

MODERNIZING SINO-U.S. CONFIDENCE-BUILDING MEASURES:

# COLD WAR CASE STUDIES AND CHINESE PERSPECTIVES

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THE CARTER CENTER



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### Acknowledgements

The authors would like to thank Tong Zhao, senior fellow in the Nuclear Policy Program at the Carnegie Endowment for International Peace and advisor for this project, who helped us refine our thinking and research. Thanks as well to Katherine Morton, associate of the China Centre at the University of Oxford and an advisor for this project.

Thanks to the Carnegie-Tsinghua Center for Global Policy for sponsoring our research project and for their tireless efforts to produce quality research, analysis, and dialogue dedicated to finding constructive solutions to economic, security, and political challenges in the Asia-Pacific region. Thanks to the faculty and staff of the Schwarzman Scholars program and Tsinghua University.

The authors also want to thank those who offered mentorship and advice as the authors sought to shape this project. Thank you to Li Bin, Tsinghua University professor of international relations and former senior fellow at the Carnegie-Tsinghua Center's Nuclear Policy Program and the Asia Program, whose course "Arms Control and Security Studies" gave us a deeper understanding of this

topic and helped shape our research. We are grateful to Philip Stewart, former executive director of the Dartmouth Conference (1972-1990) and inspiration to us as a dedicated force for peace and dialogue. Thank you as well to Karuna Nandkumar for her helpful insights and feedback on this project.

Thanks as well to all those who agreed to be interviewed for this project, providing us with their time and expertise, including: David Santoro, president of the Pacific Forum; Adm. Scott Swift, former commander of the U.S. Pacific Fleet; Philip Stewart, former executive director of the Dartmouth Conference; Brad Roberts, director of the Center for Global Security Research at Lawrence Livermore National Laboratory; Christopher Twomey, assistant professor of national security affairs at the Naval Postgraduate School; James Acton, co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace; and George Perkovich, Ken Olivier and Angela Nomellini Chair and vice president for studies at the Carnegie Endowment for International Peace.

Responsibility for any errors remains our own.

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### **Abbreviations and Acronyms**

| APSD  | Asia-Pacific Security Dialogue                      | CWC      | Chemical Weapons Convention                       |
|-------|-----------------------------------------------------|----------|---------------------------------------------------|
| ASEAN | Association of Southeast Asian                      | DCL      | Direct communications link                        |
|       | Nations                                             |          | Defense consultative talks                        |
| ASPI  | Australian Strategic Policy Institute               | DF-26    | Dong-Feng 26                                      |
| ASW   | Anti-submarine warfare                              | DMA      | Agreement on the Prevention of                    |
| AUKUS | Australia UK U.S.                                   |          | Dangerous Military Activities                     |
| BMD   | Ballistic missile defense                           | DOD      | U.S. Department of Defense                        |
| BPTA  | Border Peace and Tranquility                        | DOE      | U.S. Department of Energy                         |
|       | Agreement                                           | DPCT     | Defense Policy Coordination Talks                 |
| C3I   | Command, control, communication, and information    | НСОС     | Hague Code of Conduct                             |
|       | systems                                             | IAEA     | International Atomic Energy Agency                |
| C4ISR | Command, control, communications, computers (C4)    | ICBM     | Intercontinental ballistic missile                |
|       | intelligence, surveillance and reconnaissance (ISR) | INCSEA   | Prevention of incidents on and over the high seas |
| CBM   | Confidence-building measure                         | INF      | Intermediate Nuclear Forces Treaty                |
| CCL   | Continuous communications link                      | IRBM     | Intermediate range ballistic missile              |
| CCP   | Chinese Communist Party                             | PLNS MOU | Memorandum of Understanding on                    |
| CFE   | Conventional Armed Forces in                        |          | Notifications of Missile Launches                 |
|       | Europe Treaty                                       | LAC      | Line of actual control                            |
| CPGS  | Conventional Prompt Global Strike                   | LAMP     | Legislative assistant to member                   |
| CSBM  | Confidence and security-building                    |          | of Parliament                                     |
|       | measures                                            | LOW      | Launch on warning                                 |
|       |                                                     |          |                                                   |

| MCBM      | Military confidence-building measures                  | SAIS     | School of Advanced International<br>Studies                              |
|-----------|--------------------------------------------------------|----------|--------------------------------------------------------------------------|
| MMCA      | Military Maritime Consultative                         | SALT     | Strategic Arms Limitations Talks                                         |
| Agreement |                                                        | SDI      | Sustained Dialogue Institute                                             |
| MOLINK    | Moscow-Washington Link                                 | SDX      | Joint Statement on Strategic                                             |
| MOU       | Memorandum of understanding                            |          | Stability and Nuclear Security                                           |
| MSE       | Agreement on Reciprocal Advance                        | SLV      | Space-launch vehicle                                                     |
|           | Notification of Major Strategic<br>Exercises           | SPACECOM | U.S. Space Command                                                       |
| NATO      | North Atlantic Treaty Organization                     | SSBN     | Ship submersible ballistic nuclear (nuclear ballistic missile submarine) |
| NFU       | No first use                                           | SSN      | Ship submersible nuclear (nuclear attack submarine)                      |
| NGO       | Non-governmental organization                          |          |                                                                          |
| NPT       | Nuclear nonproliferation treaty                        | START    | Strategic Arms Reductions Treaty                                         |
| NRC       | Nuclear Regulatory Commission                          | THAAD    | Terminal High Altitude Area                                              |
| NRRC      | Nuclear Risk Reduction Center                          |          | Defense                                                                  |
| NTI       | Nuclear Threat Initiative                              | TTBT     | Treaty on the Limitation of<br>Underground Nuclear Weapon Tests          |
| OS        | Open Skies                                             | UCS      | Union of Concerned Scientists                                            |
| OSCE      | Organization for Security and<br>Cooperation in Europe | UK       | United Kingdom                                                           |
| PLA       | People's Liberation Army                               | UN       | United Nations                                                           |
| PLARF     | ,                                                      | U.S.     | United States                                                            |
| FLARF     | People's Liberation Army<br>Rocket Force               | USIP     | U.S. Institute of Peace                                                  |
| PNE       | Treaty on Underground Nuclear                          | USSR     | Union of Soviet Socialist Republics                                      |
|           | Explosions for Peaceful Purposes                       | UUV      | Unmanned Underwater Vehicles                                             |
| PRC       | People's Republic of China                             |          |                                                                          |

### **Executive Summary**

Rising Sino-American tensions have prompted widespread discussion of a "New Cold War," and analysts increasingly worry that flashpoints in the bilateral relationship could trigger conventional war that could escalate to the nuclear domain. This research utilizes the Cold War analogy as a starting point for analyzing how nuclear war between the U.S. and China can be averted.

During the Cold War, the United States and the Soviet Union did not meaningfully engage in nuclear risk reduction until after they reached the brink of nuclear war during the Cuban Missile Crisis. Thus, this research considers early-stage confidence-building measures (CBMs) that emerged prior to and in the immediate aftermath of the Cuban Missile Crisis, which laid the groundwork for stabilizing the nuclear relationship. These CBMs include crisis prevention and management mechanisms such as back-channel dialogues—understood both as a path to further CBMs and as CBMs in

and of themselves—hotlines, and Nuclear Risk Reduction Centers (NRRCs).

The authors draw on these Cold War case studies and as well as Chinese perspectives on CBMs to inform policy recommendations for the modern Sino-U.S. nuclear relationship. The United States and China should institute measures to enhance mutual understanding and foster epistemic communities to generate mutually acceptable shared principles and ideas about nuclear crisis prevention and management, personnel, and mechanisms. These ideas should be discussed among government officials in Track 1 dialogues prior to implementation. Furthermore, the U.S. and China should prioritize reducing risks of miscalculation and misunderstanding by revitalizing direct communications links (DCLs) and strengthening institutions that mimic the functions of the National and Nuclear Risk Reduction Centers.

### Introduction

By Raven Witherspoon

#### **Preview of the Problem**

The ongoing deterioration in U.S.-China relations has prompted widespread discussion of a "New Cold War" (Goldstein, 2020). Though no consensus exists among politicians or academics as to the scope of this Cold War analogy, it is evident that competition in trade and technology and criticism in the realms of global health and human rights continue to erode progress in realms that necessitate some level of cooperation—climate change and nuclear risk reduction, for example. Moreover, several key areas of geopolitical concern (e.g., the South and East China Seas, Taiwan, and increasingly cyberspace) could rapidly become flashpoints for conventional or nuclear conflict.

These risks took on new urgency following U.S. House Speaker Nancy Pelosi's visit to Taiwan in the summer of 2022, after which experts and politicians in the U.S., China, and Taiwan adopted more forceful language and proactive postures regarding contingencies for a military confrontation over Taiwan (Robbins, 2022; Lee and Wang, 2022; Chien and Che, 2022). Zhang Tuosheng of the Chinese Arms Control and Disarmament Association recently warned:

The cross-strait situation is now at its most dangerous moment since the end of the Cold War. In the past three years, PLA fighter jets and warships have flown and navigated around Taiwan on many occasions. More recently, the

PLA has conducted more combat-readiness drills to deter pro-independence forces in Taiwan and potential external intervention. Since 2019, U.S. warships have more regularly sailed through the Taiwan Strait. With more military operations on both sides, the possibility of a military crisis or conflict caused by misjudgment or accidental discharge of fire has seriously increased (Zhang, 2021, 36).

Escalation of this kind of conflict is not hard to imagine: A U.S. cyberattack on China's entangled conventional-nuclear command and control systems could lead China to believe the United States sought to disable China's nuclear counterstrike capabilities in advance of a U.S. first strike.

Escalation remains a distinct possibility even if conflict unrelated to Taiwan arises. For example, on Dec. 29, 2022, a People's Liberation Army (PLA) pilot intercepting a U.S. military aircraft over the South China Sea conducted an "unsafe maneuver," flying within 20 feet of the aircraft (USINDOPACOM, 2022). The possibility of accidental collision in the air or at sea could also spark a crisis. Even events that seem unrelated to the Sino-American relationship could spark a crisis. During the Jan. 6, 2021, assault on the United States Capitol, Gen. Mark Milley, chairman of the Joint Chiefs of Staff, made a call to his Chinese counterpart in response to "concerning intelligence" that China was anxious about a possible U.S. attack on China amid the domestic instability (Baldor, 2021).

Such risks are heightened as the nuclear capabilities of both nations continue to undergo

considerable advancement. Technological developments have increased the sophistication of American and Chinese cross-domain deterrence, and concerns about cyberattacks and space-based systems have grown significantly. Recent hypersonic missile tests, entangled weapons systems, and efforts to enhance early warning capabilities have also raised alarm bells as the U.S. and China disagree about the stabilizing or destabilizing effects of these developments (Brustlein, 2021). These developments are more alarming in light of asymmetries in the two nations' arsenals and reports of rapid Chinese expansion that render arms control efforts unviable in the short term (Office of the Secretary of Defense, 2021).

The nuclear doctrines and postures of these two nations are also distinct from those of the two global powers during the Cold War. Not only do the U.S. and China have different perceptions of what is considered destabilizing nuclear policy (first use, strategic ambiguity, etc.), but their distinct experiences with crisis management have also led to divergent threat perceptions and appetites for engagement. Furthermore, Department of Defense (DOD) reports indicating China's potential shift toward a "launch on warning" posture indicates the possibility of a more compressed time frame for retaliatory decision-making under conditions of informational asymmetry (Office of the Secretary of Defense, 2021).

While the possibility of nuclear use between the U.S. and Russia has raised alarms amid the war in Ukraine, less attention has been paid to the U.S.-China relationship, a relationship with far less historical experience managing nuclear crises. Unfortunately, risk-reduction institutions designed to mitigate miscalculation, inadvertent escalation, or accidents between the U.S. and China are facing significant challenges. Military-to-military dialogues have been indefinitely postponed, and bilateral crisis communication infrastructure remains underutilized despite formal and informal commitments from both nations to enhance risk-reduction efforts (Shah and Walker, 2021). This has implications not only for U.S.-China relations, but also for the state of global affairs. As two of the world's only nuclear powers, the U.S. and China bear the responsibility of ensuring nuclear war is never fought, as they

acknowledged in 2022 when the five nuclear-weapon states reaffirmed the 1985 Reagan-Gorbachev statement: "A nuclear war cannot be won and must never be fought" (U.S. Office of the Press Secretary, 2022). For these reasons, it is imperative that the U.S. reassess and adapt current approaches to bilateral nuclear risk reduction.

In 2021, the United States Institute of Peace published an anthology of essays by 12 Chinese and American security experts offering policy recommendations for improving the nuclear relationship (Kim et al., 2021). Despite the diversity of perspectives and recommendations, the authors expressed near unanimous support for CBMs designed to reduce risk. Presidents Xi Jinping and Joe Biden have since expressed willingness to engage on nuclear issues, prompting consideration of appropriate methods for adapting CBMs with the goal of averting escalation and preventing crises (Leary et al., 2021). This research posits that next steps must employ a thorough understanding of the adoption and implementation of CBMs during the Cold War as well as modern Chinese perspectives on CBMs in order to properly address today's Sino-American security challenges.

### The Question at Hand

This research seeks to answer the question, "How can CBMs used during the Cold War be further adapted in light of Chinese perspectives on CBMs to prevent Sino-American nuclear escalation?" This open-source research incorporates perspectives drawn from expert interviews, historical texts, news reports, scholarly writings on military culture, and public statements by political and military figures into a historical approach to adapting modern U.S.-China CBMs.

First, this study provides an overview of the current Sino-American nuclear relationship and Chinese perspectives on CBMs using academic papers, opinion pieces by Chinese officials and nuclear scholars, as well as stances taken by China in CBM negotiations with neighboring nations like Russia and India. From this analysis, the authors derive a list of general observations of Chinese perspectives on CBMs. Three early Cold War CBMs (Tracks 1.5 and 2 dialogues, hotlines, and Nuclear

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Risk Reduction Centers) are then examined as case studies. Each case study considers the implementation of the CBM during the Cold War and views of contemporary and current experts and government officials on its use. The authors then examine if and how the CBM's core functions have been replicated in the U.S.-China relationship, how this has evolved, and the current state of engagement. From this, the authors develop recommendations for adapting existing U.S.-China CBMs to better support the goals of nuclear risk reduction and de-escalation.

### What Are Risk-Reduction Institutions?

The 1989 book "Windows of Opportunity: From Cold War to Peaceful Competition in U.S.-Soviet Relations" includes a chapter by negotiation expert William Ury titled "Developing Risk Reduction Institutions and Procedures" wherein Ury describes the unique psychological components of crisis decision-making. In addition to highlighting "diminished rationality," he identifies four factors that contribute to increased risk: "scarcity of time, high stakes, lack of critical information, and [having] few usable options" (Ury, 1989, 2-3). "A tense relationship, a point of conflict, a trigger for combat, and a[n incident of] misinterpretation" are cited as four additional advertent and inadvertent factors that enhance the possibility of war (Ury, 1989, 4). Thus, the goal of risk reduction institutions across levels of engagement-official and unofficial, military and civilian—is to reduce the possibility of miscalculation and misunderstanding prior to or in the midst of crises. These institutions aim to address ambiguities in capabilities and posture by creating a culture in which both sides may expect and request authoritative answers to questions on relevant matters.

Ury does not neglect the potential harms of risk-reduction efforts. In addition to intentional misuse (deception, spying, etc.), he admits the possibility that information sharing may unintentionally contribute to escalation as the timing and context of information may have a negative impact regardless of how useful the content may be. With regard to dialogues, he includes posturing and

leveling accusations as negative potential outcomes. However, Ury notes that the American security community tends to believe engaging in risk reduction is still a worthy cause despite these possibilities as "what matters most is establishment of systematic approach for preventing and defusing dangerous incidents" (Ury, 1989, 5).

### What Are Confidence-Building Measures?

Confidence-building measures (CBMs) are a form of risk reduction developed in the West during the Cold War. In developing a definition of CBMs most relevant for the goals of this study, Alan J. Vick's "Building Confidence During Peace and War" (1988) provides a foundational perspective. Vick defines nuclear CBMs as "both unilateral and cooperative measures that might inhibit unintended escalation or improve the prospects that escalation, once begun, can be controlled or reversed in ways that minimize the risks of unwanted nuclear confrontations." This can include "information sharing, rules of the road, increasing the transparency of military operations, limiting coercive uses of armed forces, and creating barriers to short-warning attack" (Vick, 1988, 3).

This research adds to the above definition of CBMs by incorporating their possible contribution to strategic stability. Much recent scholarship has considered the scope of the term "strategic stability" (Li, 2021; Saalman, 2022). However, the authors of this study refrain from positing a specific definition and instead appeal to the potential of CBMs to generally enhance stability in the nuclear domain and beyond. Based on this understanding and the reviewed literature, the key aims of CBMs are identified and visualized in Table 1 (derived from Military Confidence-Building Measures, 2021; Vick, 1988). This research does not assume CBMs are inherently positive forces in the bilateral relationship; CBMs may fall short of the aims listed in the table, thus possible shortcomings are considered in each case study.

Table 1. Aims of Confidence-Building Measures

| Foster/Increase                     | Prevent/Reduce                     |  |  |
|-------------------------------------|------------------------------------|--|--|
| Mutual Trust                        | Ambiguity                          |  |  |
| Understanding of Intentions         | Accident                           |  |  |
| Transparency                        | Suspicion                          |  |  |
| Predictability                      | Misunderstanding                   |  |  |
| ilitary Awareness Miscalculation    |                                    |  |  |
| Awareness of Firebreak              | Military Tension                   |  |  |
| Cooperation                         | Antagonism                         |  |  |
| Interdependence                     | Opportunities for Coercion         |  |  |
| Shared Security Needs               | Opportunities for Surprise Attacks |  |  |
| Future Confidence-Building Measures | Outbreak of War                    |  |  |

### Why Study CBMs?

#### A Fairly Uncontroversial First Step

Following the Cuban Missile Crisis, the mutual appetite for CBMs between the U.S. and Soviet Union grew substantially. Since then, CBMs have been viewed as a relatively low-cost first step toward addressing risks in the bilateral nuclear relationship. This also appears to be true in the Sino-American context: Nuclear experts and political leaders refer to CBMs as a starting point for improved relations.

### A Foundation for Further Agreements

Many experts agree that any form of arms limitation is infeasible in the current Sino-U.S. relationship given asymmetries in the nations' respective nuclear arsenals and differing historical experiences with arms control. Some fear that arms control will not be considered until a crisis occurs. CBMs, on the other hand, might be more palatable and provide a basis for future arms control discussions. In John Borawski's 1986 work "Confidence-building Measures: Rescuing Arms Control," he notes that arms-control-averse countries may be more inclined to accept CBMs, which are foundational to arms control, as these primarily address the concerns of misperception and miscalculation rather than limiting the employment of weapons.

### A Track Record of Positive Impact

Richard E. Darilek highlights the numerous benefits to be reaped from CBMs. Chief among these is the "institutionaliz[ation of] the right of adversaries to ask questions and expect answers"

(Darilek, 1992, 259). Darilek claims this voluntary give-and-take is perhaps of greater importance than the information shared because it increases general openness. Furthermore, the ability to move beyond misperceptions constitutes "the single most important contribution made by initial CBM agreements" and is much needed in the current Sino-U.S. nuclear relationship (Darilek, 1992, 259). Each CBM provides its own potential benefits, which are analyzed in subsequent case studies.

#### Resilience

Darilek notes that CBMs were not necessarily responsible for the political changes that took place in the U.S.-Soviet relationship, but that they contributed to crisis stability and remained relatively reliable throughout the highs and lows of the relationship (Darilek, 1992, 259). Borawski also notes that even politically tense periods rarely detract from bilateral support for some CBMs such as U.S.-Russia hotlines and NRRCs, which have continued to see supplementary agreements and increased utilization even during times of heightening political tension.

### Why Adapt Cold War CBMs?

Since CBMs were first developed as a response to Cold War conflicts between the U.S. and Soviet Union, critical analysis of Cold War CBMs can provide a starting point for understanding the genesis of risk-reduction theories and identifying strengths and shortcomings in their historical implementation. However, a sweeping application of Cold War-era approaches to today's confidence-building

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efforts would certainly be inadequate for contending with modern U.S.-China nuclear concerns.

Where careless pontification might equate or over-identify modern China with the Soviet Union of the 1960s and '70s, thoughtful scholarship must acknowledge the many substantial differences between both nations and how Chinese perspectives on CBMs come to bear in its relationship with the U.S. Thus, those seeking to improve the bilateral relationship must also seek to understand Chinese perspectives on CBMs. Engaging with these perspectives will provide insight into the kinds of CBMs that might be acceptable to the Chinese government as opposed to those which might face opposition due to the cultural, historic, and strategic context that informs China's decision-making.

### Why Research These Case Studies?

Tracks 1.5 and 2 dialogues, hotlines, and NRRCs (now known as National and Nuclear Risk Reduction Centers) are all CBMs focused on information exchange. They were selected as case studies based on their initial implementation during the Cold War, continued use today, and previous contributions to crisis prevention and management.

These are particularly relevant to current U.S.-China dynamics as these have often been cited as "first stage" CBMs for nations experiencing deterioration of the bilateral relationship. They constitute the category of CBMs in which the U.S. and China have most engaged, and therefore provide a base of experience to iterate upon. These CBMs are also specifically tailored to "facilitating crisis communication, enhancing mutual understanding, and increasing transparency," which are priorities highlighted in writings by both nations (Borawski, 1986). These CBMs do not assume inherently that all information sharing is constructive or necessary, but rather seek to determine what kinds of information shared via what channels can be effective at reducing nuclear risk.

This research applies a two-step process to case study analysis. First, acknowledging the value of Cold War experiences, this research examines how the particular CBM was initially implemented, how it evolved, and how it has been viewed by contemporary and current scholars and practitioners. This

provides key insights into the genesis of each CBM, the aims and goals they initially sought to achieve, and some of their strengths and weaknesses. The historical case study provides a baseline for understanding each mechanism in its original context. Then, admitting the limitations of historical case study, the authors study if and how the CBM has been replicated in the U.S.-China relationship, how it has evolved, and the current state of engagement. In some cases, there is no clear one-to-one comparison (e.g., NRRCs). In these instances, the authors identify similar mechanisms in order to assess broad trends in U.S.-China crisis communication, prevention, and management. The authors then build upon this understanding of the Cold War and modern contexts by applying general principles on Chinese perspectives of CBMs to develop recommendations for adapting existing U.S.-China CBMs to better support the goals of nuclear risk reduction and de-escalation.

The authors do not posit these case studies as the most important or most effective CBMs; they operate in a complex risk-reduction framework, and their impact is shaped and constrained by a variety of factors, including other CBMs. Nor does this study provide a comprehensive overview of every example of use within these case studies. Rather, this research considers each CBM's origins and intentions, strengths and weaknesses, and lessons from the Cold War context that may still be valuable today.

#### **Areas for Further Research**

One area of helpful further research would be comparative historical study of Soviet perspectives on nuclear CBMs during the Cold War as compared to Chinese perspectives on CBMs today, as well as the ways in which U.S. perspectives on nuclear CBMs have changed since the Cold War. The differences between perspectives on CBMs in these two eras could further inform the ways in which CBMs are adapted today to the Sino-American context; the similarities, on the other hand, could inform the ways in which CBMs from the Cold War era could be similarly effective (or ineffective) today.

#### Notes

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Introduction 13

## **Background: The Modern Sino-American Nuclear Context**

By Raven Witherspoon and Jenna Wichterman

China is not developing its nuclear forces for some bolt-out-of-the-blue attack on America....It's trying to lock the U.S. and China into a deeper "mutual vulnerability" stalemate, so that the U.S. cannot play the nuclear card in a conventional war.

-Caitlin Talmadge, nuclear expert at Georgetown University, 2021

### **Summary**

Nuclear weapons have not long been a primary concern within the Sino-American relationship but have in recent years become an area of increasing alarm, according to policymakers and subject-matter experts. Although China conducted its first nuclear test in 1964, the number of weapons in its arsenal has always been dwarfed by those of the United States and Russia (White, 2018). Initially, this was largely because of Chairman Mao's personal belief that nuclear weapons were "paper tigers," the actual use of which was unthinkable (Talmadge, 2019). However, as both countries modernize their nuclear forces, the United States is becoming more concerned about China's evidently increasing focus on the role of its nuclear weapons. The 2018 United States National Security Strategy (NSS), National Defense Strategy (NDS), and Nuclear Posture Review (NPR) for the first time identified China as a military threat and strategic adversary (White, 2018). The 2022 NPR categorizes China as America's "pacing threat" (Kristensen and Korda, 2022). Likewise, China continues to criticize American nuclear doctrine, posture, and developments that it characterizes as destabilizing and aggressive. This section outlines recent concerns from the perspectives of both nations.

### **American Concerns About China**

### Possibly Abandoning No First Use (NFU) for Launch on Warning (LOW)

Immediately after its first nuclear test, China announced its intention to adhere to a doctrine of "no first use," a stance that asserts it will not launch a nuclear first strike but retains the right to counterstrike. China clarified that it was in fact desirous of a complete elimination of nuclear weapons but that nuclear testing was necessary to defend itself against the threat posed by the U.S. and end "the monopoly of nuclear weapon states" (Government of the People's Republic of China, 1964).

In alignment with its NFU policy, China has traditionally made use of a "minimum deterrent" arsenal kept at low-alert level with warheads unmated from missiles (Talmadge, 2019). Thus, China believes its NFU policy is not only credible, but that it is also inherently stabilizing. However, these facts remain insufficient to quell U.S. suspicions about the credibility of China's NFU policy. Furthermore, American skepticism has grown in recent years as Chinese nuclear forces have evolved.

The typical deterrence strategy associated with NFU relies on an ability to maintain assured retaliation via a survivable second-strike capability—the ability for one's nuclear weapons to "survive a first strike and then inflict unacceptable damage on an adversary" (Cunningham, 2015). States may achieve this by qualitatively enhancing their arsenal or growing it to a size that would tax an adversary's resources beyond acceptability for a first strike and/ or by employing missile defense systems which depend in part on early warning systems. While generally considered stabilizing and consistent with the logic of NFU, China's recent decision to enhance its early warning systems has been interpreted by some as signaling a shift toward a posture of "launch on warning" (LOW, also known as "early warning counterstrike"), which would enable it to launch a counterattack prior to the detonation of an enemy's first strike. According to many American security experts, LOW status could increase the risk of inadvertent escalation.

Since the 1970s, China has intermittently considered adopting LOW, but it has shifted course because of technological limitations in early warning systems (Kashin, 2021). Potential evidence of a current shift toward LOW cited by the U.S. includes advocation in PLA strategy books for raising China's nuclear alert level to reflect that of the U.S. and Russia, as well as white papers dating back to 2015 that call for improving strategic early warning capabilities. Additionally, the PLA began practicing LOW drills in 2017, and Beijing entered a 2019 agreement with Russia outlining the joint development of advanced early warning systems to supplement its preexisting ground-based phase array and orbital satellite (Office of the Secretary of Defense, 2021; Kulacki, 2019).

Yet uncertainty remains about whether China would integrate this stance into its official operating procedures. China historically has advocated against LOW; as recently as 2019, China's director general of arms control publicly criticized LOW and encouraged all nations to adopt NFU (Kulacki, 2019). Chinese experts also maintain that developing a capability (i.e., "improving situational awareness" in the case of early warning systems) does not necessitate its use generally or offensively (Zhao & Li, 2017). This may suggest that while China recognizes the risks of LOW and the importance of strategic stability, it may also believe that developing the capabilities required to move toward a more aggressive posture aligns with its own strategic interests regardless of whether these capabilities are employed. This is in holding with a recurring Chinese military concern that drives technological research and development: "technical lags invite invasion" (Wu, 2016, p. 237). Regardless of China's intentions at the moment, it will be crucial for both nuclear powers to address the heightened risks related to such a change since it could be employed any time after the development of requisite capabilities.

### Increasing and Enhancing Nuclear-Relevant Capabilities

China is increasing capabilities across its nuclear triad—land, air, and sea. The most significant developments, and those that have caused the most consternation in the United States, are related to the "backbone of [China's] arsenal," its land-based capabilities (Talmadge, 2019, p. 4). The PLA Rocket Force has increased its production of both warheads and road-mobile dual-use Dong-Feng 26 (DF-26) intermediate range ballistic missiles (IRBMs) (Office of the Secretary of Defense, 2021). In addition to doubling its intercontinental ballistic missile (ICBM) launchers, China may also be developing multiple new series of missiles (IRBMs and ICBMs) as well as additional launching options for an existing class.

The 2021 discovery of three new Chinese missile silo fields with the potential to house hundreds of ICBMs also took the world by surprise. While no conclusions can be drawn about Beijing's plans, this reveals that China at least has the capacity to house a substantially expanded arsenal (Zhao, 2021).

Alarmingly, this development has surprised even those in the Chinese nuclear community, indicating a potential disconnect between decision-makers and subject-matter experts. As a result, some scholars in the field were left to wonder if the widely publicized claim that satellite images of the alleged silos instead showed windmills was true or false.

In light of these changes, the Pentagon projected in 2021 that China may quadruple its quantity of warheads to 1,000 by 2030, a number revised to 1,500 by 2035 in the 2022 China Military Power Report (Office of the Secretary of Defense, 2021, 2022). This would constitute a rapid expansion as advocated for by pro-expansionists like prominent former China Global Times editor Hu Xijin. Though China's arsenal is still fractional compared to the U.S. arsenal, scientists have independently estimated from open-source data that China could produce anywhere from 200 to 800 warheads with its current plutonium stockpile and up to 500 using uranium, indicating no significant shift in the state of military-civil fusion in supporting nuclear aims (China's Nuclear Forces, 2021). These potential additional warheads would also have implications for the air and sea legs of China's triad.

China's air-based capabilities have undergone enhancements in recent years. Since the PLA Air Force was endowed with a nuclear mission in 2017, China has focused on developing air-launched ballistic missiles and cruise missiles capable of carrying a nuclear payload (Talmadge, 2019). China's first nuclear-capable refuellable bomber was unveiled in 2019, and a new dual-capable strategic bomber is assumed to be under development (Office of the Secretary of Defense, 2021).

China is also modernizing and enhancing its sea-based nuclear capabilities. China began developing its nuclear submarine capabilities in 1958 (Zhao, 2018). By 2015, the Chinese military conducted the first successful patrol of its second-generation nuclear ballistic missile submarines (SSBN), the 094-class SSBN, which is significantly quieter than previous vessels. This constituted a turning point for China's nuclear sea-based capabilities. As of 2021, China had "twelve nuclear submarines—two Shang I class nuclear attack submarines (SSNs) (Type 093), four Shang II class SSNs (Type 093A), and six Jin class

SSBNs (Type 094), and may have up to eight SSBNs by 2030" (Office of the Secretary of Defense, 2021).

Although the U.S. DOD considers China's sea-based nuclear deterrent to be credible, one weakness of China's nuclear submarine capabilities is their noisiness, making them easily detectable by anti-submarine warfare (ASW) efforts. This undermines the purpose of a sea-based nuclear deterrent, which relies on high mobility, unpredictable launch locations, and undetectability for survivability (Talmadge, 2019). This also makes China's submarines vulnerable to U.S. Unmanned Underwater Vehicles (UUVs), which can be used to track submarines. Notably, the People's Republic of China (PRC) has yet to confirm its plans to increase its nuclear submarine fleet, but Chinese military experts have publicly made calls for naval nuclear modernization and build-up in order to maintain China's second-strike capability (Zhao, 2018). One former major general has even publicly suggested that China needs between three and five SSBNs on patrol at any point in time, which would require a fleet of eight to 15 SSBNs given their maintenance requirements (Zhao, 2018). The questionable survivability of China's underwater nuclear capabilities indicates that it is likely in China's interest to continue developing these capabilities.

Beyond the existing triad, myriad Chinese nuclear and nonnuclear offensive developments raise concerns in the U.S. In addition to concerns about China potentially developing low-yield tactical nuclear weapons, the U.S. is alarmed by China's progress on cutting-edge offensive capabilities such as hypersonic cruise missiles and glide vehicles (Macias, 2018). Hypersonic weapons pose even more of a challenge for missile defense systems than ICBMs; the newer hypersonic weapons systems' "flight trajectory, speed, and maneuverability make them capable of evading early warning systems" (China's hypersonic missile test, 2021). Although the U.S. and Russia have now both successfully tested this technology, in 2021 China became the first to successfully test a hypersonic glide vehicle—what some have controversially termed a "Sputnik moment" (Richard, 2021; China's hypersonic missile test, 2021).

In addition to enhancing its offensive capabilities, China has increased its missile defense

budget and conducted a fifth successful land-based interceptor test (Office of the Secretary of Defense, 2021). It recently considered the possibility of deploying interceptors in space and is seeking to further develop its anti-satellite capabilities. Chinese policymakers believe that such defenses are a crucial element of deterrence for a country like China, which operates under an NFU policy.

These developments form a comprehensive and ongoing modernization process that seeks not only to increase China's arsenal or enhance its capabilities, but also to achieve a new configuration of deterrence and perhaps a new balance in strategic stability. Improvements in redundancy, development of increasingly diverse delivery systems, and stronger reliance on mobile weapons suggest that China is moving toward a substantially more sophisticated nuclear force structure that will expand its options for deterrence.

Though experts from both nations argued in 2019 that the primary aim of China's recent build-up in nuclear capabilities seemed (and was publicly stated) to be increasing the survivability of its second-strike capability, the U.S. security community seems to find it ever harder to accept this explanation (Talmadge, 2019). From the American perspective, China appears to be seeking options to hinder U.S. damage-limitation capabilities (which it perceives as defensive) while enhancing its ability to penetrate U.S. missile defense (which it perceives as offensive). Damage limitation is different (and farther-reaching) than deterrence; while the former seeks to "impose costs on the adversary" in an effort to dissuade them from launching a nuclear attack, the latter seeks to "meaningfully reduce the costs to oneself in an all-out nuclear war" (Talmadge, 2019).

U.S. Strategic Command's Deputy Commander, Adm. Charles Richard, attributes these developments to what he terms a "strategic breakout" intended to enable coercion that cannot be achieved under China's long-held minimum deterrence posture (Richard, 2021). This reflects the perspective of the official U.S. National Security Strategy, which in 2017 deemed China a "revisionist power" seeking to "displace the U.S. from the Indo-Pacific region" (Kim, 2021).

This divergence in understanding of the purpose and likelihood of use of various capabilities has

enhanced the potential for escalation. Such ambiguity around intentions makes communication, especially the development of a framework for crisis communication, even more essential.

#### **Entanglement**

The potentially destabilizing effects of the developments outlined above are amplified by entanglement between nuclear and conventional weapons and systems. In their paper "The Underappreciated Risks of Entanglement: A Chinese Perspective," Chinese arms control experts Tong Zhao and Li Bin (2017) offer insights into Chinese perspectives surrounding the development of non-nuclear technologies that could interact or be confused with nuclear weapons and their command, control, communication and information (C3I) systems. A considerable amount of China's nuclear weapons are dual-use or difficult to distinguish from their conventional counterparts (Brown, 2021). Moreover, joint conventional/ nuclear early warning systems, which form the basis of ballistic missile defense (BMD), increase the possibility that a strike meant to disable conventional capabilities could be mistaken for an attempt to disable nuclear capabilities in preparation for a first strike, potentially prompting nuclear retaliation from a nation under conventional attack. Similar concerns exist as a result of entangled C3I systems.

Another challenge highlighted by Zhao and Li is multifunction strike weapons that have both destination and warhead ambiguity, making it possible that such a weapon could be targeted at either nuclear or conventional targets and could itself be armed with either a nuclear or conventional warhead. Since China does not fully trust its second-strike capability in the event of a first strike by the U.S., the risk of inadvertent escalation when a multifunction strike weapon is used may be even higher.

While concerns about entanglement are shared by both countries—since it increases the possibility of either country encountering a "use-it-or-lose it" nuclear scenario—the U.S. remains particularly concerned that China fails to understand the risks of entanglement and utilizes ambiguity as a strategic tool. Some believe China's refusal to join the Hague Code of Conduct (HCOC), an agreement requiring risk-reduction measures addressing the possibility of accidental war, indicates an intentional disregard for

the concerns of entanglement and miscalculation broadly. While some clarity may be found in the work of authors who cite Chinese entanglement as primarily a convenience and cost-saving mechanism, further concerns arise from what the U.S. considers opacity in China's decision-making about responding to conventional attacks on nuclear forces despite some evidence of China's procedures in nuclear force exercises (Talmadge, 2019; Wu, 2022).

In response to these concerns, recent work by Chinese authors sheds light on the role of distinguishability in inadvertent escalation, concluding that recent debates have "overemphasized" the role of entanglement (Wu, 2022). In "Assessing China-U.S. Inadvertent Nuclear Escalation," Chinese nuclear expert Wu Rigiang explains that China's conventional and nuclear land-based missiles have different operational patterns, are not collocated in peacetime, and are unlikely to be collocated (or at least signaled to be collocated) during wartime as this would decrease the survivability of China's deterrent. However, the launchers for these missiles are not necessarily distinguishable and pose a target discrimination risk. According to Wu, China's SSBNs are more difficult to distinguish from SSNs because of their potentially similar noise signatures and improving stealth, and China's basic C3I networks are even less distinguishable—though emergency systems are "relatively easier to distinguish" (Wu, 2022). However, Wu notes that distinguishability is not the only factor relevant to entanglement and inadvertent escalation, and that the survivability of China's nuclear weapons under conventional attack is enough to assuage concerns. It remains to be seen whether this explanation satisfies U.S. policymakers and military planners.

#### Chinese Concerns About the U.S.

### Unwillingness to Admit Mutual Nuclear Vulnerability

China has long been frustrated with the unwillingness of the U.S. to admit mutual nuclear vulnerability. Nations are in a state of mutual nuclear vulnerability if their relationship is characterized by mutually assured destruction; in other words, if there is "no meaningful way for either side to avoid suffering unacceptable damage in a nuclear

war, no matter who goes first" (Talmadge, 2019). China wants the United States to formally acknowledge this status, thereby mutually recognizing that nuclear conflict could inflict unacceptable damage on one's own country, as was accepted by both the U.S. and USSR during the Cold War (White, 2018). However, admitting mutual nuclear vulnerability has remained an unacceptable concession for the U.S. despite advocacy from a subset of nuclear experts and a common understanding that mutual vulnerability exists regardless of formal acknowledgement.

The United States' refusal to acknowledge mutual nuclear vulnerability with China is multifaceted. U.S. allies—in particular, Japan—do not want the United States to issue such a declaration out of fear that it could weaken the credibility of the United States' extended nuclear deterrence in the Asia-Pacific. Extended deterrence refers to the guarantee by a nuclear state to defend a non-nuclear state in order to prevent these allied countries from seeking to acquire their own nuclear weapons for self-defense. Non-nuclear weapon states under extended deterrence are said to be under the nuclear-weapon state's "nuclear umbrella."

Extended deterrence constitutes a significant consideration for the U.S. even in bilateral nuclear discussions with other nuclear weapon states. For example, when engaging in New START negotiations with Russia, the United States continually consults with allies under its nuclear umbrella to incorporate their needs and concerns into U.S. strategy (Gabidullina, 2021). The United States must ensure it can maintain capabilities that can credibly deter an attack against not only the U.S. homeland, but also its non-nuclear allies (Walt and Mohan, 2021).

Additionally, the United States does not want to indicate to China that China's nuclear capabilities possess the deterrent power intended by the Chinese (Talmadge, 2019). Now that China is enhancing its nuclear capabilities, even if the United States decided to declare mutual nuclear vulnerability in order to prevent China from feeling the need to bolster its deterrent, Tong Zhao says that "the horse has left the barn," and it would be "too little, too late." He argues, "China waited for a long time, and basically, I think, reached the conclusion that 'we

have to build up our own material power, including nuclear power, to make the United States accept the reality and accept peaceful coexistence" (Zhao, 2021). For further reading on Sino-U.S. mutual vulnerability, please see the Pacific Forum's May 2022 publication "U.S.-China Mutual Vulnerability: Perspectives on the Debate."

### **Asymmetry of Nuclear Capabilities**

In 2021, the United States had 5,500 nuclear warheads to Russia's 6,257. By contrast, China was estimated to have approximately 350 warheads in the same year (ACA, 2022). China has long cited this asymmetry as the primary reason for their resistance to joining arms control negotiations; there is a traditional belief that a militarily weaker power is not obligated to engage in such limitations. Under such severe asymmetry, China believes arms control could only hamper its development of capabilities necessary for deterring stronger nuclear powers. This has remained consistent throughout the tenures of various American and Chinese political leaders (Talmadge, 2019).

The Trump administration's invitation for China to join New START negotiations with Russia marked the latest failed attempt to bring China to the table on arms control. On one hand, China may be wary of wading into a multilateral framework that has suffered many blows in recent decades. In 1997, the United States withdrew from the Anti-Ballistic Missile (ABM) treaty, a Cold War-era agreement that limited homeland missile defense systems. The end of Soviet-American nuclear hostilities was cited as the reason that U.S. participation in the ABM treaty was no longer necessary, but China continues to cite U.S. BMD as a concern (Acton, 2021a). In 2019, the United States under President Donald Trump withdrew from the Intermediate-Range Nuclear Forces (INF) Treaty, accusing Russia of having violated the treaty through its tests and deployments of a prohibited missile system (Bugos, 2019). In 2020, the Trump administration removed the United States from the Open Skies Treaty, again accusing Russia of not complying with the treaty. The Trump administration also almost allowed the New START treaty to lapse prior to its extension under the Biden administration, and Russia has now postponed New START meetings

and inspections indefinitely (Rovner, 2020; Herszenhorn, 2021; Bugos, 2022).

On the other hand, China would likely continue to refuse invitations to multilateral discussions regardless of the state of the global arms-control regime. Indeed, it is unrealistic to expect China to change its stance on this matter—the United States and Soviet Union did not engage in arms control during the Cold War until both sides had achieved rough parity in nuclear capabilities (Adler, 1992). This is because at a practical level, sizeable asymmetry coupled with an adversary's BMD may call into question the credibility of one's own nuclear deterrent. China's second-strike capability is not assured given the overwhelming size of the U.S. arsenal. Dr. Wu Rigiang wrote that, given American BMD capabilities, China in 2010 had only a 38% chance of conducting a successful second strike against the United States, assuming the continuance of Chinese weapons' low-alert status, numbers that were not anticipated to change significantly by 2025 (Wu, 2020). This is one driving factor of China's current nuclear modernization and expansion.

### **Modernization of Offensive Capabilities**

Not only does the U.S. possess far more nuclear warheads, but it is also generally improving its guidance systems, data processing, artificial intelligence, communication, and other technological abilities. These in turn improve U.S. abilities to target Chinese nuclear forces, thereby diminishing the survivability of China's significantly smaller nuclear arsenal and likely contributing to China's nuclear build-up (Talmadge, 2019).

China also remains particularly troubled by the development of the United States' Conventional Prompt Global Strike (CPGS) system and other high-precision or hypersonic weapons. China is anxious that these could diminish the nation's nuclear deterrent because of their potential use to disable China's nuclear weapons, thereby denying China's second-strike capability (Cunningham and Fravel, 2015). Zhao and Li have noted that some Chinese experts already assume the U.S. is "interested in deliberately using hypersonic weapons to preemptively attack China's nuclear forces" (Zhao and Li, 2017). This is especially concerning to China; the U.S. may be more likely to use these

capabilities given that CPGS is a conventional system and therefore is not explicitly within the nuclear taboo (Saalman, 2014).

#### **Ballistic Missile Defense**

For a long time—at least since the second Bush administration's 2002 withdrawal from the 1972 Anti-Ballistic Missile Treaty limiting homeland missile defense systems—China been particularly worried about the United States' BMD systems (Sevastopulo, 2021). BMD systems "seek to defend a given area from attack by locating and tracking an incoming ballistic missile, then launching an interceptor to destroy the missile before it can reach its target" (Ward, 2021). The United States continues to invest in efforts to modernize its BMD systems, which represents the country's policy of pursuing damage limitation in the event of a nuclear attack (Mayfield, 2021). Indeed, the United States has multiple nuclear adversaries—Russia, North Korea, and in the future potentially Iran-against which its BMD is intended to defend, making any commitment to BMD reductions a uniquely challenging calculus (Talmadge, 2019).

Though these capabilities are defensive, they limit the deterrent effect of China's nuclear forces by rendering them less likely to be effective in a second strike. Thus, some experts have credited U.S. pursuit of BMD systems with China's recent decisions to upgrade and modernize its nuclear forces, though others note that BMD alone is not enough to account for China's recent decisions and instead must be considered in conjunction with other factors (Zhao, 2021). For example, Chinese strategists view U.S. BMD capabilities as the "shield" and its CPGS system as the "sword," both contributing to an erosion of China's second-strike capability.

In particular, the United States' placement in 2017 of the Terminal High Altitude Area Defense (THAAD) system within South Korean territory aggravated the bilateral nuclear relationship. According to the United States, the system was deployed in South Korea to defend against North Korean missiles. China officially stated concerns about THAAD's radar diminishing China's nuclear deterrent by allowing the U.S. to surveil missile tests in northeast China and ascertain the radar signature

of various warheads in order to distinguish between real warheads and decoys (Meick and Salidjanova, 2017). Tracking data on Chinese missiles could then be utilized "to calculate intercept trajectories for the United States' longest-range missile defenses, which are based in California and Alaska" (DeVore, 2017). The U.S. denies THAAD's technical ability to provide such information, but one author argues that China's core concern is actually the extent to which THAAD strengthens the United States' multilateral security and defense presence with allies in the region, further contributing to China's feelings of encirclement (DeVore, 2017).

### **Security Engagements in the Indo-Pacific**

United States security engagements with Australia have contributed to further deterioration of the Sino-American nuclear relationship. In November 2021, the United States, United Kingdom, and Australia announced the trilateral Australia-UK-U.S. (AUKUS) security pact, committing themselves to enhanced security cooperation. As part of this agreement, the United States and United Kingdom agreed to provide Australia with nuclear-powered submarines (Gering, 2021). In addition to the deal's contribution to China's feeling of encirclement in the Asia-Pacific, some experts are concerned about the possible impact on nonproliferation norms. Australia will become the first non-nuclear-weapon state "to exercise a loophole that allows it to remove nuclear material from the inspection system of the International Atomic Energy Agency (IAEA)," setting a potentially dangerous precedent and allowing other nations to make similar deals, potentially using naval reactor programs as means to develop nuclear weapons (Acton, 2021). In April 2022, the three AUKUS countries also announced that they would cooperate on developing hypersonic missiles for deployment on Australian territory, a move seen as a response to China's hypersonic missile test the previous year (Associated Press, 2022).

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## Chinese Perspectives on Confidence-Building Measures

By Shivam Shankar Singh and Raven Witherspoon

From the Chinese point of view, individuals who lack the integrity to honor their personal commitments can circumvent any system of formal regulation, while trust between partners obviates the need for detailed language codified in signed contracts. From the Western point of view, interpersonal trust is meaningless in the absence of written agreements effectively enforced by a commonly recognized authority with the power to compel parties to comply.

-Union of Concerned Scientists, 2003

### **Summary**

Recommendations for adapting Sino-American nuclear CBMs would be remiss if they did not incorporate informed understanding of various Chinese perspectives, especially given that theories related to the development and implementation of CBMs originated in Western Cold War frameworks. Furthermore, RAND analyst Lyle Morris and U.S. Col. Kyle Marcrum note that "Understanding and accepting the PRC perspective (and not attempting to change its mind [on crisis communications and crisis management]) could help U.S. leaders adjust their expectations" (Morris and Marcrum, 2022).

This chapter therefore outlines a few key perspectives on CBMs expressed by Chinese nuclear experts, military personnel, and policymakers. These insights have been gathered from publications by Chinese authors and non-Chinese authors who have firsthand experience in backchannel dialogues with Chinese nuclear experts or policymakers. These views do not constitute a consensus—Chinese nuclear thinking is not a monolith—but rather offer a few common themes that have emerged in the literature. Furthermore, while some views may have relatively clear evidence in the available literature, other perspectives that underlie decisions and positions taken by China might not have a clearly (and publicly) defined justification. Some of these gaps have been partially filled by supplemental interviews with domain experts, but gaps remain to be filled by further dialogue and exchange.

It is important to be familiar with these perspectives and their underlying logic regardless of whether one believes these perspectives are genuinely held by relevant Chinese decision-makers or are merely convenient explanations for China's actions. Though some may argue that China's refusal to

engage in CBMs is rooted solely in considerations of power and influence (especially regarding arsenal size and capability), refusal to contend with or at least acknowledge China's stated views will not produce results in bilateral discussions addressing nuclear issues. The perspectives outlined here will likely continue informing all levels of U.S.-China nuclear dialogue in the future.

China has deep-seated fears of interference by foreign powers and concerns regarding sovereignty because of recent historical memory of exploitation at the hands of foreign powers.

### **Key Chinese Perspectives on CBMs**

- 1. China has a fundamentally different cultural understanding of the concepts of "confidence-building" and "trust" than the U.S. and other Western nations. This is a foundational stumbling block to any bilateral discussion, especially those related to security concerns.
- China emphasizes the overarching state of the strategic relationship as the foundation of dialogue and prefers to develop agreements on general principles rather than discuss specific tactical or technical concerns.
- 3. China has shown a preference for focusing on stated policy and intentions and thus believes firmly that its NFU policy is both credible and inherently stabilizing. China does not believe Western concerns about its NFU policy are genuine.
- 4. China's faith in the value of nuclear CBMs between global powers remains uncertain, and China has primarily utilized CBMs to handle border disputes with neighbors.
- 5. China has deep-seated fears of interference by foreign powers and concerns regarding sovereignty because of recent historical memory of exploitation at the hands of foreign powers. This

- fear is especially pronounced with regard to the United States interfering in what China considers domestic matters.
- 6. China's military doctrine prizes secrecy and ambiguity. Concealing intentions and abilities is deemed necessary for security, especially within asymmetric relationships where China believes increasing certain forms of transparency disadvantages the weaker party. This concern is particularly pronounced in the nuclear domain, where greater transparency may hinder deterrence.
- 7. China views risks of inadvertent escalation as negligible, perhaps undervaluing these risks as they relate to recent technological developments and entanglement of nuclear and conventional weapons and C3I systems.
- 8. China's recent engagement in discussions of crisis communications indicates willingness to further engage on crisis prevention and management, despite China's previously stated belief that the U.S. uses the concept of crisis management as a cover for its pursuit of aggressive military actions.

### Understanding Key Chinese Perspectives on CBMs

1. China has a fundamentally different cultural understanding of the concepts of "confidence-building" and "trust" than the U.S. and other Western nations. This is a foundational stumbling block to any bilateral discussion, especially those related to security concerns.

Independent analysis by Chinese experts in both language and security studies confirms that Chinese conceptions of key security terms differ substantially from those of Western counterparts. One anonymous scholar of language explained these differences through traditional concepts of banking (anonymous, personal communication, Nov. 30, 2022). He noted that approval for a bank loan in the Western context would be premised on the assets of the applicant—their financial ability to repay the loan, rather than their reputation as a reliable or principled person. This forms the foundation of the

West's conception of "credit." This methodology harbors an implicit assumption that the law will require the debtor to repay a loan or will administer punitive measures regardless of the individual's personal "trustworthiness," indicating faith in legal institutions and contracts.

The scholar contrasted this with private banking institutions originating in the Ming Dynasty known as 钱庄 (gián zhuāng), which operated along the fringes of legality and offered credit on the basis of trustworthiness and personal networks (anonymous, personal communication, Nov. 30, 2022). These institutions relied on the reputation of an individual or company – what could be gleaned from word of mouth about their morals (仁, 义, 礼, 智, 信 or rén, yì, lǐ, zhì, xìn; the five Confucian virtues of benevolence, righteousness, propriety, wisdom, and trustworthiness), in order to determine the likelihood of repayment. Thus, the Chinese term for credit 信用 (xìn yòng) also encompasses elements of trustworthiness, indicating faith in a person or relationship. He noted this was not necessarily because Chinese Ming Dynasty society was inherently more moral than other societies, but rather because the law was not capable of compelling a debtor to pay, especially a debtor who held power.

Another scholar also utilized the character 信 (xìn), meaning trust or faith, to explain challenges posed by initial translations of the term CBM (anonymous personal communication, Feb. 24, 2022). This scholar noted that China was not initially active in the creation or theoretical development of CBMs when they emerged in the Cold War, so the translation of "confidence-building measures" chosen by the UN did not reflect Chinese thinking. The term selected "建立信任 措施" (jiàn lì xìn rèn cuò shī) uses 信任 (xìn rèn), which more accurately reflects the ability to trust or have faith in something or someone. This term shares the character 信 (xìn) with the aforementioned 信用 (xìn yòng), meaning trustworthiness and credit. However, as the Chinese concept of trust hinges upon one's morals and intentions, this scholar asserted that trust in a security context would require faith that one's adversary does not seek to harm them and will not utilize their weapons (anonymous, personal communication, Feb. 24, 2022). This is counter to the traditional concept of deterrence, which requires both the capability and credibility to utilize one's weapons. Thus, it would be impossible for trust to be established between two nuclear adversaries based on the traditional Chinese notion of trust. According to the scholar, "confidence" is distinguishable from "trust" in that confidence requires understanding an adversary's capabilities, posture, and declarative policy — verifiable information. These form the basis of the Western concept of informational CBMs, which is not aligned with traditional Chinese thinking.

These differences have become evident in bilateral discussions of security issues and are well-articulated in a report by the Union of Concerned Scientists on Sino-U.S. transparency:

It would be impossible for trust to be established between two nuclear adversaries based on the traditional Chinese notion of trust.

"This essential cultural difference in negotiation style and aims is a product of distinct and potentially conflicting notions of the social contract. Chinese individuals appear to be bound to each other by mutual obligations grounded in personal relationships, and traditional notions of political and social order are routinely described and understood using analogies to the family and to friends. Westerners, particularly Americans, seem to be bound to each other by pieces of paper containing mutually agreed-upon language and procedures that define the principles and practices that organize their relationships. While recognizing the limits of this generalization, the different political traditions of China and the West are relevant to attempts to build trust and increase feelings of mutual security. From the Chinese point of view, individuals who lack the integrity to honor their personal commitments can circumvent any system of formal regulation, while trust between partners obviates the need for detailed language codified in signed contracts. From the Western point of view, interpersonal trust is meaningless in the absence of written agreements effectively enforced by a commonly recognized authority with the power to compel parties to comply" (Union of Concerned Scientists, 2003).

Wu Riqiang similarly notes that remedying hostility between nations may inherently remove the necessity to learn more about a counterpart's capabilities, but Western scholars fear the possibility of drastic and covert changes to an opponent's capabilities under the shadow of amicable policy (Wu, 2016).

'Part of the difficulty for Western observers is distinguishing between "rhetorical" and "real" Chinese security concerns.'

In summary, China views trust as a foundational component of a relationship based on the history and current trajectory of a party's actions. Mutual trust therefore cannot be established by signing agreements or implementing policies; how could one have faith in an agreement signed by a party they do not trust? Trust instead must be evidenced by conduct before progress can be made toward cooperation. Thus, the aforementioned language scholar classified confidence-building measures as the 结果 (jié guŏ), or result of a foundational trust, not the 起点 (qǐ diǎn), or starting point for initiating and further building trust (anonymous, personal communication, Nov. 30, 2022). Conversely, the U.S. views trust or confidence as something that can be jointly developed by showing one's willingness to formally agree to and abide by measures that increase mutual security.

These conflicting perceptions are not limited to the concepts of trust and confidence. While efforts made in 2006 to reconcile definitions of key security terms helped the U.S. and China to mutually define approximately 1,000 terms, some concepts like "limited deterrence" remain topics of debate (Kulacki, 2011). Furthermore, differences

between the terms used by Chinese nuclear experts in bilateral discussions and those used in writings by the PLA have also led to confusion about Chinese intentions – though experts note that this does not reflect the existence of a secret "internal" nuclear policy as was suspected by some in the U.S. Michael Krepon in his 1997 compilation "Chinese Perspectives on Confidence-Building Measures" also noted the challenges posed to security dialogues by the language barrier: "Rhetorical modes of expression and analytical extrapolations that may be unexceptional in Chinese discourse are foreign to most Western strategic analysts. Part of the difficulty for Western observers is distinguishing between 'rhetorical' and 'real' Chinese security concerns." Even after translation, it remains difficult for counterparts to accurately assess the priorities and concerns of the other party. Of course, some may attribute the use of seemingly ambiguous language to a strategic choice on the part of China, but it may also result from genuinely distinct perceptions about the nature of security issues and ways of discussing them. Krepon and the aforementioned language scholar both likened these discussions to 鸡同鸭讲 (jī tóng yā jiǎng), literally "like chickens talking with ducks," a Chinese phrase indicating a fundamental inability to communicate with one another (anonymous, personal communication, Nov. 30, 2022).

Such foundational misunderstandings may also play a role in China's preference for focusing on the macroscopic elements of the bilateral relationship and establishing general principles of engagement.

### 2. China emphasizes the overarching state of the strategic relationship as the foundation of dialogue and prefers to develop agreements on general principles rather than discuss specific tactical or technical concerns.

In their 1997 article "Confidence-building Measures in Asia," former Chinese Vice Foreign Minister Liu Huaqiu and Zheng Hua, former assistant researcher at the China Defense Science and Technology Information, posit that Chinese culture tends to prioritize seeking agreement on general principles before specifics and modalities are discussed. The Panchsheel Agreement, also known as the Five Principles of Peaceful Coexistence, signed by India and China on April 29, 1954, is one example.

Those principles included mutual respect for sovereignty and territorial integrity, non-aggression, non-interference in the internal affairs of other nations, equality and mutual benefit, and peaceful coexistence, all of which served as the starting point for further negotiations. The general principles laid out at the Bandung (Asian-African) Conference of 1955—political self-determination, mutual respect for sovereignty, non-aggression, non-interference in internal affairs, and equality—are also cited as an example of the "Asian Approach" to CBMs (Liu and Hua, 1997).

This preference is rooted in a cultural perspective Wu described as "The Philosophy of Holism ... which emphasizes viewing issues with a systematic, overall perspective and resolving issues at the strategic level" (Wu, 2016, 234). It is assumed that all other relevant issues will fall into place once the roots of conflict are resolved. However, if these strategic level issues cannot be resolved, then the parties arrive at an impasse.

Authors with experience in bilateral security dialogues have highlighted Chinese attention to general principles as an effort to develop a "comprehensive framework" similar to the holistic approach taken by Chinese medicine (Union of Concerned Scientists, 2003). Western counterparts in these dialogues instead hope to focus less on overarching elements of the bilateral relationship such as Taiwan or U.S. national security doctrine, and instead seek to identify specific areas of potential cooperation like technology. This speaks to the Western preference for "individualism and empirical analysis ... resolving issues starting from the operational level and gradually improving matters at the strategic level through the accumulation of resolutions at the operational level" (Wu, 2016, 234).

Evidence of these discrepant views has also arisen in recent articles by Chinese security experts. Retired military officer and senior fellow at Tsinghua University's Center for International Security and Strategy Professor Zhou Bo has noted that China tends to discuss "strategic issues" while the U.S. prefers to discuss "tactical issues" in the bilateral dialogues held under the Military Maritime Consultative Agreement (Crabtree, 2022). For example, "China had argued for general reductions and even the ending of 'hostile naval

and air surveillance' by the U.S., while the U.S. complained about specifics" (Crabtree, 2022). In other dialogues, Wu notes that American questions about hypothetical tactical scenarios like a U.S. conventional attack on Chinese nuclear forces may be viewed by the U.S. as efforts to gather specific and stabilizing information, whereas China perceives these as threats requiring ambiguity to circumvent (Wu, 2022).

China tends to discuss 'strategic issues' while the U.S. prefers to discuss 'tactical issues' in the bilateral dialogues.

3. China has shown a preference for focusing on stated policy and intentions and thus believes firmly that its NFU policy is both credible and inherently stabilizing. China does not believe Western concerns about its NFU policy are genuine.

Opposing views on the credibility of China's stated NFU policy offer a classic example of Chinese emphasis on the value of stated intentions as juxtaposed with American emphasis on operational details. U.S. policymakers and experts argue that declaratory policy is not binding or verifiable, hence China can roll back or ignore its commitment to NFU when it decides the option of first use aligns with its interests (Spies, n.d.). Gregory Kulacki, senior analyst and China project manager in the Global Security Program at the Union of Concerned Scientists, writes:

"The U.S. participants [in dialogues] do not appear to respect anyone, from either country, who takes a no-first-use pledge seriously. To them, the pledge is an expression of naïveté or mendacity. They suspect, therefore, that the Chinese individuals participating in bilateral talks either cannot or will not speak truthfully about China's 'actual' nuclear weapons policy" (Kulacki, 2011).

Kulacki goes on to discuss Chinese views of American mistrust regarding its NFU policy:

"The Chinese participants do not understand U.S. suspicions. They mistakenly ascribe U.S. mistrust to a hegemonic arrogance that has led the United States to use nuclear threats as part of a broader U.S. policy intended to intimidate and contain China. It is difficult for Chinese analysts to appreciate why a country with overwhelming conventional military superiority is unable to make a basic confidence-building commitment that a much weaker China finds acceptable. The U.S. response to this impasse is to search for a different set of Chinese interlocutors."

The possibility for drastic shifts in rhetoric and policy under each U.S. presidential administration further complicates Chinese efforts to understand American intentions.

From China's perspective, it has a strong historical record of clearly stating its intentions, the arena most valued by Chinese thinking, while U.S. intentions remain hostile or uncertain. This uncertainty may arise in part from the differences in U.S. and Chinese political culture. Brad Roberts, director of Lawrence Livermore National Laboratory's Center for Global Security Research, noted in an interview that Chinese participants in Track 1.5 dialogues expressed wariness of deep divisions across the American political landscape that enable people to invent crises to gain political advantage (B. Roberts, personal communication, April 22, 2022). The possibility for drastic shifts in rhetoric and policy under each U.S. presidential administration further complicates Chinese efforts to understand American intentions. Other anonymous interviewees also noted that some in China may even believe partisan politics is an act put on to distract China from America's true goals (anonymous, personal communication, April 4, 2022).

Intentions may be hard to read even within the same party, as was the case when Pelosi visited Taiwan in 2022 against Biden's urgings, a situation that could not occur under the Chinese system, which operates in a hierarchical and consensus-based manner. This power-sharing among branches of government and dissent among highlevel leaders is particularly troublesome for Beijing, which places a premium on the mutual agreement of leaders at the highest level. Once there is discord between the executive and other branches of the U.S. government or military, credibility can be lost in the eyes of China (anonymous, personal communication, April 4, 2022).

Correctly interpreting and trusting a counterpart's intentions presents an important area of tension that China and the U.S. must address. Combined with other measures, establishing how to make China's NFU and other policies more credible from a U.S. perspective could lay the groundwork for reducing the risk of nuclear escalation between the two nations. Efforts by the U.S. to understand how to reassure China of its intentions without formally committing to an NFU policy would likewise be helpful.

## 4. China's faith in the value of nuclear CBMs between global powers remains uncertain, and China has primarily utilized CBMs to handle border disputes with neighbors.

Although China's experience negotiating and implementing CBMs is limited, China has experienced the positive effects of CBMs in handling border disputes and mitigating similar conflicts. The CBMs China established with India for disengaging forces along disputed border areas have proved to be of significant value in recent years. The first of these measures, formalized in the 1993 Border Peace and Tranquility Agreement (BPTA), established the "Line of Actual Control (LAC)" while committing the two nations to jointly working to reach peaceful agreement on the location of the border (Joshi, 2020). It also led to an agreement that both sides would reduce their military deployments along the border to a "minimum level" based on the principles of "mutual and equal security." The 1996 agreement "Confidence-Building Measures in the Military Field Along the Line of Actual

Control in the India-China Border Areas" barred combat aircraft and helicopters from flying within 10 kilometers of the LAC and set limits on the two nations' military presence and armaments in the region. The 2005 "Protocol on Modalities for the Implementation of Confidence-Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas" created standard operating procedures in the event of opposing patrols' encountering each other on territories claimed by both nations (Joshi, 2020).

For many years these agreements worked to minimize conflict between the military patrols when personnel came face to face in the disputed regions. When conflict arose in 2020, both armies refrained from the use of firearms and instead resorted to hand-to-hand combat and the use of rudimentary weapons like sticks and stones, thereby limiting damage and preventing further escalation (Associated Press, 2021). These measures offer useful examples of force limitations and incidents agreements acceptable to China.

Other past agreements also show, at least on a limited basis, that China is willing to engage in substantive CBMs. China signed a multilateral agreement on increasing military confidence with Russia, Kazakhstan, Tajikistan, and Kyrgyzstan on April 26, 1996, that stipulated a non-attack policy for military forces along borders, placed limits on border-area military exercises, and provided for the exchange of information about military affairs within 100 kilometers of the border (Liu and Hua, 1997).

These examples also support scholars' claims that China's initial reasons for engaging in CBMs were limited to ending regional wars and mitigating newly emerging armed conflicts with neighboring nations (Xia, 1997). Ensuring peace at its land borders has been the primary goal of Chinese CBMs, and China has yet to engage in significant CBMs beyond its neighborhood. This willingness to engage locally may result from China's regional power in the Indo-Pacific; thus, China's faith in the efficacy of nuclear CBMs between global powers remains uncertain.

5. China has deep-seated fears of interference by foreign powers and concerns regarding sovereignty because of recent historical memory of exploitation at the hands of foreign

### powers. This fear is especially pronounced with regard to the United States' interfering in what China considers domestic matters.

Historical experience with perceived U.S. interference in what China sees as domestic matters underlies bilateral distrust. After the Tiananmen Square incident of June 1989, the U.S. did not stop at imposing diplomatic and economic sanctions on China (Harding, 1990). The U.S. and its allies in Europe not only suspended high-level military exchanges, but also convinced the World Bank and the Asian Development Bank to halt lending to China. In the immediate aftermath, many in China leveled allegations that the U.S. was involved in the anti-government demonstrations and was using covert means to promote the "peaceful evolution" of communist countries from socialism to capitalism.

Ensuring peace at its land borders has been the primary goal of Chinese CBMs, and China has yet to engage in significant CBMs beyond its neighborhood.

The term "peaceful evolution" has been used in multiple Chinese documentaries about the fall of the Soviet Union that cite U.S. efforts to disseminate American culture, increase personnel exchanges, and utilize the U.S. Embassy in the Soviet Union to instill historical nihilism—lack of faith in the narratives promoted by the Communist Party—in the local populace (Pine, 2022). China remains wary of these actions, which it perceives as covert attempts to undermine the power of the party, as well as more overt efforts by the U.S. to contain China's regional or global power.

In recent years, the U.S. has also voiced strong opposition to China's actions toward disputed territories in the South China Sea. Although China has professed support for multilateral CBMs in the South China Sea, this has not resulted in concrete engagement. Professor Hasjim Djalal, senior advisor to the Indonesian minister for maritime affairs and fisheries and Indonesian naval chief of staff, shared

this reflection at the 2013 MCBM in the South China Sea Conference:

"My experience in more than 20 years of managing potential conflicts in the South China Sea together with the ASEAN members, China, and Chinese Taipei within the 1.5 Track diplomacy indicates that China seems to be positive and willing to cooperate on technical, scientific, and environmental issues. But it's less enthusiastic about developing cooperation on resource distribution issues and least interested in talking about territorial, sovereignty, and jurisdictional issues" (ASPI, 2013).

Confusing the enemy by 'creating the utmost uncertainty in its mind' has also been a key aspect of security policy since at least the revolutionary years under Mao Zedong.

Djalal's experience seems be in stark contrast to the aforementioned Chinese aversion to discussing technicalities. Michael Krepon has also contrasted China's willingness to engage in bilateral CBMs on border disputes with its reluctance to engage in multilateral CBMs in the South China Sea (Krepon, 1997).

These discrepancies in China's interactions with regional neighbors and its willingness to engage with Western powers may arise in part from China's fears of foreign intervention in what it perceives to be regional or domestic affairs—especially intervention by militarily stronger nations. To justify these concerns, China often points to its history of indemnity payments and unfair treaties imposed on China during its "Hundred Years of Humiliation" following the Opium Wars.

One could certainly make the argument that China chooses to engage with its neighbors more than with Western powers because China has more leverage over its neighbors and therefore is sometimes able to arrive at more favorable deals with its neighbors than with Western powers. This may indeed be a factor, alongside the factor of historical memory and sensitivity to perceived Western undue interference of China's sovereignty. Both sentiments help to explain China's reluctance to agree to specific and binding clauses without a long process of evaluation.

6. China's military doctrine prizes secrecy and ambiguity. Concealing intentions and abilities is deemed necessary for security, especially within asymmetric relationships where China believes increasing certain forms of transparency disadvantages the weaker party. This concern is particularly pronounced in the nuclear domain, where greater transparency may hinder deterrence.

Evidence suggests that China's military doctrine has historically prized secrecy. Well-known Chinese sayings from works of military strategists—for example, Sun Tzu's "conceal your dispositions, and your condition will remain secret, which leads to victory; show your dispositions, and your condition will become patent, which leads to defeat" and "the whole secret lies in confusing the enemy, so that he cannot fathom our real intent"—have led to a military culture where the value of transparency is not widely agreed upon. Tong and Li (2017) explain that confusing the enemy by "creating the utmost uncertainty in its mind" has also been a key aspect of security policy since at least the revolutionary years under Mao Zedong.

Wu's "How China Practices and Thinks About Nuclear Transparency" offers a deep dive into the myriad avenues through which China practices transparency, including the "release of historical documents, disclosures by the government, releases by civilian discovery, and releases by foreign governments, media, and academia" (Wu, 2016, p. 220-228). This work outlines the development of China's thoughts on military transparency and consolidates the views of a number of influential Chinese scholars and military officials to form a cross-sectional view of the spectrum of stances on transparency. Some assert that institutionalizing bilateral military exchanges and cooperation is the only way to increase trust, while others argue transparency is overrated and that mutual restraint is most important. Nearly all cite the importance of trust as a basis, and most confirm the importance of transparency of intentions over capabilities. Dr. Wu cites these as two of China's four nuclear transparency priorities—in order: conveying intentions, charting the history of the nuclear program, introducing capabilities, and disclosing future development plans.

Other authors offer slightly different typologies for distinguishing kinds of nuclear transparency. In his 2003 appendix to a Stockholm International Peace Research Institute publication, Li differentiates five kinds of nuclear transparency: transparency in nuclear strategy, qualitative transparency (capabilities), quantitative transparency (capabilities), clarification of nuclear activities, and acceptance of site visits (Li, 2003). According to Li, China at that time supported transparency in strategy, often shared qualitative information, relied on quantitative ambiguity, was ambivalent about clarifying nuclear activities, and was generous about hosting site visits. He predicted that a number of factors would continue to enhance China's appetite for transparency, including reduced concerns about survivability, reduced reliance on quantitative ambiguity because of deploying a mobile deterrent, and increased scientific collaboration on new technologies. These shifts have not come to fruition, possibly as a result of China's long-held beliefs about transparency under conditions of asymmetry.

China considers transparency to be in the best interest of the militarily superior nation: "For military powers, more transparency is to their advantage because it shows their strong deterrent forces, while for militarily weak countries it exposes their vulnerabilities, thus creating an unfavorable security equation for militarily weaker countries" (Liu and Hua, 1997, p. 7). China may consider this especially true in the nuclear domain, where transparency could call into question the survivability of China's nuclear arsenal and ability to retaliate, thereby weakening deterrence. A similar view is articulated by Xia Liping (1997) in his paper "The Evolution of Chinese Views Towards CBMs."

Chinese perspectives on transparency remain in stark contrast to Western experiences with CBMs that placed great emphasis on allowing adversaries to correctly ascertain capabilities in order to avoid inadvertent nuclear escalation. Thus, if the U.S.

wants China to engage in transparency measures, they must convince China of the benefits transparency—beyond the topic of intentions—could afford both parties. Any discussion of information-based CBMs must consider what degree of transparency China can comfortably engage in and what information is most desired from the American perspective. Likewise, the U.S. should seek to understand what forms of transparency China most seeks from the U.S. and what kinds of information would be most stabilizing.

China considers transparency to be in the best interest of the militarily superior nation: 'For military powers, more transparency is to their advantage because it shows their strong deterrent forces, while for militarily weak countries it exposes their vulnerabilities....'

# 7. China views risks of inadvertent escalation as negligible, perhaps undervaluing these risks as they relate to recent technological developments and entanglement of nuclear and conventional weapons and C3 systems.

Zhao and Li (2017) note that China has not traditionally treated the risk of inadvertent escalation as a major security concern, something that has prompted many in the U.S. nuclear policy community to consider whether a Sino-U.S. conflict could "go nuclear" (Talmadge, 2017). In particular, experts warn that China may not be fully considering the risks presented by technological advancement and increased ambiguity because of commingling weapons and delivery systems or the possibility of attacks on C3 systems that could threaten a nation's nuclear capabilities. Experts in the U.S. and China also have divergent views on the purposes and potential use of several technologies, thereby adding to concerns that one side might miscalculate conventional actions, which could result in inadvertent escalation.

Some scholars argue these divergent views may result from China's lack of experience with nuclear crises—though critics have countered that the 1969

Sino-Soviet border conflict could have crossed the nuclear threshold. Others cite China's firm belief that nuclear conflict cannot be limited once initiated, making conventional-to-nuclear escalation "unthinkable" under the nuclear taboo, as the reason for China's supposed lack of attention to inadvertent escalation (Cunningham and Fravel, 2019). The Pentagon's 2021 China Military Power Report instead highlights China's confidence in modern technological capabilities:

PLA views on escalation are informed by the notion that contemporary "informatized" conflict, enabled by modern C4ISR capabilities, provides leaders with sufficient battlefield awareness to calibrate military effects and elicit a desired adversary response. PLA strategists view warfare as a science, discounting the possibility of inadvertent escalation and the effects of the "fog of war."

This is especially concerning considering Congressman Rick Larsen and scholars such as James Acton and Ankit Panda have sounded alarms that the U.S. also has neither adequately considered inadvertent escalation nor adequately incorporated it into military planning (Acton and Panda, 2020).

Chinese thinking in this domain continues to evolve as discussions about escalation and crisis stability become more frequent. Notably, Dr. Wu Rigiang's recent publication "Assessing China-U.S. Inadvertent Escalation" relies on thorough technical assessments of China's C3 system and the survivability of China's nuclear deterrent under conventional attack to address the risk of inadvertent escalation via use-it-or-lose-it, unauthorized/ accidental, and damage limitations mechanisms. He concludes that these risks are "extremely low" (Wu, 2022). Whether this technical analysis reflects broader Chinese thinking or military perspectives of inadvertent escalation is uncertain. The 2022 DOD China Military Power Report acknowledges concerns raised by some Chinese experts about the possible impacts of hypersonic devices on escalation. 8. China's recent engagement in discussions of crisis communications indicates willingness to further engage on crisis prevention and management, despite China's previously stated belief that the U.S. uses the concept of crisis management as a cover for its pursuit of aggressive military actions.

Professor Zhou Bo notes that it was only in October 2020 when the U.S. DOD and Chinese PLA convened their first Crisis Communications Working Group that the two nations moved from discussing accidents to discussing crises (Zhou, 2021). Representatives from the Chinese Central Military Commission's (CMC) Office for International Military Cooperation, the CMC Joint Staff Department, and PLA Southern Theater Command interfaced with U.S. counterparts from the Office of the Secretary of Defense, the Joint Staff, and Indo-Pacific Command in these conversations. While the American side had previously pushed for technical discussions on the issue of crisis management, the Chinese stance emphasized that there would not be a crisis if the U.S. did not cause one. Such a stance could be interpreted as a part of China's strategy, as it would aim to decrease the willingness of the U.S. to engage in maneuvers in contested areas like the South China Sea because of ambiguity and inability to gauge China's potential reaction. However, dialogues in recent years have shown that China does see value in mutual engagement regarding preventing crises, a marked change from its prior engagements with the U.S.

These experiences proffer lessons for future engagement. In 2006, scholars from the U.S. and China identified eight basic principles for successful crisis management between the two nations. These principles stress the need for clear, direct, and balanced communication along with the need to limit objectives when trying to reach consensus (Swaine and Zhang, 2006). These principles should guide future engagement and are included in this research as Appendix A.

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### Tracks 1.5 and 2 Dialogues

By Jenna Wichterman and Raven Witherspoon

The twin Beijing and Hawaii dialogues were a rare learning opportunity for all participants. We Chinese learned enough about classic American (Western) strategic terminology, while the American side learned enough about traditional Chinese thinking to enable a substantially new and better form of communication. We came to understand each other. ... In our assessment, it also improved the quality of policy consultation to both governments.

- Retired Maj. Gen. Yao Yunzhu, People's Liberation Army, 2020

### Summary

The Dartmouth Conference, held between American and Soviet nongovernment participants during the Cold War, helped resolve political and nuclear crises and tensions, fostered better understanding of the other party, and contributed to agreements between the two Cold War adversaries. Five major factors led to the Dartmouth Conference's success: government access to policymakers, which allowed for dialogue recommendations to be turned into policies; the centrality of relationships; the fact that the dialogues adapted to a changing context and covered the entirety of the bilateral relationship; the convening of meetings even amidst crises; and the independent and nongovernmental sponsorship and funding of these dialogues.

Some of these takeaways from the Dartmouth Conference—along with helpful lessons from the Pugwash Conferences—can be applied to the Sino-American nuclear relationship today. The Beijing and Hawaii Dialogues, stalled in 2019 after losing U.S. government funding, showed some evidence of success over their 15-year history. They contributed to stronger mutual understanding, built personal relationships that could help manage future crises, and began building a transnational "epistemic community" that could design nuclear CBMs acceptable to both parties. This research proposes continuing the Beijing and Hawaii Dialogues without requiring Track 1 dialogues as a prerequisite, with independent nongovernmental organization (NGO) sponsorship and funding, and with the goal of continuing to foster a transnational "epistemic community" around nuclear policies

and serve as a platform to make progress on other early-stage CBMs.

## Definition of Tracks 1.5 and 2 Dialogues

#### What Are Tracks 1.5 and 2?

Often described as "back-channel" diplomacy, Track 1.5 and Track 2 diplomacy are both informal forms of diplomacy. As opposed to Track 1 diplomacy, which is confined to strictly government-to-government meetings, Track 1.5 dialogues are "conversations that include a mix of government officials—who participate in an unofficial capacity—and nongovernmental experts," and Track 2 dialogues gather "unofficial representatives on both sides, with no government participation" (Staats et al., 2019).

### What Are Dialogues?

The definition of "dialogues" is slightly more nebulous. Perhaps the most relevant definition of "dialogue" comes from the Sustained Dialogue Institute (SDI), a nonprofit formed by former U.S. Assistant Secretary of State Harold Saunders. This model of dialogue was formulated as a five-stage process based on Saunders' experience leading the Dartmouth Conference—a continuous dialogue process during the Cold War to be discussed in depth later ("The Dartmouth Conference: The First 50 Years," 2010). Saunders defines dialogue as:

A process of genuine interaction through which human beings listen to each other deeply enough to be changed by what they learn. Each makes a serious effort to take others' concerns into their own picture, even when disagreement persists. No participant gives up their identity, but each recognizes enough of the other's valid human claims so that they will act differently toward the other (How to Use Sustained Dialogue Issue Sheets, 2017, p. 3).

### Why Consider Dialogues a CBM?

This research includes dialogues as a form of CBM because they seek to achieve identical aims as those

enumerated in the chart titled "Aims of Confidence Building Measures" in a previous chapter. Tracks 1.5 and 2 diplomacy can help with crisis prevention by addressing the causes of crises. Dialogues can also help counterparts establish shared principles and best practices for crisis management and create back channels of civil society actors who can work together informally to manage potential future crises (Odell & Cerny, 2021).

Tracks 1.5 and 2 dialogues can also help ease or prevent conflict by creating "epistemic communities." An epistemic community is "a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area," along with a "shared normative commitment" and "principled approach to the issue at hand" (Hass, 1992, p. 3). The phrase was first defined in this way by Amherst University professor of political science Dr. Peter Hass. While both political systems and domestic constraints impact countries' policies, epistemic communities play a role in states' processes for articulating and understanding their interests, framing complex problems for wider policy discussions, proposing policies, and pinpointing areas for negotiation or common ground with other parties (Hass, 1992). This is founded on the assumption that "actors can learn new patterns of reasoning and may consequently begin to pursue new state interests" (Hass, 1992, p. 3).

In order to be more impactful, these communities must exercise power within national and international bureaucracies and must also deal with complex topics such that policymakers have enough uncertainty that they turn to these expert communities. Sometimes policymakers do not know they do not possess enough information about a given topic until a crisis emerges, at which time they are more likely to turn to experts to help resolve uncertainty before making a decision. Although Hass does not explicitly mention dialogues or Track 1.5 or 2 diplomacy, he does cite "conferences, journals, research collaboration, and a variety of informal communications and contacts" as platforms upon which epistemic communities can form (Hass, 1992, p. 17). Nuclear dialogues (especially if they are continuous and involve many of the same participants over time) including nuclear experts are exactly the kind of platform which would create the "transnational epistemic communities" to which Hass refers.

The U.S.-Soviet Cultural Exchange Agreement allowed for greater people-to-people and cultural exchanges between the two Cold War powers.

### Dialogues Are CBMs and 'Pre-CBM'

In addition to being a CBM, dialogues are also "pre-CBM" in the sense that they are intended to create and foster the conditions for other CBMs. They are a foundational step toward other CBM agreements because they serve to increase mutual understanding of what agreements would be acceptable to all parties. For example, under the right conditions, Track 1.5 or 2 dialogues could identify mutually beneficial and mutually acceptable CBMs that would then be discussed more formally at the Track 1 level to facilitate implementation.

## **Cold War Dialogues**

#### **Dartmouth Conference**

The Dartmouth Conference was an idea first conceived and brought to life by Norman Cousins, an American political journalist, author, and professor. Influenced by the devastation of Hiroshima after visiting the site, he became a lifelong advocate of world peace ("The Dartmouth Conference: The First 50 Years," 2010). Cousins was a close friend of U.S. President Dwight D. Eisenhower, who sent him to the signing ceremony of the 1958 U.S.-Soviet Cultural Exchange Agreement in Moscow to "see what could be done" (P. Stewart, personal communication, March 5, 2022). The U.S.-Soviet Cultural Exchange Agreement allowed for greater people-to-people and cultural exchanges between the two Cold War powers, including through films, magazines, and airline flights. In exchange for granting the Soviet Union access to information about the United States' technology and industry, the United States opened a window through which to

introduce its culture to the Soviet Union ("Cultural Competition/Cultural Cooperation: U.S. Trade and Cultural Fair in Moscow and the Kitchen Debate," 1959). After this agreement was signed, Cousins was sent with Eisenhower's blessing to Moscow in 1959 and presented the idea of a "citizens' conference" to the Soviet Peace Committee ("The Dartmouth Conference: The First 50 Years," 2010). The concept of the citizens' conference was roundly criticized by his audience at the time. Nevertheless, within the year, the Soviets agreed to begin the conference as Cousins had proposed. Cousins had many high-level connections, and he quickly sought to involve them in these conferences, the first of which was held in November 1960 (P. Stewart, personal communication, March 5, 2022).

Since then, the Dartmouth Conferences have constituted an ongoing forum in which "leading American and Soviet intellectuals (nongovernmental representatives) meet to discuss peace initiatives and means of easing tensions between the two superpowers. It was used as an unofficial channel of communication between the respective governments" (The Dartmouth Conference, The First 50 Years," 2010, p. 42).

Many analysts believe that Dartmouth contributed to the process of détente. Its goal was to "conduct regular dialogues between informed Russian and American citizens across the full range of issues impacting the U.S.-Russia relationship for the purpose of encouraging enhanced international security and more effective management of the relationship across all its dimensions" (Stewart, 2021, p. 1).

Dartmouth participants have met 145 times over 60 years (Stewart, 2021), often at a biannual frequency ("The Dartmouth Conference: The First 50 Years," 2010). These meetings are sponsored and funded jointly by the U.S.-based Kettering Foundation and the Russian Peace and Economy Foundation (Stewart, 2021).

This report focuses mainly on the Dartmouth Conference as a case study for Soviet-American Tracks 1.5 and 2 dialogues that impacted the bilateral nuclear relationship during the Cold War. The Dartmouth Conference was selected for several reasons. First, it was a bilateral initiative between the Americans and the Soviets. Second, among the

Soviet-American bilateral back-channel dialogue efforts, Dartmouth is the longest-standing, as it continues between the United States and Russia to this day¹ (Stewart, 2021). Finally, the Dartmouth Conference yielded highly successful results in the Soviet-American nuclear and political relationship and therefore serves as a "gold standard" for Tracks 1.5 and 2 diplomacy in helping superpowers to ease bilateral nuclear tensions. This is thanks to a number of unique characteristics of the Dartmouth Conference from which lessons can be drawn for the Sino-American nuclear relationship.

## Impact on the Political and Nuclear Relationship

Anyone familiar with Track 1.5 or 2 dialogues agrees that measuring the impact of these dialogues on policy is difficult, if not impossible. Policymaking processes are complex, and attempting to trace any given policy back to one conversation, individual, or interaction is often futile. Nevertheless, it is possible to examine historical, anecdotal, and testimonial evidence pointing to the influence of the Dartmouth Conference on the political and nuclear bilateral Soviet-American relationship.

First, many Dartmouth participants on both sides have spoken to the impact of the conference on their perception of the other side, noting that the conference led to stronger personal relationships and therefore trust. This was true at times during the Cold War when very few (or no) formal channels existed between the Soviets and the Americans or were consistently maintained; Dartmouth filled this need ("The Dartmouth Conference: The First 50 Years," 2010).

Yevgeny Primakov, a Dartmouth participant and eventually the prime minister of Russia (1998-1999), says, "The Dartmouth Conference was also valuable in that it contributed to the growing human affinity and the forging of friendships, so difficult to imagine at that time" ("The Dartmouth Conference: The First 50 Years," 2010, p. 2). He tells the story of a dinner between the participants that lasted until 3 a.m. at which everyone had such a good time that even David Rockefeller rescheduled his flight so that he could stay longer ("The Dartmouth Conference:

The First 50 Years," 2010). Russian participant Alla Bobrysheva described it thus: "Sharing the same space during the entire week-long conference contributed greatly to the establishment of new human relationships. Sitting together at one table during meals, walking together to the conference room, enjoying a stroll together on the campus grounds ... all this led to discovering in a recent adversary a friendly human being with many similar feelings and problems. Political issues were discussed not with enemies but with thoughtful scholars deeply concerned about the future of their countries and the world" ("The Dartmouth Conference: The First 50 Years," 2010, p. 14).

Other evidence of the impact of Dartmouth was the extent to which high-level individuals made time to participate in the process. U.S. Gen. Brent Scowcroft, Gen. David Jones, ambassadors Charles Yost and Richard Burt, and Assistant Secretary Harold Saunders were merely a few examples of high-level U.S. officials who joined the Dartmouth process after leaving government service, having spent years briefing Dartmouth participants in preparation for conferences. Soviet generals, party officials, and Foreign Ministry staff often participated in the dialogues as well ("The Dartmouth Conference: The First 50 Years," 2010).

There is also reason to believe that the Dartmouth Conference helped to manage the Cuban Missile Crisis. Dartmouth participants met amidst the crisis and began discussing how they might help ease tensions. One participant proposed that the United States should offer to remove its missiles from Turkey. According to Phil Stewart, former executive director of the Dartmouth Conference (1972-1990), "that was communicated through the Vatican to the president's office. And now I'm sure the president was aware that we had those missiles. But I think it was the nudge, if you will, from our people, that helped make that decision" (P. Stewart, personal communication, March 5, 2022). Prominent Soviet journalist and Dartmouth participant Yuri Zhukov later said, "I think that in our meeting in Andover ... the way we dealt with the problems, were harbingers of the solution reached at the highest level later

1 We often use the past tense to describe the Dartmouth Conference because it is in reference to the Dartmouth Conference's impact during the Cold War in particular.

on" ("The Dartmouth Conference: The First 50 Years," 2010, p. 15). In an interview, Cousins also describes himself and other Dartmouth participants as having been "this liaison for the pope during the week of the missile crisis" (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986).

The relationships built through the Dartmouth Conference also contributed to the successful negotiation of the Comprehensive Nuclear Test Ban Treaty.

Back channels created through relationships built by the Dartmouth Conference also helped the Kennedy administration negotiate the Soviet release of Cardinal Josyf Slipyj, major archbishop of the Ukrainian Greek Catholic Church, who had been arrested by the Soviets upon their capture of Lviv. Although it did not resolve a nuclear crisis, Slipyi's release affected the political relationship in a positive way. In an interview, Cousins recounts the fact that President John F. Kennedy asked him to meet with Soviet Communist Party Secretary Nikita Khrushchev "because of the access that we had as a result of the Dartmouth Conference Series" (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986). Cousins met with Khrushchev, trying to convince him to release Slipyj. As Cousins recounts:

Mr. Khrushchev turned to me, and he said ... "I still don't know why should I do this?" And so ... simplistic as it might sound, I said, "Why, I think it's the ... it'd be a decent thing to do." And he said, "Oh." See, once we lifted this out of ... its political frame, and once we just put it on a moral level, he saw the point. And when I got back to the United States, I received a telephone call from Ambassador [Anatoli] Dobrynin saying that he'd received a message from Khrushchev and that the archbishop was released and asking about the methods of release. (War and Peace in

the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986).

Thus, it seems that the relationships built at Dartmouth led to the release of the cardinal, which helped ease Soviet-American tensions.

The relationships built through the Dartmouth Conference also contributed to the successful negotiation of the Comprehensive Nuclear Test Ban Treaty. When Cousins met with Khrushchev at his home on the Black Sea, one of his goals was "to attempt on behalf of President Kennedy to clarify the situation with respect to the test ban." The talks had stalled because, as Kennedy described it, Khrushchev had misunderstandings about the United States' views on inspection:

Khrushchev had claimed that the United States had gone back on its word concerning the number of inspections that it wanted, but the main point that President Kennedy asked me to try to register with Khrushchev was that he, President Kennedy, was genuinely interested in reducing the tensions between both countries ... and in laying the basis for ... genuinely workable peaceful relationship between the two societies (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986).

Prior to this meeting, the pope had given Cousins a medallion thanking him for securing Slipyj's release, and Cousins had sent the medallion to Khrushchev. In this meeting, Khrushchev told Cousins that the medallion had served as a topic of conversation and also perhaps a small way of building legitimacy with other party cadres. This demonstrates the small interpersonal interactions that helped build the relationship leading to greater trust.

Cousins recounts when Khrushchev expressed his frustration that the United States had upped their ask from three inspections to six inspections in the CTBT negotiations: "'You know,' he said, 'You sound like a broken record. You keep bringing up the fact that ... President Kennedy is acting in good faith.' He said, 'I'm acting in good faith too. But the fact of the matter is that the United States has no desire really to do this and wants inspections

for the purpose of military espionage." In response, Cousins began packing to go. When Khrushchev asked why he was leaving, Cousins replied that he was preparing to confess his failure to the president and to his own wife and daughters. In response, Khrushchev said, "Please sit down. ... You haven't failed. ... We'll start all over again. All right" (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986). It was the human touch that ultimately led to success.

When Cousins recounted the interaction to Kennedy—especially Khrushchev's frustrations about the American request to increase the number of nuclear inspections-Kennedy replied, "Gosh. I can understand exactly how he feels and how and what that situation is, but we'll make a fresh start." As Cousins put it: "And they did and they won" (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986). Cousins describes the long-term impact of that breakthrough as providing "momentum that would carry the United States and the Soviet Union into a series of agreements not just with respect to a test ban, but with respect to some resolution of the Berlin crisis and other sources of tensions between the two societies" (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986).

The Dartmouth Conference also had a longerterm cooling effect on the Soviet-American relationship. In the Kettering Foundation's report about the Dartmouth Conference, titled "The Dartmouth Conference: The First 50 Years," Dartmouth is described as "a mind at work in the midst of a relationship" (2010, p. 57). The report defines "mind at work" as:

"A group of highly knowledgeable people having a sufficient degree of freedom from official constraints, with high personal motivation and adequate resources of energy, time, and money, to engage the most difficult issues ... not just an exchange of accusations or information; it requires both a willingness and a capacity to hear deeply, to seek to understand the reasons behind the thinking" ("The Dartmouth Conference: The First 50 Years," 2010, p. 57).

The report's conclusion notes that thinking about policy impact could easily "miss the forest for the trees ... policy seldom forms in a vacuum, but rather from a constant stream of ideas forming, shaping, flowing, and continuously reshaping within a larger policy community" ("The Dartmouth Conference: The First 50 Years," 2010, p. 56). Because Dartmouth participants were instructed to "test the waters" on certain policy ideas and report back their counterparts' reactions to policymakers, Dartmouth smoothed this process and provided a platform for both sides to form policy with the "other" more in mind.

Thinking about policy impact could easily 'miss the forest for the trees ... policy seldom forms in a vacuum, but rather from a constant stream of ideas forming, shaping, flowing, and continuously reshaping within a larger policy community.'

#### **Factors that Led to Success**

Five major factors contributed to the successes of the Dartmouth Conference. First, Dartmouth participants had access to government policymakers both before and after the dialogues, such that policy informed the dialogues and the dialogues informed policy in a positive feedback loop. In addition to high-level former U.S. and Soviet government officials, prominent journalists like Cousins and wealthy business elites like U.S. investment banker David Rockefeller were also involved. Similar levels of elites on the Soviet side were involved, such as Georgy Arbatov, who served as an advisor to five Soviet Communist Party general secretaries, and Yevgeny Primakov, who later served as prime minister of Russia. Cousins mixed subject-matter experts with generalist and interested elites, shaping task forces that focused on specific issues. Cousins himself had access to and personal relationships with Eisenhower, Kennedy, and Khrushchev. This level of access meant that government officials often briefed the Dartmouth participants on policies before the dialogues so that participants could float ideas by their counterparts and come

to the discussions with a good understanding of their government's perspectives on issues ("The Dartmouth Conference: The First 50 Years," 2010).

Additionally, the two governments were highly interested in the Dartmouth Conference findings, and there existed well-established procedures for the conference participants to report to each respective government before and after each meeting. For example, the participants would write joint reports and policy recommendations for their governments. This allowed for the benefits of the Dartmouth dialogues to be applied to Track 1 negotiations and government policies. According to Phil Stewart, Dartmouth had high-level government interest in its findings for over 60 years, which made it stand out among all the other bilateral back-channel dialogues occurring throughout the Cold War (Stewart, 2021; "The Dartmouth Conference: The First 50 Years," 2010).

Although intense policy discussions took place, participants had time in between to go for a walk, play a sport, eat a meal, and get to know one another as humans, which helped to build trust within the policy discussions, which persisted through times of crisis later.

While many have noted that participants' perspectives of the "other side" often change as a result of dialogues, this only matters insofar as participants can transmit these findings and understanding of the "other's" humanity to decision-makers. That is exactly what happened with Dartmouth. On the American side, participants had informal connections with and engaged in detailed briefings before and after each conference with members of the top foreign policymaking institutions, including the White House, National Security Council, the State Department, the DOD, and the CIA. As for the Soviets, the same happened with some of the highest organs of the party and the state, including the KGB, the Ministry of Foreign Affairs, Ministry of Defense, and the Secretariat's International Department ("The Dartmouth Conference: The First 50 Years," 2010).

As mentioned before, Cousins also made good use of his relationships by engaging in informal "shuttle diplomacy" between Kennedy and Khrushchev (War and Peace in the Nuclear Age; At the Brink; Interview With Norman Cousins, 1986).

The second component that led to Dartmouth's success was its centering of relationships at the core of its mission. As for selecting participants from the American side, Cousins chose some participants based on personality-people who he believed would represent the United States and its ideals well-in order to help the Soviets see beyond their stereotypes about Americans. Thus, he included ballerina Agnes DeMille, former U.S. senator and businessman William Benton, and playwright Russell Crouse. One Soviet participant, Alla Bobrysheva, described the powerful interactions she had with some of these participants, indicating that Cousins chose wisely. Bobrysheva said that this served to "illustrate the kind of human relations breakthrough that ... was no less important than the political value of starting the Dartmouth process" ("The Dartmouth Conference: The First 50 Years," 2010, p. 9).

It was also important that these participants were able to engage in an unofficial capacity and within the context of an informal format. Though former or even current government officials participated in the dialogues, they were always acting in a private capacity. This ensured that participants would see one another not as the "other side" but as humans, which "would form the basis for addressing fundamental human challenges together" ("The Dartmouth Conference: The First 50 Years," 2010, p. 13). It also provided space for people to explore ideas more freely, without being constrained by their government's official positions on any given issue. This relaxed and informal environment provided each side deeper insights into the intentions and thinking of the other. Although intense policy discussions took place, participants had time in between to go for a walk, play a sport, eat a meal, and get to know one another as humans, which helped to build trust within the policy discussions, which persisted through times of crisis later ("The Dartmouth Conference: The First 50 Years," 2010). Prior to the Dartmouth Conference, both sides lacked this information exchange environment.

Before the 1959 signing of the Soviet-U.S. Cultural Exchange Agreement, virtually the only bilateral interaction that these countries had engaged in for 30 years was at the official level. This resulted in diplomats' being out of touch with the other side's civil society, an issue rectified by the Dartmouth Conference.

Third, the Dartmouth Conference format was expansive. In covering the entirety of the relationship, the conference kept the dialogue relevant and highlighted the links among many of the issues. Almost any bilateral initiative requiring mutual understanding could be folded into and championed by the Dartmouth Conference, which provided great latitude for engagement. For example, Dartmouth included cross-border health-care collaboration projects. As Harold Saunders explained, Dartmouth sought to engage the "whole bodies politic" (Stewart, 2021).

Dartmouth was also flexible. As the relationship evolved, so too did the structure. This was accomplished mainly through the task forces, each of which was dedicated to exploring key issues in the bilateral relationship. The Dartmouth Conference included task forces on regional conflicts, arms control, political relations, and civil society, among others ("The Dartmouth Conference: The First 50 Years," 2010). When regional proxy conflicts became more of a flashpoint in the bilateral relationship, the conference increased its focus on these issues through its Regional Conflicts Task Force.

Fourth, Dartmouth succeeded because it held frequent meetings and convened its participants even amidst crises. Participants did not boycott or cancel meetings to make a political point, as often happens to Track 1 dialogues. Dartmouth participants always met during crises, including during the Cuban Missile Crisis (P. Stewart, personal communication, March 5, 2022). They also met after the Soviets invaded Afghanistan, with American participants asking, "was it not important to maintain a trusted venue where each side might listen to the other's concerns, where the reasons for the current crisis could be explained, where ideas for moving beyond the crisis might be explored?" ("The Dartmouth Conference: The First 50 Years," 2010, p. 25). By contrast, the United States government during the same time period cut off almost

all communication with the Soviets, withdrew the Strategic Arms Limitations Talks (SALT) Treaty from Senate consideration, and decided to boycott the Moscow Olympic Games. Despite these political tensions, Dartmouth dialogues continued ("The Dartmouth Conference: The First 50 Years," 2010).

The Dartmouth organizers wanted both sides to have and feel a sense of ownership over the process, as this would ensure that there was mutual buy-in and an equal power relationship.

The fifth contributing factor to Dartmouth's success was its joint ownership, management, and funding completely independent of government support. In many other bilateral Cold War dialogues, American government institutions organized and funded the talks, but Dartmouth leaders intentionally did not allow this to happen (Stewart, 2021). On the U.S. side, Dartmouth funding initially came entirely from the Ford Foundation and then the Charles F. Kettering Foundation—both private, nongovernmental foundations (Stewart, 2021). On the Soviet side, the Russian Peace and Economy Foundation provided support. This ensured that the dialogues did not depend on government support and governments could not use the dialogues as bargaining chips in negotiations. Each side also picked its own participants; the other side had no control over that process. The Dartmouth organizers wanted both sides to have and feel a sense of ownership over the process, as this would ensure that there was mutual buy-in and an equal power relationship (P. Stewart, personal communication, March 5, 2022).

## Dartmouth Had Successes Despite Obstacles and Failures

The Dartmouth Conference experienced major obstacles, some of which have particular relevance for the Sino-American relationship today. First, it was difficult for the Soviet participants to adopt the conception of themselves as participating as "private" individuals, since this conception of

private citizenship did not exist in the Soviet Union. Nevertheless, both sides agreed to try to live up to this principle.

Both sides also faced pressures from public opinion. Participants on both sides were often publicly criticized, accused of "naiveté" if they chose to defend or explain the other side. Government officials sometimes became territorial when participants began "encroaching" into their work through their participation in dialogues ("The Dartmouth Conference: The First 50 Years," 2010).

Participants on both sides were often publicly criticized, accused of 'naiveté' if they chose to defend or explain the other side.

Unsurprisingly, political tensions did at times affect the dialogue, and the Soviets in particular sometimes used the dialogue as an opportunity to "dump" party line critiques on the United States. For example, following a series of 1977 Arab-Israeli disagreements that affected the Soviet-American relationship, the Soviet leadership disallowed a Dartmouth task force to continue meeting without direct government oversight for seven years, which hampered progress on constructive dialogue. Dartmouth participants managed "dumping" sessions—when Soviet participants used valuable dialogue time to repeat party line critiques of the United States-by limiting their time to the first hour of plenary sessions ("The Dartmouth Conference: The First 50 Years," 2010).

Nevertheless, the Dartmouth Conference resulted in positive benefits for the relationship and contributed to successful crisis management. In applying lessons from the Dartmouth Conference to the current Sino-American relationship, it is important to remember that obstacles may not preclude benefits from dialogue.

## Other Cold War Soviet-American Dialogues

In addition to the Dartmouth Conference, it is worth considering U.S.-Soviet scientific exchanges that impacted the Soviet-American political and

nuclear relationship during the Cold War. The most notable of these scientific exchanges were the Pugwash Conferences. Formally known as the Pugwash Conferences on Science and World Affairs, the Pugwash Conferences were a multilateral initiative, unlike the bilateral Dartmouth Conference. The Pugwash Conferences were held by the Pugwash organization, which won the Nobel Peace Prize in 1995 for its work creating "dialogue across divides" specifically on issues related to nuclear weapons and weapons of mass destruction (Pugwash Conferences on Science and World Affairs, n.d.). The conference first met in 1957 and included 22 scientist participants from the United States, the Soviet Union, Japan, the United Kingdom, Canada, Australia, and various other countries (About Pugwash, n.d.). Since then, the number of participants has grown.

Evidence indicates that epistemic communities of experts-including those cultivated through the Pugwash and Dartmouth conferences—during the Cold War played a significant role in the nuclear norms that developed between the United States and the Soviet Union, including those that produced the Anti-Ballistic Missile (ABM) Treaty. American scientists and strategists spent years formulating theories about the origins of nuclear war and the impact of new technologies on the nuclear arms race. They ultimately made arguments about the necessity of cooperation between nuclear adversaries and began spreading these ideas internationally in the 1950s through "negotiations proposals, bargaining and negotiation positions, summit meetings, technical conferences (such as the Surprise Attack Conference), and scientific forums (such as Pugwash and the 'Doty,' 'Dartmouth,' and 'Panofsky' groups)" (Adler, 1992, p. 133). Indirectly, their ideas began spreading through "Western statements and strategic debates, congressional hearings and debates, press reports, and academic books and articles" (Adler, 1992, p. 133). According to physicist Frank von Hippel, former chairman of the Federation of American Scientists, bilateral Soviet-American meetings between scientists "often provided an opportunity to investigate new experimental ideas that government agencies have been loath to explore for fear of reducing political maneuvering room" (Adler, 1992, p. 135). These

scientists who met and exchanged ideas at these various forums had access to high-level policymakers and played a major role in eventual treaties and arms control agreements.

An example of the diffusion of ideas from American to Soviet scientists occurred when American experts first proposed the idea of strategic nuclear arms control to their Soviet counterparts in the 1950s. When American experts first proposed the idea of strategic nuclear arms control, the Soviets were opposed, thinking that this entailed inspection without disarmament; after all, in the Russian language, "kontrol" means "to inspect" and does not include the English concept of management. It took decades for this idea to be communicated clearly and take hold among Soviet experts as well (Adler, 1992). Andrei Kokoshin, the Soviet First Deputy Minister of Defense from 1992 to 1997, explained that "at the beginning [of the ABM negotiations], the Americans had a larger pool of ideas of arms control and we borrowed some of them" (Adler, 1992, p. 137).

These examples were only possible because Soviet interlocutors seeking to get their government's buy-in on ideas developed by American experts felt more comfortable advocating for these ideas because they knew and trusted that these American experts were advocating these ideas to their government as well (Adler, 1992). Thus, relationships and trust were central for the success of the conferences and further measures.

## Sino-American Dialogues Beijing and Hawaii Dialogues

The "China–U.S. Dialogue on Strategic Nuclear Dynamics held in Beijing" and the "U.S.–China Strategic Dialogue in Hawaii" are collectively known as the "Beijing and Hawaii Dialogues" (Roberts, 2020). From 2004 to 2019, representatives from both countries met annually or biannually, 22 times in total, with half of the meetings held in Beijing and half held in Hawaii. Think tank experts, academics, former and current government officials participating in an unofficial capacity, and military officials at the junior and senior levels were all represented at different points throughout the dialogue (Roberts, 2020).

During this time, very few bilateral Track 1 nuclear dialogues took place (Roberts, 2020), which elevated the significance of these back-channel talks. Various dialogue participants who have shared their experiences agree that the dialogues developed in three general phases. In the first ("opening") phase, the participants became acquainted with one another and clarified their nuclear policies and the logic behind them. In the second phase, the dialogues both deepened and broadened, and it seemed genuine progress could be made. In the third and final phase before the termination of the dialogues, the quality of the dialogues eroded and progress stalled (Roberts, 2020).

These dialogues were primarily funded and sponsored by the U.S. DOD's Defense Threat Reduction Agency (DTRA), which provided approximately \$5 million for the process. The DTRA outsourced the role of facilitating these dialogues to various organizations over the years, including the U.S.-based think tank Center for Strategic and International Studies (CSIS), the U.S. nonprofit Institute for Defense Analyses, the U.S.-based Pacific Forum, the U.S.-based RAND Corporation, and the China-based China Foundation for International Strategic Studies (Roberts, 2020). The dialogues were terminated in 2019 when the DTRA cut off funding for these talks. The DTRA cited two primary reasons for withdrawing funding. First, the Chinese were unwilling to move from Track 1.5 and Track 2 dialogues toward Track 1 dialogues. Second, the Chinese side began sending increasingly lower-ranked and less relevant military officers to the dialogues. One Chinese participant cited the increasing difficulty of obtaining a U.S. visa, growing security restrictions upon entry to the United States, and experiencing harassment at U.S. airports as some of the reasons that Chinese participants became less enthusiastic about continuing their participation in the dialogues (Roberts, 2020).

## Why Focus on the Beijing and Hawaii Dialogues?

This report will focus mostly on the Beijing and Hawaii Dialogues for several reasons. First, these lasted for 15 years and covered many topics in the bilateral nuclear relationship. Second, many experts involved in numerous Sino-American dialogue

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processes cited these as the most successful. Third and finally, there was sufficient publicly available information about them, which cannot be said for many other back-channel processes as some of these dialogues are ongoing and cover politically sensitive topics. This research includes interviews with a number of individuals involved in Sino-American Tracks 1.5 and 2 dialogues—both nuclear-specific dialogues and dialogues on the political or security relationship generally—and while some interviewees were forthcoming about which dialogues they were involved in, others were not; therefore, for some evidence provided by these interviewees, we will simply refer to available information without specifying the organization or affiliation.

## Impact on Political and Nuclear Relationship

The Beijing and Hawaii Dialogues were cited by participants as successful for various reasons, the first being the "mutual demystification" that they provided to nuclear policymakers, especially regarding each party's intentions (Roberts, 2020). Participants on both sides in a report on the dialogues all agreed that the dialogues helped with mutual understanding (Roberts, 2020). One U.S. participant listed lessons that the Americans learned, including that there is a long and intense deliberative process behind China's nuclear strategies (Roberts, 2020). The same participant concluded after these dialogues that China's capabilities do not contradict its stated NFU policy, and that China faces increasing pressure to update its nuclear strategy because of increased perceived security threats, among other insights (Roberts, 2020). One Chinese participant listed lessons that the Chinese participants learned, including that American nuclear policy is shaped more by threats from Russia and North Korea than it is by the Sino-American relationship (Roberts, 2020).

Furthermore, both sides were able to see open debate among their counterparts, which helped them understand that the other side was not a policy monolith; for example, the Americans noted interest in an argument between their Chinese counterparts about China's NFU policy (Roberts, 2020). Retired PLA major general and dialogue

participant Yao Yunzhu wrote of the dialogues that they were a "rare learning opportunity for all participants. We Chinese learned enough about classic American (Western) strategic terminology, while the American side learned enough about traditional Chinese thinking, to enable a substantially new and better form of communication. We came to understand each other" (Roberts, 2020, p. 14).

A second metric of success for the Beijing and Hawaii Dialogues is that they built personal relationships and some level of trust among the participants. Maj. Gen. Yao wrote that over time, "the discourse grew smoother and the atmosphere improved" (Roberts, 2020, p. 14). The frequency of the meetings and consistency of participants "contributed to building personal trust and professional credibility" (Roberts, 2020, p. 14). In the same report, all participants noted that the second stage of the dialogue was the peak of cooperation because of the relationships and trust that had been established.

Third, the Beijing and Hawaii Dialogues began to form the foundations for a Sino-American nuclear policy epistemic community, which could potentially build toward more CBMs. Brad Roberts, dialogue facilitator and former U.S. deputy assistant secretary of defense for nuclear and missile defense policy, said that the dialogues helped both sides create a "bi-national community of interest with a shared vocabulary and habits of cooperation" (Roberts, 2020, p. 30). He added that through the dialogue process, both countries developed the next generation of experts and policymakers on bilateral nuclear issues (Roberts, 2020). Pacific Forum President David Santoro spoke about the increasing number of PLA officers and Chinese officials that he observed participating over time in these dialogues as well (D. Santoro, personal communication, March 29, 2022). He elucidated the progress made in building a shared understanding of nuclear terms: "When we started those discussions, basically the Chinese were not fluent in nuclear policy lingo. ... We didn't have the same concepts, not the same language, they didn't understand us. We didn't understand them. So, I guess the primary success of that dialogue is to build that community, to engage with them, to clarify some points, and ultimately

to develop a relationship" (D. Santoro, personal communication, March 29, 2022).

#### **Factors That Led to Successes**

Participants and organizers cited various important factors that contributed to the successes of the Beijing and Hawaii Dialogues. First, the fact that the dialogues took place in alternating locations—first in China and then in the United States—helped ensure that high-level participants on both sides who otherwise might have faced difficulty traveling out of the country because of time constraints or security concerns could still participate on at least a biannual basis (D. Santoro, personal communication, March 29, 2022). The Hawaii dialogues also contributed to putting participants at ease given the islands are a relaxing environment (D. Santoro, personal communication, March 29, 2022).

The high-level participation, and thus access to government officials, on both sides also contributed to the dialogues' successes. Maj. Gen. Yao said that the dialogues were more successful because of "senior participation" (D. Santoro, personal communication, March 29, 2022). Dr. Santoro said the Chinese dialogue participants "had access to government. They were talking to them regularly, getting feedback from them about the types of issues that they should explore in the 1.5, and then they were briefing them about the results of that process, so interactions were constant. So much so that sometimes we would go with them to engage with PLA officers and others" (D. Santoro, personal communication, March 29, 2022). Regarding how important these connections to government are for dialogue success, Santoro said, "I think it's absolutely critical. I don't think we can do anything if there is not some level of interactions and connections" (D. Santoro, personal communication, March 29, 2022). By contrast, "the decreasing level of senior participation from the Chinese side devalued both dialogues" toward the end.

Finally, participants' ability to engage in their private and informal capacity and have consistent and frequent interactions contributed to the relationships and mutual understanding established over time. Dialogues were held off the record (Roberts, 2020). Maj. Gen. Yao also noted the

importance of having the same participants gather consistently twice a year, which helped the dialogue to move forward over time and "contributed to personal trust and professional credibility" (Roberts, 2020, p. 14).

## Lessons From Other Bilateral Sino-American Dialogues

Important lessons can be drawn from interviews and research into other Sino-American bilateral dialogues—both nuclear and non-nuclear. First, experts contend that Tracks 1.5 and 2 dialogues have been producing the beginnings of transnational epistemic communities since the 1980s, as evidenced by the extent to which the Chinese Second Artillery (SA)—the PLA branch tasked with overseeing China's land-based nuclear missiles, replaced with the PLA Rocket Force in 2013-began to engage in international nuclear dialogues (Li. 2011). According to Li, in the 1980s, China's "nuclear establishment" sent nuclear scientists to international dialogues. Although hesitant at first to engage in any discussions beyond purely technical ones, eventually these scientists became more comfortable, and "they developed friendship with and trust in scientists from other countries. ... [T] hey gained experience and confidence in dialogue on nuclear policy issues and came to understand the importance and benefits of these dialogues" (Li, 2011). Italian and American scientists helped support these Chinese nuclear establishment members to support the creation of international dialogues hosted by Chinese nuclear institutions and the ability of young Chinese nuclear scientists to study abroad. These efforts bore fruit, as these young members of the nuclear establishment are now playing key roles in China's international strategic nuclear dialogues.

Second, Li argues that Chinese stakeholders were more willing to engage in nuclear dialogues when they possessed the adequate expertise to do so. Li argues that the SA was historically reluctant to engage in international nuclear dialogues, in contrast to China's "nuclear establishment" (Li, 2011). He explains that the reason for this difference must lie in the fact that the SA previously did not possess as much "expertise and institutional

culture and experience when it came to international dialogue" (Li, 2011). He argues that foreign support for building the "experience and expertise in international dialogue" helped to create a community of nuclear experts in China that knew how to engage in strategic nuclear dialogues at the international level (Li, 2011).

Li argues that once the SA felt sufficiently comfortable with their expertise on nuclear matters, they were more willing to engage in nuclear dialogues. In the 1990s, the SA began sending some officials to observe Sino-American Track 1.5 strategic dialogues (Li, 2011). In response, many of these SA leaders began sending some of their professors and trainers to these dialogues as well so that they could pass on what they learned (Li, 2011). Eventually, the SA allowed these professors to not only observe, but also to engage in the dialogues (Li, 2011). This seemed to lead to increased buy-in from these SA officials on the importance of Track 1.5 dialogues. For example, one SA dialogue participant published an article promoting the idea that China should increase its nuclear transparency (Li, 2011).

Li concludes that "expertise is a key variable shaping [experts'] attitudes toward dialogue" (Li, 2011). This is consistent with the previous findings about the Cold War scientist communities, in which transnational epistemic communities were established through shared training and mutual exchange of ideas about strategic issues (Li, 2011). This lends further support for the importance of dialogues over long periods of time, as it fosters these communities that can be helpful when the time is ripe for CBMs and even potentially arms control agreements. Li argues that these dialogues also helped enhance an epistemic community within China because the SA interacted with other Chinese institutions and individuals engaging in nuclear issues, both prior to and following the dialogues (Li, 2011).

Third, the PLA has also begun applying crisis management principles to its policymaking processes as a result of Tracks 1.5 and 2 dialogues. As mentioned in the previous section on Chinese perspectives on CBMs, a series of Track 2 dialogues resulted in a 2006 report that detailed a list of eight crisis management principles the United States and China agreed would enhance future discussions (Odell & Cerny, 2021). In an interview,

one participant in these Track 2 dialogues said that they led to growing acceptance of those crisis-management principles among Chinese experts. For example, the creation of the CCP's Central National Security Commission in 2013 resulted in part from the diffusion of ideas about crisis management in these Track 2 dialogues. This was somewhat inspired by the idea that China could better manage crises if it had a body somewhat similar to the United States' National Security Council (Anonymous, personal communication, April 4, 2022).

Fourth, similar to Cold War dialogues, the informal and nongovernmental nature of some 1.5 and 2 dialogues has led to greater successes. As a participant in multiple U.S.-China bilateral security-related Tracks 1.5 and 2 dialogues and former U.S. commander of the Pacific Fleet (2015-2018), Adm. Scott Swift noted in an interview that "Without direct government representation and participation, my sense is that the dialogues are much more open and free-flowing" (S. Swift, personal communication, April 2, 2022). This is partially because dialogue participants do not face the time pressures of a government-assigned task or deliverables that must be produced before the next election cycle (S. Swift, personal communication, April 2, 2022). He said that for both parties, "it depressurizes a lot of the discussions," and that compared to his experiences as former commander of the Pacific Fleet, "they're much more open than the discussions that I had when I was in government and I was talking with my military counterparts in the PLA" (S. Swift, personal communication, April 2, 2022).

Furthermore, other back-channel Sino-American dialogues support findings from the Dartmouth Conference that these dialogues are more effective at continuing even amidst crises when their funding comes from independent, nongovernment sources. Adm. Swift mentioned that government-funded back-channel dialogue efforts risk losing government support if one side becomes unhappy with the other country's actions (whether related or not to the dialogue topic at hand). "They'll cut off their support for the dialogue," he said. "And I think that's exactly the wrong approach. If anything else, the dialogues should be accelerated and accentuated. ... In those times of tension is when we need

these dialogues more than ever" (S. Swift, personal communication, April 2, 2022). He added that the government often expects to be able to measure impact or results if it chooses to fund an activity; however, as has been mentioned previously, the impact of Tracks 1.5 and 2 dialogues is difficult (if not impossible) to measure and may not materialize or be evident until decades later (S. Swift, personal communication, April 2, 2022). Both of these factors mean that government-funded back-channel dialogues are more fragile, and it appears that Tracks 1.5 and 2 dialogues are more sustainable if they have independent funding sources.

Finally, other back-channel Sino-American dialogues have demonstrated that while in-person dialogues are helpful for making progress, some virtual components can also contribute to their effectiveness. A number of back-channel dialogues went online after the COVID-19 pandemic emerged and have continued in this format given that China has not yet opened its borders fully to foreigners (S. Swift, personal communication, April 2, 2022). Adm. Swift noted that when travel becomes possible again, it will be important to host some in-person dialogues again; from his perspective, an in-person format fosters more relationships and shows greater commitment. On the other hand, it might be possible to include higher-level participants if they are requested to provide only a few hours of their time for a videoconference, rather than the multiple days required to travel for a dialogue (S. Swift, personal communication, April 2, 2022).

## Way to Address Obstacles to Effective Sino-American Dialogue

The Chinese and American participants in the Beijing and Hawaii Dialogues both emphasized different failures and obstacles to success. Roberts noted that American nuclear policy failed to adapt based on insights generated in the dialogues, and "if anything, it seems to be losing interest in assuring China about the validity of its promises of strategic restraint" (Roberts, 2020, p. 30). He cited the U.S. refusal to acknowledge nuclear vulnerability with China or provide China with a viable and reasonable path to arms control that acknowledged China's valid security interests (Roberts, 2020).

Roberts also listed topics on which the parties failed to find common ground. He noted that the talks lost momentum toward the end, partially because of the souring of the political relationship and time spent airing grievances, and partially because the participants spun their wheels discussing the same issues to "incorporate new information and bring new participants up to speed" (Roberts, 2020, p. 16).

When the Chinese participants came to Hawaii for the dialogues, they faced increased barriers to receive U.S. visas, harassment at U.S. airports, and increased security checks at airports.

Santoro emphasized that the dialogues failed to produce Track 1 nuclear talks, which was a major reason the DTRA withdrew funding. Despite the fact that he disagreed with the decision to end the dialogues, Santoro said that the U.S. decision was understandable because there was a need to incentivize China to move forward with Track 1 talks (D. Santoro, personal communication, March 29, 2022). Both sides cited the decreasing level of seniority of the Chinese participants as another reason to halt the talks (Roberts, 2020).

Maj. Gen. Yao, on the other hand, emphasized the difficulties faced by Chinese participants. As time went on, when the Chinese participants came to Hawaii for the dialogues, they faced increased barriers to receive U.S. visas, harassment at U.S. airports, and increased security checks at airports, which made these participants anxious about their safety and diminished their interest in participating in the future (Roberts, 2020).

China's political system also operates in a "top-down" manner, such that major initiatives affecting issues as sensitive as nuclear policy could not occur without the approval of top leadership. In an interview, Roberts mentioned that in the Beijing and Hawaii Dialogues, without formal agreements by leaders that an issue is important, it is difficult to make meaningful progress (B. Roberts, personal communication, April 22, 2022).

In response to these obstacles, this research maintains that restarting Beijing and Hawaii Dialogues is imperative despite associated challenges. It is important to remember that the positive results of the Dartmouth Conference took time to materialize. The Dartmouth Conference lasted for nearly 30 years during the Cold War, whereas the Beijing and Hawaii Dialogues have lasted only 15 years thus far. As mentioned above, the Beijing and Hawaii Dialogues have made progress, and it will take more time for this progress to result in further CBMs or arms control agreements given the asymmetric nature of U.S. and Chinese nuclear capabilities.

American and Chinese participants in the Beijing and Hawaii Dialogues highlighted the fact that they incurred some professional (and sometimes personal) risks as part of their participation in the dialogues.

Just as success was not guaranteed during the Cold War-especially given how close the two nations came to nuclear war on several occasions-success is not guaranteed now between the U.S. and China in using dialogue as one of many means to clarify misunderstanding and create back channels and better policies to prevent nuclear escalation. However, given the scale of the risk and evidence of back-channel dialogue success in earlier periods of history, it is worth persevering through the obstacles explained above. Furthermore, the Dartmouth Conference succeeded in influencing policymakers through briefings, joint reports, and policy recommendations, as well as creating relationships between people (such as Cousins and Khrushchev) who could meet in times of crisis. These sorts of outputs do not necessarily require formal Track 1 negotiations to influence perceptions and policies and contribute to successful crisis management.

#### **Other Potential Obstacles**

Although the Beijing and Hawaii Dialogue participants did not list this as an obstacle, China's information environment and political decision-making processes could also be an

obstacle to successful Tracks 1.5 and 2 dialogues. While discussing the possibilities for inadvertent escalation, Tong and Li also highlight the compartmentalized nature of communication and the secrecy around nuclear capabilities in China. They note that "many Chinese experts who are cleared to attend international exchanges and dialogues" may not be sufficiently familiar with internal discussions on Chinese nuclear policy to comment at these dialogues (Zhao and Li, 2017, p. 52). This siloed nature of information in China where experts participating in dialogues, especially Tracks 1.5 and 2 dialogues, may not be familiar with operational arrangements, poses a significant challenge to the possibility of Sino-U.S. nuclear CBMs.

The problem is compounded further by the fact that Chinese experts often find it "too sensitive" to delve into issues around China's developing nuclear capabilities, and the increasing power competition between the U.S. and China has led to "stricter internal security regulations that greatly discourage even domestic academic discussions on basic factual issues. Direct, candid, and substantive exchanges between U.S. and Chinese experts have also become much harder" (Zhao, 2021). In March 2022, China tightened restrictions on scholars hoping to attend international conferences. A few aspiring conference participants were prevented from joining an online conference after Chinese security and education officers stepped in (Feng, 2022). This presents a major challenge to conducive dialogues between the two nations.

The deteriorating political relationship also raises the stakes and costs for anyone engaged in Tracks 1.5 and 2 dialogues. American and Chinese participants in the Beijing and Hawaii Dialogues highlighted the fact that they incurred some professional (and sometimes personal) risks as part of their participation in the dialogues (Roberts, 2020). This deterioration also might make some former participants unwilling or less enthusiastic about participating again, as perceptions of the other sour on both sides. There are similar concerns related to China's increasing restrictions on foreign NGOs which creates additional risks for both foreign NGOs and Chinese institutions hosting and funding these dialogues (Odell & Cerny, 2021).

Other challenges may have more to do with the U.S. political system and resources directed toward building the nuclear expertise required to engage in these back-channel dialogues. The fact that the U.S. presidential administration can change as frequently as every four years can hamper progress. For example, if dialogue participants spend years formulating and refining policy recommendations acceptable to both governments, only to find that these recommendations are unacceptable to the incoming president, this time may feel wasted for all involved. Furthermore, personnel and funding might become an issue. The United States has not dedicated as many resources to growing its nuclear expert community as China has in recent years (Roberts, 2020). This occurs amidst a worrying trend of charitable foundations increasingly pulling funding from anti-nuclear war initiatives out of concern they are not generating the desired impact (Matthews, 2022).

There are ways to address these potential obstacles. First, having a third party—a nation considered neutral or friendly to both the United States and China-host and fund the dialogues would help circumvent some of the concerns about the constraints on civil society in China. Second, dialogue organizers will have to remain up to date on the levers of influence within both the United States and Chinese political systems to ensure that they select participants who can speak authoritatively about their respective countries' intentions and policies, as well as provide helpful insights generated from the dialogue to government policymakers who can actually implement the best ideas. To be clear, this does not mean that participants should be asked to provide unapproved confidential information in the process. However, just as during the Dartmouth Conference and as in conversations between Khrushchev and Cousins, there is often non-secret yet previously unshared information that can help clarify misunderstandings between the two sides. For example, the influence of the PLA Rocket Force (PLARF) over China's nuclear policy continues to grow, potentially at the expense of the role of China's scientific community (C. Twomey, personal communication, April 27, 2022). Although it is much easier for dialogue initiatives to find scientist participants, as opposed to current

or former Chinese government or military officials, the Beijing and Hawaii Dialogue facilitators should focus on bringing PLARF officials to the table (C. Twomey, personal communication, April 27, 2022).

Furthermore, Chinese frustrations with the U.S. political system - especially the potential impacts of changing administrations and the latitude of Congress in making decisions (such as Pelosi's visit to Taiwan) against the will of the president-should be topics of discussion during the dialogues. Dialogues can also be a helpful platform for U.S. participants to clarify that decisions changing from administration to administration are a function of the political system as opposed to evidence of dishonesty or bad-faith negotiations. The dialogue participants can, in response, time their discussions around U.S. election cycles such that any progress they make regarding bilateral nuclear policy has a better chance of implementation by a sitting U.S. president. Additionally, it's important to note that this problem will occur at the Track 1 level, in addition to the Tracks 1.5 and 2 levels.

Finally, the Dartmouth Conference faced similar problems to those occurring amid Sino-American nuclear dialogues today. As mentioned previously, Soviet participants had difficulty identifying as "private" individuals not speaking on behalf of their governments, and both sides faced pressure from public opinion (being accused of "naiveté") in a hostile political environment between the two countries. Political tensions often negatively affected the progress of the dialogue. However, the Dartmouth Conference had many successes despite these obstacles, and it's possible that the Sino-American nuclear dialogues can, too. Putting time limits on "party-line dumping sessions," as implemented during Dartmouth, could be helpful.

## Recommendations for U.S.-China Nuclear Dialogues Today

Today's Sino-American nuclear dialogues would benefit from reviewing Cold War history and the Soviet-American dialogues that helped manage a tense relationship between two nuclear superpowers. Of course, there are principles from the Cold War dialogues that do not apply today because of a different global context and the fact that China

Tracks 1.5 and 2 Dialogues

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perceives dialogues and nuclear policies differently than did the Soviet Union. Nevertheless, bearing these constraints in mind, the authors propose the following recommendations for present-day Sino-American dialogues:

## 1. Restart the Beijing and Hawaii Dialogues, maintaining the access to policymakers, goal of fostering relationships, and meeting frequency.

The positive effects of Tracks 1.5 and 2 dialogues can take years if not decades to materialize, as evidenced by the impacts of relationships developed through the Dartmouth Conference. Some aspects of the Dartmouth Conference never proffered concrete results, while others exceeded expectations; it takes years and many attempts for a few ideas (albeit important ideas) to stick. Some ideas planted during the Pugwash Conferences did not materialize into Track 1 negotiations for nearly a decade, and it took multiple years for the Beijing and Hawaii Dialogue participants to begin feeling comfortable enough to make significant progress on mutual understanding (Roberts, 2020).

Many components of the Beijing and Hawaii Dialogues were going well, and restarting these talks with many of the same participants will make it possible for the progress made over 15 years to continue. The access to government and policymakers should be maintained and expanded, and the focus on fostering relationships and trust should also be maintained and bolstered. Both of these elements were crucial for the success of the Dartmouth Conference and helped to create the small successes already seen from the Beijing and Hawaii Dialogues. Furthermore, given that Chinese security experts tend to view "confidence-building" more as rooted in trust and personal relationships (see "Chinese Perspectives on Confidence-Building Measures" chapter), keeping relationship-building central to the dialogues' mission will be important.

The biannual or annual frequency of meetings should also be maintained because this frequency matches the importance of the issues at hand and makes regular attendance as achievable as possible for participants. Indeed, report writers and interviewees who had participated in the Beijing and Hawaii Dialogues expressed support for this frequency of meetings. Adding some virtual

components to the dialogues, as suggested by Adm. Swift, could help ensure high-level participants can participate at a frequency required for the types of relationship-building that Tracks 1.5 and 2 dialogues can uniquely foster.

Most importantly, the significance of these bilateral nuclear dialogues has only grown since the Beijing and Hawaii Dialogues were halted in 2019. As China has built new missile silos and enhanced other nuclear capabilities, Washington has reacted with anxiety. China's 2021 hypersonic missile test and the United States' AUKUS deal announcement the same year both provide even more material for discussion.

# 2. Given the benefits of Tracks 1.5 and 2 dialogues beyond contributions to Track 1 diplomacy, Track 1 dialogues should not be made a prerequisite for restarting or maintaining Tracks 1.5 and 2 dialogues.

The U.S. and China should restart Tracks 1.5 and 2 dialogues even if China continues to stall on holding Track 1 talks. Unlike U.S.-USSR Track 1 talks in later stages of the Cold War, Sino-U.S. Track 1 dialogues are unlikely to occur in the present moment. China and the United States still have asymmetric nuclear capabilities, making China less interested in talking at the Track 1 level. Track 1 talks may be more likely in the bilateral relationship when China perceives its nuclear capabilities to be a sufficient deterrent against the United States.

It is true that many of the benefits accrued from U.S.-Soviet back-channel (Tracks 1.5 and 2) diplomacy during the Cold War became evident through Track 1 talks. For example, impacts of Pugwash, Dartmouth, and other exchanges were realized through Track 1 ABM negotiations. Additionally, Cousins' back-channel facilitation of communication between Khruschev and Kennedy on the issue of nuclear inspections—enabled by his Dartmouth relationships—contributed to Track 1 CTBT negotiations.

However, Tracks 1.5 and 2 talks today can contribute to future Track 1 talks by building the relational and ideological foundations for common understandings and solutions. As evidenced by the impacts of Pugwash and other scientific exchanges, it sometimes takes years or decades for the ideas

generated in these exchanges to impact Track 1 talks. Thus, even without currently ongoing Track 1 talks, Tracks 1.5 and 2 talks may yet be able to positively impact Track 1 talks that occur in the future.

Tracks 1.5 and 2 dialogues also have value in and of themselves. Cousins' back-channel advocacy—such as his negotiation of the Soviet release of Slipyj—was facilitated by his participation in the Dartmouth Conference, and interactions like these can occur even without Track 1 dialogues. Similarly, Tracks 1.5 and 2 dialogues can facilitate relationships that can help in moments of crisis even without Track 1 dialogues, as evidenced by the role of Dartmouth participants in the resolution of the Cuban Missile Crisis.

Tracks 1.5 and 2 dialogues can also be slightly depoliticized, a trait not shared by Track 1 talks. Track 1 talks are tenuous as they can end when the political relationship experiences challenges. This occurred during the Cold War when President Jimmy Carter requested that the U.S. Senate delay action on ratifying SALT II after the Soviets invaded Afghanistan (Glass, 2018). A planned Sino-American Track 1 nuclear dialogue was canceled as a punishment by the Chinese government for U.S. arms sales to Taiwan (Roberts, 2020). Additionally, after Pelosi's visit to Taiwan in August 2022, China canceled dialogues between the PLA and the U.S. military, a move that will be discussed further in later chapters of this research (Liu, 2022). Tracks 1.5 and 2 talks, on the other hand, can continue even amidst political crises. Conditioning the sustainment of these talks on the continuance of Track 1 dialogues would therefore limit their effectiveness.

Chinese participants in the Beijing and Hawaii Dialogues have argued as much, stating that the Americans should not let perfect become the enemy of good and cut off back-channel dialogues simply because they are not optimally paired with Track 1 talks (Roberts, 2020). Tracks 1.5 and 2 dialogues can also build mutual understanding about the other side's intentions, generating goodwill and trust before a crisis emerges. As time passes and these dialogues continue to stall, both sides will miss key developments in the other's nuclear doctrines, capabilities, and intentions (Roberts, 2020). Finally, Tracks 1.5 and 2 dialogues can have other important, policy-relevant outcomes

beyond Track 1 dialogues. For example, dialogue participants can produce joint publications, private briefings to officials, and recommendation papers to both governments.

Americans should not let perfect become the enemy of good and cut off back-channel dialogues simply because they are not optimally paired with Track 1 talks.

## 3. The Beijing and Hawaii Dialogues should be sponsored and funded by an independent NGO, rather than (or in addition to) the DTRA.

The Cold War and recent Sino-American dialogues offer support for this recommendation. The Dartmouth Conference's non-government funding allowed meetings to continue even amidst political crises. These dialogues were not used by governments as bargaining chips, unlike the political origins of the loss of DTRA funding experienced by the Beijing and Hawaii Dialogues.

The Beijing and Hawaii Dialogues should be sponsored and funded by an independent NGO, either instead of or in addition to the DTRA. It would be best for this organization to be based in a country that both sides trust such as Singapore. A European NGO that has a positive or neutral reputation with both governments would be another good option. This is offered as an alternative to co-ownership and co-sponsorship by an American NGO and a Chinese NGO because of the difficulties faced by NGOs in China.

In an interview, Beijing and Hawaii Dialogues facilitator Roberts suggested that DTRA funding should be maintained alongside independent NGO funding, given that DTRA funding reassured Chinese participants that the dialogues were legitimate because they were sponsored by the U.S. government (B. Roberts, personal communication, April 22, 2022). Beijing and Hawaii Dialogues participant Chris Twomey agreed on the importance of continued U.S. government funding for the dialogues for the same reasons (C. Twomey, personal communication, April 27, 2022).

# 4. The United States and China should sign a people-to-people exchange agreement to lay the groundwork for more back-channel engagements.

The 1958 U.S.-Soviet Cultural Exchange Agreement laid the foundation for the Dartmouth Conference and other back-channel Soviet-American engagements. In recent years, the people-to-people ties between the United States and China have spiraled in alarming ways as both sides have expelled or sanctioned journalists and as China refused most foreigners entry into the country under its Zero-COVID policy. A people-to-people exchange agreement will be helpful should the Beijing and Hawaii Dialogues continue in person as Adm. Swift suggested.

A more comprehensive cultural exchange agreement modeled after the 1958 U.S.-Soviet agreement between the United States and China would face challenges, given Beijing's censorship policies and historical concerns about Western foreign interference, and the United States' increasing concern about undue CCP influence. However, a narrower people-to-people exchange agreement would not pose these challenges.

Rather, a bilateral people-to-people exchange agreement would adopt the Chinese preference for "top-down" approaches to CBMs as expressed by Roberts. Such an agreement from the top could be an important way to address the hierarchical nature of China's political system, in which stakeholders have difficulty acting without the express support of the top leadership. It would provide top leadership blessing for people-to-people exchanges, thus lowering the risks for experts and former government and military officials to participate in these Tracks 1.5 and 2 dialogues.

# 5. Bilateral Tracks 1.5 and 2 dialogues should be utilized as a platform to make progress on low-hanging-fruit CBMs, such as crisis communications.

Sino-American back-channel dialogues should follow the Cold War model in this regard. In the Pugwash Conference, it was an American scientists' presentation to Soviet counterparts that planted the seed for the ABM treaty. Back-channel relationships and conversations initiated by the Dartmouth

community helped Cousins convince Khrushchev that Kennedy was seeking inspections in good faith.

The Beijing and Hawaii Dialogues have already included discussions on CBMs. At the peak of these bilateral dialogues, American participants briefed their Chinese counterparts on Cold War Soviet-American verification principles, technologies, and processes (Roberts, 2020). The two parties also spent time discussing potential nuclear transparency measures (Roberts, 2020). As Dr. Brad Roberts recounts, "Our work on possible confidence and security building measures (CSBMs) became much more specific and productive, leading to a catalog of ideas, including some related to the regulation of competition in the cyber and space domains" (Roberts, 2020, p. 23). This led to a Track 2 Sino-American joint study on the same topic. Chinese participants were able to share with their American counterparts a prevalent Chinese perspective on transparency-based CBMs, namely that these measures favor the stronger power and hurt the weaker power; therefore, from the Chinese perspective, the United States has a greater responsibility to increase transparency (Roberts, 2020). These back-channel discussions and exchanges of views are important if there is ever to be an eventual breakthrough at the government-to-government level.

# 6. Through Tracks 1.5 and 2 dialogues and other channels, both sides should take steps to further build a transnational "epistemic community" around nuclear policies.

The transnational epistemic community around nuclear policies was key for the management of nuclear tensions. This epistemic community was created through various channels, including "negotiations proposals, bargaining and negotiation positions, summit meetings, technical conferences ... and scientific forums," along with public statements, debates, congressional hearings, press statements, and academic publications (Adler, 1992, p. 133). Nuclear experts and peace enthusiasts in the United States and China should create these types of forums in order to create similar communities to share ideas with one another. Tracks 1.5 and 2 dialogues will help to foster this community through regular meetings and relationship building.

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## **Hotlines**

By Raven Witherspoon

The proper operation of hotlines and other crisis management mechanisms are needed most when bilateral relations are poor and, therefore, the chances of misperceptions and conflict escalation are high. Given the downward trajectory of U.S.-China relations, properly functioning crisis management mechanisms will become much more important for preventing longstanding tensions from evolving into hot conflicts.

- Patricia M. Kim, former Senior Policy Analyst at the U.S. Institute of Peace, 2020

## **Summary**

Hotlines are often highlighted as the first and longest-lasting CBM adopted by the U.S. and USSR during the Cold War-"the initial exception to the Cold War arms control stalemate" (Miller, 2021). Used primarily to resolve acute crises, they provide a necessary channel for crisis communications and have expanded in scope since the Cold War. Negotiations expert William Ury argues in favor of hotlines' role in "institutionalizing consultations," which can "help ensure their continuation during tense times" (Ury, 1989, 4). Thus, hotlines are one way to encourage the systemization of continuous engagement. Additionally, the confidentiality of these channels enables leaders to de-escalate by retreating from destabilizing stances without losing face in the public eye (Suri 2018; Miller, 2021).

This study seeks to understand the role of hotlines in nuclear risk reduction during the Cold War, how understandings of crisis communications from that era have been operationalized in the U.S.-China context, and the ways in which the current state of Sino-U.S. crisis communication via hotlines can be improved.

## **Cold War U.S.-Soviet Hotlines**

### **Origin and Intention**

The Moscow-Washington Direct Communications Link (a.k.a. DCL, MOLINK) constitutes the earliest CBM established between the two Cold War superpowers beyond bilateral dialogues (Borawski, 1986). Proposed at the 1962 Geneva Disarmament Conference, the concept of a near-instant communications channel was first explored in an earlier Soviet draft treaty as a mechanism for American

and Soviet leaders to exchange critical information during times of crisis (Hudson, 1973). The "hotline," as it came to be known, was formally established in 1963 to reduce the risk of accident or miscalculation between the two nuclear states. Proponents posited the DCL as a symbol of mutual commitment to rapid and secure communication between heads of state, "only to be used for the most urgent matters of war and peace" (Egilsson, 2003, 17).

### **Design and Relevant Upgrades**

Critical to the DCL's original design was the perhaps counterintuitive lack of a direct voice or video link. Though mentions of the "hotline" tend to evoke Hollywood-style images of a red telephone, original planners determined that live audio calls increased the risk of miscommunication and potential escalation; tone, mistranslation, and misinterpretation all might unintentionally heighten tensions (Nye, 1984, 408). Furthermore, 1960s audio encryption technology proved unfit for safeguarding extreme matters of national security.

The DCL initially allowed wire telegraph and radiotelegraph service between two terminals—one in the Pentagon's National Military Command Center and one in Moscow (Washington-Moscow Hotline, 2022). It was later updated with satellite capabilities (1978), fax (1985), and secure email and chat (2007) that enable image and file sharing. While direct voice link capacity was added in 1990, this feature functions separately from the DCL and is more commonly used for "diplomatic and scheduled traffic," not leader-to-leader crisis communications.

The U.S. DCL terminal was originally manned 24/7 by military personnel, tested hourly, and overseen by the Joint Chiefs of Staff. The Pentagon terminal was frequented by defense personnel such as head of Strategic Air Command Gen. Curtis LeMay (Vergun, 2013). Two additional U.S. terminals have since been established in the White House military communications center and at an alternate military command center in Raven Rock Mountain, Pennsylvania.

Beyond technological enhancements, the DCL has also undergone a number of iterations in scope. The 1971 Accidents Measures Agreement expanded

the circumstances under which the DCL might be used to include conveying notifications of otherwise ambiguous missile launches (Miller, 2021). A 1999 memorandum also altered DCL security clearance, enabling connection between the chairman of the Russian government and U.S. vice president, as well as between the secretary of the Russian Security Council and the American national security advisor. Thus, the current configuration of the DCL enables communication among a slightly larger constituency on a broader range of issues.

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In addition to the DCL, there exists another variety of temporary direct communications channel known as a deconfliction line. The U.S. and Russia established their first deconfliction line in 2015 during their concurrent but independent interventions in Syria (Gambrell, 2017). This line connected the Russian Ministry of Defense with the forward headquarters of U.S. Central Command in Qatar. Senior officials successfully collaborated with air traffic controllers to ensure no aircraft collisions occurred, but Russia withdrew from this communication channel after a 2017 missile strike by the U.S. despite forewarning via the deconfliction line. Another U.S.-Russia deconfliction line was established in March 2022 to reduce the risk of miscalculation during the conflict in Ukraine (Stewart and Ali, 2022). This direct phone link connects U.S. European Command and the Russian Ministry of Defense and has been used once when Russia undertook military action near "critical infrastructure" in Ukraine.

#### **Examples and Analysis of Use**

The first use of the Direct Communications Link was to inform the Soviet Union of the assassination of Kennedy (Washington-Moscow Hotline 2022; Stone, 1988). Since then, it has been used in

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noncrisis situations including U.S.-USSR updates on the 1968 Apollo moon mission and attempts by Carter to reach his counterpart during SALT II negotiations (Stone, 1988). However, the most salient examples of the DCL's use have occurred during crises "in the context of wars involving other parties, in situations in which the interests of Washington and Moscow were in conflict and especially in which there was some possibility that their capabilities might collide" (Miller, 2021). These instances are listed in the following timeline, a few of which will be examined in further depth below (adapted from Washington-Moscow Hotline, 2022; Stone, 1988; Hudson, 1973; Borawski, 1986).

#### **Timeline of DCL Use in Crises**

2003 Iraq War

1967 Six-Day War between Egypt and Israel 1971 India-Pakistan War 1973 Yom Kippur War 1974 Turkish invasion of Cyprus 1979 Russian invasion of Afghanistan 1981 Threat of Russian invasion of Poland 1982 Israeli invasion of Lebanon 1991 Gulf War

Instances of use enable assessment of the DCL's value. In "Trusting Through the Moscow-Washington Hotline," authors Simon and Simon rely on symbolic interactionist role theory in their novel analysis of the hotline. This framework considers two actors who adopt roles as trustor or trustee based on their perceptions of their shared circumstances. These roles consist of expectations about the behavior of both actors that, when aligned, can lead to cooperation toward mutually beneficial outcomes. This is distinct from decision-making based on previous experience, interests, or identity, all of which may play a role without constituting the primary driver of role adoption.

In the case of nuclear crises, those outcomes are de-escalation and peace, which can theoretically be achieved by actors "opting out of their role as a distruster and choosing to behave as though they trust each other" regardless of whether they truly do (Simon and Simon, 2021, 660). This allows the

actors to affirm the credibility of their communications and postpone resolution of more entrenched conflicts in the name of near-term tension reduction.

The hotline's ability to foster this kind of shortterm relationship relies on three key factors: the confidentiality of messages, the shared identification of the situation as a crisis, and the sustaining of dialogue at the leader-to-leader level. Once these three criteria are met, a delicate third space can exist between heads of state in which they are temporarily freed from the constraints of typical diplomacy and media pressures (posturing, refusing to retreat, sensationalizing, etc.). This allows them to earnestly discuss their mutual expectations for norms of behavior between them. In this context, trust is "a reaction to risk and uncertainty" that "defines an actor's acceptance of vulnerability to another" (Simon and Simon, 2021, 660). While fragile, one key strength of the hotline is that it enables the formation of this interpersonal trust in the absence of greater bilateral political trust-especially when other diplomatic channels have been halted or deemed untrustworthy as a result of a fraught political relationship or similar factors.

The Six-Day War (1967) between Egypt and Israel exhibited the power of hotlines in suspending adversarial perceptions about one's counterpart. Prior to the crisis, the Soviets viewed President Lyndon B. Johnson as "impulsive" and capable of "losing his cool in a crisis" (Simon and Simon, 2021, 665). This created an impression of unpredictability, which could have led to miscalculation and misunderstanding on the part of the Soviets about American intentions throughout the conflict. However, over the course of 19 hotline messages, Premier Alexei Kosygin grew to both understand and respect Johnson—the two exchanged a number of reassuring gestures that reestablished equilibrium. Their reciprocal consideration for the other side—sending prior notice of force movements, clarifying intentions—reduced sources of distrust. However, because of the inability of either side to fully de-escalate conflict between Israel and Egypt, the hotline also served as a channel for increased pressure and "signaling determination" (Miller, 2021). While the hotline facilitated both the cooling and heating of relations throughout this episode, the crisis was ultimately resolved peacefully.

The 1973 Arab-Israeli War similarly exemplifies the hotline's ability to establish or tarnish credibility. "[Richard Nixon and Leonid Brezhnev's] correspondence, which entailed fifty-five pre-war messages, was the means by which they first established outcome expectations and set behavioral standards of frank and businesslike-rather than ideologically motivated-conduct" (Simon and Simon, 2021, 667). The trust they developed enabled Brezhnev to accept Nixon's reassurances that his inflammatory views in the press and public policy—often in direct contradiction to his sincere and cooperative hotline messages—were a politically useful facade, while his personal (hotline) communications with Brezhnev were to be trusted. As a result, both parties were able to suspend doubts about the other's credibility to more fully engage in crisis management. This also enabled the sharing of sensitive information and personal grievances when one party felt the other had failed to meet mutually defined expectations. Expressions between leaders of their disappointment, confusion, and disagreement in particular reinforce claims about the hotline's unique ability to create space for mutual understanding and cooperation.

Under these circumstances, hotlines transcend their role as merely a mode of communication and instead represent a unique and temporary liminal space in which messages deemed untrustworthy when received through other channels are granted enhanced credibility (Simon and Simon, 2021). This is because of the deeply rooted and intentionally reinforced perception that any use of the hotline indicates the utmost severity of circumstances; the Soviets were deeply alarmed when Carter once attempted to use the hotline in non-crisis scenario and requested he refrain from such behavior in the future for this very reason (Stone, 1988). This indicates a greater level of attention and a greater threshold for use.

For all of these reasons, initiation and regular upgrading of a hotline has tended to be a relatively noncontroversial first step toward improving—or at least demonstrating the intention to improve—bilateral relations. During times of heightened tension when other bilateral engagement has ceased—e.g.,

during the pause in START and INF treaty negotiations—the DCL has still received formal attention and mutual agreement on upgrades. With this in mind, hotlines may also be particularly effective when used as a symbol of increased mutual understanding; they can be utilized in the public sphere to reassure the general public that progress is underway (Egilsson, 2003).

Beyond the development of trust and the symbolic value of communications, hotlines are also capable of precipitating greater CBMs. Army Col. Charles Fitzgerald, the DCL's first director and eventual translator for the SALT I negotiations, believed that the success of early CBMs like the hotline had the potential to precipitate even greater connection; he went so far as to advocate military personnel exchanges between the U.S. and USSR (Vergun, 2013). This is one of many possible next steps once foundational CBMs like dialogues and hotlines are established.

Expressions between leaders of their disappointment, confusion, and disagreement in particular reinforce claims about the hotline's unique ability to create space for mutual understanding and cooperation.

However, a balanced perspective must also consider well-founded criticisms of hotlines. Of utmost concern is the potential for inflammatory use. The DCL is a neutral tool capable of enabling cooperation, but it is also susceptible to intentional misuse, as Secretary of State Henry Kissinger noted was the case when inflammatory American rhetoric heightened tensions in a few Cold War hotline exchanges including the 1971 war between India and Pakistan (Miller, 2021). A hotline can be used to convey "false information, misleading exchanges, duplicitous messages" and serve as a "pipeline for expressions of warnings and escalatory pressures," thus worsening a crisis (Miller, 2021). This is especially risky when one side is attempting to engage in genuine trust-building. However, even without malicious intentions, parties to a hotline may inadvertently alarm their counterpart. Simon and Simon

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note the fragility of the temporary trust between heads of state in crisis, stating that the relationship is susceptible to intentional deception and third-party interference. Furthermore, repeated instances of discrepancy between words and actions can threaten credibility, disrupting trust and weakening incentives for further communication and information sharing (Simon and Simon, 2021).

While these concerns are valid and deserve careful consideration, scholars have also cited uses of the DCL that did not swiftly precipitate peace as having still contributed to stability by reducing the risk of miscalculation. This was true when U.S. and Soviet leaders communicated via hotline during the USSR's invasion of Afghanistan in 1979 and when the USSR threatened to invade Poland in 1981 (Suri, 2018). Furthermore, heated rhetoric via hotline communications has not necessarily escalated crisis scenarios: Threats by both presidents Nixon (India-Pakistan 1971) and Ronald Reagan (USSR-Poland 1981) resulted in an extended time frame for de-escalation, rather than escalation to war.

These differences – particularly the lack of a 'modern Cuban Missile Crisis' – have been cited as one reason for the differences in the Soviet Union's and China's willingness to engage with the hotline.

Ultimately, despite its theoretical potential for misuse, the DCL has served for nearly 50 years as a "limited but practical" and "effective" crisis management tool that simultaneously enables trust and cooperation during acute crises while laying the groundwork for further CBMs (Egilsson, 2003). From this historical case study, one can extrapolate the original objectives of the hotline, the benefits it has provided, and its overall value as a crisis communication mechanism that can be replicated in other bilateral relationships. This context provides the basis for understanding the initiation and implementation of similar mechanisms in the U.S.-China context.

## U.S.-China Hotlines and Crisis Communication Infrastructure

## **Origin and Intention**

Like the Cold War hotline, the existing hotlines between Washington and Beijing were adopted in order to provide direct communication channels to manage crises and reduce the risk of nuclear war. The first proposal for a Sino-U.S. leader-to-leader direct communications channel was made in 1971 during visits by Nixon and Kissinger to China in conversation with Premier Zhou Enlai (Egilsson, 2003). Though these meetings occurred prior to the establishment of full diplomatic relations, the U.S. offered an agreement on preventing accidental nuclear war as a conduit to creating new crisis communications infrastructure. However, Nixon and Kissinger received no reply from their Chinese counterparts; thus, the development of a presidential hotline was tabled for a number of decades.

Revived interest in the possible hotline in the early 1990s has been attributed in some circles to China's desire to revitalize its international image in the wake of Tiananmen and to leverage the legitimizing symbolic power of hotlines as "confirmation of its superpower status" (Egilsson, 2003). In 1998, the two countries officially signed an agreement to establish the Beijing-Washington hotline, which came online under President Bill Clinton (Kimball, 2020). Here it is important to note the distinction between Moscow's and Beijing's reasons for adopting a hotline and the stark contrast in the bilateral relationships at the time of agreement. These differences – particularly the lack of a "modern Cuban Missile Crisis" - have been cited as one reason for the differences in the Soviet Union's and China's willingness to engage with the hotline.

In addition to the Beijing-Washington hotline, other crisis communication mechanisms grew out of two dialogues Clinton initiated—the Defense Consultative Talks (DCT-1996) and Military Maritime Consultative Agreement (MMCA-1997)—to coordinate information sharing between the U.S. and Chinese militaries (Odell, 2021). These military-to-military engagements, which will be further discussed in a later chapter, resulted in the establishment of the Defense Telephone Link (DTL). This secondary hotline was agreed upon in

2006 by Presidents George W. Bush and Hu Jintao to "advance bilateral military ties" (Odell, 2021; Li, 2008). As per the treaty, the hotline intended to connect the Zhongnanhai Telecommunications Directorate and the U.S. Office of the Secretary of Defense Communications. Upon receipt of a request, Zhongnanhai would be tasked with forwarding communications to PLA Headquarters or the Foreign Affairs Office of the Chinese Ministry of National Defense. (Cody, 2007). The Bush administration also introduced the Defense Policy Coordination Talks (DPCT) as a bolster for the MMCA; thus, risk reduction and transparency remained key topics of discussion in the bilateral relationship with communication, addressing nuclear concerns, and strengthening military relations emerging as strong desires on both sides as they developed plans to execute the DTL agreement.

Preparation for the DTL culminated in a 2008 meeting between the U.S. deputy assistant secretary of defense and China's director of the Defense Ministry's foreign affairs office, in which both sides enumerated the myriad reasons for establishing this risk-reduction measure (Li, 2008). Not unlike justifications for the hotline provided by U.S. and Soviet officials, the American and Chinese statements emphasized the need for strong crisis communication channels between military leaders and expressed concerns about increasing tensions and possible miscalculation—perhaps, for example, over U.S. arms sales to Taiwan. The DTL came online following these discussions in 2008, the agreement for which includes the following:

- The DTL is primarily for communication between the U.S. secretary of defense and the Chinese minister of national defense, though mutual agreement allows for communication between other defense officials.
- All requests should be sent 48 hours in advance.
- Immediate official exchange may be requested during a crisis through an initial working-level call.
- Topics of discussion should include: any emergency between Chinese and U.S. armed forces, major events regarding Chinese and U.S. armed

- forces, important issues regarding bilateral military-to-military exchange, etc.
- Any differences in the interpretation of application of the agreement should be resolved through consultation.

### Design, Infrastructure, and Upgrades

Following the establishment of the presidential hotline (Beijing-Washington Hotline) in 1998 and the military-to-military DTL in 2008, a number of upgrades, alterations, and expansions have been proposed—though not all have been implemented.

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Proposals in 2011 called for the establishment of a "cyber hotline" to jointly combat cybercrime and spam (Segal, 2011). The U.S. and Russia were in discussions on a similar mechanism, but while the Moscow-Washington link was later expanded to include cyber concerns, U.S.-China discussions ended as quickly as they began for reasons that remain unclear. These discussions were later revived and implemented with the first test of the U.S.-China Cybercrime and Related Issues Hotline in 2016, a measure that encompasses only commercial cyber theft concerns, not military cyberthreats (Joint Summary, 2016; Xu and Lu, 2021).

In 2014, the two nations adopted a nonbinding memorandum of understanding (MOU) to the aforementioned Military Maritime Consultative Agreement (1998) known as "Agreements on the Notifications of Major Military Activities," which utilizes the DTL. During this time, accident agreements and codes of conduct like the Code for Unplanned Encounters also began to take on a stronger role in the U.S.-China risk reduction

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framework. An MOU titled "Rules of Behavior for the Safety of Air and Maritime Encounters" codified "rules of the road" for air encounters in accordance with existing international norms and laid the foundation for further discussions under the MMCA framework. In 2015, Presidents Barack Obama and Xi Jinping agreed to create an audiovisual "military crisis notification mechanism" via the DTL through an annex to this MOU (Borger, 2021; Odell, 2021). This created procedures for utilizing the DTL to connect both militaries "at the appropriate level in a timely fashion" (Office of the Secretary of Defense, 2016). Thus, the DTL shifted away from its primary use in crisis communications toward a more regular communication model similar to that of the U.S.-Russia NRRC, which will be discussed in depth in the following chapter. The altered procedures for the DTL included the following (Borger, 2021):

- Requests should include date of proposal; specify voice, video, or non-secure phone; officer/official initiating and expected to receive (name and title); reason; requested date and time; and alternate date and time.
- The expectation that requests will receive response within 24 hours should be formalized.
- If no consensus is reached between proposed officials, either side can propose lower-level or alternative counterparts.

This agreement was taken as a symbolic commitment to "normalizing" communications, and a goodwill call was made between naval officials in the South China Sea immediately following the agreement.

These MOUs resulted from more than 10 rounds of bilateral negotiation following Xi's proposal during a 2013 summit with Obama to develop targeted CBMs (Office of the Secretary of Defense, 2015). The two agreements prompted optimism from the Chinese side; in 2015 Maj. Gen. Yao Yunzhu of China's Academy of Military Science highlighted the flexible nature of such agreements and their potential for improvement and expansion as the basis for additional CBMs (Yao, 2015). Overall, these efforts were perceived to contribute to predictability and stability, and additional annexes—including a ballistic missile launch

notification agreement, a measure that already exists between the U.S. and Russia—were discussed the following year.

Two years later, 2017 marked a shift in substantive action as Track 1 diplomatic and security dialogues between joint staff renewed emphasis on direct communication between the Pentagon and PLA headquarters via the "Agreement to Increase Communication" (Garamone, 2017). This measure explicitly sought to "lessen miscalculation" and "mitigate crisis" by increasing military-to-military contacts. Similar sentiments prevailed in October 2020 when the bilateral Crisis Communication Working Group hosted its inaugural meeting (Office of the Secretary of Defense, 2020). These video meetings between high-level officials were intended to "discuss crisis communications, crisis prevention, and crisis management" as well as "build mutual understanding." However, other mechanisms degraded during this time period as disputes over agenda-setting prevented annual MMCA meetings from taking place (Odell, 2021).

The most recent proposal for supplementing communications by expanding the role of hotlines resulted from two close encounters in February 2022 between the Chinese Space Station and Starlink satellites owned by American entrepreneur Elon Musk (Hitchens, 2022). China suggested the creation of a DCL for the reporting of close orbital approaches to satellites in space as China asserts the U.S. was unreachable during the time frame of the potential collisions. While the U.S. has denied claims that Chinese counterparts tried to reach them through any official communications mechanism, China maintains that their communications were ignored and that a direct link would be useful. China does not currently have a bilateral agreement with U.S. Space Command (SPACECOM), the U.S. body responsible for the Space Surveillance Network and Space. Track.org, which alerts relevant parties when close encounters are imminent. China's reluctance to utilize these existing mechanisms is at least partly because of a desire to deny U.S. authority in defining international operational parameters for avoiding emergency collisions. While a space-focused hotline has not materialized, China has begun independently sharing its orbital information on a government website to prevent future

close encounters, an indicator that China is willing to implement creative transparency methods of risk reduction that align with its perspectives on CBMs as explained in a previous chapter.

#### **China's Other Hotlines**

China operates a number of other hotlines with allies and adversaries alike. The 1998 Sino-Soviet nuclear hotline was the first to be established; however, the existence of a DCL between Chinese and Soviet leaders actually predates rapprochement. As early as 1969, the Soviets attempted to contact Chairman Mao and other high-level leaders through a similar hotlinelike mechanism during a pressing border conflict, but their efforts were refused by communications operators who deemed them "Soviet revisionists" and refused to contact higher-level leadership. The Soviets were told that this communication method "was no longer advantageous and that normal diplomatic channels would suffice" (Egilsson, 2003). This episode was one early indicator that China and the Soviet Union held starkly different beliefs about the objectives and necessity of a leader-to-leader hotline.

The Sino-Soviet direct communications link was reinstated in 1998 following rapprochement, this time linking the two defense ministries (Kimball, 2020). Aside from the Beijing-Washington Hotline, this remains China's only other nuclear hotline. However, China maintains defense hotlines with India, South Korea, and Japan, as well as direct communications channels with Vietnam's Ministry of Foreign Affairs and Taiwan's chief of cross-strait affairs (Kimball, 2020).

## Current Status of U.S.-China Crisis Communications

The history of U.S.-China crisis communications is troubled, with both sides historically claiming the other has failed to respond to their requests for contact—an obstacle not faced in the relationship between the U.S. and the Soviet Union. The U.S. cites three primary examples of failed attempts to reach China. The first instance occurred prior to the establishment of the Beijing-Washington Hotline when President George H.W. Bush was unable to reach President Deng Xiaoping after the violence in Tiananmen Square (Mann, 1999). Following

the presidential hotline's establishment, Clinton sought to speak with President Jiang Zemin after the American bombing of the Chinese Embassy in Belgrade, but he also received no reply. Then, when Chinese and U.S. aircraft collided over Hainan in 2001, the U.S. was unable to reach China's foreign ministry via the DTL for over 12 hours (Cody, 2007).

Communication was critical to reducing anxieties and the potential for misjudgment; one phone call between Clinton and Jiang changed the trajectory of the handling of the embassy incident.

Analysis of the latter two incidents by Fudan University's Associate Dean for the School of International Relations and Public Affairs Wu Xinbo in his 2008 "Managing Crisis and Sustaining Peace between China and the United States" offers insight into how these crises were handled from the perspectives of both countries. He notes that communication was critical to reducing anxieties and the potential for misjudgment; one phone call between Clinton and Jiang changed the trajectory of the handling of the embassy incident even after China postponed high-level security dialogues. Conversely, public calls from the George W. Bush administration for accountability at the presidential level—rather than private communications—during the EP3 incident hampered progress, resulting in the U.S. eventually suspending all bilateral contacts including academic visits and six congressional delegations.

Wu Xinbo also highlights the importance of understanding the "internal processes of each side," which were often at odds (Wu, 2008, 10). While the Chinese Ministry of Foreign Affairs was empowered to speak on these incidents, they did not always have sufficient information about PLA activities to comment, nor could decisions be made without the approval of the Standing Committee. It remains to be seen if issues in the speed and accuracy of information sharing within the PRC have been remedied

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by the 2013 creation of China's Central National Security Commission, but it is still true that the PLA is not allowed to engage in military-to-military communication during crises until party leaders have agreed upon the content of messages (Morris and Marcrum, 2022).

The possibility of accidental collision in the air or at sea remains a key concern for crisis prevention and communication.

Conversely, actions taken by the U.S. military prior to the approval of the president or State Department sometimes heightened tensions-indicating that neither country can claim their internal processes offer a singular solution to the challenges of crisis management (Wu, 2008). While the U.S. consistently prioritized direct communication, it sometimes alienated China with its direct utilitarian approach, which was perceived as callous by Chinese officials who prioritized the assignment of responsibility and the development of symbolic gestures in alignment with the Chinese focus on relationships and general principles. Wu also offered thoughts on mitigating future crises, positing eight principles for handling future accidents, which is abbreviated in this research as Appendix B.

Despite the myriad lessons garnered from these incidents, recent instances have prompted further concerns about bilateral crisis communications. In 2009, for example, the USS Impeccable was shadowed by five Chinese vessels during a mission in the South China Sea (Wolfgang, 2020). Military sources familiar with the incident said the situation was only resolved after a complex series of phone calls from U.S. Command in the Pacific to the American embassy in Beijing, then to the Chinese Foreign Ministry and ultimately the PLA. In other instances, Chinese military officials have been accused of failing to properly warn the U.S. and other nations of military exercises in proximity to their ships, such as a 2013 incident in which the USS Cowpens nearly collided with Chinese warships (Wolfgang,

2020). Most recently, on Dec. 29, 2022, U.S. INDOPACOM reported a PLA pilot conducted an "unsafe maneuver" by flying within 20 feet of a U.S. military aircraft while intercepting it over the South China sea (USINDOPACOM, 2022). The possibility of accidental collision in the air or at sea remains a key concern for crisis prevention and communication.

High-level leader-to-leader engagement with hotlines also remains unreliable. Though some experts have claimed bilateral relations have evolved beyond the era in which Hu's administration severed Beijing-Washington Hotline communications to "protest U.S. policies" and the period of tit-for-tat suspension of military interactions, questions remain as to the ability of the U.S. and China to establish trustworthy crisis communications (Odell, 2021; Yao; 2015). Despite the successful use of the DTL for a scheduled meeting between Presidents Biden and Xi in 2021, experts believe it remains unclear whether the presidential hotline would be answered in a crisis (Kine and Luthi, 2021).

Many American experts have commented in recent years on the need for better Sino-American crisis communications. The following quotes provide a sample of their views:

- Lloyd Austin, current U.S. secretary of defense: "[The U.S. is] committed to pursuing a constructive stable relationship with China—including stronger crisis communications with the PLA" (Haenle, 2021).
- Caitlin Talmadge, a non-resident senior fellow in foreign policy at the Brookings Institution: "The lack of working crisis communications channels, as well as a broader lack of in-depth regular strategic dialogue, is a serious problem in the U.S.-China relationship. It raises the odds of miscalculation and escalation, particularly over Taiwan. Both sides need to understand the other's red lines and would benefit from establishing mechanisms for an off-ramp in the event of a crisis or war" (Borger, 2021).
- Patricia M. Kim, a senior policy analyst with the China Program at the U.S. Institute of Peace:
   "The proper operation of hotlines and other crisis

management mechanisms are needed most when bilateral relations are poor and, therefore, the chances of misperceptions and conflict escalation are high. Given the downward trajectory of U.S.-China relations, properly functioning crisis management mechanisms will become much more important for preventing longstanding tensions from evolving into hot conflicts" (Wolfgang, 2020).

- Navy Capt. James Fanell, former director of intelligence for the U.S. Pacific Fleet: "I am not sure how effective such a communications channel would be, as [China] may try and make us dependent upon such a protocol but then in the midst of a crisis fail to answer the other end of the line" (Wolfgang, 2020).
- Lyle J. Morris, a RAND senior policy analyst, and Col. Kyle Marcrum: "The PRC does not hold the same value and goals for hotlines as the United States: It views them as tools to manipulate rather than to solve crises. The United States is better off changing its expectations, understanding how the PRC views crisis communications, and shifting the focus to the internal, inter-agency process by which U.S. policymakers would coordinate in a crisis with Beijing" (Morris and Marcrum, 2022).

American policy experts, senior defense leaders, and politicians have also shared their understanding of China's perceptions of crisis communications mechanisms. First, a lack of historical experience with nuclear CBMs has led to suspicion from China about the motivations behind the creation and potential misuse of crisis communications avenues like hotlines (Atwood, 2021). Although some authors report that China now has a more robust understanding and willingness to engage in CBMs in general, as noted in the section on Chinese perceptions, others note China's residual hesitance to accept and engage with American risk-reduction mechanisms at the risk of "[giving] credence and legitimacy to American military exercises and operations near their borders" (Borger, 2021).

These perceptions of Chinese reservations hold true based on interviews conducted with Chinese nuclear and arms control experts. Some have noted that many in China's security community maintain a strong preference for crisis prevention and view their American counterparts' dedication to crisis management as indicative of intentions to provoke conflict in the region (Li, 2003). This perspective is supported by comments from Tan Kefei, a spokesperson for China's defense ministry, who said, "[Washington] should not claim that it wants to set up a hotline while it keeps boosting its military presence in the Asia-Pacific" (Haenle, 2021). This is indicative of a larger divide among Chinese security experts, those who "prefer deterrence over dialogue" and those who seek greater exchange in order to buttress what has been described as a "rudimentary" bilateral CBM framework (Haenle, 2021). However, it would be a mistake to attribute China's lukewarm embrace of the nuclear hotline solely to misunderstanding of American intentions – more likely, according to Maj. Gen. Yao, it results from different strategic interests (Yao, 2015).

Some have noted that many in China's security community maintain a strong preference for crisis prevention and view their American counterparts' dedication to crisis management as indicative of intentions to provoke conflict in the region.

Furthermore, while there are challenges within the U.S.-China relationship that may give China pause in responding to the nuclear hotline, evidence suggests that China's understanding of the goals of hotline-based crisis communications also differ from its counterparts. In addition to the aforementioned rebuffing of Soviet hotline calls during the 1969 border conflict, China has also ignored calls from Vietnamese officials as recently as 2014 over Chinese vessels in contested waters of the South China Sea (Atwood, 2021). South Korea also encountered delayed communication when it waited more than 15 minutes for Beijing's response during a 2017 incident involving Chinese bombers deployed over Korean airspace (Shim, 2017). It has thus been theorized that China's

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willingness to engage with hotline communications is dependent on the state of the particular bilateral relationship and whether China might view ignoring communication as justified retaliation; the South Korean incident, for example, occurred in the wake of the U.S.'s placement of THAAD missile systems on the peninsula. Moreover, it seems China has fewer qualms about utilizing hotlines in non-crisis scenarios. Within the same week of rejecting President Clinton's call during the Belgrade incident, President Jiang spoke with President Boris Yeltsin via the Sino-Soviet hotline about non-crisis-related topics.

The U.S. and China should seek common ground in defining crisis, a process that should include reflecting on previous incidents and producing convergent translations of any terms that currently contribute to misunderstanding.

These signs gesture to fundamentally different expectations for crisis communications mechanisms than those faced by the U.S. and the Soviet Union during the Cold War. Thus, they give rise to a number of suggestions for improving bilateral CBMs informed by Chinese perspectives.

## Recommendations for Hotlines and Crisis Communication

1. The U.S. and China should develop a shared understanding of what constitutes "crisis" and agree upon general principles of crisis communication as they relate to different categories of crises.

Having faced the existential risks posed by the Cuban Missile Crisis together, the U.S. and USSR had clear, shared incentives to communicate prior to and during crises. Through communication, they also developed a shared understanding of what constituted crisis and what developments could lead to escalation. The U.S. and China do not have this shared history nor subsequent shared

perceptions. The original text of the 2008 U.S.-China DTL agreement does not define "crisis," nor does the supplemental "Military Crisis Notification Mechanism For Use of the Defense Telephone Link" (Notification of Major Military Activities, Annex III). Thus, the U.S. and China should seek common ground in defining crisis, a process that should include reflecting on previous incidents and producing convergent translations of any terms that currently contribute to misunderstanding.

The U.S. and China should then pursue agreement upon communication principles for different kinds of crisis. While the U.S. and USSR primarily used the DCL during the Cold War to limit escalation in third-party countries and prevent proxy wars, the U.S. and China must face multiple domains of potential conflict where both sides have immediate interests. They may also encounter a more diverse array of crisis scenarios given advancements in technology and other factors of the Sino-U.S. relationship explained in previous chapters. Thus, both sides would benefit from a more thorough understanding of ideal communication procedures for responding to categories of crisis scenarios, examples of which may include accidents, direct conventional confrontation, third-party conflict, false alarm or malfunction of early warning systems, political upheaval, etc.

The internal operations of both countries will face unique challenges in addressing the risks posed by these distinct crises. Preferred methods of assuaging international concerns related to a domestic political event such as the Jan. 6, 2021, Capitol attack will not be identical to those used to address escalation during a conventional conflict. While leaders may decide some situations require discretion and internal consensus before engaging with official bilateral communication channels, others may require swift sharing of technical or other information to confirm the validity of claims and relevant data. Thus, each nation may view the most desired form and evolution of communication differently.

Understanding how each nation thinks about procedures for handling distinct crises could enable more flexible responses from both sides. Complying with mutually beneficial norms can also serve

as a gesture of commitment to safeguarding the security interests of all parties, reducing concerns about intentional misuse of hotlines or imposing hegemonic requirements on a counterpart. This may require both nations to conduct internal analysis and potentially streamline or otherwise reform their current internal crisis communication institutions, which are, in the case of the U.S., "underequipped to coordinate timely policy responses in a crisis with China" (Morris and Marcrum, 2022).

In light of China's preference for not sharing operational or tactical details in response to hypothetical questions, these discissions should not seek to understand how the other side would respond militarily to a particular incident. Rather, they should seek to generate understanding and agreement upon principles for communication. Examples may include:

- Appropriate channel(s) for initiating contact (presidential hotline, DTL, deconfliction line, etc.).
- Shared norm of confirming receipt of information regardless of intent to respond.
- Internal processes and additional national bodies to be involved in crisis communications (e.g., State Department, Ministry of Foreign Affairs, etc.).
- The order of crisis communication priorities for each country (confirming information, assignment of responsibility, formal apology, retrieval of technology, etc.).
- Strategies for limiting the role of media coverage in escalation in the public forum (limiting information disclosure, refraining from unilateral statements of blame, etc.).
- Appropriate unilateral steps if requests for communication go unanswered.

These discussions should use existing accident agreements, "rules of the road," and codes of conduct as a starting point for understanding how crisis communication may be conducted. They should also consider the history of U.S.-China crisis communication in identifying potential systemic

differences but should not allow discussions to digress into airing out past grievances.

## 2. The U.S. and China should clarify chains of command for receiving and responding to hotline communications.

As evidenced by the Chinese hotline operator who told the Soviet Union during the 1969 border crisis that he would not connect "a revisionist" to Chairman Mao—and evidenced by former Chinese Premier Zhou Enlai's fond recollection of this event—misalignment of nations' perceptions of the criticality of leader-to-leader crisis communication poses a major challenge to crisis management. Thus far, the U.S. has been unable to expect the same level of engagement from China as it had previously experienced with the USSR. It is therefore imperative that nations have clear directives for connecting relevant decision-makers to one another.

Both sides should consider developing loosely predetermined lists of whom they would seek to contact during crisis.

The current DTL agreements note, "During a crisis, if the official or officer requested is unavailable, another official or officer may be proposed, particularly to ensure a timely response." Thus, both sides should consider developing loosely predetermined lists of whom they would seek to contact during crisis - potentially framed as "the person responsible for (or overseeing) x" in case the personnel in these roles change or are unknown. These preferences could be formulated based on chains of command in potential flashpoint locations like the South China Sea. While either side could still refuse to connect selected counterparts—and the PLA still must await approval from above to communicate with foreign militaries during crisis—discussing options could help decision-makers better target their communication requests.

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# 3. The U.S. and China should internally outline acceptable back channels and unofficial mechanisms for precrisis and crisis communications.

During the Cold War, back-channel diplomacy (formal Tracks 1.5 and 2 dialogues as well as informal contacts) provided alternative communication mechanisms when other channels fail. In response to the tenuous state of U.S.-China military-to-military communications, both countries should unilaterally assess existing informal relationships that could facilitate greater mutual understanding during times of crisis. This internal analysis should evaluate private trustworthy connections between the U.S. and PRC that could enable a free flow of information when formal or public communications fail to take place or fail to produce desired results.

Both nations should seek opportunities to strengthen interpersonal relationships between U.S. officials (national security advisor, secretary of state, etc.) and their Chinese counterparts (premier, minister of defense, etc.), and between Chinese and American nuclear experts beyond official dialogues. These channels could be used to initiate off-the-record discussions between leaders, or to prompt reconsideration when recurring dialogues are imperiled because of political disagreements, as was the case between American and Soviet scholars and practitioners.

## 4. The U.S. and China should develop general principles and procedures for establishing temporary deconfliction lines or ongoing theater-level communication.

Established bilaterally during crises, deconfliction lines constitute a middle ground between the role-based trust temporarily established by the original Cold War nuclear hotline and the lower-level relationships built through regularized military-to-military contacts. Deconfliction lines proved

useful during the Syrian War and are now active between the U.S. and Russia in navigating the War in Ukraine. While the U.S. and China have less bilateral experience with this crisis communication mechanism than the U.S. and Russia, it could still offer an acceptable form of direct military-to-military communication between the most relevant personnel.

Explicitly defining specific routes for regional communication may aid in developing lower-level military contacts in key areas of potential future conflict. For example, Maj. Gen. Yao Yunzhu posited in 2015 the possibility of the U.S. and China establishing communication channels between their theater commands. Zhang Tuosheng, council member of the Chinese Arms Control and Disarmament Association, has also recently advocated for establishing theater-level contact (Zhang, 2021). This might entail connecting U.S. Indo-Pacific Command to China's chief of cross-strait affairs or Eastern Theater Command. Such connections could facilitate real-time communication between relevant parties in the event of a conflict related to Taiwan.

While historically Chinese leaders at this level have not been authorized to communicate with counterparts directly without prior approval from above, China may find it useful to have these lines of communication open to more readily aid the flow of communication once decisions at higher levels have been made. China can still choose whether to engage with these deconfliction lines, so their establishment will not inherently challenge China's top-down military structure. It may be useful to begin these discussions by agreeing upon intentions and general principles of engagement for this bilateral mechanism, affirming mutual commitment to timely communication and assuaging Chinese concerns that establishing theater-level contacts indicates a U.S. desire to initiate or exacerbate theater-level conflict.

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## **Nuclear Risk Reduction Centers**

By Raven Witherspoon

The Nuclear Risk Reduction Center ... has not generated earth-shattering headlines. But it has worked quietly to help us avoid shattering the earth.

-Former Secretary of State Madeleine Albright, 2001

## Summary

For over 35 years, NRRCs have sought to foster cooperation and interdependence, prevent miscalculation and misunderstanding, reduce suspicion and opportunities for coercion, and increase predictability, transparency, and awareness of a counterpart's intentions. As institutions for both crisis prevention and management, they act as mechanisms for prior notification of military activity and verification of treaty compliance. They are cited as one of the most resilient and well-utilized Cold War CBMs. However, no comparable singular institution exists in the U.S.-China relationship.

This research seeks to understand the role of Cold War NRRCs, the mechanisms by which they enhanced stability (military-to-military engagement and prior notification), the comparable institutions or processes that exist today in the U.S. and China crisis prevention framework, and how these might be improved through the application of Chinese perspectives.

## Cold War Nuclear Risk Reduction Centers

## **Origin and Intention**

The earliest iteration of U.S.-Soviet NRRCs was proposed in 1982 by U.S. Senators Sam Nunn and John Warner through the U.S. Congressional Working Group on Nuclear Risk Reduction (United States Department of State, 2012). A Soviet-American joint task force convened to explore the possibility of establishing this kind of "crisis control center," as they were then known, and scholar William Ury's work helped lay the foundation for their development (Miller, 2021).

Following the successful establishment of the presidential hotline—and rooted in similar post-Cuban Missile Crisis zeal for CBMs—NRRCs aimed to open communication channels below the head-of-state level during both peacetime and crises (U.S. Department of State, 2009c; Ushakov, 2017). Prior to the outbreak of a crisis, the centers would serve as hubs for information-sharing regarding potentially inflammatory activities, including military exercises and launch notifications. During a crisis, the centers could function as an immediate

communication channel between military leaders and technical experts in both countries (Ury, 1989). In this way, they would operate at the intersection of crisis prevention and crisis management, though they were originally envisioned for preventing crisis (Agreement on the Establishment, 1987).

Communications-based CBMs like NRRCs serve long-term purposes such as 'increas[ing] the transparency and predictability of the relationship, and demonstrat[ing] common interest.'

It was ultimately decided that NRRCs would operate as an enforcement and verification mechanism for arms control agreements and other multilateral CBMs while also functioning as a barrier to escalation resulting from accidents or miscalculation (Ury, 1989; Miller, 2021). Joseph Nye, former U.S. assistant secretary of defense for international security affairs, stated that communications-based CBMs like NRRCs serve long-term purposes such as "increas[ing] the transparency and predictability of the relationship, and demonstrat[ing] common interest" (Nye, 1984, 412). In their theoretical analysis of CBMs, Nye and Ury both noted the potential value of utilizing NRRCs as the launching point for working groups that could discuss inadvertent triggers and design contingency procedures for bilateral conflict. Thus, the official written agreement on establishing NRRCs highlighted the opportunity to build a "new strategic relationship based on mutual trust, openness, predictability, and cooperation" (Agreement on the Establishment, 1987).

These intentions were also made clear in the remarks delivered by President Ronald Reagan and Soviet Foreign Minister Eduard Shevardnadze upon signing the 1987 agreement to establish the NRRCs. Reagan specifically highlighted the NRRCs' role in "reducing the risks of conflicts that could otherwise result from accident, miscalculation, or misunderstanding" (Reagan, 1987). Shevardnadze noted that such cooperative measures were rare during that era

of the Cold War, but that the agreement symbolized a commitment to the Reagan-Gorbachev statement and gestured toward the possibility of further arms reductions.

#### **Design and Upgrades**

NRRCs have consistently utilized the same technology as the DCL to connect the U.S. Department of State with the Soviet Ministry of Defense (Agreement on the Establishment, 1987). Their initial mission was to transmit launch notifications pursuant to responsibilities outlined in the INF treaty, 1971 Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War, and the 1972 Prevention of Incidents On and Over the High Seas.

After receiving notifications—a process that took roughly 30-45 seconds at the time of construction—messages from the Soviet Union were first prioritized by time and "operational sensitivity" before being translated and sent to respective departments within the U.S. government (Newsom, 1998). The U.S. NRRC was also empowered to utilize satellite imagery, rely on other government agencies, or conduct inspections to verify the truth of reports.

Over time, the scope of NRRC notifications was expanded to include six additional channels including a government-to-government communications link (GGCL) with Moscow, the 1992 Organization for Security and Cooperation in Europe network (OSCE), a GGCL with Almaty and Kiev, the 1993 Continuous Communications Link (CCL) with Minsk, the 1995 Arms Control and Regional Security (ACRS) network, and the 1997 Chemical Weapons Convention (CWC) network (U.S. Department of State, 2009a, b). As a result, NRRCs now operate in six languages (English, Russian, Spanish, French, German, and Italian) and enable demonstrations of compliance with more than 20 international agreements spanning more than 100 countries (U.S. Department of State, 2009c). The centers were also endowed in 2013 with an expanded role in cybersecurity, operating under U.S.-Russia cooperation as a new avenue for direct inquiries about cyber concerns (U.S. Office of the Press Secretary, 2013). Table 2 lists treaties currently or previously supported by the NRRCs and is derived from U.S. Department of State (2009a, b).

Table 2. Treaties and Agreements Supported by Nuclear Risk Reduction Centers

| Year | Title                                                                                                                                                                                   | Parties                                                            |  |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
| 1963 | Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water                                                                                                   | 15+ Nations                                                        |  |
| 1971 | Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War (Accidents Measures)                                                                                                | Union of Soviet Socialist Republics<br>United States               |  |
| 1972 | Prevention of Incidents On and Over the High Seas (INCSEA)                                                                                                                              | Union of Soviet Socialist Republics<br>United States               |  |
| 1972 | Interim Agreement Between The United States of America and The<br>Union of Soviet Socialist Republics on Certain Measures With Respect<br>to the Limitation of Strategic Offensive Arms | Union of Soviet Socialist Republics,<br>United States              |  |
| 1973 | Agreement Between The United States of America and The Union of Soviet Socialist Republics on the Prevention of Nuclear War                                                             | Union of Soviet Socialist Republics<br>United States               |  |
| 1979 | Treaty Between The United States of America and The Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms (SALT II)                                         | Union of Soviet Socialist Republics,<br>United States              |  |
| 1980 | Agreement Between The United States of America and The International Atomic Energy Agency for the Application of Safeguards in the United States                                        | United States, the International<br>Atomic Energy Agency (IAEA)    |  |
| 1986 | Confidence- and Security-Building Measures (Stockholm Conference)                                                                                                                       | 15+ Nations                                                        |  |
| 1987 | Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF)                                                                                                        | Union of Soviet Socialist Republics<br>United States               |  |
| 1988 | Agreement on Notifications of Launches of Intercontinental Ballistic<br>Missiles and Submarine-Launched Ballistic Missiles                                                              | Union of Soviet Socialist Republics<br>United States               |  |
| 1989 | Agreement on the Prevention of Dangerous Military Activities (DMA)                                                                                                                      | Union of Soviet Socialist Republics<br>United States               |  |
| 1989 | Agreement on Reciprocal Advance Notification of Major Strategic Exercises (MSE)                                                                                                         | Union of Soviet Socialist Republics<br>United States               |  |
| 1989 | Bilateral Verification Experiment and Data Exchange (Wyoming MOU)                                                                                                                       | Union of Soviet Socialist Republics<br>United States               |  |
| 1990 | Treaty on the Limitation of Underground Nuclear Weapon Tests (TTBT)                                                                                                                     | Union of Soviet Socialist Republics<br>United States               |  |
| 1990 | Treaty on Underground Nuclear Explosions for Peaceful Purposes (PNE)                                                                                                                    | Union of Soviet Socialist Republics<br>United States               |  |
| 1992 | Conventional Armed Forces in Europe (CFE) Treaty                                                                                                                                        | 15+ Nations                                                        |  |
| 1994 | Joint Statement on Strategic Stability and Nuclear Security (SDX)                                                                                                                       | Russian Federation, United States                                  |  |
| 1994 | Treaty on the Reduction and Limitation of Strategic Offensive Arms (START)                                                                                                              | Belarus, Kazakhstan, Russian<br>Federation, Ukraine, United States |  |
| 1997 | Chemical Weapons Convention (CWC)                                                                                                                                                       | 15+ Nations                                                        |  |
| 1999 | Vienna Document 1999 of the Negotiations on Confidence- and Security-Building Measures (CSBM)                                                                                           | 15+ Nations                                                        |  |

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|-----------|------|----|----|
|           |      |    |    |

| 2000 | Memorandum of Understanding on Notifications of Missile Launches (PLNS MOU)                                                                                                                                                         | Russian Federation, United States |  |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--|
| 2000 | Memorandum of Agreement Between the United States of America and the Russian Federation on the Establishment of a Joint Center for the Exchange of Data from Early Warning Systems and Notifications of Missile Launches (JDEC MOA) | Russian Federation, United States |  |
| 2002 | Open Skies (OS) Treaty                                                                                                                                                                                                              | 15+ Nations                       |  |
| 2002 | Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC)                                                                                                                                                                | 15+ Nations                       |  |
| 2016 | Protocol Regarding Activity Threatening Information and Communication Networks, Systems, or Infrastructure (Cyber Security Protocol)                                                                                                | Russian Federation, United States |  |

Overseen by the State Department's Bureau of Arms Control, Verification, and Compliance director, the NRRCs continue to shoulder additional responsibility beyond treaty information transmission: NRRC staff members advise Department of State and interagency policy and operational offices on government-to-government communications including development of standard operating procedures, training programs, and information technology used in telecommunications. The NRRC staff participate in international negotiations and provide expertise within their core competency of communications of arms-control and security-related notifications (U.S. Department of State, 2009c). In these ways, the NRRCs have evolved to encompass a more robust framework of contributions to nuclear risk reduction and confidence-building measures.

#### **Examples and Analysis of Use**

Use of the NRRCs has increased substantially with the addition of new treaties and parties to its mission. While the U.S. and USSR exchanged 1,800 messages in 1988, only nine years later in 1997 they exchanged more than 15,000 messages as a result of 18 additional treaties and agreements (U.S. Department of State, 2009c). Within this official capacity, the NRRCs have aided in the confirmed elimination of a class of missiles under the INF treaty, assisted with the removal of tanks and armored vehicles under the CFE treaty, and directly supported CBMs as outlined in the 2011 Vienna Document via military activity and inspection

information sharing. Beyond their explicit role in regularized information exchange and verification, NRRCs have also been used for crisis communication. When U.S. nuclear forces were placed on high alert during the 2001 terrorist attacks, the U.S. sent messages via the NRRCs to reassure Russia that this posture was intended solely to respond to the terrorist crisis and not intended to threaten Russia (U.S. Department of State, 2009c).

However, unlike the hotline, use of NRRCs to transmit non-crisis or non-treaty-relevant information remains the norm. In this capacity, they have also been used to provide satellite data that Russia has used to avoid collisions with debris from a decaying satellite (Porth, 1998). When the U.S.-Russian embassy communications systems were interrupted by a fire in 1999, the NRRCs were temporarily used as a secondary communication channel. This channel was also used by Obama to warn Russia to cease its cyber-influence campaign during the 2016 presidential election—a warning that official reports claim may have been successful in convincing Russia to limit and even end its interference (Ignatius, 2016).

According to expert analysis, the NRRCs have buttressed the international nuclear risk-reduction regime, supporting ongoing nuclear peace for more than 30 years. As stated by former Secretary of State Madeleine Albright: "The Nuclear Risk Reduction Center ... has not generated earth-shattering headlines. But it has worked quietly to help us avoid shattering the earth" (U.S. Department of State,

2009c). This is a simple but resounding endorsement, especially as multiple authors have noted that Cold War-era treaties, verification methods, and other CBMs are no less necessary today than they were at the time of their conception (Porth, 1998; Newsom, 1998).

The primary success of the NRRCs has been and continues to be their institutionalization and regularization of high-level military communication. During the Cold War, dedicated lines of contact and specific notification procedures helped to facilitate the transmission of critical information in a timely manner to the most relevant recipients. This is because all parties developed a shared set of expectations about the nature of said information (Porth, 1998). By "laying out the who, what, where, when, and how" of treaty compliance, utilization of the centers provided reassurance that all parties believed in and sought to abide by their agreements (U.S. Department of State, 2009c). This was especially important in connecting the State Department and Soviet Ministry of Defense – a linkage that excluded middlemen and reduced hierarchical barriers to communication in recurring peacetime exchanges and crises.

The secondary achievement of the NRRCs is their contribution as foundational institutions for further CBMs. As noted by Soviet scholars, their ability to generate mutual trust and faith in security results from their role in "normalizing the relationship"; NRRCs have increased the transparency, predictability, and reciprocity necessary for further action (U.S. Department of State, 2009c). For example, John D. Holum, former under secretary of state for arms control and international security affairs under President Clinton, noted in a 1998 speech that the U.S. draws "confidence and strength" from the NRRC's success, highlighting ratification of the Comprehensive Test Ban Treaty as a next step derived from the subsequent improvement in relations (Newsom, 1998).

Beyond enabling new agreements, NRRCs have also contributed to bilateral confidence-building through personnel exchanges (U.S. Department of State, 2009c). A 2004 program saw Russia and the U.S. send NRRC watch officers to their counterpart centers to observe proceedings and share perspectives. The success of this exchange led to the

inclusion of other nations in planned exchanges, including Ukraine and Kazakhstan.

With these myriad successes in mind, it appears that Holum's 1998 description of NRRCs as "the most effective and meaningful elements of [the U.S.] national security team" remains relevant (Federation of American Scientists, 1998).

#### Analogous U.S.-China Crisis Prevention Infrastructure

Unlike nuclear hotlines, there is no direct comparison to be made between the Cold War NRRCs and a singular institution in the modern Sino-U.S. context. China is not party to any of the nuclear treaties that rely on NRRCs for verification, and no comparable verification center exists between the two nations despite calls from some in the American security community to establish one (Nuclear Threat Initiative, 2021). This not only indicates a lack of dedicated mechanisms for direct communication about certain kinds of information, but it also means the U.S. and China have had less opportunity than the U.S. and USSR during the Cold War to develop mutual trust via routine engagement with lasting notification channels.

China is not party to any of the nuclear treaties that rely on NRRCs for verification, and no comparable verification center exists between the two nations.

While this constitutes a considerable gap in the institutional bilateral risk reduction framework, it also provides an opportunity for innovation in both drawing lessons from Cold War experiences and in imagining future policy options. It reduces the temptation to uncritically apply Cold War mentalities and frameworks to distinct issues in the modern context. Therefore, this research focuses on the primary functions of the NRRCs in supporting strategic stability, then consider analogous institutions, processes, and mechanisms by which similar

goals may be achieved. This approach draws on the above literature and acknowledges NRRCs' role as both an information CBM that facilitates information-sharing and as a communication CBM—a potential avenue for generating dialogue on critical security issues.

Thankfully, the fact that the U.S. and China do not utilize NRRCs bilaterally does not indicate a lack of existing CBMs relevant to the above objectives. There are a number of disaggregated institutions attempting with varying degrees of success to support elements of risk reduction facilitated by NRRCs, including regular military-to-military contacts and prior notification of military activity.

#### **Military-to-Military Contacts**

One fundamental purpose of NRRCs is to facilitate systematic and regular information exchange between military officials across varying ranks. Cold War NRRCs facilitated the development of a class of diplomatic, military, and technical experts familiar with nuclear risk reduction who were available to interface 24 hours a day, 365 days a year (Miller, 2021). Cultivating this kind of network—a result of repeated good-faith engagement during peacetime-requires time and political will and remains in a relatively early stage in the U.S.-China context as a result of years of tit-for-tat disengagement on both sides. This has complicated the ability to communicate and coordinate at the most basic levels; thus, understanding recent trends in military-to-military engagement is necessary for assessing the current state of Sino-U.S. crisis prevention mechanisms.

An authoritative, though not comprehensive, resource on the nature and frequency of U.S.-China military-to-military contacts is the "U.S.-PRC Defense Contacts and Exchanges" chapter of the Pentagon's annual China Military Power Report. This section outlines the goals, strategy, and achievements of the U.S. DOD in its relationship with the PRC.

The DOD's military contacts in particular are said to "focus on risk reduction and mitigating the chance of misunderstanding" with "the long-term goal of advancing transparency and nonaggression" (2018). The stated priorities have shifted slightly in

character and wording over time, though some recur in subsequent iterations of the report:

- "Building sustained and substantive dialogue through policy dialogues and senior leader engagements" (2018)
- "Building concrete, practical cooperation in areas of mutual interest" (2018)
- "Enhancing risk management efforts that diminish the potential for misunderstanding or miscalculation" (2018)
- "Encouraging China to act in ways consistent with the free and open international order" (2019)
- "Promoting risk reduction and risk management efforts that diminish the potential for misunderstanding or miscalculation" (2019)
- "Challenge the PRC's behaviors inconsistent with the free and open international order" (2020)
- "Promote risk reduction and risk management to limit the potential for misunderstanding or miscalculation that could escalate into crisis" (2020)
- "Build the structures and habits necessary to manage crises and prevent incidents from spiraling into conflict" (2020)

The trend of these objectives indicates increased attention to crisis prevention, as well as a more hawkish view of China's behavior regarding the current international order.

China's attention toward crisis management and prevention has also grown in the past decade. According to an anonymous interviewee with experience in Sino-American Track 2 dialogues, the establishment of the Communist Party's National Security Commission at the 2013 18th Party Congress marked a positive shift in perceptions of military-to-military engagement as this new institution consolidated decision-making power on crisis management and interactions (Anonymous, personal communication, April 4, 2022). This was substantiated by changed behavior; rather than continuing its practice of "canceling dialogues to signal displeasure," China began to choose

Table 3. Military-to-Military Contacts Between the U.S. and China 2016-2021

|                                     | 2016                                             | 2017                                                                                                                                                                                              | 2018                                                                                                                                                                 | 2019                                                       | 2020 | 2021                                                                                                             |
|-------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------|
| High-level<br>Visits to<br>China    | • U.S. Chief of<br>Naval Operations<br>to China  | Chairman of the Joint Chiefs of Staff                                                                                                                                                             | • Secretary of<br>Defense                                                                                                                                            | Chief of Naval     Operations                              |      |                                                                                                                  |
|                                     | • U.S. Chief of Staff<br>of the Army to<br>China |                                                                                                                                                                                                   |                                                                                                                                                                      |                                                            |      |                                                                                                                  |
| High-level<br>Visits to the<br>U.S. | Theater                                          | Southern Theater Commander Deputy Chief of the Joint Staff Department                                                                                                                             | PLA Army<br>Commander<br>Minister of<br>Defense                                                                                                                      |                                                            |      |                                                                                                                  |
| Recurrent                           | Coordination<br>Talks in China                   | Coordination Talks in China Diplomatic and Security Dialogue Military Maritime Consultative Agreement Working Group in China and the Plenary in the United States Army-to-Army Dialogue Mechanism | Security Dialogue Military Maritime Consultative Agreement Working Group in the United States and the Working Group and Plenary in China Defense Policy Coordination | Security Dialogue in the United States • Military Maritime |      | Defense Policy     Coordination     Talks     Military Maritime     Consultative     Agreement     Working Group |

engagement even amid political disagreements. This interviewee's experiences in Track 2 dialogues also revealed greater internal debate within China about the role of crisis management and prevention with more voices advocating for engagement on prevention than before. Thus China, for a time, seemed more willing to conduct leader-to-leader meetings and high-level (Track 1) recurring dialogues. Table 3, derived from six years of the DOD China Military Power Report, shows recent trends in military-to-military contacts.

As evidenced by the table above, high-level communications have dwindled to single digits in the past six years, and those remaining have encountered obstacles (Haenle, 2021). Initiated in 2017, the U.S.-China Diplomatic and Security Dialogue proffered an agreement signed by both nations' joint

chiefs of staff aiming to bolster crisis management and communication mechanisms (Office of the Secretary of Defense, 2018). Though these dialogues were halted by the Trump administration in 2019, a PRC delegation still managed to travel to D.C. to discuss a Chinese white paper on national defense (Haenle, 2021). The Defense Policy Coordination Talks concerning risk reduction and CBMs were postponed in 2019 before resuming in subsequent years. In 2020, the Asia-Pacific Security Dialogue (APSD) was postponed, but the annual Crisis Communications Working Group met to discuss crisis prevention and management (Haenle, 2021). Initiated in 1998 to address operational matters and review unsafe incidents in the South China Sea, the Military Maritime Consultative Agreement (MMCA) meetings were canceled in 2020 because of differences in agenda-setting (Anonymous, personal communication, April 4, 2022). These dialogues resumed in 2021 before being halted again in the wake of Pelosi's August 2022 visit to Taiwan, after which China also canceled the China-U.S. Theater Commanders Talks and Defense Policy Coordination Talks (DPCT) among other cooperative bilateral measures (Ministry of Foreign Affairs, 2022). Chinese experts have classified this response as "unprecedently strong," marking a drastic reduction in avenues through which the two nuclear powers might discuss risks related to their military conduct (Jiang, 2022).

Despite the tenuous condition of recurring military exchanges, high-level military officials have at least occasionally spoken with counterparts via video teleconference. In 2017, such teleconferences took place via the DTL between a U.S. Naval admiral and Chinese vice admiral on maritime issues, as well as between the PLA deputy director of the joint staff and the U.S. director of the joint staff for strategy, plans, and policy. Two teleconferences took place in 2018, the first between the U.S.'s and China's respective joint chiefs of staff, and the second between a U.S. naval admiral and Chinese naval commander. China made its first request for a DTL call in 2019, a year in which five other high-level calls utilized the same channel. In 2020, the U.S. secretary of defense and the PLA minister of national defense teleconferenced twice, the chairmen of the Chiefs of Staff connected three times, and the U.S. deputy assistant secretary of defense for China and deputy director of the PLA's Office for International Military Cooperation spoke twice.

An anonymous interviewee cited this period of time as indicative of substantial progress; while political factors like the trade war taxed U.S.-China relations, this scholar argued that military-to-military contacts were one of the healthiest aspects of the bilateral relationship (Anonymous, personal communication, April 4, 2022). This resulted from the concerted efforts by various high-level officials in both countries to prioritize engagement. However, political rhetoric always retains power over the course of general relations: The interviewee

also noted the harmful effects of the discrepancy between positive engagement at the military level and the negativity expressed by the U.S. executive branch in speeches and other public communication—in other words, the Pentagon was not viewed by China as credibly speaking on behalf of the Trump administration (Anonymous, personal communication, April 4, 2022).

A shift in contact occurred in 2021 as talks initially failed to materialize between Defense Secretary Lloyd Austin and the vice chairman of China's Central Military Commission, Gen. Xu Qiliang (Haenle, 2021). This has been a sore spot in relations as China has encouraged Austin to meet with his civilian counterpart—an unexplained deviation from meetings organized under the Trump administration. However, Austin and Xu did eventually meet via the DTL, and the U.S. deputy secretary of defense for China also utilized the DTL to meet with the PLA Office of International Military Cooperation's deputy director.

Beyond high-level engagement, experts claim the lack of contact between lower-level American and Chinese military officials—owing in part to the strictly hierarchical nature of China's political and military structure where "contact beyond leader-level engagement is disincentivized"—remains an obstacle to clear and consistent communication (Kine and Luthi, 2021; Atwood, 2021). The China Military Power reports also reveal a significant decline in functional exchanges and joint and multilateral exercises. Back-channel dialogues among retired former officials can still provide some avenues for positively influencing decision-making at the top, but these avenues are less visible and offer less reliable benefits in addition to uncertain risks (Odell, 2021).

The current state of affairs finds the U.S. and China trapped in an alarming cycle where "the suspension of bilateral dialogues exacerbates the deterioration of security relations, which in turn makes [dialogues] more difficult to resume" (Zhang, 2021, 45). There is no substitute for direct engagement between government and military leaders with insight into capabilities, strategic posture, and planning. American experts are concerned by not only the lack of bilateral communication on nuclear risk

reduction, but also insufficient internal attention to the topic in military planning and crisis response (Acton and Panda, 2020). Experts have called not only for the revival of dialogues and the creation of internal bodies to assess escalation risks, but also for increased ad hoc consultation between government and military counterparts (Zhang, 2021)

#### Prior Notification – Missile Launch Agreements

Prior notification remains a crucial element of crisis prevention and a regular task of the NRRCs. This CBM institutionalizes communication at the military level and reduces the risk of accidental war based on uncertainty about the nature of a detected launch (Cosmas et al., 2014). Prior notification is important for mitigating worst-case thinking among military decision-makers, especially in times of crisis. For example, Dr. Wu Rigiang notes in his 2011 work "Global Missile Defense Cooperation and China" that information confirming a detected launch did not originate from the Pacific could reduce escalatory use-it-or-lose-it pressure for China since U.S. submarine-based weapons in the Pacific were the only weapons capable of decapitating China's nuclear forces at that time (Wu, 2011).

While the U.S. and China currently lack a missile-launch prior-notification agreement, China does engage in this CBM with Russia, demonstrating an understanding of the risks posed by accidental launch and indicating an interest in risk reduction. Their 2009 advanced notice agreement is a bilateral measure with some similarities to the responsibilities of parties to the aforementioned Hague Code of Conduct, a multilateral agreement in which China has declined to participate (Champlin, 2009). Both agreements trace their roots to similar Cold War measures—the SALT-Accidents Measures Agreement, the Ballistic Missile Launch Notification Agreement, and START-which collectively required the notification and disclosure of telemetry data across classes of missiles traveling beyond national borders. However, unlike these historic agreements, the Russia-China agreement does not place any restrictions on nuclear deployments or capabilities. In 2021, both nations agreed on a 10-year extension to this agreement, citing

their shared commitment to "maintain[ing] global strategic stability" (Extension of China-Russia Deal, 2021). "Preventing the Spark: A Trilateral Launch Notification Agreement" in the Carnegie Endowment's 2021 "Reimagining Arms Control" offers a comparison of notification commitments among the three nuclear powers (Acton et al., 2021).

Some in the U.S. have called for the establishment of a similar bilateral missile launch notification agreement with China if not the adoption of a trilateral agreement. In addition to pre-empting inadvertent escalation and "serving as a test case for informal arms control arrangements," this measure could remedy several gaps identified in the trilateral notification regime by experts (Cosmas et al., 2014; Acton et a. 2021). Among these gaps are notifications for shorter-range launches, maneuverable boost-glide missiles, missile defense interceptor tests, and suborbital space launches. Acton et al. also provide a more targeted conceptualization for a proposed trilateral notification regime aimed at resolving these issues.

However, expressions of reluctance from both the U.S. and China emphasize security concerns. Cold War agreements required 24 hours' notice of a launch including date, location, area of anticipated impact, and relevant telemetry data. Both nations hesitate to share such information—particularly telemetry data, which is considered sensitive-with an adversary, especially one currently unconstrained in the bilateral relationship by arms-control agreements. Both are also concerned about confidentiality, arguing that the other would gain more from prior notification while they themselves would bear the risk of the other sharing information with opponents (Japan in the case of China, and North Korea in the case of the U.S.), allowing them to overserve launch characteristics and discern more information about technical capabilities. Given these concerns, some authors have raised postlaunch notification as a potentially more agreeable measure.

The recent evolution of these arenas of CBMs, historically facilitated by NRRCs, offers a few starting points for recommendations.

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## Recommendations for Nuclear Risk Reduction and Information Sharing

## 1. The U.S. and China should resume regular military-to-military contacts, including recurrent exchanges and high-level visits.

The Strategic Security Dialogue, Military Maritime Consultative Agreement Working Group, Crisis Communications Working Group, and other recurrent military-to-military contacts are critical for the development of informed crisis management and prevention policy. These Track 1 meetings create opportunities to develop mutual understanding and maintain relationships between military counterparts. Suspending meetings of this nature, as both countries have done previously, has not successfully reduced risks by compelling the other side to change their behavior; it has only served to heighten risks and squander time. Although government-to-government contacts may continue to be threatened by downturns in the political relationship, the relationships developed through Track 1 contacts can at the very least increase the likelihood that they will be able to help manage tensions through their relationships.

Resumed dialogues should assess the risks of inadvertent escalation, steps taken by both sides to reduce risk, and appropriate methods of signaling restraint (G. Perkovich, personal communication, Nov. 21, 2022. Prior to meeting, both sides should conduct internal analyses of the extent to which risk reduction has been considered and implemented in strategic planning.

In the absence of dialogues, both countries should consider engaging in other forms of unilateral transparency such as publishing white papers that can signal a desire for mutual understanding.

## 2. The U.S. and China should expand the role of the DTL as a de facto NRRC.

While the Cold War model of NRRCs may not be as relevant to the U.S.-China dynamic, a result of the 2015 agreement between Obama and Xi to create an audiovisual military crisis notification mechanism, the DTL currently fulfills some roles of an NRRC. It is advisable that both countries reaffirm the annex that codifies procedures for the

use of the DTL in this capacity and expand relationships between counterparts who may be expected to receive these calls. Goodwill calls, like that between naval officers in the South China Sea immediately following the 2015 agreement, should be scheduled with greater frequency and seek to include a broader range of correspondents. These calls should not require sharing sensitive information and therefore should not invoke strong resistance based on Chinese hierarchical concerns.

The DTL should also be expanded to incorporate other elements of risk reduction that resemble the functions of the NRRCs. Staff relevant to the operation of the DTL in both countries should be able to participate in international negotiations and provide expertise within their core competency of communications of arms control and security-related notifications. This is crucial to building the epistemic communities necessary to identify challenges to crisis communications and innovate new strategies to reduce risk while respecting the distinct security interests of both nations, as was critical during the Cold War. Experts should consider roles the DTL might play in further CBMs (prior notification, for example) and determine what resources would be needed to technologically and logistically equip the DTL with capabilities commensurate with expanded responsibilities.

# 3. The U.S. and China should seek to understand what sort of political, technical, and military information each country would find most desirable to share and/or receive in the event of a crisis (for example, an unidentified missile launch).

Unlike the U.S. and USSR, which had routine, uniformly defined and mutually agreed-upon information disclosures via NNRCs, the U.S. and China lack standardized procedures for certain kinds of information sharing. As advancing hypersonic technology and potential launch-on-warning postures reduce the timeframe for decision-making regarding nuclear retaliation, both nations should become familiar with what information would be most effective in swiftly terminating categories of potential crises or stages along relevant escalation ladders.

As China is less likely to share information about capabilities, emphasis should be placed on

identifying technical information that could verify stated intentions and dispel concerns of deception. Examples might include launch data and system malfunction specs. While this information may not be considered acceptable to convey during peacetime, both nations might agree on its necessity in de-escalating crises, especially for confirming the accidental nature of an ambiguous event.

If the information proves to be immediately useful, this approach helps to ensure uses of the hotline are as targeted to risk reduction as possible. If the information is not immediately useful (if it requires time to analyze, for example) sending it still provides limited reassurance that one side is willing to sacrifice secure data as a gesture of goodwill and confirmation of an intent to de-escalate. This method also does not require a formal response to effectively reduce worst-case-scenario thinking and can be employed even when hotline messages go unanswered.

#### 4. The U.S. should unilaterally provide prelaunch notification of ballistic missile launches, space-launch vehicle launches, and test flights.

China clearly understands the value of launch notifications—as evidenced by its pre-launch notification agreement with Russia—but has perhaps decided that refraining from sharing pre-launch notifications with the U.S. aligns with its strategic interests. It is therefore unlikely to agree to a bilateral or multilateral framework, especially one that provides more information than that required by its agreement with Russia. However, even when implemented unilaterally, launch notifications have the potential to benefit all parties by reducing inadvertent escalation risks.

The U.S. already publishes information about its launches toward the Pacific and shares basic pre-launch information with other nations, including Russia, under the Hague Code of Conduct (e.g., class of the missile or launch vehicle, planned launch notification window, launch area, the planned direction). It could therefore choose to share this information or less with China. Regardless, a unilateral notification regime would not impose an additional information-collection burden on the U.S. and would signal understanding

of China's concerns about transparency between nations of differing military strengths.

This unilateral measure could be codified in an annex to the Notification of Major Military Activities Confidence-Building Measures Mechanism, which utilizes the DTL. It could also be achieved through indirect disclosure via government websites, similar to China's online publication of satellite orbital information to prevent collisions. Another option might be informal disclosure via third-party sources like news media, which China used previously to announce launches during crisis in the Taiwan Strait (J. Acton, personal communication, Nov. 7, 2022). From the Chinese perspective, all three mechanisms are historically acceptable unilateral transparency channels, so the U.S. should prioritize selecting a prior notification method that best safeguards its security interests while reducing nuclear risk.

Even when implemented unilaterally, launch notifications have the potential to benefit all parties by reducing inadvertent escalation risks.

The U.S. should not weaponize the adoption of this unilateral CBM to demand identical transparency measures from China. However, the U.S. should continue to encourage China to share bilateral or multilateral pre- or post-launch information as a risk-reduction norm. This would not require China to share more information than it currently does with Russia, nor would it constitute a limitation on China's capabilities or force deployments that should limit the relevance of Chinese concerns about asymmetry. All nations, regardless of the size or posture of their nuclear weapons programs, are subject to escalation risks as a result of accidental or misinterpreted launches.

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Nuclear Risk Reduction Centers

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### **| Conclusion**

The international community was lucky that the 1962 Cuban Missile Crisis did not become a massive nuclear exchange, which could have destroyed humanity. But luck is never guaranteed. We should not wait to see whether another major missile crisis will save us or destroy us.

-Tong Zhao, Carnegie Endowment expert on U.S.-China nuclear relations, 2021

As concerns mount about the trajectory of the Sino-American relationship, the increasingly complex relations between nuclear weapon states raise the stakes in potential conflicts. In times like these, it is appropriate to turn to historical experiences like the Cold War to examine lessons that should be drawn from the past. However, "New Cold War" analogies must not be exaggerated, nor should they blind us to significant distinctions in the modern context. Fruitful consideration of current dynamics must acknowledge that China's relationship to its nuclear weapons and its perceptions of CBMs are substantially different from those of both the United States and the Soviet Union during the Cold War.

Thus, this project draws upon historical case studies and present-day scholarship analyzing Chinese perspectives on CBMs, which themselves are informed by culture, history, political institutions, and past experiences with arms control. In order to grapple with concepts like mutual trust and reduce the risks of inadvertent escalation, it is critical that potential CBMs incorporate and undergo continuous creative adaptation to meet modern needs. This research concludes that Sino-American nuclear dialogues must be safeguarded and should

further implement lessons regarding engagement and funding from Cold War-era Tracks 1.5 and 2 dialogues, which helped foster a bilateral relationship capable of avoiding nuclear war. Furthermore, within the context of pre-crisis and crisis communications—particularly with regard to nuclear hotlines and the functions of NRRCs—it is necessary to further incorporate a careful understanding of Chinese perceptions of CBMs in order to facilitate risk reduction within the Sino-American nuclear relationship.

Failing to appropriately adapt CBMs will consign both nations to continue an unacceptable and dangerous status quo. Under such circumstances, the best outcome would see the nuclear risk reduction relationship remain locked in a tense stalemate in which neither side makes meaningful progress on mechanisms for de-escalating crisis or conventional conflict that never arrives. However, a more troubling possibility is that existing risk reduction measures fail to prevent a crisis or escalation, in which case the world will wait with bated breath to see if the miracle of averting nuclear war that took place during the Cuban Missile Crisis can be replicated.

### Appendix A

# Principles to Facilitate More Successful Crisis Management

By Michael Swaine And Zhang Tuosheng

- 1. Maintain direct channels of communication and send signals that are clear, specific, and detailed.
- 2. Preserve limited objectives and limited means on behalf of such objectives; sacrifice unlimited goals.
- 3. Preserve military flexibility and civilian control, escalate slowly, and respond symmetrically (in a "tit-for-tat" manner).
- 4. Avoid ideological or principled lock-in to positions that encourage zero-sum approaches to a crisis and limit options or bargaining room; do not confuse moral or principled positions with conflicts of interest.

- 5. Exercise self-restraint, and do not respond to all provocative moves.
- 6. Avoid extreme pressure, ultimatums, or threats to the adversary's core values, and preserve the adversary's option to back down in a "face-saving manner."
- 7. Divide large, integrated, hard-to-resolve disputes into smaller, more manageable issues, thereby building trust and facilitating tradeoffs.
- 8. Think ahead about the unintended consequences of one's actions.

### Appendix B

# Principles for Handling Future Accidental Crises

#### By Wu Xinbo

- 1. The two sides should come into contact with each other and set up a channel of communication as soon as possible to exchange information.
- 2. Neither side should take unilateral action to publicize the accident, especially the cause of the accident. Before both sides reach a consensus on what exactly led to the collision, releasing a one-sided story could push the other side to respond with its own version, thus locking both sides in different and even opposite positions and making it more difficult for a compromise at a later stage.
- 3. Both sides should start consultation as soon as possible. The consultation should focus on both the causes and solutions of the accident. If the two sides cannot agree with each other on the causes, then a joint investigation is necessary.
- 4. Both sides should avoid publicly raising demands to each other; an ultimatum or a coercive tone should be avoided, in particular. Demands should be raised privately through the established channel of communication or brought up in

- consultations. They should be reasonable, taking into account the moral, humanitarian, and legal factors involved, and conducive to the solution of the accident.
- 5. It is desirable that at the early stage of the crisis, both the Chinese foreign minister and the U.S. secretary of state talk to each other over the phone.
- 6. While the militaries on both sides will be involved in handling any incident, they should not assume an independent role, nor should they take charge of the consultations and negotiations.
- 7. During the bargaining process, one side may take actions to squeeze concessions from the other. Such actions, be they political, economic, or military, should be revocable and should not cause irrevocable damage to the other's interests.
- 8. During a crisis, pressure from public opinion will run high, and it is important that governments try to lead public opinion rather than be led by it.

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