

Conflict with China Revisited

Prospects, Consequences, and Strategies for Deterrence

James Dobbins, Andrew Scobell, Edmund J. Burke, David C. Gompert, Derek Grossman, Eric Heginbotham, Howard J. Shatz

Summary

Six years ago, the RAND Corporation reviewed the prospects for war between the United States and China. Possible theaters of conflict were the Korean Peninsula, Taiwan, Japan, the South China Sea, cyberspace, and India. We concluded that, while armed conflict between the two countries was not likely, the possibility was real enough to require prudent policies and effective deterrent measures. We also cautioned that those measures would become more demanding as Chinese capabilities grew. For the United States, this would mean assuming greater risks in the future to achieve the same objectives as in the past.

Events since have confirmed these judgments. The range and capabilities of Chinese air and sea defenses have continued to grow, making U.S. forward-basing more vulnerable and the direct defense of U.S. interests in the region potentially more costly. As these trends continue, the United States will find itself gradually pushed more toward the threat of horizontal or vertical escalation for deterrence, with the attendant risks of counter-escalation. Neither the United States nor China is likely to employ nuclear weapons, but even an initially localized conflict could quickly spread into the economic, cyber, and space realms, doing considerable damage to both sides.

The United States may be able to reduce or delay such reliance on escalatory responses by shifting to less vulnerable platforms: longer-range precision-strike drones and vessels to carry longer-range drones and submarines, along with the further dispersal of bases and force flows. The United States can also encourage and help allies and partners in the region to increase the range and capabilities of their own air and sea defenses. Barring unforeseen technological developments, however, it will not be possible for the United States to rely indefinitely on the direct defense of its regional interests.

Unless China commits naked and large-scale aggression—which, to be clear, is not indicated by the current pattern of its use of force—the United States will likely want to focus on deescalating localized clashes and removing bones of contention. We recommend, therefore, that the United States move sooner rather than later—before its power position in the region diminishes further—to constructively engage China across a range of potential flash points. Such engagement might include more-energetic efforts to promote the resolution of conflicting maritime claims in the South China Sea; encouragement of improved cross-Strait relations between China and Taiwan; and more-extensive consultations with China on Korea issues, including possibilities for denuclearizing North Korea, formally ending the Korean War, and Sino-American collaboration in the event of a North Korean regime collapse. The United States should maintain a dense network of diplomatic relationships with China while strengthening channels for crisis communications, including regular leader-to-leader, military-to-military contacts.

In 2011, the RAND Corporation considered the possibility of war with China.¹ Looking forward over several decades, that report concluded that Sino-American conflict could arise in and around the Korean Peninsula, Taiwan, Japan, the South China Sea, cyberspace, or India, in that order of likelihood. It did not suggest that military conflict between the two countries was inevitable, or even likely, but it argued that the possibility was real enough to require prudent policies and effective deterrent measures. At that writing, China was already challenging U.S. military superiority on its immediate periphery, making the direct defense of American allies in China's proximity progressively more difficult. Barring a wholesale U.S. shift toward more-survivable forces with longer-range strike capabilities, deterring China would increasingly have to rely on a credible threat of horizontal or vertical escalation, thus decreasing the prospect that any Sino-American conflict could be localized. This report updates our earlier analysis after more than half a decade of additional experience.

By 2030, China's gross domestic product (GDP) could exceed that of the United States.² If it chose, China could therefore become a more capable opponent than either the Soviet Union or Nazi Germany at their peak. Yet China has shown no interest in matching U.S. military expenditures, achieving a comparable global reach, or assuming substantial defense commitments beyond its immediate periphery. Such intentions might change, but if they do, the United States would probably receive considerable warning, given the lead times needed to develop such capabilities.

The Chinese military has begun to range more widely. The People's Liberation Army (PLA) is participating in peacekeeping operations in half a dozen African and Middle Eastern countries. The Chinese navy has assisted in emergency evacuation opera-

tions in the Mediterranean and antipiracy operations in the Indian Ocean and has established a logistics base in Djibouti, on the Horn of Africa. Nevertheless, we believe that core Chinese security interests and capabilities will remain focused in the Western Pacific and that China will not choose to challenge U.S. military superiority in other theaters.

Despite cautious and pragmatic Chinese policies, the risk of conflict with the United States remains, and this risk will grow in consequence, and perhaps in probability, as China's strength and assertiveness increases in the Western Pacific, a region of vital importance. In this Perspective, we review the sources of conflict we believe most likely to occasion a Chinese-U.S. military clash over the next 20 years, arranged in descending order of probability. These remain the same as those we identified six years ago, although we now rate conflict originating in the South China Sea as more likely than one over Taiwan.

We still do not believe that a Chinese-U.S. military conflict is probable in any of the cases, but our margin of confidence is somewhat lower than it was six years ago. This judgment was and is still based on the view that the United States will both avoid unnecessary provocations and retain the capacity to deter Chinese behavior that could lead to such a clash throughout this period. Developments since 2011 somewhat weaken this conviction. President Barack Obama announced a shift of American attention to East Asia, but the United States remained bogged down in the Middle East and has had to increase commitments in Europe in response to Russian aggression. More recently, President Donald Trump (and Hillary Clinton, his Democratic opponent in the 2016 presidential campaign) rejected the centerpiece of Obama's pivot to Asia, the Trans-Pacific Partnership trade pact.

In what follows, we review the plausible sources of armed conflict and then explore the operational implications that these clashes might present, the resultant requirements for defense and deterrence, and the nonmilitary means for limiting or forestalling such hostilities.

Occasions for Conflict

Korea

We list Korea first because it is the most likely locus of conflict in Asia, although not necessarily of a Sino-American conflict. Under most scenarios, China is unlikely to intervene in defense of North Korea, its increasingly estranged ally, but China might well become involved in pursuit of its own interests. Possible contingencies include a North Korean attack on South Korea, a preemptive U.S. strike on North Korean nuclear assets, or the disorderly collapse of the North Korean regime.

Since the death of Kim Jong-il in 2011, tensions on the peninsula have heightened. The deceased dictator's son has gradually solidified his hold on power, while his legitimacy is linked to accelerating the expansion of North Korea's nuclear arsenal and ballistic missile program. This has triggered great alarm in Seoul, Tokyo, and Washington, as well as seriously frayed Pyongyang's already-strained relationship with Beijing. North Korea's pattern of provocative actions has increased the potential for a spiral of unintended escalation into conflict on the peninsula or even a preemptive American strike on North Korean nuclear assets. In the event of such a conflict, U.S. and South Korean forces would likely seek to push north at least far enough to force the North Korean military out of artillery range of Seoul. The further U.S. or South Korean forces advance beyond that point, the more likely a Chinese intervention.

Although we put the risk of conflict with North Korea higher than we did six years ago, we find it less likely that the regime will spontaneously collapse. Kim Jong-un has consolidated his control, and the economy has noticeably improved. These developments suggest that North Korea will likely endure for the foreseeable future. Nevertheless, a North Korean collapse could emanate from a failed economy; a contested power transition after the death of Kim Jong-un, who is young but seeming to be in poor health; or defeat in a war with South Korea. In any such scenario, the situation in North Korea would likely be chaotic. Hundreds of thousands, perhaps millions, of civilians would migrate toward North Korea's borders in search of food and safety from clashes between rival armed groups. Collapse of central control would also jeopardize the security of the north's weapons of mass destruction and missile assets. China could send sizable forces across the Yalu River to sort out refugee flows on the Korean side of its border. The immediate operational concerns for United States Forces Korea and Combined Forces Command, and perhaps also for China, would be to secure ballistic missile launch and weapons of mass destruction sites. If any coherent North Korean army remained, it could be necessary to neutralize the Korean People's Army long-range artillery threatening Seoul. For these missions, special operations forces, forced entry, and airlift capabilities would be at a premium. China, meanwhile, would view the insertion of U.S. and South Korean forces north of the Korean Demilitarized Zone with concern and likely move its own forces in, if it had not already begun to do so, both to contain the disorder and to preempt a South Korean and U.S. takeover of the entire country.

Although South Korea would provide sizable forces and capabilities for either the conflict or the collapse scenarios, these would

require substantial American support. U.S. ground forces would be required to help rapidly seize and secure numerous locations, some with vast perimeters. Special operations forces and dedicated chemical, biological, radiological, nuclear, and high-yield explosives units would be insufficient to deal with the situation. The likelihood of confrontations, accidental or otherwise, between U.S. and Chinese forces would be high, with significant potential for escalation. Beyond the pressures to intervene and deal with the immediate consequences of a failed North Korea, the United States would confront the thorny issue of the desired end state: unification (the preferred outcome of South Korea) or the continued division of Korea (China's preference).

South China Sea

China asserts some degree of sovereignty over virtually the entire South China Sea, in the face of rival claims of other coastal states. Over the past several years, Beijing has taken a number of aggressive actions to assert its claims. These include Chinese emplacement in May 2014 of an oil rig in disputed waters with Vietnam; seizure in 2012 of Scarborough Shoal from the Philippines (a U.S. treaty ally); island-building since at least 2014, across several disputed features in the South China Sea, to expand Chinese military infrastructure to include air defenses, ports, and three runways; and the deployment of routine air and naval so-called sovereignty patrols throughout the region.

China's increasingly vigorous claims that the region is part of its exclusive economic zone, and therefore subject to some degree of Chinese control, represent a test to global norms. It is too soon to tell whether the Permanent Court of Arbitration's decision of mid-2016, which ruled against Chinese claims, will increase or decrease

the potential for further confrontation.³ Beijing officially refuses to recognize the legality of that ruling but cannot completely ignore the decision. It is unclear whether the Permanent Court of Arbitration ruling will prompt China to pursue negotiation or dialogue with other claimants bilaterally or multilaterally or, instead, fuel further rounds of more-muscular and belligerent activities in the South China Sea. What is clear, however, is that this body of water has become the unanticipated focal point of U.S.-Chinese geostrategic rivalry. Each side perceives an important principle at stake: Beijing views this as a matter of sovereignty and territorial integrity, while Washington sees it as a fundamental issue of international law, including freedom of navigation, the rights of U.S. partners in the region, and the principle of peaceful settlement of disputes.

Depending on the nature and severity of a confrontation, U.S. objectives could range from enforcing freedom of navigation against a Chinese effort to control maritime activities in the South China Sea, to helping the Philippines defend itself from an air and maritime attack, to shielding Thailand—another treaty ally—in the event of a land war in Southeast Asia.

China's ability to project military power into the South China Sea region continues to improve. Although the PLA's land-based combat aircraft lack adequate range to operate efficiently very far from home, China has acquired one operational aircraft carrier, has announced a second, and plans three to four additional carriers over the next 20 years. Although these Chinese aircraft carriers would be highly vulnerable in any armed conflict with the United States, as would China's new island bases, both assets offer ways to extend Chinese influence and cast a menacing threat against Southeast Asian states. China's air-refueling capabilities are also advancing. China continues to invest heavily in its submarine force,

Core missions for the United States would include preventing China from gaining air and sea dominance and limiting the impact of Beijing's land-attack missiles, both of which might require American strikes on mainland targets. China, for its part, might well anticipate such U.S. actions by preemptively attacking U.S. assets in the region.

which already poses a threat to U.S. carriers and other surface ships. China has also built the region's largest coast guard, with some of the world's largest and most threatening white hulls, a few of which are actually refurbished PLA Navy frigates. In 2013, Beijing combined five separate maritime law enforcement agencies into a single super-sized coast guard service that has vigorously and often aggressively acted to confront and repel violators of China's claimed sovereign territorial waters and exclusive economic zones in the South China Sea.

In the event of armed conflict, U.S. surface combatants would be at considerable risk operating within the South China Sea. On the other hand, closure of the South China Sea to commercial traffic would most heavily affect China because the United States' regional allies have alternate sea lines of communication out to the Pacific.

Taiwan

Since the election of President Tsai Ing-wen in January 2016, relations between Taiwan and China have become increasingly tense over Beijing's perception that Tsai refuses to endorse the One China principle embodied in the 1992 Consensus reached between representatives of the two sides. China has expressed its displea-

sure with the Tsai administration by freezing official cross-Straits communications; reducing tourism to Taiwan; stealing some of Taipei's few remaining diplomatic partners; and displaying growing military power, such as by deploying its bombers to fly around the island. The chance of conflict across the Taiwan Strait will remain so long as this fundamental disagreement persists.

A cross-Straits conflict could take many forms, from a Chinese blockade of Taiwanese ports, to varied levels of bombardment of targets on Taiwan, to an outright invasion attempt. Should the United States become engaged, its goals would be to prevent Chinese coercion or conquest of Taiwan and limit, to the extent possible, the damage inflicted on Taiwan's military, economy, and society. Core missions for the United States would include preventing China from gaining air and sea dominance and limiting the impact of Beijing's land-attack missiles, both of which might require American strikes on mainland targets. China, for its part, might well anticipate such U.S. actions by preemptively attacking U.S. assets in the region.

As China's military modernization progresses, the U.S. ability to confidently accomplish these missions is eroding. China is deploying capabilities that threaten U.S. land and sea power-projection platforms—air bases and aircraft carriers—as well as

Taiwan's own defenses. As a result, the direct defense of Taiwan has already become challenging and is likely to become increasingly difficult in coming years.

Cyber

Conflict could begin and maybe even stay in cyberspace, mostly likely as a response to heightened tensions in any of the geographic flash points we have cited. Having conducted repeated intrusions into U.S. networks to exfiltrate sensitive data without known U.S. reprisal, the PLA might seek and receive authority to interfere with U.S. intelligence collection and dissemination on a range of sensitive Chinese programs. Chinese leaders might not grasp that such operations would be defined as cyberwar by the United States and thus lead to retaliation. The attack could disrupt systems that the United States relies on for critical intelligence, including warning. If confident that the PLA is the attacker, the United States might decide to retaliate—for instance, against networks that support Chinese transport systems, including commercial shipping and military logistics. The impact on Chinese trade could be immediate. In addition, because the original Chinese attack would have impaired U.S. early warning capabilities, U.S. Pacific Command might be told to increase the readiness of its forces.

China could respond by conducting “soft kill” attacks (e.g., link interference) on U.S. satellites that serve the command,

control, communications, computer, intelligence, surveillance, and reconnaissance (C4ISR) grid in the Pacific, to which the United States might respond in kind. Because both Chinese and U.S. network defenses may prove of limited value against such large and sophisticated attacks, both sides might resort to counterattacks in hopes of restoring deterrence. In the ensuing escalation, both China and the United States could suffer temporary but major disruptions of critical networks, precipitating shocks in stock, currency, credit, and trade markets. Although both sides might avoid escalation to armed force, economic damage could be considerable. There are no lives lost—just extensive harm, heightened antagonism, and loss of confidence in network security. There would be no winner.

In any Sino-American armed conflict, it is highly likely that both sides would resort to offensive cyberoperations against systems on which the other relies for C4ISR and logistics. Indeed, both sides are integrating plans for such operations into war plans. There is also a risk that offensive cyberoperations intended as an alternative to kinetic attack could be misread as a prelude to such an attack and could trigger armed conflict.

Japan

Sino-Japanese relations are contentious for multiple reasons: Chinese resentment over past Japanese aggression, exacerbated by

In any Sino-American armed conflict, it is highly likely that both sides would resort to offensive cyberoperations against systems on which the other relies for C4ISR and logistics. Indeed, both sides are integrating plans for such operations into war plans.

Tokyo's ambivalence about acknowledging aggression; ongoing territorial disputes over the Senkaku/Diaoyu Islands and overlapping maritime claims; Japan's mounting concern about the growth of Chinese power and willingness to employ coercive means; and an increasing belief in both countries that they are engaged in a broader geostrategic rivalry that goes beyond any particular dispute. Tangible recent manifestations of this rivalry include China's November 2013 declaration of its first Air Defense Identification Zone (ADIZ) over a wide swath of the East China Sea, which includes the Senkaku/Diaoyu Islands (and overlaps with the existing Japanese ADIZ). Moreover, PLA air- and seacraft routinely conduct assertive patrols in the vicinity of these disputed islands.

Armed conflict could arise from a maritime or air clash in the East China Sea, a risk exacerbated by the accelerating pace of air intercepts in overlapping ADIZs. While the United States would likely work to deescalate any such a confrontation, the fundamental U.S. goal would be to help defend Japan. Doing so would require military operations to limit damage to Japan and to establish (or to reestablish) superiority in the air and maritime domains. This might require strikes on mainland targets. China's growing military capabilities will steadily increase the costs of American engagement in any such contingency and raise concerns in Japan about the United States' willingness to intervene on its behalf. Nevertheless, the direct defense of Japan should remain credible.

China is unlikely to want a war with Japan, and vice versa, so the initial response to any clash is likely to be an effort at deescalation. The United States will want to continue close consultation and joint planning with Japan to remain in a position to head off or deescalate any clash that might occur.

India

Armed conflict between China and India could be triggered by an incident along their long-contested border; a dispute over how to respond to a failing neighboring state, such as Myanmar; or as the by-product of a war between Pakistan and India. The United States would likely avoid direct engagement in any such conflict while perhaps extending diplomatic support for India, quietly providing it with intelligence and military equipment. A preeminent American goal would be to avoid any recourse to nuclear weapons—an acute threat if Pakistan were party to the conflict—while also avoiding an outright Chinese victory.

In the event of a major conflict between China and India (and most of the other contingencies mentioned above), the evacuation of U.S. and allied noncombatants would present a major operational challenge. Significant air and naval components might be required, and these could only be deployed with the permission of the respective governments.

Operational Implications

For the Korean contingencies, U.S. ground, tactical air, strike, and special operations forces would be needed; for conflict over Taiwan, a full array of naval and air forces; in the South China Sea, U.S. maritime superiority. Chinese submarines represent a growing threat to U.S. surface vessels, regardless of American superiority over Chinese naval forces. In addition, these contingencies could place heavy demands on U.S. C4ISR capabilities given the distances, possible intensity, and U.S. concepts of operations (CONOPs). Lastly, improvement and expansion of Chinese missile forces is posing military-operational problems for the United States

and allied forces that cannot be solved by missile defense with current technologies.

Other than Korea, the contingencies do not call for sizable U.S. ground forces. U.S. involvement in large-scale land warfare anywhere else in East Asia is improbable. On the other hand, a conflict in and over the Korean Peninsula would be the most consequential of any of these contingencies. Countering the nuclear threat from North Korea will remain the United States' most pressing priority in the region.

Until recently, poor joint doctrine, planning, and command and control have been China's military-operational Achilles' heel. Chinese military reforms initiated in 2016 rationalized the PLA's command and control by establishing theater commands for each of the regional conflict scenarios discussed above; these theaters are tasked with planning, logistics, mobilization, and intelligence functions to support joint operations in their assigned theaters, while services are now responsible for training and equipping Chinese forces. These reforms are also moving the PLA from a dominantly ground force into one with greatly improved naval and air force capabilities.

Direct defense by U.S. force in all these contingencies is feasible at present but is diminishing for most. This is largely the result of the numbers of Chinese missile systems and their geographic orientations. Taiwan reunification will remain the most important sizing and shaping influence on Chinese force development. Pummeling the island with ballistic and cruise missiles is already well within Chinese capabilities, but embarking, defending, and landing a large assault force is much less certain, assuming American participation in the island's defense. China has fielded antiship ballistic missiles and has the sensors to track U.S. forces

afloat. Combat, command and control, and reconnaissance aircraft can now be based at three admittedly vulnerable island airfields in the South China Sea. China's aircraft carriers, also vulnerable, will nevertheless complicate U.S. force planning and operations.

Air and missile threats to U.S. basing in the theater will increase, but U.S. dominance in the maritime domain, especially undersea, will continue. Over time, China will be able both to increase its antiaccess advantage where it currently exists and to expand toward the Pacific, to Northeast Asia, and increasingly to Southeast Asia. In sum, forward-operating U.S. forces are likely to become more vulnerable.

The difficulties of direct defense could be further complicated by Chinese cyberattack and antisatellite (ASAT) weapons, given the dependence of U.S. forces and operating concepts on computer-networked and space-based C4ISR. For this reason, the PLA appears to think that hostilities in space and cyberspace would favor China and therefore might initiate them in the context of a wider war. As time goes on, however, and as China extends the reach of its own forces and C4ISR into the Pacific, it will become vulnerable to U.S. cyberattack and ASAT. In any case, any Sino-American armed conflict will be increasingly affected, if not decided, by warfare in these new domains.

Increases in the area covered by Chinese antiaccess, area-denial (A2AD) capabilities will push the United States to harden base defenses; reposition forces further out; increase the ranges of its own weapons; and target Chinese launchers, sensors, and other capabilities on the mainland. As the PLA comes to rely more on advanced C4ISR, the United States will also have to consider striking Chinese satellites and computer networks. These trends will thus require both sides to widen their choices of targets to achieve

Two more-plausible and more-proportional escalation paths for the United States are to disable Chinese satellites and to disable Chinese computer networks, starting with those satellites and networks that enable Chinese forces to operate.

dominance over any particular geographic objective, however limited.

The United States may be able to reduce or delay dependence on escalation by shifting to less vulnerable platforms: longer-range precision strike drones, vessels to carry longer-range drone and submarines, and further dispersal of bases and force flows.⁴ Additionally, further improvement of U.S. ASAT and cyberwar capabilities suitable for military operations could pose problems for the PLA if properly integrated into U.S. war-fighting CONOPs. Barring unforeseen technological developments, however, it will not be possible or affordable for the United States to buck these trends indefinitely. Over time, the United States will feel the need to rely increasingly on its more distant and less vulnerable capabilities.

As U.S. forward-operating survivability declines, strike range must increase. U.S. military-operational emphasis in the Western Pacific will thus shift from geographically limited direct defense to more-escalatory responses and, eventually, when even these will not suffice, from deterrence based on denial to deterrence based on the threat of punishment, with the speed of the shift first affecting Taiwan contingencies. This will move the United States toward a choice between escalation—and deterrence based on Chinese fears of escalation—and noninvolvement in hostilities near China that could bring about direct armed conflict.

Escalation can take several paths. Starting with the most severe, the United States might make more explicit what has been only faintly implicit in its strategy toward China: the threat to use nuclear weapons if conventional defense fails. This would mean reviving the strategy of flexible response developed for the European theater to counterbalance Soviet conventional advantages. Yet China is very unlikely to actually invade any U.S. treaty ally, and the stakes in the more plausible Asian contingencies are hardly likely enough to justify the first use of nuclear weapons, particularly against a country such as China, possessing a secure second-strike capability. The United States did not use nuclear weapons to defend South Korea in 1950, when it was almost totally overrun, or to save South Vietnam in 1975, and the United States seems unlikely to resort to them in most future Asian contingencies except in response to a nuclear attack.

Two more-plausible and more-proportional escalation paths for the United States are to disable Chinese satellites and to disable Chinese computer networks, starting with those satellites and networks that enable Chinese forces to operate. Plans for offensive cyberoperations are becoming integrated into U.S. war-fighting CONOPs—for instance, to disrupt the computer systems on which Chinese A2AD relies. Yet, in the space and cyber arenas, it is easier to imagine how hostilities would start than how they would end—

very likely with attacks by both sides on dual-use space systems and networks with civilian and military applications, a danger that should give both sides pause.

Compounding the problem is that both these domains are offense-dominant; that is, both satellites and computer networks are exceedingly hard and costly to protect against very capable attackers. Even if U.S. forces possess superior ASAT and cyberwar capabilities, the United States stands to suffer at least as much as China in space and cyber escalation, given the United States' greater reliance on these domains for military and intelligence missions and for its economic health.

Perhaps the most logical military escalation path for the United States—most credible and most one-sided in its effects—is that of conventional precision strikes against Chinese war-fighting and war-supporting targets on the mainland. Executing such strikes would likely be quite challenging operationally and would risk significant counterescalation by China. To the extent that such strikes can be carried out from survivable platforms or beyond the range of China's medium-range missiles, the United States might be able to suppress Chinese A2AD defenses. How long such advantages could be extended beyond another decade or so depends on how long it takes China to extend the reach of its surveillance, targeting, and strike capabilities. Given China's economic and

technological potential, the answer might not be comforting for long-term U.S. planning.

The increasing difficulty in ensuring direct defense can be consequential even if Sino-American hostilities are avoided, because this trend could stimulate Chinese risk-taking, increase U.S. inhibitions, and weaken the resolve of China's neighbors in facing a China more insistent on settling disputes on its terms. On the other hand, most of China's neighbors are growing economically and in technological sophistication, and some might choose to keep pace in quality, if not quantity, with Chinese advances in the military field.

Measures Other Than Military

The United States' capacity to ensure the defense of its friends and allies on China's periphery will diminish over the coming decade. Unless and until the United States can develop and deploy fundamentally less vulnerable strike platforms and/or long-range strike systems, this can only be offset by a U.S. willingness to employ horizontal and vertical escalation. China also has options in this regard, however. For the United States, a strategy based on escalation and ultimately on deterrence by punishment means assuming greater risks in the future to achieve the same objectives as in the past. Some American interests in the region might not justify increased risks. This suggests the need to supplement

Any Sino-American conflict is likely to be fought close to China and far from the United States. For the United States, and probably for China, the greatest damage is likely to come in the economic realm.

military deterrence with other forms of dissuasion, resistance, and persuasion.

Economic Warfare

Any Sino-American conflict is likely to be fought close to China and far from the United States. For the United States, and probably for China, the greatest damage is likely to come in the economic realm. For comparison, World War II is estimated to have cost the world a permanent GDP decline of about 4 percent because of lost trade alone.⁵ Nine European countries and Japan had greater than 20 percent declines in real per capita GDP, some as much as 64 percent (Germany and Greece).⁶ In the case of a Sino-American conflict, massive and mutual economic harm would result even if the two sides eschewed the employment of economic weapons. The economies of China and the United States are linked with each other and with the rest of the world in a manner unparalleled in history. This mutual dependency can be an immensely powerful deterrent, in effect a form of mutually assured economic destruction (MAED). At the moment, the balance of advantage rests with the United States, but even the winner in such a contest will wish it had been avoided.

The operation of MAED is somewhat different from classic mutual assured destruction (MAD). It is at least theoretically possible to limit the escalation of a military clash to the subnuclear level. It would be far more difficult to limit the economic consequences of a major Sino-American war. China would not continue buying U.S. government debt while the U.S. and Chinese navies clash somewhere off Taiwan or in the South China Sea. Apple would not be shipping iPads from its factories in China. Markets would anticipate widespread disruption in U.S.-Chinese and world

trade and advance the consequences, however much Beijing and Washington sought to limit the damage.

In the case of a major Sino-American war, all of China's seaborne commerce could be affected, whereas only U.S. trade with China would suffer. This might result in much greater negative impact on Chinese GDP (up to 25 percent, according to a recent RAND report) than on that of the United States (5 percent, according to the same report).⁷ Yet, as is the case with MAD, even the weaker party gains some deterrent benefit from the mutual, if unevenly distributed, destruction.

Could economic warfare provide an alternative to armed conflict? Sanctions, even when not wholly or rapidly effective, have typically been a preferred option for the United States when the risks, poor cost-effectiveness, and opprobrium associated with military force are too great. But China is far from typical, given the scale and intensity of Sino-American economic interdependence. For China, the loss of export revenue; ability to access global credit markets; and ability to access advanced science and technology-related educational opportunities abroad, technology transfer, and critical imports (oil, food, and commodities) would have a calamitous effect on its economic and, possibly, domestic stability. However, the effects of large-scale economic warfare on U.S. equity and credit markets, investment, consumption, and employment—while less as a percentage of GDP—would also be damaging, and lasting. Economic war against China would more accurately be described as economic war with China, one of the United States' principal overseas creditors and source of manufactured goods. Such a war would likely lead to a global contraction much worse than the one of 2008–2009.

The most effective means of deterring Chinese aggression against Taiwan is for the island to focus on upgrading its own A2AD capabilities. Modernizing and expanding the number of Taiwan's antiship cruise missiles could make the cost of an amphibious invasion attempt by China unacceptably high.

Could the United States design economic measures that could hit China disproportionately hard, even while acknowledging the effect on the U.S. and world economies? One such measure might be interference with seaborne oil shipments to China. Yet oil-transport routes and arrangements are such that the entire region, including Japan, would suffer some level of disruption as a result of a distant U.S. blockade of Chinese trade. China has also been expanding its strategic oil reserve and building oil and gas pipelines to Central Asia to mitigate such dangers. For instance, Turkmenistan already supplies almost 31 percent of China's petroleum gas (which includes natural gas). Finally, like Japan in 1941, China would be likely to respond forcefully to any U.S. effort to cut off its energy imports.

Building Partner Capacity

The United States has very capable allies in the region—Japan, South Korea, and Australia, as well as other existing and prospective partners that are highly suspicious and concerned about China's growing power and assertiveness. U.S. allies and partners are worried for good reason.

Many East Asian partner nations already possess antiship cruise missiles, and these might one day be supplemented with

ballistic missiles. Yet these partners have limited capabilities to find and track distant maritime targets. Integration with U.S. long-range intelligence, surveillance, and reconnaissance and advanced command and control could allow partner nations to pose a significant challenge to Chinese naval operations. The United States could improve partner A2AD capabilities by providing surface-to-surface missiles, antiship missiles, and drones to help with C4ISR and other longer-range strike options.⁸ Thus, for example, the most effective means of deterring Chinese aggression against Taiwan is for the island to focus on upgrading its own A2AD capabilities. Modernizing and expanding the number of Taiwan's antiship cruise missiles could make the cost of an amphibious invasion attempt by China unacceptably high.

In seeking to stimulate greater local self-reliance, the United States will need to avoid two possible pitfalls. First, it will want to avoid extending guarantees that actually decrease incentives for great local defense efforts. Second, the United States will want to avoid efforts to align East Asia against China—something the United States has so far been careful not to do, because it could stimulate an arms race with China that, at least regionally, the United States would be hard-pressed to win.

Reducing Occasions for Sino-American Conflict

As the direct defense of U.S. interests on China's periphery becomes more challenging and as the costs of horizontal or vertical escalation rise, the United States may be increasingly left without good military alternatives in regional contingencies involving Chinese forces. This may weigh against U.S. involvement in instances where important U.S. interests are not at stake. Unless China commits naked and large-scale aggression—which, to be clear, is not indicated the current pattern of China's use of force—the United States will likely want to focus on deescalating localized clashes and removing bones of contention before they give rise to conflict.

Accordingly, Washington should consider moving sooner rather than later—before its power position in the region diminishes further—to constructively engage China across a range of possible flash points. Such initiatives might include more-energetic efforts to promote the resolution of conflicting maritime claims in the South China Sea; to encourage improved cross-Straits relations between Beijing and Taipei; and to create more-extensive consultations with Beijing on Korea issues, including possibilities for denuclearizing North Korea, formally ending the Korean War, and Sino-American collaboration in the event of a North Korean collapse. The United States should also strengthen channels for crisis communications with Beijing, including leader-to-leader, military-to-military, and a dense network of diplomatic relationships.

The U.S.-Chinese competition should not be viewed as a zero-sum game. As China becomes a true peer competitor, it also potentially becomes a stronger partner. At present, the United States, as the world's only superpower, bears a disproportionate burden for policing the global commons, protecting international commerce,

and maintaining international security. China, like most of the world, is a “free rider” on these efforts. Even as the United States seeks over the next several decades to sustain its defense commitments and advance its interests in East Asia, it will have an interest in encouraging the world's other emerging superpower to assume greater responsibilities for international peace and security. China's efforts to combat piracy in the Indian Ocean and its growing interest in United Nations peacekeeping can become the basis for enhanced U.S.-Chinese cooperation. In the long term, the United States will want to look for other ways to leverage Chinese power, as well as to restrain it. This will be easier and safer to do from a position of relative strength, which argues for starting this process of cooperation sooner rather than later.

Conclusion

With the passage of time and improvement of Chinese capabilities, the United States will likely find itself forced to shift from deterrence by denial, based on direct defense of its interests and allies in the Western Pacific, to deterrence by punishment, based on the threat of escalation, using longer-range weapons and more-survivable platforms. Although the United States can maintain escalation dominance for some time, China will develop escalation options of its own, including ASAT and offensive cyberwar capabilities. Chinese strategic nuclear force improvement, and the limited U.S. stakes in several of the plausible scenarios for Sino-American conflict, will reduce the credibility of threatened U.S. escalation, most particularly regarding the first use of nuclear weapons.

One means of improving the prospects for direct defense and reducing the risk of escalation is for the United States to continue

Although the risk of conflict with China cannot be ignored, neither should it be exaggerated. Any number of other conflicts seem more likely. . . . Individually, these contingencies will be less consequential than a conflict with China, but, collectively, they will shape the international environment in which both countries interact and will fundamentally influence Chinese perceptions of U.S. power and determination.

to enable the capabilities and buttress the resolve of China's neighbors. Such a strategy is designed to raise the costs of Chinese use of force and to check Chinese assertiveness at the expense of regional stability and U.S. interests. Such a strategy should not be—or be seen as—a U.S. attempt to encircle or align the region against China, lest it produce greater Chinese hostility. Indeed, a parallel effort should be made to draw China into cooperative security endeavors, not only to avoid the appearance of an anti-China coalition but also to obtain greater contributions to international security from the world's second strongest power. The United States should also continue to explore cooperative solutions to some of the above-cited sources of conflict.

Although the risk of conflict with China cannot be ignored, neither should it be exaggerated. Any number of other conflicts seem more likely, some in places we cannot even vaguely foresee at present. These more-likely conflicts may be with opponents quite different from China and will likely call for capabilities quite dissimilar from those required to deal with a real peer competitor. Individually, these contingencies will be less consequential than a conflict with China, but, collectively, they will shape the international environment in which both countries interact and will fundamentally influence Chinese perceptions of U.S. power and determination. Coping successfully with these smaller challenges may be one of the best ways to ensure that we never have to fight the larger conflict.

Notes

¹ James Dobbins, David C. Gompert, David A. Shlapak, and Andrew Scobell, *Conflict with China: Prospects, Consequences, and Strategies for Deterrence*, Santa Monica, Calif.: RAND Corporation, OP-344-A, 2011. As of June 22, 2017: https://www.rand.org/pubs/occasional_papers/OP344.html

² China's economy is expected to grow at roughly twice the rate of the U.S. economy over this period. At market exchange rates, China's GDP is about 40 percent of the U.S. GDP, and RAND estimates that, by 2025, China's GDP will be about half that of the United States. China currently commits about 2 percent of its GDP to defense expenditures, roughly half the current U.S. rate. Although Chinese defense spending has risen significantly in recent years, keeping pace with and even exceeding overall economic growth, the U.S. defense budget has, since 2001, grown even faster. Thus, in 2000, the U.S. defense budget was seven times that of China's, and, in 2010, it was ten times bigger. As the wars in Iraq and Afghanistan wind down, the U.S. rate of spending is likely to decrease, although probably not to Chinese levels. By 2025, RAND estimates that Chinese defense spending will probably be somewhat more than half of the United States'. Of course, most Chinese defense spending will be focused on the Western Pacific, whereas only a fraction of the United States' will be relevant to that region. These figures are much disputed in both the academic and intelligence communities. The figures rest on the somewhat shaky foundation of current trends extrapolated far into the future. If our calculations use purchasing-power parity rather than market exchange rates, China catches up to and surpasses the United States much more quickly. Purchasing-power parity is a better reflection of personnel costs, while market exchange rates better capture equipment costs, particularly high-tech equipment, which tends to be the area of U.S.-Chinese competition of most concern to the United States.

³ Jane Perlez, "Tribunal Rejects Beijing's Claims in South China Sea," *New York Times*, July 12, 2016. As of June 27, 2017: <https://www.nytimes.com/2016/07/13/world/asia/south-china-sea-hague-ruling-philippines.html>

⁴ Terrence Kelly, David C. Gompert, and Duncan Long, *Smarter Power, Stronger Partners, Volume I: Exploiting U.S. Advantages to Prevent Aggression*, Santa Monica, Calif.: RAND Corporation, RR-1359-A, 2016. As of June 22, 2017: https://www.rand.org/pubs/research_reports/RR1359.html

⁵ Reuven Glick and Alan M. Taylor, "Collateral Damage: Trade Disruption and the Economic Impact of War," *The Review of Economics and Statistics*, Vol. 92, No. 1, February 2010, pp. 102–127.

⁶ Robert J. Barro, "Rare Disasters and Asset Markets in the Twentieth Century," *The Quarterly Journal of Economics*, Vol. 121, No. 3, August 2006, pp. 823–866.

⁷ David C. Gompert, Astrid Cevallos, and Cristina L. Garafola, *War with China: Thinking Through the Unthinkable*, Santa Monica, Calif.: RAND Corporation, RR-1140-A, 2016. As of June 22, 2017: https://www.rand.org/pubs/research_reports/RR1140.html

⁸ Kelly, Gompert, and Long, 2016.

About This Perspective

This Perspective updates previously published RAND Corporation analysis of China as a source of military competition and potential conflict with the United States and its allies.

We would like to thank our colleagues Michael Chase and Timothy Heath, who reviewed this publication and provided helpful recommendations for its improvement.

This Perspective was sponsored by the United States Army and produced within the RAND Arroyo Center's Strategy, Doctrine, and Resources Program. RAND Arroyo Center, part of the RAND Corporation, is a federally funded research and development center sponsored by the United States Army.

About the Authors

Ambassador **James Dobbins** is a senior fellow and Distinguished Chair in Diplomacy and Security at the RAND Corporation.

Andrew Scobell is a senior political scientist at the RAND Corporation.

Edmund J. Burke is a senior intelligence and defense researcher at the RAND Corporation.

David C. Gompert is a senior fellow at the RAND Corporation and former acting director of national intelligence.

Derek Grossman is a senior defense analyst at the RAND Corporation.

Eric Heginbotham is a political scientist at the RAND Corporation.

Howard J. Shatz is a senior economist at the RAND Corporation, director of RAND-Initiated Research, and a professor at the Pardee RAND Graduate School.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.html.

The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND®** is a registered trademark.

For more information on this publication, visit www.rand.org/t/PE248.



www.rand.org