



MANAGING THE ESCALATION RISKS OF U.S. MILITARY ACTIVITIES IN THE INDO-PACIFIC

The expansion of Chinese military activities and capabilities in the Indo-Pacific region has led the United States to increase its own military activities in the region. This brief describes how the United States can select and shape its military activities to deter Chinese aggression against U.S. allies and partners while also limiting the risks of escalatory Chinese reactions.

Grounded in 14 case studies of reactions by the People’s Republic of China (PRC) to U.S. military activities and other events in the Indo-Pacific, this brief offers U.S. military planners a framework to identify the PRC *perceptions* that are likely to cause an aggressive or escalatory PRC response. The authors then discuss which potential U.S. military *activities* in the Indo-Pacific region could affect the PRC perceptions—and thus the risk of an escalatory response.

The research team created a typology of potential short-term PRC responses—from least intense to most intense—in the political, economic, and military spheres. The team also considered potential longer-term PRC responses in each sphere. This typology summarizes the menu of response options that the PRC could select, depending on the PRC perceptions, the U.S. activity characteristics, and the broader context in which the U.S. activities are undertaken.

The authors outline the implications regarding general types of U.S. activities that could escalate tensions to various degrees, specific examples of U.S. activities that could do the same, and broader lessons for U.S. policymakers. This brief concludes with recommendations for U.S. military planners.





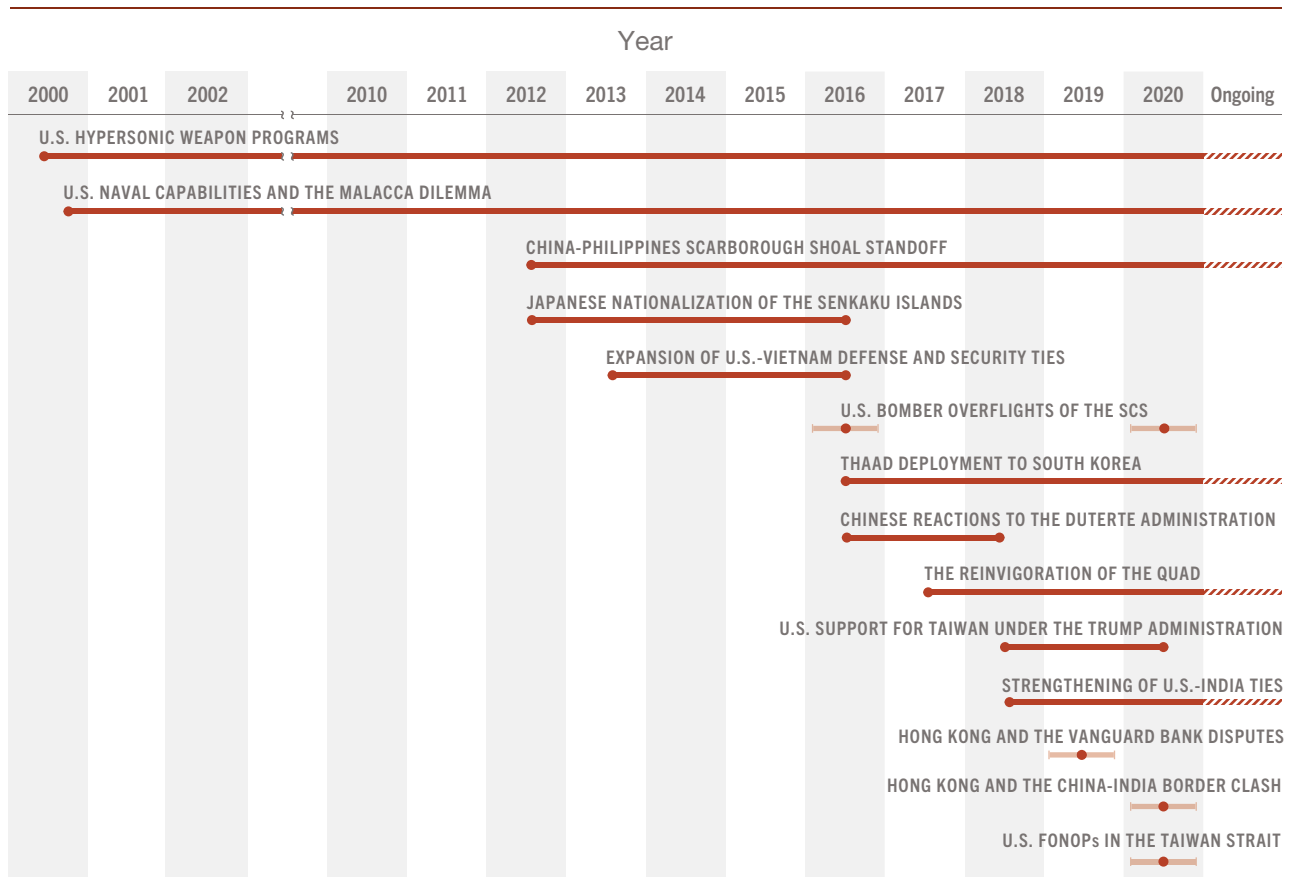
FOUNDATION FOR UNDERSTANDING AND ANTICIPATING PRC RESPONSES

The research team based its framework on an extensive analysis of PRC documents, Chinese-language literature, English-language examinations of PRC behavior, and 14 case studies—listed in Figure 1—of recent PRC reactions to U.S. military activities and other events. This analysis, and the framework that arose from it, can help U.S. military planners anticipate China’s likely responses to new or expanded U.S. military activities in the Indo-Pacific region.

The framework provides a step-by-step guide for assessing likely PRC responses to U.S. military activities. As noted, the framework consists of three main components:

- key perceptions that trigger Chinese responses to U.S. military activities
- key characteristics of U.S. military activities that influence China’s behavior
- a typology of potential Chinese responses, organized by intensity level.

FIGURE 1
Case Studies of Recent PRC Reactions



NOTE: FONOPs = freedom-of-navigation operations; the Quad = a strategic security dialog between the United States, India, Japan, and Australia; SCS = South China Sea; THAAD = Terminal High Altitude Area Defense.



KEY PERCEPTIONS THAT TRIGGER CHINESE RESPONSES TO U.S. MILITARY ACTIVITIES

The first component of the framework is the set of key Chinese perceptions that most reliably trigger responses to U.S. military activities in the Indo-Pacific region. Six perceptions appear to affect, most directly, Chinese thinking and, in turn, Chinese responses. Taken together, these perceptions form the basis for assessing how U.S. military activities might affect PRC thinking and behavior:

1

THREATS TO PHYSICAL OR REGIME SECURITY

China's perceptions of the potential threats that U.S., partner, and allied military capabilities could pose to its regime or physical security appear to strongly shape Chinese reactions, and aggressive Chinese responses are more likely the greater the perceived threat.



2

U.S., ALLIED, OR PARTNER HOSTILE INTENT

China's perceptions of U.S., allied, or partner hostile intent shape PRC responses, and greater perceived hostility toward China results in a more-threatening assessment of U.S. military capabilities or activities.

3

THREATS TO REGIME LEGITIMACY

China's perceptions of threats to its regime legitimacy appear to play a significant role in its reactions. China is more likely to respond aggressively to U.S. actions that it perceives as threats to its ability to lead, including U.S. military activities that support independence or pro-democracy movements in Taiwan, Xinjiang, Tibet, or Hong Kong.

4

THREATS TO PRC ECONOMIC DEVELOPMENT

China's perceptions of threats that U.S. military actions could pose to its economic development or access to resources—such as U.S. capabilities that could impede China's access to key sea lines of communication (SLOCs) or hamper China's ability to protect its economic interests—appear to play an important role in shaping Chinese reactions.



5

THREATS TO PRC REGIONAL INFLUENCE

China's perceptions of U.S. threats to PRC regional influence appear to strongly shape Chinese reactions. Beijing's responses to U.S. and allied activities that it perceives as undermining its regional influence have included both coercive measures and incentives to tip the regional status quo in Beijing's favor and limit the risk of escalation.

6

WEAK U.S. COMMITMENT TO THE DEFENSE OF ALLIES AND PARTNERS

China's perceptions of how committed the United States is to the defense of its allies and partners likely shape Beijing's reactions to U.S. posture enhancements; specifically, stronger signals of U.S. commitment potentially *deter* more-aggressive Chinese responses.



TABLE 1
Key Characteristics of U.S. Military Activities

CHARACTERISTIC	EXAMPLES
Location	Proximity to PRC or PRC forces Proximity to politically, economically, or militarily sensitive areas
Ally or partner involvement	Number, importance, and political disposition of allies or partners Consistency with previous cooperation with allies or partners
Capabilities	Novelty of capabilities in the activity Lethal potential and wartime usefulness of the activity Technological level employed in the activity
Profile	Timing of activity in relation to PRC or regional events Visibility of activity Associated U.S. rhetoric

KEY CHARACTERISTICS OF U.S. MILITARY ACTIVITIES THAT INFLUENCE CHINA'S BEHAVIOR

The second component of the framework is the set of U.S. military activity characteristics that would most likely influence China's behavior. How might these activities affect Chinese perceptions and motivate China to pursue different responses? The research team considered four characteristics of potential U.S. military activities—the location, the U.S. ally or partner involved, the military capabilities involved, and the activity's profile or messaging—and how each one could affect China's key perceptions. Table 1 itemizes the types of activity characteristics.

How PRC perceptions and U.S. activities interact to affect PRC responses will also depend on the *relevant context*, meaning prior events and history that relate specifically to the activities. For example, if the U.S. military were to conduct a joint exercise with an ally or partner, the relevant context could include the following factors:

- Has the PRC expressed prior concern about U.S., allied, or partner military capabilities located near where the joint exercise is taking place?
- What has been the recent trajectory of PRC relations with the U.S. ally or partner that is involved?
- Has the ally or partner made recent notable statements on Taiwan or had recent notable interactions with it?
- Does the ally or partner have naval capabilities that could restrict Chinese shipping and/or a history of exercising those capabilities together with the United States?
- How strong and explicit has the U.S. commitment to defend the ally or partner been in the past?

TYOLOGY OF POTENTIAL PRC RESPONSES

The third component of the framework is a typology of PRC responses that could result from the interaction of Chinese perceptions and U.S. activities. Beijing may choose different policy options to send different messages to the United States or other regional actors. The top part of Table 2 specifies potential short-term PRC responses, from less aggressive to more aggressive. China could also decide to respond in a limited fashion in the short term while investing substantially in longer-term responses that might ultimately be of greater concern to U.S. policymakers. The higher the level of Chinese concern with a U.S. military activity, the larger the potential for China to undertake a longer-term shift in policy. The bottom part of Table 2 specifies potential longer-term PRC responses to U.S. military activities.

TABLE 2
Menu of PRC Policy Responses to U.S. Military Activities

POLITICAL OPTIONS	ECONOMIC OPTIONS	MILITARY OPTIONS
POTENTIAL SHORT-TERM PRC RESPONSES		
LEVEL 1: NO OR MINOR RESPONSE		
<ul style="list-style-type: none"> Issue negative but routine public statements, media criticism File a formal diplomatic protest/démarche 	<ul style="list-style-type: none"> Voice isolated protests of U.S., allied, or partner companies Warn of possible damage to the regional or global economy 	<ul style="list-style-type: none"> Increase intelligence collection on U.S., allied, or partner activities Display Chinese military capabilities
LEVEL 2: NOTABLE RESPONSE		
<ul style="list-style-type: none"> Wage a concerted campaign of criticism in domestic media and associated international channels Issue a public or backchannel warning of escalation risk Cancel or reschedule key meetings or engagements 	<ul style="list-style-type: none"> Limit Chinese tourism to the United States, ally, or partner Limit select trade/aid/investment to the United States, ally, or partner Limit availability of international or public resources to the United States, ally, or partner 	<ul style="list-style-type: none"> Limit military-to-military exchanges with the United States, ally, or partner Test new military capabilities targeted at the United States, ally, or partner Increase activities to challenge or block U.S., allied, or partner military activity
LEVEL 3: ELEVATED RESPONSE		
<ul style="list-style-type: none"> Explicitly threaten to use force Attempt political interference in the United States or allied or partner state Deepen PRC support for U.S. adversaries Close U.S. consulate or send back U.S. diplomats 	<ul style="list-style-type: none"> Subject U.S., allied, or partner businesses operating in China to widespread harassment Boycott or destroy U.S., allied, or partner goods Sharply constrain international or public resources to the United States, ally, or partner 	<ul style="list-style-type: none"> Explicitly threaten to use force Engage in targeted cyber operations versus the United States, ally, or partner Conduct high-profile posturing, exercises, or signaling (major change to PLA status quo posture and activity)
LEVEL 4: SEVERE RESPONSE		
<ul style="list-style-type: none"> Close U.S., ally, or partner embassy Propose anti-U.S., -ally, or -partner resolution in UN; issue broad condemnation and call for action in PRC-dominated fora 	<ul style="list-style-type: none"> Fully boycott or cut off trade with the United States, ally, or partner Build anti-U.S. trade movement in China-dominated blocks 	<ul style="list-style-type: none"> Directly use force against the United States, ally, or partner Wage paramilitary action against the United States, ally, or partner Wage large-scale cyber campaign against the United States, ally, or partner
LEVEL 5: MAXIMAL RESPONSE		
<ul style="list-style-type: none"> Declare war against the United States, ally, or partner Detain or intern U.S., allied, or partner nationals in China 	<ul style="list-style-type: none"> Seize or appropriate the assets of U.S., allied, or partner firms Interdict U.S., allied, or partner trade beyond PRC borders 	<ul style="list-style-type: none"> Direct high-intensity strikes against U.S., allied, or partner targets Launch national mobilization Heighten nuclear alert status Invade or seize contested ally or partner territory
POTENTIAL LONGER-TERM PRC RESPONSES		
<ul style="list-style-type: none"> Prioritize relations with particular countries Become more or less aggressive or friendly toward particular countries Emphasize or de-emphasize certain interests (e.g., territorial disputes) Change intensity of ideological competition 	<ul style="list-style-type: none"> Alter BRI or other investment levels in particular countries Modulate PRC openness to certain external investments Move supply chains or sourcing of goods or resources to or from particular countries 	<ul style="list-style-type: none"> Adjust spending levels Shift spending for different capabilities Invest in militarily supportive infrastructure Modify PLA force posture Revise military strategic guidelines or strategic direction Update PLA doctrine and operational concepts

NOTE: BRI = Belt and Road Initiative; PLA = People's Liberation Army; UN = United Nations.



IMPLICATIONS

How U.S. Military Activities in General Could Influence the Risk of PRC Escalation

From the three-step framework presented earlier, one can draw general lessons and rules of thumb. Table 3, for instance, highlights several U.S. military activity characteristics that are likely to be associated with increasing degrees of PRC escalation (from the bottom up) across the four key activity categories.

While it may sometimes seem that every U.S. military activity or every characteristic of such an activity may heighten PRC concerns, Table 3 highlights that there are relatively consistent hierarchies to PRC concerns, with two patterns in particular associated with the most acute escalation potential. First, each characteristic has the potential to heighten PRC concerns about Taiwan, whether through proximity, direct involvement of Taiwan, or the demonstration or messaging of capabilities for Taiwan’s defense, and these concerns are likely to be linked to higher degrees of escalation potential. Second, threats to PRC command and control or nuclear targets, which are of substantial concern to China, may be driven by the location or capabilities involved in the activity—or, more likely, a combination thereof.

TABLE 3
U.S. Activity Characteristics, by Category and Escalation Potential

	LOCATION	ALLIES OR PARTNERS INVOLVED	CAPABILITIES	PROFILE
Increasing Intensity of PRC Reaction →	Proximity to PRC C2, nuclear targets	Direct engagement with Taiwan	Potential to degrade C2, nuclear deterrent	Accompanying statements that explicitly mention security cooperation with Taiwan
	Proximity to Taiwan	Increased access to allied or partner locations of high military utility for operations against PRC (Philippines, Vietnam)	Enhanced Taiwan and U.S. ability to counter PRC attack on Taiwan	Accompanying public anti-China statements in conjunction with U.S. activities around disputed territory other than Taiwan (SCS, India)
	Proximity to disputed territory in SCS	Increasing number of potentially anti-China partners (Australia, India)	Demonstration of capabilities primarily meant to counter China	Accompanying statements about supporting territorial claimants
	Proximity to influential states or regions of interest to China (e.g., Southeast Asia)	Involvement of new allies or partners outside of region (France)	Augmented U.S. ability to restrict maritime chokepoints, SLOCs in South Asia, Southeast Asia, SCS	Accompanying statements that explicitly challenge Chinese interests (territorial disputes, regional ambitions)

NOTE: C2 = command and control.



IMPLICATIONS

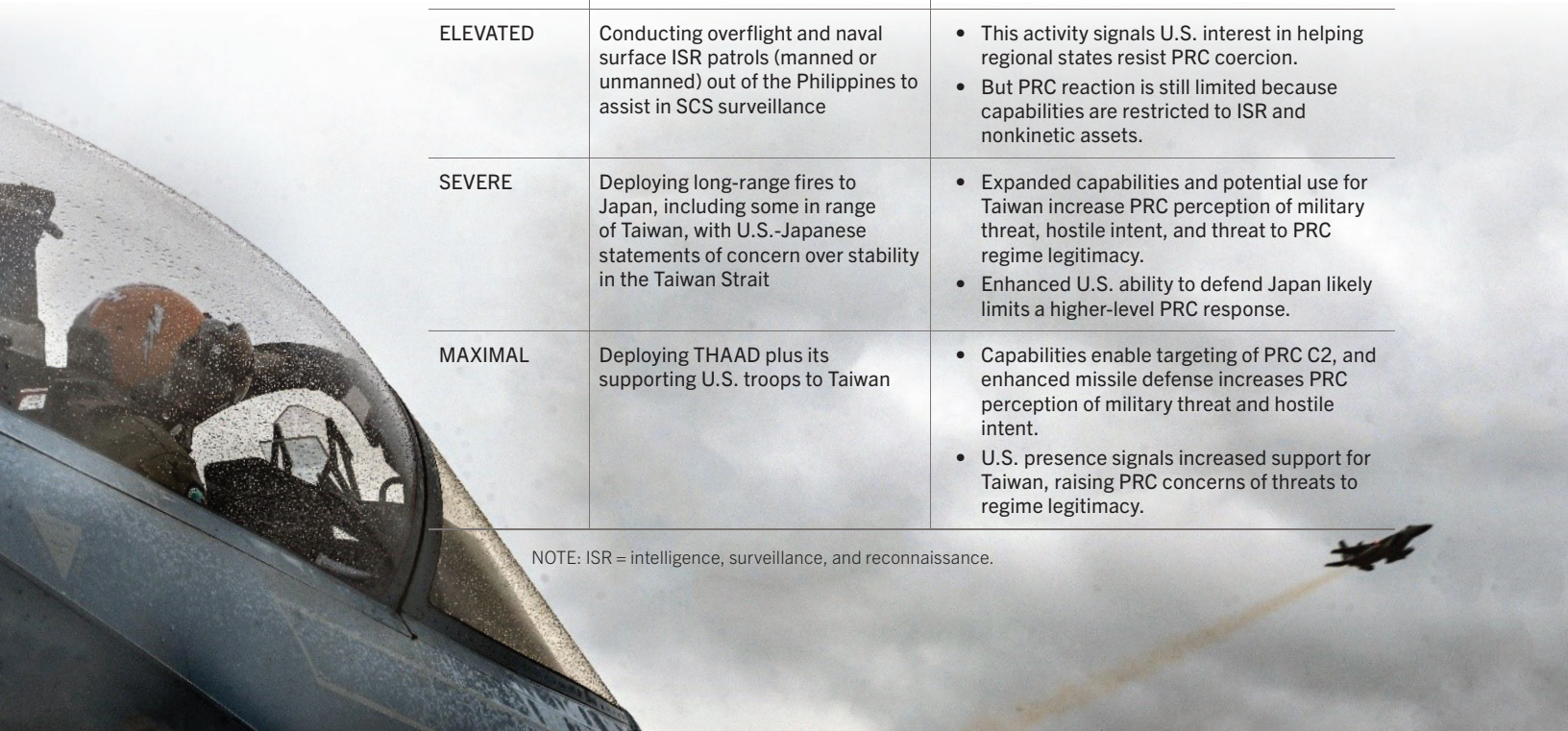
How Specific U.S. Military Activities Could Influence the Risk of PRC Escalation

The researchers then considered a set of potential, specific military activities that the United States could undertake in the Indo-Pacific. Considering the breakdown of escalation possibilities in Table 3, the team derived examples of how each level of PRC response intensity could be driven by hypothetical U.S. military activities and characteristics. While purely hypothetical—and, in fact, contingent on the broader context in which the activities might occur—these examples can help inform U.S. military planners about possible PRC reactions to particular activities, as shown in Table 4.

TABLE 4
Likely PRC Reactions Paired with U.S. Military Activities and Activity Characteristics

PRC REACTION LEVEL	HYPOTHETICAL U.S. MILITARY ACTIVITY	CHARACTERISTICS DRIVING PRC REACTIONS
NONE/MINOR	Multilateral search-and-rescue operations or exercises with Vietnam, the Philippines, and Indonesia near disputed SCS territory	<ul style="list-style-type: none"> • Involvement of SCS claimants could increase PRC perception of threat to regional influence. • But PRC reaction is limited because search-and-rescue operations are not of military concern.
NOTABLE	Involving new partners in pre-existing annual bilateral or multilateral exercises near China’s borders, Taiwan, or SCS	<ul style="list-style-type: none"> • Expanded set of partners raises PRC perception of hostile intent and threats to regional influence. • But exercises are routine and do not involve high-end capabilities.
ELEVATED	Conducting overflight and naval surface ISR patrols (manned or unmanned) out of the Philippines to assist in SCS surveillance	<ul style="list-style-type: none"> • This activity signals U.S. interest in helping regional states resist PRC coercion. • But PRC reaction is still limited because capabilities are restricted to ISR and nonkinetic assets.
SEVERE	Deploying long-range fires to Japan, including some in range of Taiwan, with U.S.-Japanese statements of concern over stability in the Taiwan Strait	<ul style="list-style-type: none"> • Expanded capabilities and potential use for Taiwan increase PRC perception of military threat, hostile intent, and threat to PRC regime legitimacy. • Enhanced U.S. ability to defend Japan likely limits a higher-level PRC response.
MAXIMAL	Deploying THAAD plus its supporting U.S. troops to Taiwan	<ul style="list-style-type: none"> • Capabilities enable targeting of PRC C2, and enhanced missile defense increases PRC perception of military threat and hostile intent. • U.S. presence signals increased support for Taiwan, raising PRC concerns of threats to regime legitimacy.

NOTE: ISR = intelligence, surveillance, and reconnaissance.



IMPLICATIONS

Broader Lessons for U.S. Policymakers

The research findings led to six broader insights for U.S. policymakers.

1

CHINA ASSUMES THAT MOST U.S. MILITARY ACTIVITIES IN THE REGION ARE AGGRESSIVE AND HOSTILE TO CHINA.

China is likely to perceive most U.S. military activities in the Indo-Pacific region as aggressive and intended to counter or target China's military capabilities and, more broadly, hinder China's regional ambitions. The Chinese leadership has come to assume a high level of U.S. hostility toward the Chinese Communist Party. However, there is still a wide range in the level of threat or concern that China may perceive from a given activity. So, while U.S. policymakers can likely assume negative Chinese reactions to most U.S. military activities in the region, the important question is the degree or intensity of those reactions.

2

CHINA'S LEVEL OF CONCERN ABOUT A U.S. MILITARY ACTIVITY DOES NOT TRANSLATE DIRECTLY INTO A LEVEL OF AGGRESSIVENESS IN CHINA'S RESPONSE.

Recent Chinese behavior suggests that China's level of concern does not directly correlate with the aggressiveness of its immediate response. Rather, China will assess the leverage and capabilities it has against a country, plus the escalatory potential of a response, in deciding how to react. Even if China is highly concerned by U.S. military activity, its response may consist of nonaggressive actions, such as economic or political inducements to a U.S. partner. China may also choose not to respond immediately if it assesses that the risk of escalation is too high or that its actions might erode its advantages in other areas, such as regional influence. U.S. military activities on U.S. territory could be least likely to provoke a direct military response by China. U.S. military activities on or near the territory of U.S. allies and partners, however, could be more likely to provoke Chinese pressure or coercion if China believes that its reaction would reduce the likelihood of direct U.S. involvement or that the allies or partners lack capabilities to escalate in a potential conflict.

China's responses to U.S. military activities that it finds particularly concerning tend to involve a mixture of political, economic, and military policies that Beijing calibrates—and integrates—depending on the situation and the leverage it assesses that it has over a host nation. U.S. allies and partners that are economically closer to China and that agree to host U.S. posture enhancements are likely to face more pressure from China because Beijing might view its ability to coerce those countries as more plausible. This was Beijing's view during the U.S. deployment of THAAD to South Korea; in that case, China used primarily diplomatic, political, and economic levers to punish South Korea in a failed attempt to stop the deployment. Where U.S. capabilities are less directly threatening, Beijing might wield a combination of carrots and sticks to alter the willingness of U.S. allies and partners to host U.S. capabilities, until such point where the posture enhancement directly impinges on China's redlines or core objectives. Several cases involving the Philippines have shown how China may use diplomatic or economic inducements while also applying military pressure where core issues, such as territorial integrity, are at stake.





3

CHINA'S CLEAR REDLINES APPEAR TO BE LIMITED IN NUMBER.

The most escalatory PRC responses are likely to be associated with only a handful of U.S. military activity characteristics: proximity to Taiwan; involvement of Taiwan; or capabilities that threaten PRC C2 targets, nuclear targets, or regime targets. U.S. military activities with other characteristics are unlikely to lead to immediate escalation. Instead, they may lead to Chinese responses short of conflict, which may contribute to a gradual ratcheting up of tensions, which, in turn, may increase escalation risks over the long term.

4

CHINESE SENSITIVITIES REGARDING TAIWAN ARE LIKELY TO CONTINUE TO COMPLICATE EFFORTS TO BETTER DEFEND THE ISLAND WHILE AVOIDING ESCALATION.

Chinese redlines generally touch on capabilities and locations that would be substantially useful for the defense of Taiwan. Long-range precision strike capabilities—and locating forces and capabilities on Taiwan—could have substantial operational value for defending the island. For this reason, these are the types of U.S. military activities most likely to generate highly aggressive PRC responses. While this is not a novel observation, it does highlight the challenge that U.S. military planners face in identifying ways to enhance the defense of Taiwan without precipitating an unwanted Chinese reaction. Enhancing the security of other U.S. allies and partners in the region is likely to be comparatively easier.

5

CHINA IS MORE LIKELY NOW THAN IN THE PAST TO USE LOWER-LEVEL MILITARY RESPONSES TO SIGNAL DISAPPROVAL OR APPLY PRESSURE, HAVING BETTER DEVELOPED SUCH CAPABILITIES.

China's recent development of less-escalatory military options—such as paramilitary forces or other gray zone capabilities—increases the likelihood that China would incorporate a lower-level military action into its response to a concerning U.S. military activity. For the past decade, Chinese leaders have directed the PLA to develop options that fall below the threshold of armed conflict. A U.S. military activity that sparks a heightened level of concern is now less likely to present China with a choice between escalating to conflict or essentially backing down, as it did in the 1996 Taiwan Strait crisis. China is now more able to pursue a combination of lower-level responses to signal its resolve to deter further U.S. action.

6

U.S. MILITARY ACTIVITIES THAT POSE ACUTE CONCERNS FOR CHINA ARE MORE LIKELY TO TRIGGER CONSEQUENTIAL CHANGES IN LONGER-TERM PRC POLICIES.

China may respond to U.S. military activities of acute concern with longer-term changes, including economic initiatives and military investments. Such responses may not be immediately visible, because they take place over a longer time horizon. China's longer-term military responses have focused on addressing capability gaps vis-à-vis the U.S. military. These shifts have included changes in China's military doctrine and operational concepts, the PLA's structure and institutions, and investments to counter U.S. capabilities (such as China's development of long-range hypersonic weapons). U.S. analysts and policymakers should be mindful that the immediately observable set of Chinese reactions to U.S. military activities may not be the end of the story and, indeed, that the longer-term changes may prove to be the more consequential.





RECOMMENDATIONS FOR U.S. MILITARY PLANNERS

CONSIDER EXPANDING THE SCALE OR SCOPE OF EXISTING MILITARY ACTIVITIES IN THE INDO-PACIFIC RATHER THAN EXPLORING ENTIRELY *NOVEL* MEANS OF SIGNALING U.S. CAPABILITIES AND COMMITMENTS. Over the past decade, the United States has conducted relatively comprehensive military activities in the region, short of those that would tend to be substantially more escalatory. On the other hand, many recent U.S. activities in the region have been smaller than those of earlier historical periods. If U.S. policymakers assess that deterrence of Chinese aggression against U.S. allies and partners is eroding, then expanding the size and scale of joint exercises, forward deployments, or other ongoing military activities in the region may be a promising way to respond.

BALANCE DIFFERENT ACTIVITY CHARACTERISTICS TO ACCOMPLISH KEY OBJECTIVES WHILE REDUCING THE LIKELIHOOD OF AN ESCALATORY PRC RESPONSE. If *some* characteristics of a military activity are judged to be both mission-essential and potentially escalatory, then planners should consider altering *other* characteristics of the activity to reduce PRC concerns. For example, if the United States were to undertake military exercises in a highly sensitive location, then U.S. planners should consider excluding other characteristics, such as highly threatening capabilities, with substantial escalatory potential. Military planners may also incorporate characteristics that may reduce PRC concerns, such as increased transparency and outreach to PRC military counterparts.





CAREFULLY CONSIDER ACTIVITIES THAT DIRECTLY INVOLVE TAIWAN, BECAUSE THESE HAVE THE MOST POTENTIAL TO LEAD TO AN ESCALATORY RESPONSE BY CHINA. The three characteristics of U.S. military activities that have the greatest escalatory potential are those taking place on Taiwan, those including Taiwanese forces, and those involving capabilities that substantially enhance the defense of Taiwan. Even the profile or messaging of U.S. activities directly involving Taiwan would be carefully scrutinized for signals that the United States was encouraging Taiwanese independence.

AGGREGATE LOWER-RISK ACTIVITIES INVOLVING TAIWAN. Activities at the lower end of the escalation risk spectrum, when aggregated in larger numbers or over time, could potentially enhance Taiwan's defense but with less likelihood of stoking a disproportionately aggressive PRC response. While any activities involving Taiwan would raise China's level of concern, judicious use of lower-risk activities could still enable the United States and Taiwan to substantially augment defense cooperation.

U.S. ACTIVITIES THAT COULD ENABLE STRIKES ON PRC REGIME OR NUCLEAR TARGETS SHOULD BE SCRUTINIZED WITH PARTICULAR CARE. Deploying exquisite ISR and long-range strike capabilities that could threaten PRC regime survival or the PRC nuclear deterrent could lead to similarly aggressive PRC reactions. China would likely perceive threats to its nuclear deterrent as justifying an aggressive response. The ability of U.S. conventional precision-strike weapons to hold China's nuclear forces at risk has already compelled China to invest in conventionally armed short-, medium-, and long-range ballistic and cruise missiles and to develop boost-glide systems that allow the Chinese military to target U.S. forces outside of the region. U.S. or allied capabilities that would threaten China's nuclear deterrent could therefore be met with a potentially escalatory response.



This brief describes work done in RAND Project AIR FORCE and documented in *Managing Escalation While Competing Effectively in the Indo-Pacific*, by Bryan Frederick, Kristen Gunness, Bonny Lin, Cortez A. Cooper III, Bryan Rooney, James Benkowski, Nathan Chandler, Cristina L. Garafola, Jeffrey W. Hornung, Karl P. Mueller, Paul Orner, Timothy R. Heath, Christian Curriden, and Emily Ellinger, RR-A972-1, 2022 (available at www.rand.org/t/RR-A972-1). To view this brief online, visit www.rand.org/t/RBA972-1. 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.

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; linking directly to this product page is encouraged. Permission is required from RAND to reproduce, or reuse in another form, any of its research documents for commercial purposes. For information on reprint and reuse permissions, please visit www.rand.org/pubs/permissions.

Image credits: Cover—Senior Airman Trevor Gordnier/U.S. Air Force, Mass Communication Specialist Seaman Heather McGee/U.S. Navy; page 2—Cpl Cody Rowe/U.S. Marine Corps; page 3—Cpl Matthew Manning/U.S. Marine Corps, Amy Smith/U.S. Navy, Mass Communication Specialist 3rd Class Wesley J. Breedlove/U.S. Navy; page 4—Jeremy Buddemeier/U.S. Air Force; page 6—Sgt Artur Shvartsberg/U.S. Marine Corps; page 7—Senior Airman Antwain Hanks/U.S. Air Force, Staff Sgt Christian Conrad/U.S. Air Force; page 8—SPC Matthew Mackintosh/U.S. Army, Sgt. 1st. Class David T. Chapman/U.S. Army; page 9—P_Wei/Adobe Stock, atosan/Getty Images; page 10—Chad J. McNeeley/DoD, Lance Cpl Kasey Peacock/U.S. Marine Corps; page 11—Mass Communication Specialist 1st Class Jeremy Graham/U.S. Navy, PO2 Justin Stack/U.S. Navy; back cover—SPC Rachel Christensen/U.S. Army, SPC Adeline Witherspoon/U.S. Army.

© 2023 RAND Corporation

www.rand.org

RB-A972-1