarding its willingness to implement that threat, and strive to calibrate its strategic messaging and behavior to reassure the opponent that the fielded deterrent will only be used to uphold the articulated threat. The defender must continually assess whether the opponent understands and internalizes this deterrence communication as intended.²⁷ All this clearly signifies that a deterrence policy risks disastrous failure if the theories are not tempered by the specifics of a given opponent's leaders and the geostrategic situation.²⁸

Given the consequences of critical knowledge gaps, misinterpretations, or misperceptions throughout this process, deterrence planners must employ extensive risk-mitigation measures to account for uncertainties

and ambiguities that might cause their policy to provoke vice deter.²⁹ One such measure might be fielding a less militarily efficient deterrent at the margins than might otherwise be preferred in terms of capabilities, positioning, posturing, or action at a given point in time. This might be sensible if there is adequate evidence such restraint would help reduce or prevent excessive anxiety within the opposition leadership while still maintaining deterrence credibility. A deterrent would fail, after all, if it led the competitor to perceive that aggression out of fear or desperation might be marginally less costly to its interests in the long run than inaction.

Confidence-building measures can offer additional mitigation tools for promoting mutual reassurance with respect to capabilities and intentions. CBMs are especially useful for addressing specific fears, legitimate needs, or weaknesses in ways verbal guarantees cannot.³⁰ They are often executed via political agreements between national leaders or even between armed forces rather than as formal treaties to narrow the number of entities on both sides that are parties to negotiation, ratification, and implementation. CBMs can include commitments by each side to announce the purpose and duration of military activities in or near a contested area; accept the other's on-demand, in-person observations of military exercises, as well as inspections of fielded force concentrations, within a given theater under defined terms; institute procedures for mutually managing forces when in close proximity; and institute cooperative processes for restraining "civilian activists." They can also be structured to provide selective transparency regarding force structures, weapons inventories and deployed payload configurations, decision-making processes, and even force doctrine to mitigate the risks that excessive ambiguities might lead to extraneous peacetime arms racing or perhaps hasty, unnecessarily escalatory or even preemptive actions in a crisis. It follows that these "information exchange" CBMs, combined with activity notification and on-demand-inspection CBMs that support verification, can greatly contribute toward mitigating the crisis instability risks created when one or both sides field weapon systems whose employment characteristics and effects make them appear well-suited to first strikes.³¹ These reassurances can moderate the military edge within grand strategy by providing a bridge between deterrence policies and engagement policies with the objective of further incentivizing the competitor's preference of security cooperation over confrontation.³² More importantly, they can

also provide both sides with critical mechanisms for mitigating the risk a mutually-undesired crisis might spiral into a war.

The United States and its East Asian allies would be wise to continuously advocate adoption of a codified military-centric CBM regime with China, perhaps modeled on elements of the Organization for Security and Cooperation in Europe (OSCE) Vienna document series or the Cold War–era US-Soviet Incidents at Sea (INCSEA) agreement, as a tool for encouraging reciprocal reassurance at minimum and establishing new East Asian security norms at maximum. Military-centric CBMs might actually provide a more politically viable first step toward the proposed South China Sea Code of Conduct and other diplomatic-economic CBMs that encompass broader national activities in the East Asian maritime. If one side fails to honor military-centric CBMs during mounting tensions, they can even aid deterrence by providing the other side with a political, if not strategic, warning for war—assuming the warning is accepted and adequately acted upon, of course.

CBMs can only be successfully negotiated when neither side believes it has a decisive military advantage because of mutual deterrence's sustainable credibility and when both sides agree to refocus their competition into less dangerous spheres because both perceive the costs of accidental war as making further destabilization undesirable.³³ China's reluctance to negotiate even rudimentary incident-prevention and escalation-mitigation CBMs is consistent with its apparent strategic culture core aspect that favors manipulating crisis instability to coerce opponents and attain political objectives without war.³⁴ As discussed in the next section, aggressive embrace of such tactics by contemporary Chinese leaders indicates they may not fully appreciate the lessons of major Cold War crises, including one in which China's overconfident brinkmanship not only backfired dangerously, but contributed to its being the side that ultimately conceded. It may be quite some time before patient diplomacy, geostrategic trends, US and allied efforts to rebalance the regional conventional balance of power, or in the worst case a major incident or crisis that deeply shakes Chinese confidence in their abilities to predict reactions, control events, and manipulate risks will incentivize their desire for codified CBMs of any kind.³⁵ In the interim, their disinterest in CBMs provides the United States and its East Asian allies with a powerful—and so far underutilized—public and private diplomatic-informational counter-

argument against China's claims that East Asian and US strategic hedging actions conducted to date are in fact unjustifiable and malicious.

Nuclear Deterrence and Preventing Great-Power Conventional War

Despite their potential utility for reassurance, CBMs are unlikely to do much to help a conventional deterrence policy restrain an extremely desperate, anxious, or overconfident opponent. Nor is conventional deterrence alone sufficient against a potential adversary that implies its nuclear arsenal may shield its homeland-based military apparatus from conventional and cyber-electronic counterattacks even as it freely uses that apparatus to execute or support conventional strikes against US and allied defensive forces or territory.³⁶ Regardless of how one interprets China's declaratory nuclear no-first-use policy thresholds, just about any form of US intervention that successfully thwarts Chinese objectives in a major East Asian contingency carries the inherent risk of eventually precipitating some form of Chinese nuclear escalation.³⁷ Types of targets can matter—in the West at least there is a perceived difference between counterforce and countervalue strikes. Beyond notional US and allied strikes against, or imminent threats to strike, the latter target types, China's core escalatory triggers during a notional conventional war could conceivably end up as anything that jeopardizes the state's physical integrity as its leaders define it or the Chinese Communist Party's continued rule.³⁸ If Chinese leaders commit major political capital to achieving a specific grand strategic objective by force, the only difference between successfully grinding their offensive into stalemate via US and allied direct conventional defense (with or without counterstrikes against select mainland PLA targets), via cumulative distant blockade or peripheral counteroffensive campaign(s), or via economic or information warfare is the relative amount of time before they might feel compelled to explore nuclear escalation.

None of this should be interpreted as asserting Beijing would inevitably, let alone deliberately, escalate a Sino-US war to the nuclear threshold. There is an English-language scholarly consensus at present that "no first use" remains strongly ingrained in Chinese strategic culture and nuclear policy. No scholars have uncovered evidence current Chinese political leaders embrace nuclear escalation under the aforementioned

circumstances. These observations do signify, though, that the specifics of a notional future confrontation at a certain point in time could shape their nuclear calculus in ways that are inherently unpredictable at present. Although national strategic culture and political traditions will heavily guide any leader's approach to dealing with a given situation, their evolving perceptions of situational stakes—and the crisis-psychological factors acting upon them or their immediate subordinates—may be just as, if not more, influential on their decision making.

It follows that China's political objectives in a notional war and the degree of commitment its leaders cumulatively incur to achieve them are central. Even if both sides absorb significant cumulative attrition of their conventional military potential, including assets located within their respective homelands, it is entirely possible that their objectives and commitments might remain sufficiently limited for mutual nuclear deterrence to prevail indefinitely. In actuality, so long as neither side becomes existentially endangered by the conflict, this limited conventional war could continue until they become sufficiently exhausted to seek a political settlement, whether temporary or permanent.

Even if one coldly chooses to discount the probable catastrophic human and economic costs of a purely conventional great-power clash, the nuclear risk alone makes it unwise for either side to blindly assume that its counterpart does not presently view a specific political objective or issue as existential, that this interest prioritization would be static and not dynamic amid prolonged direct hostilities, and that an initially limited conventional campaign could therefore be indefinitely kept limited.

This genuine risk of extreme danger, though, can reinforce deterrence. Deterrence credibility does not depend on a state explicitly threatening that it will "go nuclear" if it cannot conventionally hold the line in a given scenario. As deterrence theorist Thomas Schelling observed during the Cold War, credibility is instead established by convincing the other side that fog and friction inherent in direct conflict might inadvertently lead—via iterative reactive rational decisions on both sides—to either side making the first nuclear release at whatever scale and that the other side would assuredly feel compelled to match this action. While their respective nuclear policies and doctrines as well as conventional actions might affect the escalatory characteristics and flow, there would be no way to guarantee neither side would ever perceive itself as being pressed to make a nuclear choice. The first release could conceivably be

a preemptive response based on the initiator becoming convinced that the other side imminently intended a nuclear first strike, or it could be a theater-level action based on fear that the other side's conventional progress would soon cause irrevocable harm to the initiator's survival interests. The fact that both sides deeply want to avoid crossing into nuclear warfare at each iteration of this decision-making sequence would be immaterial, as the ill-controlled process the original attacker initiated would risk carrying them against their strategic—and personal—preferences into the abyss.³⁹

With respect to a notional Sino-US crisis or conflict, and regardless of what their actual nuclear policies or doctrine may be, one can imagine any number of inadvertent or accidental escalations committed by one or both sides that could trigger a cascading cycle of action and reaction.⁴⁰ For example, publicly available PLA doctrine suggests that Chinese nuclear forces might be elevated to a higher readiness posture or take other field actions to support deterrence operations during their conventional missile campaign.⁴¹ Consider, then, what might occur following US detection of possible PLA launch preparations or actual launch of a DF-21 medium-range ballistic missile strike. An observable increase in Chinese nuclear force readiness, combined with the DF-21's dual nuclear and conventional capabilities, make it likely that US political leaders would at minimum raise their strategic forces to a higher readiness posture as a precaution as well as to reinforce US deterrence. Observable evidence of the US posture change might then be interpreted by Chinese leaders as an indication and warning of possible US preparations for a strategic first strike, with the Chinese reaction serving as the next iteration of the vicious cycle.

A similar cycle might occur following a large-scale Chinese cyber-electronic attack against US theater-level command, control, and communications (C3) systems and networks—and almost certainly would if either side's C3 strategic systems and networks came under intentional attack or incidental disruption. Indeed, targeting errors and unpredictable second- or third-order effects in any warfare domain can serve as potent catalysts for a rapid, vicious escalatory cycle. Alternatively, a vicious cycle might spiral far more slowly—perhaps imperceptibly until too late—as the conventional fight either degenerated into an incremental tit-for-tat competition in escalation or US and/or allied conventional

progress-induced Chinese leaders to explore signaling actions or even battlefield intervention using nuclear forces.⁴²

The logical utility of the “ill-controlled process” as a deterrent may therefore depend upon Chinese and US leaders educating each other about their respective escalatory threshold perceptions and escalation management concerns.⁴³ It will be particularly important to convince Chinese political and military leaders that modern C3 technologies offer no panacea for overcoming fog and friction. Chinese perceptions of information-age warfare appear largely rooted in theory and in lessons-learned from field exercises and experiments rather than from actual warfare experience.⁴⁴ Any ingrained idea that network-centric warfare can provide “perfect” battlespace situational awareness and control over forces invites misperceptions. These might include interpretation of certain military actions as operational-strategic indications and warnings, or otherwise as deliberate political signals, when they are not; a belief that what is displayed by the C3 system reflects ground truth when it does not; or faith that one’s own units will at all times be connected to and finely controllable via the system. Such misperceptions could prove incredibly dangerous in a crisis or a direct conflict.

This danger is amplified by historical evidence that Chinese strategic culture encourages manipulation of crisis instability without due appreciation of a given situation. In the nearly five decades since China joined the nuclear club, only in the 1969 Sino-Soviet border crisis were Chinese leaders pressured by the combination of opposing forces in very close proximity, a heightened threat of catastrophic national damage, and great-power prestige stakes. The crisis began with a Chinese small-unit ambush of a Soviet border patrol in March 1969 and descended over the following months into a series of periodic tit-for-tat skirmishes by both sides. There is evidence, though, that by the summer of 1969 the Soviet force redeployments to the region, diplomatic messages to other global parties, and increasingly strident rhetoric had convinced Chinese leaders that continued skirmishing might eventually grant the Soviets an excuse to initiate a preventive war, that Beijing’s overwhelming inferiority in strategic nuclear forces meant the Soviets could easily devastate China with impunity, and that Chinese diplomatic conciliation was therefore necessary.⁴⁵

It is important to stress that the nature of the crisis allowed for a gradual evolution in Chinese risk perceptions, as neither side faced im-

mediate, compressed decision-making time lines. Both sides recognized China's then lack of long-range strike capabilities meant its leaders had no incentives to unleash massive and crippling conventional—let alone nuclear—preemption. Though Chinese leaders may have been concerned that on-scene PLA commanders might inadvertently act or react in ways that provided the Soviets a justification for preventive war, this is not quite the same as the problem of maintaining confident political control over military forces in a fast-moving crisis when both sides have preemption incentives. Even at a peak point in the crisis, Chinese leadership deliberately shut down its primary means of direct communication with its Soviet counterparts. This may have been intended to heighten uncertainty and risk as a means of coercion but also may have had the deliberate or unintentional secondary effect of humiliating Soviet leadership. Either way, it was an unforced mistake that may have fed the Soviet escalation that ultimately coerced Chinese agreements to forswear border provocations and to resume negotiations.⁴⁶

It is correspondingly unclear whether Chinese strategic culture contains an experience equivalent to or as sobering as the Cuban missile crisis, or even superpower maneuvers during the Yom Kippur War when Soviet and American strategic forces were near-parity. These crises indoctrinates the leaders and international relations experts on the difficulty of maintaining positive control in a fast-moving crisis as well as the criticality of direct communication to avoid an undesired war.⁴⁷ This represents a very important topic for future US scholarly study of Chinese strategic culture. Since any such gap within Chinese strategic culture might pose a severe risk to crisis stability and therefore to deterrence, it must become a central focus for exploration via US multitrack diplomacy. On this issue in particular, dialogue with China's strategic studies elites in academia may be just as important as dialogue with its political and military leaders.

It follows that multitrack diplomacy with China should convey US concerns that even limited direct conventional aggression against an East Asian ally would gravely risk unleashing ill-controlled escalatory processes. These channels must make clear that the United States is striving to establish a mutual understanding and appreciation of how such a process risk is an inherent condition of nuclear-age conflict management and that it in no way represents US policy. Messaging would need to emphasize the fundamental and historically proven difficulty of precisely

tailoring and controlling uses of national power at all levels of contact with the opponent in a crisis or direct conflict such that those actions and behaviors are not misinterpreted by the opponent, do not have unforeseen and destabilizing effects, and do not ultimately place either side in a situation where escalation becomes perceived as the “least bad option.”⁴⁸ Situational conveyance of varying forms of this message to buttress deterrence, even by the Soviets themselves, was not uncommon during the Cold War.⁴⁹

Assuming this diplomatic communication is ultimately successful, one might think the ill-controlled-process logic means nuclear deterrence by punishment renders conventional deterrence by denial redundant. As the United States learned during the 1950s, nothing could be further from the truth. Credible conventional deterrence by denial remains necessary, because even a risk-averse nuclear-armed opponent may rationally calculate that a defender’s relatively weak in-theater conventional defenses and ambivalent political resolve offer an enticing opportunity for coercive brinksmanship. The opponent might also see a window for rapidly accomplishing limited objectives, such as selective seizure of isolated territories or neutralization of in-theater forces, using conventional methods that seemingly limit “direct” contact between the two sides in time and space. Nuclear-centric deterrence of conventional war therefore risks spectacular failure, because the opponent may believe its strategy, doctrine, operational plans, and capabilities adequately mitigate vertical escalation risks.⁵⁰ Should nuclear-centric deterrence fail to prevent a war, the conventional forces necessary to implement the situationally appropriate mix of intrawar pure and deterrent defenses over the course of a prolonged conflict are generally the same ones that would otherwise be necessary for prewar deterrence by denial.⁵¹

Sufficiently sized and deployed conventional forces also provide the defender’s leadership with wider and more flexible options for escalation across multiple warfare domains, which might increase the potential adversary’s uncertainties as well as its appreciation of the room for chance. This in turn could make the ill-controlled-process logic more credible, especially since the scenario most likely to lead to a direct test of nuclear deterrence is a local failure of conventional deterrence.⁵² Conventional equilibrium can also increase nuclear stability as, if conventional deterrence fails, the immediate pressure to nuclear escalation would likely be low.⁵³ Given that an opponent’s risk tolerances are inherently dynamic

over time in response to ever-changing domestic and international political environments, successful deterrence of great-power conventional war requires mutually reinforcing conventional and nuclear deterrence to cover the spectrum of conceivable contingencies. It follows that the true “last clear chance” to avoid a cataclysmic outcome—from which neither side can hope to emerge with a “better” domestic or geostrategic situation than if there had been no war—belongs to the side contemplating conventional aggression in the first place.

Nevertheless, Chinese leaders may erroneously believe their US counterparts are the ones facing the “last clear chance” by virtue of the decision Washington would face on whether to intervene in a contingency. They might also consider themselves, and not the United States, as the guardian of the status quo regarding a specific regional issue.⁵⁴ This strongly argues for consistent and continuous multitrack diplomacy to ensure both sides understand and appreciate how their counterparts perceive the circumstances and stakes surrounding East Asian security issues. For US leaders and their representatives, this means asserting a firm position on what constitutes the status quo and accordingly emphasizing that the US deterrence policy articulated will be upheld. To reinforce this certainty, US political and military leaders might need to increase the degree of overt, predeclared “automaticity” in their deterrent posture such that a PLA attack on US forces in East Asia would trigger a predefined response that effectively binds the United States to intervene with automation achieved by predelegating execution authority to the appropriate in-theater commanders. An example might include tit-for-tat submarine-launched cruise missile attacks against campaign-critical PLA air and naval base infrastructures and their supporting air and missile defenses following a first strike against US Air Force and Navy bases in Japan. As noted earlier, the comingling of US and allied forces and military infrastructure at host-nation bases would also be especially useful for establishing automaticity.

Conventional Deterrence and the East Asian Security Dilemma

Notwithstanding these discussions of theory, to what extent do US political leaders really have reason to fear and therefore strive to deter even a limited Chinese conventional offensive against one or more US

East Asian ally in the intermediate future? After all, China has successfully wielded “civilian” activists, coast guard–like forces, and economic influence in recent years to achieve significant strategic revisions in contested western Pacific waters without resorting to blunt military force. Its financial and industrial clout have proved just as effective in incentivizing greater Taiwanese economic integration with the mainland as well as restraining direct moves by Taipei toward formal independence.

While these observations are accurate, they implicitly overlook the fact that the US forward-deployed conventional deterrent in East Asia has contributed in no small way over the past six decades to Chinese leaders pursuing primarily negative political objectives in the region, namely preventing formal Taiwanese moves toward independence as well as major changes in the Korean peninsula status quo. In contrast, China’s pursuit of positive political objectives—for now mostly limited to contesting the sovereignty of water space and peripheral territories in the East Asian maritime—has increased over the past decade in rough proportion to its perceptions of an increasingly favorable balance of in-theater military power. Indeed, even though Chinese political objectives during the 1995–96 Taiwan Strait crisis may have been limited to deterring Taipei’s continuation of a pro-independence diplomacy campaign and to influencing Taiwanese elections, the fact that Chinese leaders executed an aggressive military coercion campaign in spite of China’s dependence on trade with the United States and its East Asian allies for domestic economic growth indicates the shortcomings of economic integration as a deterrent. US conventional-deterrence posture shifts during the March 1996 portion of the crisis were ultimately necessary to convey to Chinese leaders the inherent risks of further escalating or prolonging their direct coercion.

It is not clear, though, how much longer the variables that have enabled this relative peace can remain balanced. The flammable combination within China of decelerating sustainable economic growth, simmering domestic political pressures, growing political as well as popular confidence in the PLA’s ability to wage modern war, perceptions of repeatedly stung national pride in the face of international pushback against certain domestic and foreign policies, and latent nationalist desires for regional revisionism gives added meaning to the investor maxim that “past performance should not be considered indicative of future returns.”

Until very recently, active Chinese coercion in the East and South China Sea maritime disputes did not directly escalate to involve PLA units.⁵⁵ It is hard to be confident that military-on-military incidents will remain rare the longer the disputes remain unresolved and national passions correspondingly elevated. There is real risk that a localized skirmish between the PLA and a US ally's military over these disputes could cascade into a broader, albeit initially limited, war. China could also conceivably use these disputes to manufacture a conflict that serves as a front for quickly seizing isolated and relatively undefended territories in the Ryukyus Islands, Taiwan Strait, or South China Sea from one or more US allies, with the ostensible political objective being improvement of Beijing's geostrategic position. It is similarly difficult to discount the omnipresent risk of a Chinese attempt to directly settle the Taiwan question, or that in a major Korean peninsula crisis, China might intervene militarily on behalf of Pyongyang.

These risks are exacerbated by pressures placed on the US defense budget by continuing fiscal imbalances. The United States will face increasing difficulty in maintaining the force structure needed to simultaneously sustain conventional deterrence credibility in multiple theaters, thereby forcing Washington to make difficult strategic tradeoffs regarding its risk tolerances. This credibility may suffer further over the next two decades as greater portions of the joint force's capital-intensive equipment approach the end of their programmed lifecycles without one-for-one replacement. Electronics can be periodically upgraded to provide expanded platform capabilities, networking can enhance individual platforms as well as total force capabilities, and routine intensive maintenance, including periodic overhauls, can preserve materiel readiness across decades. Nonetheless, advanced electronic suites and force networking cannot indefinitely compensate for the fact that individual platforms can only physically sustain so many years of high operational tempo before the cost of the maintenance needed to sustain readiness, if not forestall obsolescence, becomes untenable—even more so in a constrained budgetary environment. A single platform, regardless of the force networking resources available to it, is only able to physically cover or influence one area at a time. With the possible exception of heavy ground forces, current US grand strategy all but guarantees that its high military operational tempos over the past decade will not be decreasing anytime soon. Any grand strategy that assumes the United

States can quickly fill any gaps in forward-deployed deterrent forces by repeating the late 1930s experience of initiating a timely rearmament effort upon recognized political warning of war ignores the fact that modern armaments are far more complex and the US defense industry's production capacities far less able to rapidly expand than was the case eight decades ago. US political willingness to continue investing in defense at levels that sustain if not improve in-theater conventional force capabilities, quantities, and readiness may be regarded by allies, partners, and potential adversaries alike as a leading indicator of a political resolve over the near-term, and the annual budget's resultant effects on programmed force structure cannot help but imply what US political resolve might be in the intermediate and long terms.

Formal US alliances can partially mitigate any force structure shortfalls in East Asia, but only on a case-by-case basis. Although armaments technology cooperation, coordinated development of doctrine and contingency plans, and routine combined force exercises are excellent methods for improving US-allied interoperability, they do not change the likelihood that over at least the intermediate term, it will remain politically impossible to establish an automated mechanism similar to the North Atlantic Treaty that politically draws all of America's most militarily capable Asia-Pacific allies into any East Asian security crisis.⁵⁶ This greatly complicates US force structure planning, as each ally's political, territorial, material, and military involvement in a given crisis in which they are not inherent parties and are not bound by the terms of their bilateral defense treaties with the United States becomes an open political question. The roles/responsibilities allocation and access rights agreements between the United States and any given East Asian ally may very well apply only to contingencies in which that ally would inherently be a party and therefore may not contribute much to supporting US in-theater force structure design optimization across all other conceivable regional contingencies. This may not be as great of an issue in notional contingencies involving Japan or South Korea, given their formidable force structures, but will very much be an issue in notional contingencies involving Taiwan, the Philippines, or other East Asian states in the event Japan or South Korea are unwilling to employ their forces or otherwise lend their military infrastructures in even indirect support of a US intervention.

US Conventional Deterrence Credibility in East Asia

Given that the burden of maintaining a credible conventional deterrent in East Asia will largely fall upon the United States, and given the fiscal pressure that deeply limits the resources available to support defense investment, the United States will need to focus its declining resources over the next decade on developing the force-level capabilities, postures, and doctrinal precepts that deterrence theory suggests are most likely to be effective.⁵⁷ Assuming China's political leaders remain risk-averse over the intermediate term, it follows that conventional deterrence at the high end of the conflict spectrum must be designed so that Beijing loses confidence in direct PLA conventional offensive operations against US-allied territories, or regional lines of communication could enable rapid, decisive attainment of political objectives at low relative cost and risk. This translates into a policy of conventional deterrence by denial.

The force-shaping military tasks derived from this policy relate to the regional geographic nature and the need to forestall Chinese attainment of predictable political objectives in notional contingencies. Joint and combined forces will need to be structured for and possess war-gamed and field exercise-tested doctrine supporting decentralized, mutually supporting, and potentially simultaneous execution of tasks such as localized maritime area control and denial; defense against airborne/amphibious assault upon friendly territory, including agile pre-hostilities defensive force insertion or reinforcement in isolated forward areas; forcible reentry of adversary-occupied friendly territory; logistical support of forward forces while under opposition; and transoceanic/intratheater mass air- and sealift under opposition. Complicating matters further, all of these tasks will need to be performed within contested cyber-electromagnetic environments.

Concepts of operations for executing these tasks will likely need to increase emphasis on countertargeting and force-level damage mitigation through agile dispersal, not only in terms of where units and groups operate from during contingencies, but also the formations and tactics they employ and correspondingly address the force coordination and logistics challenges generated by dispersal. Austere dispersed forward bases on land, in fact, have great potential for supporting joint and combined operations in contested maritime areas.⁵⁸ Nonetheless, it is particularly critical that doctrine, force structure and posture, network architectures, and operational plans be predicated on assumptions that US and al-

lied leaders will probably not receive, let alone recognize and act upon, “timely” strategic warning of war, and that their forward forces will likely absorb significant damage and degradation from a PLA conventional and cyber-electronic first strike across multiple warfare domains. Any defensive force not designed to promote resilience in a first strike’s aftermath may broadcast provocative weakness and correspondingly erode deterrence credibility.⁵⁹

Conversely, if its resilience can effectively parry a first strike at the operational and strategic levels, if not also at the tactical level, the defending force might actually gain significant military and diplomatic leverage. This is doubly useful in the event a potential adversary’s leaders precipitate a crisis under the mistaken impression that the associated risks are controllable. This latent resiliency can generate crucial diplomatic space for trying to convince the potential adversary’s leaders of their miscalculations if they do not come to such conclusions on their own. Likewise, it is undesirable for the defender in a crisis to be forced to take actions that can reinforce the other side’s erroneous perceptions, and defensive resilience can provide the defender’s leaders with options that maintain high multi-warfare domain readiness, and thus deterrence credibility, without necessarily requiring actions that might be misperceived as hostile.⁶⁰ Lastly, if these measures are unsuccessful and the opponent does in fact execute a first strike, successful resilience creates new facts on the ground in that the defender’s surviving in-theater forces would retain considerable conventional offensive and defensive capacity whereas much of the other side’s best weapons—plus the one-time effects of strategic surprise—would have been expended for little gain. Given the intense Chinese political objectives and interests that would likely drive such an attack, the possibility should not be overlooked that a failed PLA first strike might entice Chinese leaders to seek deescalation.

New technologies and evolved material solutions will be necessary to execute these tasks. They will include expanded layered theater air and missile defenses that use active as well as passive measures, resilient information and communications system/network architectures that enable “fighting through” debilitating cyber and electronic attacks, enhanced offensive and defensive EW capabilities with emphasis on systems that can support deception and concealment, and cyber-attack capabilities that can manipulate or disrupt nonstrategic C3 and logistics systems. These will also include distributed undersea warfare sensors and weapons

(including increased attention to defensive as well as offensive mine warfare), persistent wide-area surveillance and reconnaissance systems that can support targeting, increased technical capabilities for forward area rearmament and refueling of maritime forces, and expanded fire support as well as long-range conventional strike capabilities against targets at sea and ashore. All of these must be supported by improved joint and combined C3 interoperability at the theater and tactical levels. Individual service tactical data networks that enable a firing unit to launch and guide weapons against targets using sensor data provided either initially or solely by separate units, such as the US Navy's Cooperative Engagement Capability, will likewise need to become more interoperable with other services' and allies' equivalent networks.

As alluded in the earlier examination of Air-Sea Battle, long-range conventional strike systems in particular might play a disproportionate role in reinforcing deterrence credibility by making Chinese leaders much less certain about the utility of a PLA conventional first strike. This is because first-strike logic hinges not only on whether it can inflict a massive and painful blow against the defender's forces and C3 systems, but also on whether the attacker can quickly capitalize operationally on that blow. In other words, even if the attacker incapacitates a significant portion of the victim's forces in a conventional first strike, if it cannot take advantage of this window of opportunity to achieve critical offensive objectives before the victim's surviving forces rally to reestablish a grinding defense, then the first strike would have only served to ignite a more protracted conflict.

Long-range conventional strike systems could fill two roles very early in a conflict to blunt notional Chinese post-first-strike operations. First, they could partially compensate for suppressed or destroyed friendly in-theater forces by conducting strikes or mine laying against the PLA expeditionary and naval forces performing offensive operations within the contested zone, not to mention the logistical forces supporting those operations. These attacks could either be conducted in direct support of surviving in-theater forces or on an opportunistic basis.⁶¹ Second, long-range conventional strike systems could be used in a "second strike" against campaign-critical infrastructure at PLA air, naval, and perhaps even cruise and short-range ballistic missile force bases directly supporting the Chinese offensive; land-based sensors that figure prominently in its wide-area surveillance of the contested zone (but not in early warning

for their strategic forces); and the theater air and missile defenses that protect the above or otherwise screen PLA forces participating in the offensive.⁶² Again, the precedent established by the Chinese first strike and the principle of reciprocity would strongly shape initial US counter-strike target sets; the same logic would apply following any subsequent Chinese escalations.

Although execution of these roles would not enable long-range conventional strike systems to singlehandedly defeat a PLA offensive, they and complementary cyber-electronic operations would likely help suppress its tempo. Additionally, they would be pivotal in providing combined arms support to relatively more vulnerable friendly forces operating in and near the contested zone, thereby helping create the conditions in theater necessary for defensive resiliency. All these contributions might grant the United States and its allies reasonable chances for denying a Chinese *fait accompli* and ensuring any conflict would be neither quick nor cheap. Even if a conflict opened without China conducting a first strike, as discussed earlier a latent US long-range conventional strike capability could still be quite useful at minimum for intrawar deterrence.

The question of what types of current or new-technology long-range conventional strike systems might best fill the above roles should be resolved by war gaming and other campaign-level analysis. It seems reasonable, however, to assert that there would need to be a mix of systems fielded to balance between responsiveness, survivability, payload deliverability, and the ability to mitigate inadvertent escalation as well as crisis instability risks within the overall capability portfolio.⁶³ Nonetheless, it must be understood that long-range conventional strike systems will neither be able to achieve their full operational potential nor avoid wasting scarce rounds in the absence of high-confidence target detection and classification support from surveillance and reconnaissance assets operating across multiple warfare domains.⁶⁴ Nor will aircraft-centric strike systems in many cases be able to reach deep within a contested zone, let alone attack targets within China's borders if necessary, without aerial refueling and EW support.⁶⁵

Beyond the implicit deterrence messages generated by force design and capability development efforts, the United States and its allies must also selectively display their fielded capabilities and doctrine for performing the previously discussed tasks to Chinese leaders. Joint and combined force exercises are a particularly important means for com-

municating political and military credibility, as the frequency, methods, and apparent realism of training are all either directly observable or can be selectively disclosed.⁶⁶ US armaments development and testing efforts, as well as armaments cooperation with allies, foreign military sales to allies, and coordination of military-diplomatic initiatives and messaging with parallel allied efforts, are also very useful tools for communicating political and military credibility.

All this must be balanced, however, with disciplined efforts to identify and limit overt demonstration of certain capabilities, doctrine, tactics, and planning details that would simplify China's job of "designing around the deterrent."⁶⁷ This is hardly a new risk management task facing US military leaders and planners, and the only differences from current exercise and system test procedures might be to more closely integrate their planning with deterrence policy planning. The more challenging risk management task will be continuously assessing demonstration plans against the East Asian geopolitical environment and the evolving US understanding of Chinese leaders, as it might be just as unduly provocative to conduct a given exercise or force movement in a given location under some circumstances as it would be to cancel a previously announced exercise or implicitly rule out certain widely anticipated force movements in that same location under others.

This is not to say the more readily observed and measured force attributes of proximity, quantities, and readiness are not just as, if not more, important to deterrence credibility than displays of capabilities and doctrine. Although unlikely, it is possible that no amount of capability and doctrine demonstrations will communicate a deterrent's credibility to a potential adversary unable or unwilling to interpret the messages as the defender intends. The potential adversary may not fully comprehend the defender's way of war, may not fully appreciate the range of capabilities of a given system or force organization within a combined arms context, or may possess excessive confidence in its own. In contrast, major aspects of force readiness posture can be observed remotely, the raw distances between force concentration areas and contested zones can be compared against known or readily estimable platform performance attributes, and sheer quantities of units present in theater can make an impression—provided the potential adversary appreciates the most basic capabilities of those units when comparing them to its own force structure and weapons inventories. Perhaps most importantly, it must be un-

derstood that independent of all other forms of deterrence messaging, an opponent may interpret the defender's force proximity, quantities, and readiness attributes as the clearest indicators—whether intentional and accurate or otherwise—of political resolve.⁶⁸

A further problem is that credible high-end conventional deterrence incentivizes an intelligent competitor to use incremental salami-tactic probes to test the defender's resolve and perhaps also achieve limited political objectives.⁶⁹ Whereas high-end conventional deterrence centers on static military latent capabilities, low-end conventional deterrence against salami-tactic escalation often requires dynamic employment of constabulary forces. These forces normally consist of coast guards, gendarmeries, or other national law enforcement or border control agencies.

China's achievements at Scarborough Shoal against the Philippines in spring 2012 demonstrate it does not take many Chinese constabulary personnel, or alternatively "civilian activists," to take de facto control of a small, isolated, and contested island, atoll, or reef—particularly when they are implicitly supported by PLA forces serving as an "over-the-horizon" anti-intervention deterrent.⁷⁰ From the perspective of US East Asian allies and partners, the strategic consequences to them are the same regardless of whether the Chinese salami tactics observed thus far were the result of China's explicit policy direction to—or tacit tolerance of bureaucratic competitions among—its maritime constabulary organizations.

Low-end dynamic conventional deterrence within the East Asian maritime is predicated on US allies deploying sufficient, sustainable quantities of constabulary forces to contested areas over long periods to protect isolated territories, water-space usage rights, and freedom of navigation as defined by international laws and norms.⁷¹ Since constabulary forces cannot be everywhere within a given maritime area at once, persistent wide-area surveillance and reconnaissance systems will be necessary for cueing their operations. These forces must also be equipped with multiple nonlethal options—as well as delegated authority for national law enforcement—for neutralizing the activities of, and potentially even physically apprehending, nonmilitary transgressors. The delegated legal authority point is particularly important, as notwithstanding the desire to avoid the escalatory and diplomatically questionable step of placing traditional military forces in direct contact with an opponent's constabulary forces or civilians, there are political and legal reasons why a nation might prefer not to assign its military, let alone an ally's mili-

tary or constabulary forces, a domestic law enforcement role.⁷² Lastly, recording and rapidly transmitting sensor or audiovisual documentation of an encounter may buttress future deterrence if it can be successfully used to diplomatically shame the other side for violating internationally accepted behavioral norms or international law.⁷³

Nevertheless, dynamic low-level conventional deterrence using constabulary forces will lack credibility if any over-the-horizon PLA supporting forces are not matched by equivalent allied over-the-horizon forces. If China is to be dissuaded from pressing its incremental salami-tactic campaign, its leadership needs to be confronted with the probability that PLA intervention against US allies' constabulary forces would bring the PLA into direct contact with their militaries, and with it, the risk that follow-on escalation would likely trigger US commitments under bilateral defense treaties.⁷⁴

Deterrence and the Price of Peace

Concern for future East Asian peace boils down to a central dilemma: when one state applies persistent, incremental power to bring a contested object under its political control, the other state(s) must choose whether to concede and risk inviting future coercion directed against other valued objects and interests or confront and thereby increase the risk of war. Notwithstanding their own needs to answer domestic demands for national pride and prestige, US East Asian allies presently have no basis for confidently believing Chinese regional ambitions are limited to currently contested objects. The absence of a reciprocated CBM regime and the omnipresent danger of any and all parties misperceiving intentions certainly amplify this problem, but the core factor driving the risk of war is and will continue to be the lack of a foundational political consensus between China and its neighbors on regional security principles. Indeed, China and its East Asian neighbors may very well be viewing the region's security dilemmas from mutually exclusive philosophical and ideological standpoints. If this is the case, it does not bode well for accommodation on these issues, let alone for grand strategic reassurance. Such a philosophical-ideological divide likely indicates a heightened risk for grand strategic confrontation and a lowered likelihood for regional security cooperation through at least the intermediate term.⁷⁵

Furthermore, it is an analytical mistake to grant current and future Chinese leaders credit for military-strategic decision-making procedural coherency—let alone wisdom—not yet demonstrated in a rapidly unfolding, dynamic, and chaotic regional crisis with major domestic and international political implications. It is intellectually reckless to rationalize away why they would not commit seemingly irrational, destabilizing, and precedent-setting escalatory acts under such circumstances. Chinese strategic culture's lack of experience navigating fast-moving crises and waging modern war combines with the limited open-source information on PLA doctrine to generate a concern that Chinese leaders may be overconfident in their abilities to positively control forces and events during heightened tensions. Should Chinese leaders additionally underrate how Clausewitzian popular passions may influence their competitors' military-strategic decision making, Sino-US crisis stability will face an even greater danger.

Deterrence cannot be obtained cheaply. The difference between what is defensively optimal and what is fiscally affordable generates a credibility risk that US political leaders must address within their deterrence policy and overall grand strategy. It bears repeating that the opponent's perceptions are the critical variables in estimating a deterrence policy's chances for success. US political leaders and opinion elites may consider a given deterrence policy to be elegant and enlightened, but if it does not impact a potential adversary's calculations in the intended way, it invites disaster. Beyond considerations related to US communications of resolve through nonmilitary means, theory only makes clear that deterrence credibility in East Asia depends upon in-theater stationing and preemption-resistant configuration of sufficient US forces and materiel to cause Chinese leaders to question the chances that any notional PLA offensive will secure a rapid, low-cost, and decisive victory. Theory alone cannot indicate whether a marginal dollar allocated toward specific improvements in capabilities, quantities, positioning, or readiness will improve credibility more than if allocated toward any one of the others. All four of these attributes are central to conventional deterrence, and shortcomings in one or more of them in terms of defensive efficacy or implied political resolve can at best only be partially compensated for by the others.

Choosing which tradeoffs to accept requires a cyclical, adaptive process built around continuous detailed net assessments of the Sino-US

strategic balance, the ever-evolving understanding of Chinese objectives and perceptions discussed earlier, and disciplined war gaming and experimentation.⁷⁶ One must understand that unlike nuclear deterrence, an opponent can “design around” a conventional deterrent once its outlines are evident. Sustaining conventional deterrence credibility therefore requires continuous investment of budgetary resources and political will to adapt in response to countermoves until the underlying political issues separating the two sides are resolved.⁷⁷ None of this should be interpreted as an assertion that current US conventional deterrence in East Asia is improperly sized, positioned, postured, or outfitted, but rather as an assertion that its evolution must be firmly rooted in conventional core principles if it is to succeed.

US leaders must ultimately decide whether the interests in East Asia they wish to uphold justify the cost of deterrence, and if not, accept the strategic consequences of commitment redefinition or extrication. These consequences, however distasteful, remain vastly preferable to having a relatively unambiguous US deterrent threat revealed by a crisis to be a bluff. Similarly, a deterrence policy must be but one element of a coherent US grand strategy that applies all elements of national power to address relations with China, the security of allies, and East Asian stability; it cannot substitute for such a strategy.⁷⁸ Unless hope is to be surrendered that East Asian players can peacefully find mutually acceptable solutions for the region’s security challenges if granted enough time and strategic space, US political and military leaders must better understand and implement conventional deterrence principles as well as secure the American people’s enduring support for the requisite commitments and investments. 

Notes

1. For example, see James Dobbins et al., *Conflict with China: Prospects, Consequences, and Strategies for Deterrence* (Santa Monica, CA: RAND Corp., 2011), 5–7, 8–10. The authors correctly advocate for building defensive capacities of US East Asian partners as a means of deterrence and attempting to promote reassurance by finding areas for cooperation in which mutual interests align. However, their implied definitions of *deterrence by denial* and *deterrence by punishment*, as well as their evaluations of the relative utilities of both approaches under varying strategic circumstances, do not seem consistent with the extant body of work on conventional deterrence theory.

2. For examples, see Greg Jaffe, “U.S. Model for a Future War Fans Tensions with China and Inside Pentagon,” *Washington Post*, 2 August 2012, http://www.washingtonpost.com/world/national-security/us-model-for-a-future-war-fans-tensions-with-china-and-inside-pentagon/2012/08/01/gJQAC6F8PX_story.html; and Raoul Heinrichs, “America’s Dangerous Battle Plan,” *Diplomat*, 17 August 2011, <http://thediplomat.com/2011/08/17/america%E2%80%99s-dangerous-battle-plan/>. The *Washington Post* article implicitly acknowledges that US contingency planning for long-range conventional strikes against

limited military targets on Chinese soil is not guided by a strategy or doctrine rooted in preemption, but is rather conceived as a means of supporting restoration of US operational-strategic access to East Asia following a Chinese conventional first strike. Nevertheless, the article focuses on the escalatory risks that might be heightened by US conventional counterstrikes. Also of interest is Joshua Rovner, "Policy Brief 12: Air-Sea Battle and Escalation Risks," University of California Institute on Global Conflict and Cooperation, January 2012. Although Rovner examines many of the deterrence-undermining escalation dynamics examined in this essay, he does so solely within the context of notional long-range conventional strikes rather than the general context of a Sino-US war. Rovner also does not propose any alternative deterrence concepts that would present fewer or "more acceptable" escalatory risks.

3. See Alexander George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974), 537; Michael S. Gerson, "Conventional Deterrence in the Second Nuclear Age," *Parameters* 39 (Autumn 2009): 36–40; Paul K. Huth, *Extended Deterrence and the Prevention of War* (New Haven, CT: Yale University Press, 1998), 56–84; John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1983), 24, 63–64, 203, 207–8, 211; and Edward Rhodes, "Conventional Deterrence," *Comparative Strategy* 19 (Fall 2000): 222–23, 230, 242–47. For excellent discussions on why a defensive strategy or operational plan's success cannot be predicated on recognizing and rapidly acting upon warning of war, see Richard K. Betts, *Surprise Attack* (Washington: Brookings Institution, 1982), 87–141, 155–56; and George and Smoke, *Deterrence in American Foreign Policy*, 572–80. The latter observe that decision makers need not be rendered impotent by ambiguous warning; there are many measures they can prudently take to incrementally increase defensive readiness, thoroughly reevaluate the costs and risks of various actions (or inaction), clarify commitments, and otherwise enhance deterrence in such a situation. However, there is a difference between a crisis providing decision makers with the inherent time and space to safely take such measures and the psychological and political factors Betts highlights that can increase decision-making friction and result in an impotent defensive response.

4. George and Smoke, *Deterrence in American Foreign Policy*, 532.

5. See Janice Gross Stein, "Deterrence and Reassurance," in *Behavior, Society, and Nuclear War*, vol. 2, eds. Philip E. Tetlock et al. (New York: Oxford University Press, 1991), 16; and Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca: Cornell University Press, 1989), 137, 139–40.

6. See Gerson, "Conventional Deterrence in the Second Nuclear Age," 41–42; Mearsheimer, *Conventional Deterrence*, 209–12; Rhodes, "Conventional Deterrence," 223–26, 236; Stein, "Deterrence and Reassurance," 29; and Richard Ned Lebow, "Conclusions," in *Psychology and Deterrence*, eds. Richard Jervis, Lebow, and Janice Gross Stein (Baltimore: Johns Hopkins University Press, 1985), 207–10, 212, 214–17.

7. For the purposes of this article, *punishment* is defined as the use of one or more forms of national power to inflict damage upon a transgressor who violates the defender's deterrence threshold. This damage can be against fielded military forces and their infrastructure, industrial infrastructure supporting military production, civil and economic infrastructure, governmental institutions and authorities (potentially including leaders themselves), and/or civil populations. The duration can range from a one-time blow to a series of blows or pressure over a protracted period. Deterrence by punishment therefore is geared around the latent threat of inflicting a degree of damage that a potential adversary deems unacceptable, which in turn restrains that potential adversary from taking the proscribed action.

8. See Gerson, "Conventional Deterrence in the Second Nuclear Age," 38; and Rhodes, "Conventional Deterrence," 225, 248. This would not seem to bode well for successful deterrence using the concept of "mutually assured economic destruction" if opposition leaders judge the probable costs of inaction, or the value of a desired political object, to exceed the estimated costs of incurred economic damage.

9. The most authoritative of these include Gen Norton A. Schwartz, USAF, and ADM Jonathan W. Greenert, USN, "Air-Sea Battle: Promoting Stability in an Era of Uncertainty," *American Interest*, 20 February 2012, <http://www.the-american-interest.com/article.cfm?piece=1212>; CAPT Philip DuPree, USN, and Col Jordan Thomas, USAF, "Air-Sea Battle: Clearing the Fog," *Armed Forces Journal*, May 2012, <http://www.armedforcesjournal.com/2012/05/10318204>; *Air-Sea Battle Doctrine: A Discussion with the Chief of Staff of the Air Force and the Chief of Naval Operations* (Washington: Brookings Institution, 16 May 2012), <http://www.brookings.edu/~media/events/2012/5/16%20air%20sea%20>

battle/20120516_air_sea_doctrine_corrected_transcript.pdf; and Gen Mark Welsh, USAF, and ADM Jonathan W. Greenert, USN, “Breaking the Kill Chain: How to Keep America in the Game When our Enemies are Trying to Shut Us Out,” *Foreign Policy*, 16 May 2013, http://www.foreignpolicy.com/articles/2013/05/16/breaking_the_kill_chain_air_sea_battle.

10. For the definition of *maritime denial* (as well as *maritime control*) as used in this article, see Jonathan F. Solomon, “Maritime Deception and Concealment: Concepts for Defeating Wide-Area Oceanic Surveillance-Reconnaissance-Strike Networks,” *Naval War College Review* 66, no. 4 (Autumn 2013), 107–8. Additionally, the term *long-range conventional strike* as used herein covers any capability that can deliver a conventional strike weapon against a target at a distance exceeding roughly 1,000 nautical miles (nm). The rationale for this range is the approximate effective distance a notional future contested zone may extend from China’s coast. Deep strike systems obviously would be capable of maximum ranges well in excess of this threshold, but the likelihood that these systems will be more expensive than theater-range systems suggests there will probably be a larger inventory of the latter. Strike timeliness—particularly a system’s ability to execute a mission fast enough to hit a fleeting target or provide tactically meaningful response times when supporting other friendly forces—also suggests that the strike systems’ relative proximity to the fight will be an important campaign-level consideration. Consequently, theater-range systems require a range of at least 1,000 nm if they are to strike contested inner sections if not an adversary’s homeland bases and military infrastructure located close behind its borders. Current long-range conventional strike systems include penetrating bombers armed with short-range ordnance, standoff bombers armed with cruise missiles, and submarines armed with cruise missiles. Future systems might include strike fighters armed with longer-range versions of current standoff weapons, submarines armed with theater-range ballistic or hypersonic missiles, standoff bombers armed with hypersonic missiles, or even land-based transoceanic hypersonic missiles. For an examination of current development, potential employment, and escalation risk considerations, as well as arms control treaty issues involving these future systems, see James Acton, *Silver Bullet: Asking the Right Questions About Conventional Prompt Global Strike* (Washington: Carnegie Endowment for International Peace, 2013). Regarding the operational capability and crisis stability tradeoffs among legacy and potential future strike systems, see Forrest E. Morgan, *Crisis Stability and Long-Range Strike: A Comparative Analysis of Fighters, Bombers, and Missiles* (Santa Monica: RAND, 2013). It is also important to note that the 1987 Soviet-US Intermediate-Range Nuclear Forces (INF) Treaty prohibits the production of ground-launched ballistic missiles with ranges between 500 and 5,500 kilometers, meaning that any US theater-range missile developed for conventional strike that would follow a ballistic trajectory for most of its flight path would need to be sea-based so long as the treaty remains in effect. See “Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Elimination of their Intermediate-Range and Shorter-Range Missiles (INF Treaty),” US Department of State, 8 December 1987, <http://www.state.gov/t/avc/trty/102360.htm>.

11. For an authoritative acknowledgement that EW and cyberspace operations might, under specific circumstances, be more appropriate and effective than conventional land-attack strikes, see Welsh and Greenert, “Breaking the Kill Chain.” For examples of how EW and cyberspace operations might fill these roles, see Solomon, “Maritime Deception and Concealment,” 87–116.

12. There is some historical evidence Chinese political leaders limited the PLA’s use of force when they were concerned about escalatory risks. Of particular interest are the cases where use of PLA aerospace power was restricted, perhaps in part to avoid setting escalatory precedents. That said, these historical restraints occurred under different geostrategic circumstances, involved a different generation of Chinese leaders with different political objectives, and involved a much-less-capable PLA, so it is difficult to assert their applicability to current and future cases. See Forrest E. Morgan et al., *Dangerous Thresholds: Managing Escalation in the 21st Century* (Santa Monica: RAND, 2008), 188–94. As Clausewitz might have predicted, the scope, scale, and forms of force Chinese leaders would be willing to authorize in a given contingency would no doubt be derived from how they valued their political objectives at that time. This, combined with historical evidence of Chinese self-restraint, generates some hope that multitrack diplomatic outreach well prior to any potential crisis might help Chinese leaders appreciate the extreme escalatory dangers and probable consequences if the PLA were ever directed to implement

its apparent conventional and cyber-electronic first strike doctrine. The same dialogue would be very useful for Chinese leaders to communicate their escalatory threshold perceptions relative to potential US or allied military actions.

13. For an overview of the historical precedents and associated variables that might drive how strongly the United States would respond to a first strike directed solely at US naval forces, see Jonathan F. Solomon, “Defending the Fleet from China’s Anti-Ship Ballistic Missile: Naval Deception’s Roles in Sea-Based Missile Defense” (Master’s thesis, Georgetown University, 2011), 73, <http://gradworks.umi.com/1491548.pdf>.

14. In fact, none of the official public descriptions of Air-Sea Battle even imply the concept embraces preemption. Conversely, the aggressor’s precedent-setting is almost universally overlooked in the Western debate over Air-Sea Battle.

15. See Jack Snyder, “Perceptions of the Security Dilemma in 1914,” in *Psychology and Deterrence*, 179; and Stein, “Deterrence and Reassurance,” 17.

16. Douglas McCready, *Crisis Deterrence in the Taiwan Strait* (Carlisle, PA: US Army Strategic Studies Institute, November 2003), 26–27.

17. For detailed explanations of apparent first-strike advocacy in publicly available PLA doctrine, see Dean Cheng, “Chinese Views on Deterrence,” *Joint Force Quarterly* 60 (1st Qtr. 2011), 92–101; Ron Christman, “Conventional Missions for China’s Second Artillery Corps,” *Comparative Strategy* 30, no. 3 (July 2011): 198–228; Roger Cliff et al., *Entering the Dragon’s Lair: Chinese Antiaccess Strategies and Their Implications for the United States* (Santa Monica: RAND, 2007), 13–15, 23, 28–43, 47–50; James C. Mulvenon et al., *Chinese Responses to U.S. Military Transformation and Implications for the Department of Defense* (Santa Monica: RAND, 2006), 46–47; and Larry Wortzel, *China’s Nuclear Forces: Operations, Training, Doctrine, Command, Control, and Campaign Planning* (Carlisle, PA: US Army Strategic Studies Institute, May 2007), 8–14, 36. For a compelling description of reasons why Chinese leaders might be willing to accept the escalatory risks inherent in unleashing conventional first strikes against core US bases in Japan and Guam, see David Shlapak, “Projecting Power in a China-Taiwan Contingency: Implications for USAF and USN Collaboration,” in *Coping with the Dragon: Essays on PLA Transformation and the U.S. Military* (Washington: Center for Technology and National Security Policy, National Defense University, December 2007), 91–92. For an assessment of apparent gaps in publicly available PLA doctrine regarding the tension between escalation management on one hand and decisively seizing the operational-strategic initiative on the other, see Morgan et al., *Dangerous Thresholds*, 49–51, 54–57, 68–71, 77–81, 181–86. For excellent discussions of the basic incentives driving an inferior power to strike first against a superior power, see Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), 234–35; and Jervis, *Meaning of the Nuclear Revolution*, 164–73. Note in particular that Jervis’s discussion pertains primarily to nuclear first strikes, but many of the factors he identifies are also extensible to conventional first strikes.

18. Ernest R. May and Philip D. Zelikow, *The Kennedy Tapes: Inside the White House during the Cuban Missile Crisis* (Cambridge, MA: Harvard University Press, 1997), 327, 334–36, 406–14, 424–25, 433, 435–37, 448–49, 615–16.

19. Meghan L. O’Sullivan, *Shrewd Sanctions: Statecraft and State Sponsors of Terrorism* (Washington: Brookings Institution Press, 2003), 109, 113–17, 120–22, 133–37, 142–43, 145–48, 150, 153–54, 157.

20. The leading example of a conventional deterrence policy aimed at China that rests upon economic blockade is “offshore control.” T. X. Hammes, *Offshore Control: A Proposed Strategy for an Unlikely Conflict* (Washington: Institute for National Strategic Studies, National Defense University, June 2012); Hammes, “Strategy and AirSea Battle,” *War on the Rocks*, 23 July 2013, <http://warontherocks.com/2013/07/hammes-strategy-and-airseabattle/>; and Hammes, “Sorry, AirSea Battle Is No Strategy,” *National Interest*, 7 August 2013, <http://nationalinterest.org/commentary/sorry-airsea-battle-no-strategy-8846>. For additional arguments highlighting offshore control blockading concept’s strategic limitations and risks, see Elbridge Colby, “Don’t Sweat AirSea Battle,” *National Interest*, 31 July 2013, <http://nationalinterest.org/commentary/dont-sweat-airsea-battle-8804>.

21. See Rhodes, “Conventional Deterrence,” 241; and Stein, “Deterrence and Reassurance,” 17.

22. Mearsheimer, *Conventional Deterrence*, 25–27.

23. Stein, "Deterrence and Reassurance," 17. It is not clear such a thing as a geographical barrier even exists in the age of long-range aerospace strike.

24. This observation was summed up excellently in a US Navy officer's memo during development of the 1980s US Maritime Strategy: "We must continuously reinforce in the Soviet mind the perception that it could not win a war with the United States, both before a war, to enhance deterrence, and at all phases of the war should it occur . . . the key point here is that the desired prospect must be as perceived and measured in Soviet terms." See John B. Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986*, Newport Paper 19 (Newport, RI: Naval War College Press, 2004), 54.

25. Note that adversarial leaders are likely to place far greater stock in their conclusions about the defender's interests and objectives than in any deterrence commitment signaled by the defender. Their own interests, objectives, and fears also quite possibly may override even the defender's most credible commitment, signal, or deterrent force-in-being. See George and Smoke, *Deterrence in American Foreign Policy*, 560–61; and Lebow, "Conclusions," 212–17, 231–32.

26. Understanding their risk tolerances within these contexts is especially critical to crafting a deterrence policy. See George and Smoke, *Deterrence in American Foreign Policy*, 505.

27. Rhodes, "Conventional Deterrence," 234–35, 241. For a definitive theoretical foundation of what shapes opponent leaders' innate deterrability, given their interests and perceptions, see George and Smoke, *Deterrence in American Foreign Policy*, 503–613. For a more detailed discussion of issues surrounding the relative clarity or ambiguity of deterrent threats, see Glenn Snyder, *Deterrence and Defense* (Princeton: Princeton University Press, 1961), 246–49.

28. Lebow, "Conclusions," 232.

29. *Deterrence Operations Joint Operating Concept*, version 2.0 (Washington: Department of Defense, 2006), 45–52.

30. Stein, "Deterrence and Reassurance," 31–56.

31. For more on these aspects of CBMs, see Christopher A. Ford, *Information-Based Arms Control and Sino-American Trust* (Washington: Hudson Institute, December 2012), 5–8; and Acton, "Silver Bullet," 134–38.

32. George and Smoke, *Deterrence in American Foreign Policy*, 591.

33. Stein, "Deterrence and Reassurance," 41, 44–45, 51.

34. Abram N. Shulsky, *Deterrence Theory and Chinese Behavior* (Santa Monica: RAND, 2000), 38–40. Of note, CBMs are most likely to succeed when an opponent's primary strategic motivation stems from safeguarding its own security vice seeking to revise the status quo for its benefit at others' expense. See Stein, "Deterrence and Reassurance," 58.

35. For background on the lack of progress in negotiating maritime CBMs with China through 2010, see Peter J. Brown. "US and China Can't Calm South China Sea," *Asia Times*, 4 June 2010, <http://www.atimes.com/atimes/China/LF04Ad01.html>; and Alexander Martin, "Tokyo Seeks Military Hot Line to Beijing," *Wall Street Journal*, 13 February 2013, http://online.wsj.com/article/SB10001424127887324162304578301372138755346.html?mod=rss_whats_news_us.

36. Gerson, "Conventional Deterrence in the Second Nuclear Age," 36.

37. See Wortzel, *China's Nuclear Forces*, 14–18, 26–30; Baohui Zhang, "The Taiwan Strait and the Future of China's No-First-Use Nuclear Policy," *Comparative Strategy* 27, no. 2 (April 2008): 164–82; Thomas J. Christensen, "The Meaning of the Nuclear Evolution: China's Strategic Modernization and US-China Security Relations," *Journal of Strategic Studies* 35, no. 4 (August 2012): 447–87; Peng Guangqian and Rong Yu, "Nuclear No-First-Use Revisited," *China Security* 5, no. 1 (Winter 2009): 83; M. Taylor Fravel and Evan S. Medeiros, "China's Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure," *International Security* 35, no. 2 (Fall 2010): 48–87; and Morgan et al., *Dangerous Thresholds*, 61–68, 80. Though Fravel and Medeiros, as well as Morgan et al., conclude based on their analyses of historical Chinese nuclear policy and publicly available PLA doctrinal works that "no first use" is unlikely to be revoked, they agree that the policy allows for significant ambiguities. They do make a compelling point that contemporary PLA doctrine does not describe how nuclear weapons might be used operationally other than as retaliation for an actual or seemingly imminent nuclear first use by an adversary or perhaps in retaliation for a conventional first strike against PLA

nuclear forces. Nevertheless, they seem to agree that the internal Chinese debate surrounding “no first use” means the standing absolutist interpretation of the policy might not be permanent. It is important to observe that nuclear escalation does not necessarily mean the actual launching of nuclear weapons; the deliberate manipulation of nuclear force postures and positioning for coercive purposes can also be considered a form of escalation.

38. See Christensen, “Meaning of the Nuclear Evolution,” 478–79; and Michael S. Chase et al., “The Future of Chinese Deterrence Strategy,” *Jamestown Foundation China Brief* 9.5, 4 March 2009, http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=34661&tx_ttnews%5BbackPid%5D=459&no_cache=1.

39. Schelling, *Arms and Influence*, 44–45, 94–104. Also see George and Smoke, *Deterrence in American Foreign Policy*, 527–28; and Jervis, *Meaning of the Nuclear Revolution*, 21–22, 74–99. Note in particular that the conditions resulting from the ill-controlled process are consistent with Jervis’s description of “Mutually Assured Destruction.”

40. For an excellent overview of inadvertent and accidental escalation issues, see Morgan et al., *Dangerous Thresholds*, 23–28.

41. See Christman, “Conventional Missions for China’s Second Artillery Corps,” 210, 212; Christensen, “Meaning of the Nuclear Evolution,” 477, 482; Brad Roberts, “Strategic Deterrence beyond Taiwan,” in *Beyond the Strait: PLA Missions Other than Taiwan*, eds. Roy Kamphausen, David Lai, and Andrew Scobell (Carlisle, PA: US Army Strategic Studies Institute, Spring 2009), 179–80, 196–200; and Morgan et al., *Dangerous Thresholds*, 54–55, 65.

42. For other possible actions that could initiate a vicious escalatory cycle, see Christensen, “Meaning of the Nuclear Evolution,” 468–72, 479–80, 482–83. For an excellent discussion of how decision makers under severe psychological strain in a crisis may interpret the opposing side’s behaviors as inherently hostile and not consider less-menacing alternative explanations, see Jervis, *Meaning of the Nuclear Revolution*, 152–57. Note, though, that a “tit for tat” escalatory approach—combined with firm but flexible diplomatic outreach to the adversary—actually may offer the best chance for ultimately deterring the adversary from further escalation. Tit-for-tat signifies that any escalation by the adversary would be matched by equivalent escalation. The complementary diplomatic approach would involve offering the adversary “off-ramps” that allow the defender to achieve its vital political objectives and the adversary to save face. See Huth, *Extended Deterrence*, 74–84. The adversary’s perceived value of their political objectives, of course, would dictate the point at which they might evaluate the costs and risks of further escalation as too great to merit continuation, and therefore might begin searching for off-ramps.

43. Morgan et al., *Dangerous Thresholds*, 25–26. War gaming could play a major role in shaping US talking points and agenda items for such a dialogue by identifying previously unrecognized or underappreciated inadvertent (and perhaps even accidental) escalation risks.

44. For context on Chinese C3 architectural goals, see Cortez A. Cooper, “Joint Anti-Access Operations: China’s System of Systems Approach,” Testimony Presented before the U.S. China Economic and Security Review Commission, 27 January 2011, 6–7. It is not clear from this and the few other English-language open-source analyses on this topic whether Chinese political leaders understand the real-world capabilities and limitations of advanced C3 or whether they mirror-image C3 doctrine and capabilities as providing US political leaders with a degree of direct situational awareness and control over US forces similar to what they apparently seek to attain over PLA forces.

45. To understand how US leaders contemporaneously viewed the geopolitical motives of both sides in the crisis, see “Intelligence Note: Peking’s Tactics and Intentions along the Sino-Soviet Border,” US State Department, Bureau of Intelligence and Research, 13 June 1969, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB49/sino.sov.6.pdf>. For a summary of the crisis itself, as well as the Chinese decision for conciliation, see “Sino-Soviet Border Talks: Problems and Prospects,” Office of Current Intelligence, US Central Intelligence Agency, 10 November 1969, 7–10, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB49/sino.sov.26.pdf>. A fantastic collection of official Chinese documents tracing the trajectory of Chinese thinking during the crisis is found in Chen Jian and David L. Wilson, eds., “‘All under Heaven is in Great Chaos’: Beijing, the Sino-Soviet Border Clashes, and the Turn towards Sino-American Rapprochement, 1968–69,” *Cold War International History Project Bulletin* 11 (Winter 1998): 155–75.

46. See “Zhou Enlai’s Report to Mao Zedong and Mao’s Comments, 22 March 1969,” in Jian and Wilson, “All under Heaven is in Great Chaos,” 162; and Shulsky, *Deterrence Theory and Chinese Behavior*, 12, 76. This Chinese decision to avoid direct communication with the other side in an escalating crisis and instead employ diplomatic ambiguity and other measures intended to increase crisis instability for coercive purposes and/or enhance operational-tactical military impact in a war’s opening moves is consistent with their actions immediately prior to several of their historical direct military conflicts. Unlike apparent Chinese operational plans during the Sino-Soviet crisis as described within the Zhou report to Mao and several other documents in Jian and Wilson, though, many of these conflicts involved a Chinese conventional offensive first move in mass. See Shulsky, 55–61, 64–72, 75–77.

47. See Roberts, “Strategic Deterrence beyond Taiwan,” 189–90; and Morgan et al., *Dangerous Thresholds*, 49–51. There may be some circumstantial evidence supporting hope on this front, though. See Morgan et al., 188–94; and Andrew Chubb, “Radar Incident Obscures Beijing’s Conciliatory Turn toward Japan,” *Jamestown Foundation China Brief* 13.4, 15 February 2013, [http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews\[tt_news\]=40462&tx_ttnews\[backPid\]=25&ccHash=f0dc74bbb5b2591002ea8abc2f576f05](http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews[tt_news]=40462&tx_ttnews[backPid]=25&ccHash=f0dc74bbb5b2591002ea8abc2f576f05).

48. For talking points US diplomats could use to overcome any Chinese reluctance toward establishing such a dialogue, see Christensen, “Meaning of the Nuclear Evolution,” 483–84. Tying this into far broader Sino-US discussions encompassing the conventional balance of power, space and cyber warfare, respective force doctrine, and military-to-military management (not resolution) of specific regional security issues may also increase the likelihood of success. See James Acton, “The Dragon Dance: U.S.-China Security Cooperation,” Carnegie Endowment for International Peace, 29 November 2012, <http://carnegieendowment.org/globalten/?fa=50148>.

49. This message was perhaps most famously conveyed in Nikita Khrushchev’s “Letter to Kennedy, October 26, 1962,” in Laurence Change and Peter Kornbluh, eds., *The Cuban Missile Crisis, 1962* (New York: New Press, 1998), 198. It was also conveyed following lesser incidents, such as false warnings of nuclear attacks, to highlight the implications of C3 system fallibility not only with respect to preventing accidental war when tensions were relatively low, but also with respect to situational awareness and positive control over forces in an actual crisis. For example, see “Message from Brezhnev to President on Nuclear Attack False Alarm,” US Department of State, 14 November 1979, <http://www2.gwu.edu/~nsarchiv/nukevault/ebb371/docs/doc%202%2011-14-79.PDF>.

50. Huth, *Extended Deterrence*, 206–7. It is important to note that while this condition may exist, as posited by the “stability-instability paradox,” it may not always be the case. Glenn Snyder, an early articulator of the paradox, points out that the interplays between context, specific circumstances, and chance are the keys to its real-world application. In his view, a Soviet conventional offensive against NATO or Japan would have had vastly greater ramifications to US interests and prestige, and therefore more risk of unleashing inadvertent escalatory processes, than one against countries in which US interests were peripheral. Robert Jervis agreed, noting that Schelling’s ill-controlled escalatory process meant nuclear equilibrium hardly created any margin of safety for major conventional provocations or wars. See Snyder, *Deterrence and Defense*, 225–26; Glenn Snyder, “The Balance of Power and the Balance of Terror,” in *Balance of Power*, ed. Paul Seabury (San Francisco: Chandler Publishing Co., 1965), 199; and Jervis, *Meaning of the Nuclear Revolution*, 21–22, 105. Nevertheless, it is the defender’s inability to confidently know whether the stability-instability paradox will work for or against deterrence efforts at a given point in time that drives the need for a conventional hedging force capable of denying the opponent’s potential fait accompli attempts.

51. Gerson, “Conventional Deterrence in the Second Nuclear Age,” 38. For a description of the distinctions between pure and deterrent defenses, see Schelling, *Arms and Influence*, 78–79.

52. Huth, *Extended Deterrence*, 206–7.

53. Snyder, “Balance of Power and the Balance of Terror,” 194, 199. Snyder points out, however, that just as nuclear stability may not necessarily breed conventional instability, conventional stability can breed nuclear instability. This is because an adversary may interpret the defender’s efforts to establish conventional equilibrium as an attempt to create an alternative to having to “go nuclear” first to implement its deterrent threats. The adversary may therefore become more willing to challenge the defender

conventionally based on the perception that the latter's resolve was shaky. While this logic is sound, it seems likely that if the adversary recognizes Schelling's ill-controlled-process logic as a real danger and accepts Snyder's and Jervis's other arguments regarding the stability-instability paradox, Snyder's initial observation regarding conventional equilibrium contributing to nuclear stability would be more likely to prevail.

54. As such, they might perceive that they are reacting to revisionist attempts by the United States and its allies, and that therefore the United States is the one risking initiation of the ill-controlled process. See Christensen, "Meaning of the Nuclear Evolution," 452, 463–66, 472–75, 481–82.

55. See Yuka Hayashi, Jeremy Page, and Julian Barnes, "Tensions Flare as Japan Says China Threatened Its Forces," *Wall Street Journal*, 5 February 2013, <http://online.wsj.com/article/SB10001424127887324445904578285442601856314.html>; and Chubb, "Radar Incident Obscures Beijing's Conciliatory Turn toward Japan."

56. Part of this is due to East Asia's twentieth-century history, namely the legacy of the Japanese Empire prior to 1945. Geography and military-strategic circumstances, though, also play major roles. The size of West European states meant that a Soviet ground thrust into West Germany would inherently imperil its neighbors through rapid follow-on military conquest or eventual coerced political "Finlandization." This threat was self-evident to Western Europe's politicians and peoples of the late 1940s. As the Second World War had also devastated their economies, militaries, and civil infrastructure, standing alone could not provide a viable deterrent.

These geographic and military-strategic circumstances do not apply in today's East Asia. It is hard to politically envision East Asian states seeking a binding collective security architecture absent a Chinese military threat to their sovereignties that is so ominous it overcomes the Japanese imperial legacy issue for some and nonalignment preferences of others. It should be noted that the imperial legacy issue includes Japan's own need for constitutional amendments to make participation in a collective security architecture possible.

The critical piece, however, would come down to how Japanese and South Korean political leaders evaluate their dependencies on the rest of East Asia for trade and security. They are likely to remain satisfied with their respective bilateral defense treaties with the United States so long as they do not individually perceive their security has become critically dependent upon that of other East Asian states. Should Japan and South Korea perceive their respective interests would be gravely jeopardized if other East Asian states were to fall within China's orbit via coercion or conquest, though, they would likely become the chief advocates of a formal architecture that commits the United States to collective security.

57. The relative probable efficacy of a deterrence policy option should be evaluated based on whether there is sufficiently rigorous analytical evidence that it provides "the most promising means by which an adversary's decision calculus is moved toward deterrence and away from coercive action or attack." See *Deterrence Operations Joint Operating Concept*, 52–53.

58. This is a central point of the new US Navy and Marine Corps "Single Naval Battle" concept. See Maj Gen Kenneth McKenzie Jr., USMC, "Naval Power and the Future of Assured Access," *Armed Forces Journal*, January–February 2013, <http://armedforcesjournal.com/2013/01/12842317>. That said, US and allied preparation and use of dispersed forward operating bases (FOB) on land—however austere, remote, and transient—may generate domestic political challenges for the host nation during peacetime as well as war. Sites that a host nation is willing to allow the United States to use in contingencies involving its direct defense might not be politically available in those that do not. Though peacetime diplomacy can establish the terms of US access to potential FOBs on a given nation's soil, these terms can easily change based on political circumstances. Doctrine developers and operational planners must take these risks into consideration.

59. Betts, *Surprise Attack*, 19–20, 22–23, 56. For examples of how Chinese doctrine aims to deny the United States strategic, if not tactical, warning of war, see Christman, "Conventional Missions for China's Second Artillery Corps," 209–10.

60. Huth, *Extended Deterrence*, 202–3.

61. Strikes along these lines would fit nicely into friendly combined arms maritime denial operations in the contested zone. See Solomon, "Maritime Deception and Concealment," 98.

62. The PLA's fielding of robust integrated air defenses in support of these kinds of bases and sensor sites, not to mention these systems' extensibility for supporting offensive operations near China's borders, strongly suggests Chinese leaders deem all of these target types as legitimate for US conventional strikes in a major conflict. See Colby, "Don't Sweat AirSea Battle."

63. Standoff bombers and strike fighters could attack relatively fixed and not heavily hardened PLA targets whose neutralization would slow down, if not significantly weaken, a Chinese offensive campaign. Standoff strike aircraft could also "open the door" for strikes by penetrating aircraft. Penetrating bombers and strike fighters would be necessary to attack more-hardened PLA targets, as well as for general follow-on strikes once standoff-range weapons inventories were inevitably depleted. The high combat potency of strike aircraft, though, suggests most would normally need to be based outside the contested zone to mitigate crisis instability risks and also provide expanded escalation management options; bombers would obviously be based much further away than fighters. The greater an aircraft's basing distance from the contested zone, though, the less it would be able to respond quickly to fleeting tactical needs or opportunities. In contrast, submarines' high survivability within a contested zone means they would not be vulnerable to preemptive attack and that this forward positioning could compensate somewhat for the strike aircraft basing-distance problem. Strike missile-armed surface combatants may contribute as well, albeit from the outer areas of the contested zone. It follows that sea-launched cruise (or future theater-range ballistic) missiles could be quite useful against the same target types as standoff aircraft, which in turn suggests their potential role as the leading edge of an assured conventional second strike and similar time-critical follow-on strikes. Their limited potency and the time-consuming (and currently vulnerable) logistics of reloading their launchers, however, means these missiles must still be complemented within the portfolio by strike aircraft. Dispersed FOBs for strike fighters within the contested zone (if available) and aircraft carriers operating from the periphery (as possible) can help in this regard. For analysis supporting these assertions, see Morgan, "Crisis Stability," 31–32, 38–50, 99–123.

64. Solomon, "Maritime Deception and Concealment," 94–96. Though the logic expressed in that article is specifically applied to the launch of a standoff-range strike against maritime forces, it is just as extensible to any attacker-defender dyad. Also see Acton, "Silver Bullet," 83–84, 88, 100, 146.

65. Mark A. Gunzinger, *Sustaining America's Strategic Advantage in Long-Range Strike* (Washington: Center for Strategic and Budgetary Assessments, 2010), 4, 32–39, 51, 53.

66. Note that exercises do not necessarily need to demonstrate the actual approach US and allied forces would follow in a war. An exercise's core military purpose is to help participating forces become more proficient in executing doctrine and tactics. Beyond this objective, exercises can be—and historically were—designed to shape a potential adversary's perceptions of how US and allied forces would fight. Typically, this involves selectively disclosing certain capabilities deemed likely to impress the potential adversary. Another application might be to "prove" to the opponent something it already believes is true about US and allied forces, plans, or strategy. Exercises designed with these secondary purposes in mind can be particularly useful for reinforcing deterrent credibility. Doctrine, tactics, and capabilities deemed too war-critical to risk peacetime exposure to the opponent can be exercised using unit-level and force-level synthetic training systems. See Solomon, "Maritime Deception and Concealment," 103, 105–7; and Christopher A. Ford and David A. Rosenberg, *The Admirals' Advantage: U.S. Navy Operational Intelligence in the Second World War and Cold War* (Annapolis, MD: Naval Institute Press, 2005), 97.

67. Rhodes, "Conventional Deterrence," 228, 235.

68. In this light, it is important to note that the much-referenced 2012 Center for Strategic and International Studies (CSIS) study on US Asia-Pacific force structure options primarily examined the geopolitical, domestic-political, material, and fiscal feasibility of each option. The unclassified, publicly released main body of the study did not seem to examine the operational-tactical war-fighting efficacy of each option within the operational-strategic context of a direct Sino-US conflict. Nor did it examine those options within the context of deterring a Chinese attempt to militarily achieve a *fait accompli*. It is not clear whether the judgments on force structure sufficiency were in part informed by war gaming the options within these contexts using known and anticipated Chinese capabilities, doctrine, and force structure as well as US and allied doctrines and peacetime postures in the near and intermediate-terms as

reference points. It is similarly unclear whether the force structure options were thoroughly “red teamed” from apparent Chinese perspectives, especially in terms of what these possible estimates of operational-tactical efficacy might imply about US political resolve. As a result, while the study has great utility for assessing force structure political and fiscal viabilities, it does not seem to address the critical questions of how each option might affect Chinese decision-making calculus. See *U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment* (Washington: CSIS, 27 June 2012).

69. For a detailed description of the “salami tactics” concept, see Schelling, *Arms and Influence*, 66–69, 77–78. For an explanation of why such tactics are particularly attractive per the stability-instability paradox, see Snyder, *Deterrence and Defense*, 231–38. In fact, Snyder argued the paradox applies more to incentivizing forms of conflict beneath the major conventional war-level than to incentivizing conventional war itself.

70. Note that China’s maritime “salami tactics” are consistent with the ones they employed prior to the 1969 Sino-Soviet border crisis. See “Intelligence Note: Peking’s Tactics,” 1–2.

71. For an example of the constabulary force structure and operational tempo demands needed to sustain deterrence within the context of the Japan Coast Guard, see Yuka Hayashi, “Island Spat Tests Japan’s Coast Guard,” *Wall Street Journal*, 12 December 2012, <http://online.wsj.com/article/SB10001424127887324339204578170733637585700.html>.

72. The exception to this is use of one’s own air forces to intercept aircraft that violate national airspace. Though constabulary air arms can also be used for this purpose, long-standing international norms widely accept use of military airpower for protection of national airspace.

73. Prospects do not seem high for a public shaming approach succeeding with China in the near term, though. See Oriana Skylar Mastro, “Signaling and Military Provocation in Chinese National Security Strategy: A Closer Look at the Impeccable Incident,” *Journal of Strategic Studies* 34, no. 2 (April 2011): 219–44. Thoroughly disseminating documentation of such encounters may end up being more important for establishing and sustaining popular support within US, allied, and partner societies as well as appealing to neutral states.

74. Huth observes that defender’s pairing of tit-for-tat escalation with firm but flexible diplomatic outreach may be particularly useful under such salami-tactic conditions. A potential aggressor may not have committed itself to use of direct military force at the start of a confrontation, as a probing action might have gotten out of hand. See Huth, *Extended Deterrence*, 201. The positioning of credible military forces over the horizon from the constabulary forces they backstop is consistent with Huth’s recommendations.

75. See Christopher A. Ford, “Sinocentrism for the Information Age: Comments on the 4th Xiangshan Forum,” *New Paradigms Forum*, 13 January 13, <http://www.newparadigmsforum.com/NPFFestsite/?p=1498>.

76. For more on deterrence experimentation, see *Deterrence Operations Joint Operating Concept*, 54.

77. Rhodes, “Conventional Deterrence,” 229.

78. George and Smoke, *Deterrence in American Foreign Policy*, 506.

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