

NEW MEMBERS OF THE CLUB: CHINESE PARTICIPATION IN ARMS CONTROL REGIMES 1980-1995

by Wendy Frieman

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The integration of the People's Republic of China into the international community following decades of isolation remains the central issue for observers of contemporary Chinese affairs. Even after 15 years of a Chinese "open door" policy, many questions remain about whether the Chinese government is genuinely committed to the international institutions and values that have shaped the post-World War II world. At the same time, the importance of bringing China into this community has never been greater. Another period of isolation or autarchy is likely to be accompanied by behavior that would be destabilizing regionally as well as globally. And the Chinese themselves have demonstrated a desire to be players in the international club, initially for economic and strategic reasons, but increasingly

because membership represents a source of national pride and prestige.

However, adherence to arms control treaties and compliance with other norms of international security behavior present more troublesome dilemmas for Chinese integration into the world community. They pose challenges both for the Chinese and for those trying to understand Chinese behavior for several reasons. First, in any society, compromises on national security are perceived as more significant than those made in the interest of trade or economics. In China, such compromises are even more difficult because of a history of foreign subjugation. Second, the mere access to information about the military in a society such as China, where virtually all important information is considered a state secret could be seen as a threat and as a poten-

tial compromise of national security. Third, arms control treaties and other international security commitments often include imprecise terms and definitions, which can make judgments about compliance subjective. Even when requirements are precisely articulated, evidence of compliance is often only available to those countries with sophisticated national technical means (NTM), and they rarely release it.

The historical record of Chinese participation in arms control regimes prior to 1980 is extremely thin. Under Mao Zedong, China took a relatively consistent and ideological approach to arms control. China insisted that these agreements were dominated by Western powers, that they had been formulated without consulting China, that they were inherently discriminatory (limiting the activities of the "have-nots" while

placing no requirements on the "haves" to disarm) and that, for all these reasons, they did not apply to China. Beyond simply denouncing the existence of these regimes, China prior to 1978 also occasionally engaged in behavior that ran counter to the norms of arms control and international relations.²

With the emergence of the post-Mao leadership and the open-door policies of the early 1980s, however, came a gradual change in China's position on international arms control regimes. The Chinese leadership began to study the possibility of playing a more active role in existing regimes and in formulating new agreements. This shift has resulted in China's accession to the nuclear Non-Proliferation Treaty (NPT) in 1992, its signing of the Chemical Weapons Convention (CWC), its agreement to adhere to the terms of the Missile Technology Control Regime (MTCR), and its participation in talks on a Comprehensive Test Ban Treaty (CTBT). (See Figure 2.)

The purposes of this article are to examine: 1) the Chinese bureaucratic structure that formulates arms control policies; 2) the commitments the Chinese have made and the degree to which they have adhered to these commitments; and 3) the patterns that have emerged in Chinese behavior over the past 15 years. The focus is almost exclusively on formal agreements and, therefore, excludes behavior such as defense spending, military exercises, participation in confidence-building measures, or other areas where China is not under any formal

commitment that constrains its activity. The emphasis is on multilateral agreements, such as the NPT, but several other agreements (Sino-Soviet, Sino-Indian) are also examined to determine Chinese adherence to bilateral security commitments.

INSTITUTIONS AND BUREAUCRATIC STRUCTURE

Unlike the United States and Russia, both of which have a 20-year history of participation in arms control regimes, China lacks the bureaucratic procedures and personnel required to negotiate and enforce these agreements. There is no single government agency in China (comparable to the Arms Control and Disarmament Agency (ACDA) in the United States) with a mandate to specialize on these issues. A serious shortage of trained people inside and outside the government compounds this problem. The field of arms control as a profession and an area of professional specialization or scholarly inquiry is just beginning to emerge in China. No single organization has more than a handful of knowledgeable individuals in this field; most of the people are either over 60 or under 40. One reason for the small supply of experts is the absence of a training program, curriculum, and open source information. Universities can offer courses in U.S. or Russian security policy, but not in Chinese security policy. Texts and primary source materials are difficult to obtain, especially outside the military complex.³

There are about two dozen organizations within China that play

some role in formulating Chinese positions on arms control and non-proliferation. The prestige and influence of the different organizations connected to arms control continue to shift. This is partly because the field is new, and partly because in China personal prestige is often much more important than institutional affiliation: a single individual can change the status of an institution. The units that have some role in formulating policy can be assigned to one of several categories (their inter-relationships as noted numerically throughout the text are depicted in Figure 1): academic think tanks, departments of the Ministry of Foreign Affairs, units involved in nuclear weapons research and production, departments of the Chinese People's Liberation Army (PLA), industrial ministries, and mass organizations. The military, that is, the PLA, weighs in heavily on decisions that commit China to reductions or restrictions in the use of weapons important to China's national security.

Academic Think Tanks

A small number of Chinese academic organizations address national security and arms control policy. Within the Chinese Academy of Social Sciences, the *Institute of World Economics and Politics (1)* addresses political-military issues at a very general level in its research papers and conferences. The *American Studies Center at Fudan University (2)* in Shanghai is unique in its establishment of an academic program of instruction and research focused

on national security policy and arms control. Two young arms control experts affiliated with the center have a solid understanding of the issues, but seem to have only limited access to individuals or information in their own system. They visit the United States frequently and publish articles on Western and Russian arms control.

The Ministry Of Foreign Affairs (MFA)

Initially responsible primarily for coordinating and articulating policy, the MFA seems to have emerged as a central player in for-

mulating policy. Within the Ministry, arms control expertise is concentrated in the fourth division of the *Ministry's International Organizations and Conferences Department* (3). The staff of this department is extremely well-informed about both technical and policy issues; this might be the only place in the bureaucracy where technical and policy expertise are joined.

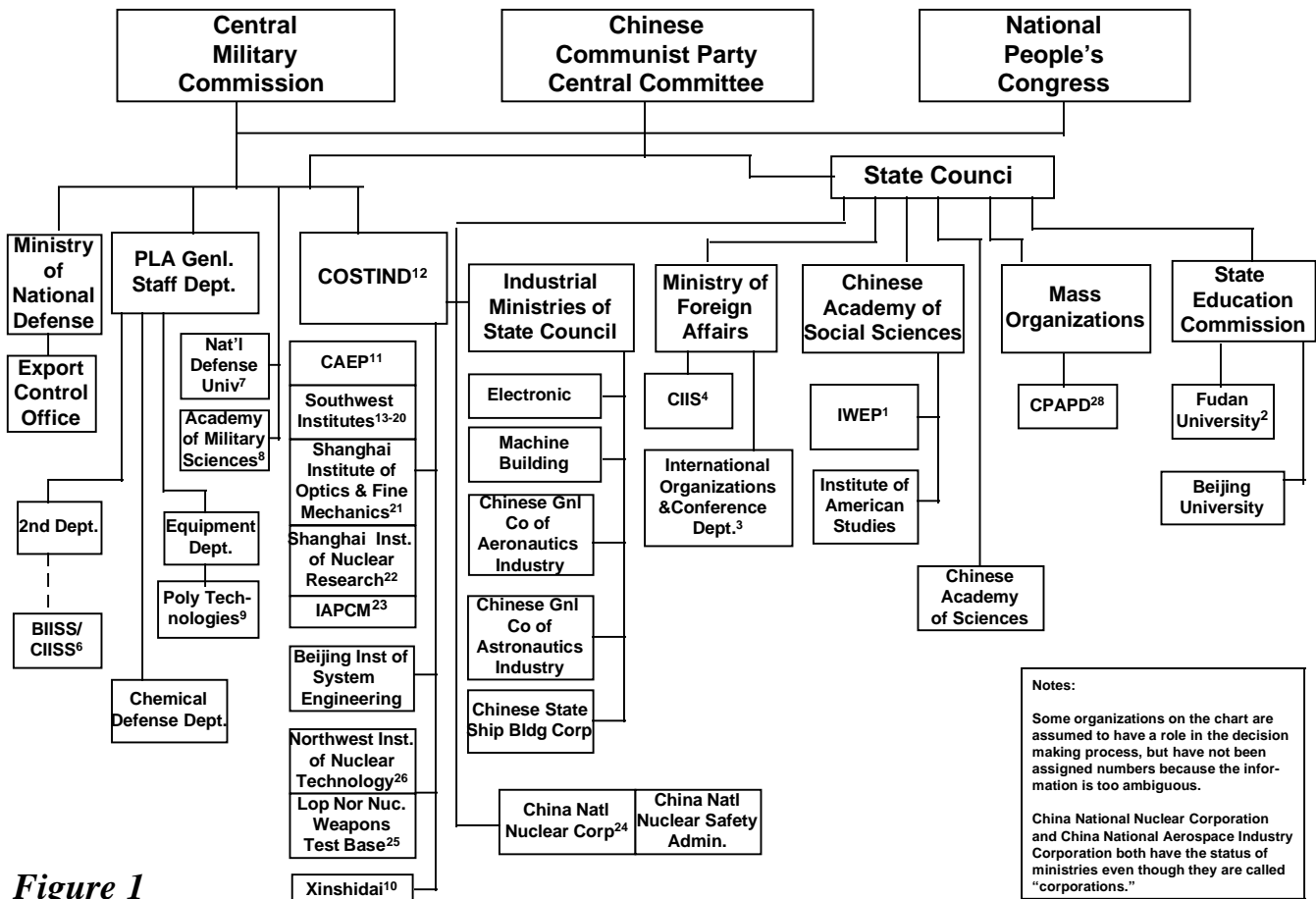
The People's Liberation Army

The voice of the PLA has always been powerful in decisions affecting China's national interest,

but appears to be increasingly influential in any decisions concerning Chinese commitments to limit weapon sales, production, development, or testing. U.S. government officials have speculated that there is an ongoing contest for control of the arms control agenda between the MFA and the PLA.

Several entities within the PLA are known to have a role in formulating Chinese positions on arms control treaty negotiations. By definition, any Chinese commitment to an international arms control regime must be approved by the powerful Central Military

ORGANIZATIONS INVOLVED IN CHINESE ARMS CONTROL DECISIONMAKING



Notes:
Some organizations on the chart are assumed to have a role in the decision making process, but have not been assigned numbers because the information is too ambiguous.

China National Nuclear Corporation and China National Aerospace Industry Corporation both have the status of ministries even though they are called "corporations."

Figure 1

Commission (CMC). In addition to the CMC, the *General Staff Department* (5), the rough equivalent of the U.S. Joint Chiefs of Staff, represents the views of the services on arms control and related issues. Several research institutes affiliated with the PLA—the *China Institute of International Strategic Studies* (now *CISS*, formerly *BISS*) (6); the *Institute for Strategic Studies at the National Defense University* (7); and the *Academy of Military Sciences* (8)—analyze international arms control proposals and conventions as they affect Chinese defense posture, force planning, strategy, doctrine, training, and tactics. None is focused exclusively, or even primarily, on arms control and nonproliferation, but each organization has one or more researchers who are knowledgeable about the subject. In addition, senior PLA officers (as well as their brothers, wives, cousins, uncles, offspring, and so forth) run the extremely powerful weapons export companies connected to the PLA and the defense establishment. Because these companies negotiate foreign weapons sales, it is likely that they weigh in on policy decisions that would restrict their activities. Among the more powerful of these companies are Beijing-based *Poly Technologies* (9) and *Xinshidai (New Era Corporation)* (10).

The Weapons Research And Development Complex

China's nuclear weapons labs are centralized under the *China Academy of Engineering Physics (CAEP)* (11), also referred to as the "Ninth Academy," located in

Mianyang, just north of Chengdu in Sichuan Province. The CAEP, in turn, reports to the *Commission on Science, Technology, and Industry for National Defense (COSTIND)* (12), whose purview is considerably broader than nuclear weapons. COSTIND supervises virtually all of China's military research, development, and production. It is a military organization, staffed largely by active duty officers, although most of the institutions (factories and research institutes) supervised by COSTIND are run by civilians. Within COSTIND, an Arms Control and Disarmament Program serves as a clearinghouse for arms control information.

Below COSTIND, the CAEP is an umbrella organization comprised of institutes specializing in various aspects of nuclear weapons research and development: the *Southwest Institute of Fluid Physics (SIFP)* (13); the *Southwest Institute of Nuclear Physics and Chemistry (SINPC)* (14); the *Southwest Institute of Chemical Materials and Technology* (15); the *Southwest Institute of Electronic Engineering* (16); the *Southwest Institute of Structural Materials* (17); the *Southwest Institute of Applied Electronics* (18); the *Southwest Institute of Computer Application* (19); the *Southwest Institute of Environmental Testing* (20); the *Shanghai Institute of Optics and Fine Mechanics (SIOFM) High Power Laser Laboratory* (21); the *Shanghai Institute of Nuclear Research (SINR)* (22); and the *Institute of Applied Physics and Computational Mathematics (IAPCM)* (23).

These institutes are compartmentalized, with seemingly little horizontal integration across bureaucratic lines. Technical experts at the CAEP, mostly civilian scientists and engineers, clearly have a role in formulating Chinese positions on arms control and nonproliferation, and COSTIND itself sends technical experts to represent Chinese positions at the Conference on Disarmament in Geneva. COSTIND personnel and (even more so) CAEP scientists seem less informed about foreign policy and the larger context of their work than their counterparts in other countries. They are called on primarily for technical input.

COSTIND is also partially responsible for supervising certain activities of the *China National Nuclear Corporation (CNNC)* (24), which produces, stores, and controls all fissile material for civilian as well as military applications. Finally, it is virtually certain that the scientists who work at the *Lop Nor Nuclear Weapons Test Base* (25) and its supporting research institute, the *Northwest Institute of Nuclear Technology (NINT)* (26), are also called upon to provide technical expertise regarding arms control and verification procedures.

Other Institutions

The largest concentration of arms control personnel (in pure numbers) is found in "mass" organizations such as the Chinese People's Association for Peace and Disarmament. Most have limited knowledge of the technical issues and often only a general understanding of the policy issues.

A RECENT HISTORY OF CHINESE POSITIONS ON ARMS CONTROL AND ADHERENCE TO TREATIES

Negative Security Assurances

China has long maintained that a critical first step in the disarmament process is the declaration by all nuclear powers that they would not be the first to use nuclear weapons. China made a no-first-use pledge in 1964 and has been pressuring other countries to do likewise. In 1993 and then again in 1994, China proposed to the United Nations formal negotiations towards a no-first-use treaty among the five nuclear powers.⁴ But the Chinese agree that no-first-use pledges are inherently unverifiable and can be reversed at a moment's notice. Nevertheless, they maintain that the pledge is required in order to realize serious progress in disarmament.⁵ At different times, China has insisted on a U.S. no-first-use pledge as a prerequisite to Chinese cooperation in other areas.

Biological Weapons Convention (BWC)

In 1985, China signed the BWC, which has no compliance mechanism and relies largely on consultations and voluntary disclosures. Multilateral pressure to tighten the treaty and institute a verification regime began to grow after the conclusion of the CWC, which included a verification and inspection regime far surpassing those in previous multilateral arms control treaties. As a result, China paid close attention to the 1992 to 1993 sessions of VEREX, an ex-

perts group that evaluated various compliance mechanisms that could be used to strengthen the treaty. The Chinese have strenuously opposed recent moves to introduce on-site inspection and legally binding disclosures of past activity.⁶ The United States has repeatedly accused China of being in violation of the treaty since it signed it in 1985. China has categorically denied the accusations as "groundless."⁷

Sino-Soviet and Sino-Russian/CIS Arms Control

China began talking to the Soviet Union about troop reductions along the border as part of a pattern of overall improvement in bilateral relations in the late 1980s. Since then, significant progress has been made in reducing tension and building confidence between China and the Russian/CIS states. Measures include agreements for substantial force reductions, adjustment of the border to settle long-standing territorial disputes, no-first-use pledges by both sides, and a Sino-Russian agreement to detarget strategic missiles. This cooperation has been extended to various forms of security cooperation that go well beyond (and might in fact be counterproductive for) arms control and nonproliferation.⁸ These activities include exchange of military personnel, technology transfer, and arms sales.

P-5 Talks on Weapons Transfers to the Middle East

The five permanent members of the U.N. Security Council (P-5)

began talks in 1991 aimed at limiting proliferation of weapons in the Middle East. Agreements reached in this forum consisted primarily of voluntary disclosures, consultations, and advance notification of weapons transfers. China participated in several sessions, but withdrew from those talks when other, unrelated issues (U.S. weapons sales to Taiwan) disrupted U.S.-China relations in 1992. The Chinese have argued in this forum that disclosures and notification requirements should pertain not to missiles but to advanced fighter aircraft. They have also stated their position that the region should not be limited to the Middle East but should take in Cyprus and Turkey (in response to the U.S. position that Morocco, Algeria, Tunisia, and Libya should be included).⁹ China has also repeatedly pointed to the fact that the United States is the largest exporter of weapons to the Middle East and that China would stop weapons exports entirely if the other P-5 members would do likewise.¹⁰

Transparency in Armaments Transfers/U.N. Conventional Arms Register

China is a participant in the U.N. Register of Conventional Arms negotiated after the Gulf War and approved by the General Assembly in 1991. The purpose of the register is to promote transparency as a way of limiting proliferation, and its terms call on members to disclose imports and exports of several categories of conventional weapons, including tanks, armored combat vehicles,

large caliber artillery systems, combat aircraft, attack helicopters, warships, missiles, and missile launchers. Disclosures have been required annually beginning in 1993. The Chinese have made disclosures each year since then and have participated in negotiations on how the register should be expanded. China has opposed measures which would in any way limit sovereignty of either buyer or seller.

Missile Technology Control Regime

The MTCR emerged in the late 1980s as a result of concern among seven Western nations about the spread of ballistic missile technology to unstable and potentially hostile regimes. It was, in fact, Chinese missile transfers that were a primary target of the regime. The MTCR identifies certain categories of missiles and missile-related technologies that member states are discouraged from exporting. Member countries are to “exercise restraint,” “exercise particular restraint,” and maintain a “strong presumption to deny” exports, depending on the item and the recipient country. Since the terms are imprecise, the agreement allows for certain transfers on a case-by-case basis, depending on the provision of end-use assurances from the receiving country, the relationship of the item in question to delivery systems, and so forth. For example, a source of continuing debate between China and the United States is whether or not the M-11 missile falls within MTCR guidelines, with each side interpreting

the text to support a different position.

For several years, China remained aloof from the MTCR. Beginning in 1991, however, in response to sanctions imposed by Washington (and, to a lesser extent, pressure from other Western powers), Chinese leaders made a series of statements to U.S. officials indicating they would adhere to the guidelines of the MTCR. Secretary Baker announced that the first such pledge had been made to him verbally in Beijing in November 1991. This commitment was later formalized in a letter that Chinese Foreign Minister Qian Qichen sent to Secretary Baker in February 1992.¹¹ However, confusion continued for some time after that as to how China interpreted the agreement and their pledge to abide by it with respect to the M-11. The text of the letter was never made public in the United States, and the Chinese press did not report either Qian’s verbal promise to Baker or the content of the correspondence. China reaffirmed its commitment to the MTCR in another statement in October 1994, once again, in response to U.S. economic sanctions. Although the text of this statement was made public, it did not specifically address the M-11 as a system covered by the terms of the MTCR.¹² Nor did the 1994 statement indicate whether China’s adherence would be governed by the original (1987) MTCR terms, or the terms as revised by the member states in 1993.¹³ Significantly, China’s 1995 White Paper on arms control made no mention of the MTCR, although it specifically addressed China’s commit-

ment to a number of other international regimes.¹⁴

Although the Chinese have made bilateral commitments to adhere to the terms of the regime, they are not formal members. This puts the Chinese in the same category as the other “adherent” countries (Brazil, Israel, Russia, Romania, South Africa, and Ukraine) who have agreed to abide by the terms of the agreement but do not participate in the meetings of member countries. The Chinese have repeatedly objected to Washington’s pressure to adhere to standards that China had no role in formulating.¹⁵ The Chinese have their own suggestions as to how MTCR guidelines should be structured, including the notion that they should include advanced fighter aircraft. However, it is generally accepted that once a country agrees to adhere to a regime, it is appropriate to measure behavior against these commitments. The question of whether the regime is “fair” is a separate issue.

Several caveats are in order before any judgments can be made about Chinese compliance with MTCR commitments. The MTCR, which now includes over 20 member countries, has no multilateral enforcement or verification mechanism. The United States is the only member country that has both implemented domestic legislation requiring sanctions and then used those sanctions against the Chinese. U.S. charges that China has violated the terms of the MTCR have been supported largely by classified information. Thus, it is more difficult for anyone outside the U.S. government,

to evaluate the validity of the claims. Sanctions are only required by U.S. law when there is overwhelming and incontrovertible proof of violations, and each time there is a new accusation, the evidence is debated for some time within the U.S. government before such a determination is formally made.¹⁶ These debates are often politically charged. Furthermore, Chinese formal commitments to adhere to the regime have been either classified (as in the case of the 1992 letter to Secretary Baker) or imprecise as to those items that most concern the United States (as in the case of both the 1992 and 1994 commitments). For all these reasons, the MTCR seems to function more as a barometer of the U.S.-China relationship than as a test of China's compliance to international arms control commitments.

The United States first raised formal complaints about Chinese missile transfers in 1991, before any Chinese commitments to adhere to the regime. Despite the fact that the Chinese were not members, the United States elected to impose sanctions that denied China certain dual use and high technology items. The sanctions were lifted in early 1992 after Qian's letter to Baker. In late 1992, the United States again formally accused China of violating the terms of the regime, and in August 1993 it imposed sanctions (as required by U.S. law). In January 1994, the United States decided to permit the sale of Hughes satellites that had previously been blocked by the August sanctions. These were the only pending sales affected by the sanctions. How-

ever, the U.S. decision was technically an exception and not a lifting of the sanctions. In the October 1994 statement, as reported by U.S. officials, China agreed to limit not only exports of missiles with a stated range of 300 kilometers, but also sales of any missile "inherently" capable of traveling that distance with a 500 kilogram payload. In response to this agreement, the United States formally lifted the August 1993 sanctions. However, debate continued within the U.S. government in the summer of 1995 as to whether China was or was not in compliance with MTCR guidelines.

After each U.S. accusation of missile transfers to Pakistan, China denied that they were in violation of any proliferation-related commitments. Most denials were ambiguous, not specifying whether China was denying the existence of the transfer, the notion that the transfer had violated MTCR guidelines, or the notion that China had ever actually agreed to refrain from selling M-11s to Pakistan.¹⁷ In less formal settings, Chinese scholars and officials continued to insist that the MTCR was not fair, both because it excluded aircraft and because China was not involved in formulating the terms of the agreement. These complaints escalated subsequent to President Bush's decision to sell F-16 aircraft to Taiwan in the summer of 1992.¹⁸ The Chinese also pointed out that they were victims of shifting goalposts: in 1993 the MTCR members adjusted the guidelines to include missiles capable of delivering any type of weapon of mass destruction. This

required member states to restrict even more items than previously. As an "adherent" but not a member, China is required to live by the decisions of the members without being able to influence them. Finally, the Chinese often point out that the United States is the largest exporter of military hardware in the world and that U.S. technology sales were in part responsible for building up the Iraqi military capability that the U.S. wanted to prevent.

Chinese responses to U.S. sanctions have included threats to withdraw from the MTCR, giving the whole interaction a circular quality. By the time the sanctions had been imposed, it appeared to the United States that the Chinese had already withdrawn in practice by not complying with the terms of the regime. The Chinese also responded by being more intransigent on other arms control issues, including talks on limiting sales to the Middle East, and threatening other forms of "non-cooperation," such as formal resistance to sanctions on North Korea in the U.N. Security Council.

Non-Proliferation Treaty

After years of internal debate and rhetorical opposition to the treaty, China formally submitted its instrument of accession to the NPT in March 1992. China's decision to join the NPT was widely hailed as a landmark and the beginning of a real commitment to arms control and nonproliferation. In the past, China's primary argument with the NPT had been that it was discriminatory, placing no constraints on nuclear powers

while severely limiting the activities of non-nuclear states.

At the 1995 NPT Review and Extension Conference, China initially said it would support a "smooth extension" of the treaty, without clarifying whether "smooth" was in fact equivalent to an unconditional and indefinite extension. At the end of the day, however, China did not stand in the way of the consensus decision on the indefinite extension of the treaty.

Despite these actions, China's actual commitment to the details of NPT implementation remains unclear. Besides the combined efforts of member states (backed by ultimate—but rare—resort to the U.N. Security Council), the NPT has no formal compliance mechanism. The International Atomic Energy Agency (IAEA) verifies adherence only to the safeguards agreement entered into by the state with the IAEA. China joined the IAEA in 1984 and subsequently agreed voluntarily to place some of its civilian facilities under safeguards.¹⁹ However, as a declared nuclear power, China is exempt from mandatory IAEA inspections, since it is already understood to be making nuclear weapons.

When China joined the NPT it also, of course, undertook obligations with respect to transfer of nuclear technology to other countries as set forth in Article I of the treaty. However, the IAEA does not verify the compliance by declared nuclear states, of which China is one, with respect to Article I of the NPT. No organization is charged with that responsibility; instead, one of the

member states must provide evidence of noncompliance for consideration by the U.N. Security Council. The political and technical costs of an accusation can be quite high and, in practice, only the United States has chosen to make an issue of nuclear exports in violation of Article I.

China has signed nuclear cooperation agreements with over a dozen countries and has transferred nuclear technology to countries with whom it does not have a formal agreement. The U.S. Congress failed to ratify an agreement that would permit U.S. nuclear transfers to China in 1985. During the debate over that agreement and in the years since, reports that China has transferred nuclear weapons-related technology to Iran, Pakistan, Syria, and Algeria have surfaced repeatedly in the U.S. Congress.²⁰ Most recently, the United States has accused China of selling 5,000 ring magnets to Pakistan in violation of the NPT, but declined to impose sanctions after China gave verbal assurances it would refrain from similar sales in the future.²¹ However, the information about these transfers has come from U.S. intelligence agencies, not from the IAEA.

In the case of Iran, China initially denied that there had been any transfer at all, and then agreed that several contracts had been signed for a research reactor for peaceful purposes. In each instance, Chinese officials have insisted that all Chinese transfers have been conducted under safeguards consistent with IAEA obligations, and that the transfers consisted only of nuclear material

or equipment to be used for peaceful purposes.²² When pressured by the United States in 1995 to cancel a nuclear-related sale to Iran, China agreed only to postpone it.²³ Chinese officials flatly denied at the time that the transfers related in any way to nuclear weapons technology. Evidence to the contrary has been unavailable for public scrutiny, consisting largely of classified imagery from U.S. satellites.

It is worth noting that China has not joined the Nuclear Suppliers Group (NSG), whose main efforts have focused on tighter controls over nuclear transfers than those specified in the NPT. In 1993, NSG members agreed to a policy that would require full-scope safeguards for countries that were recipients of nuclear technology. China is now the only major supplier that does not formally require these full-scope safeguards as a condition of supply.²⁴ In general, very little is known about any formal Chinese procedures for export controls on nuclear materials and equipment. Officials insist that these transfers are tightly-controlled, but refuse to release details of procedures or organizations responsible for that control.²⁵ China has offered no evidence that it requires end-use certifications to minimize the chance of re-transfers of sensitive materials.

Chinese behavior with respect to North Korea's NPT membership has been ambiguous. Although China has no explicit obligations to impose economic sanctions on North Korea, the United States and other Western powers looked to China to apply pressure on

Pyongyang when it became clear that the North was beginning to develop nuclear weapons. As one of the few sources of food and energy for North Korea, China has considerable leverage and influence. However, in the elaboration of the U.S.-DPRK Agreed Framework, it is questionable whether Chinese pressure was either exerted or (if so) played any role. Indeed, during this time, the Chinese indicated they would veto any Security Council resolution that applied significant pressure on North Korea to comply with its NPT obligations.²⁶

With respect to China's overall NPT participation, the evidence is not conclusive. Since 1992, the United States has made several accusations of violations, which China has denied. The Chinese contend that U.S. concern about NPT violations is selective and arbitrary, targeting U.S. adversaries but ignoring violations by U.S. friends. In the context of a regime whose verification and inspection mechanisms are largely irrelevant to China, accusations of violations often appear to be more closely tied to the vicissitudes of U.S.-China relations than to any pattern in Chinese proliferation, or non-proliferation, behavior.

Sino-Indian Arms Control

In 1993, Chinese and Indian negotiators began to make noticeable progress towards resolving their long-standing border dispute, signing a border agreement and establishing an expert group to supervise its implementation. Although neither side was completely satisfied with the progress

achieved in the subsequent months, consultations have continued, addressing such issues as meeting points between border personnel along the Line of Actual Control and other confidence-building measures.²⁷

Chemical Weapons Convention

China began to participate in discussions at the Conference on Disarmament (CD) on the treaty at the very beginning of the negotiation process in 1980, and it remained an active member until the conclusion of those talks in September 1992. In fact, this is the first instance in which China has played a significant role in formulating the terms of a major multilateral arms control agreement. China has maintained a consistent rhetorical position that "all countries capable of manufacturing and producing chemical weapons should stop testing, producing, transferring, and deploying them; and pledge against the use of such weapons."²⁸

The CWC differs in a dramatic way from the other arms control treaties China has signed: it has provisions for on-site challenge inspections of facilities in any member state. No Chinese facility has ever been subjected to an on-site inspection by an international verification regime. China's only other experience with on-site inspections has been in the context of routine IAEA inspections.²⁹ Chinese officials have indicated that they do not wish to support challenge inspections—such as those performed in Iraq—by assigning Chinese personnel to challenge inspection teams. At the

same time, they have refrained from openly criticizing challenge inspections.

Not surprisingly, therefore, China expressed concern about possible challenge inspections early on in the CWC negotiation. One concern, not unique to the Chinese, was that parties to the treaty would use the pretext of a challenge inspection to gain access to sensitive facilities for commercial or military espionage. Thus, Chinese representatives to the CD repeatedly insisted that only "reasonable" requests made by the challenging state should be satisfied and that the "legitimate rights and interests of the challenged state should also be respected and protected."³⁰ In order to prevent abuse of the challenge inspection procedures, China said that "requests for challenge inspections should be reasonable, specific, and precise."

China has also emphasized its legitimate difficulties in complying with the disclosures required within 30 days of the treaty entering into force. At the time of entry into force, China will be required to disclose all chemical production, and, in some cases, use of chemicals that fall into three schedules. Given the size of China's chemical industry and the difficulty of collecting accurate statistics, the Chinese are concerned that a very real possibility exists that an unreported facility will be the subject of a challenge inspection. In this instance, the Chinese government wants the chance to investigate on its own before the site is opened to a team of foreigners.³¹ This position clearly undermines the effective-

ness of the verification regime and greatly lowers the cost of behavior that violates the treaty. But it accurately reflects Chinese fears of the consequences of on-site inspections. Although other parties to the treaty have resisted the idea of challenge inspections, the domestic political cost to any Chinese leader who allows China to become the target of such an inspection is likely to be particularly high.

An equally important issue is the disposal of old chemical weapons, some of which were left in China by the Japanese during World War II. In 1992, China announced that fewer than 300,000 of the 2.3 million old chemical weapons left behind in China by foreign countries had been destroyed.³² China maintains that declaration of the existence of these weapons and their destruction are the responsibility of those who left them, and not the Chinese government.³³ The destruction of these weapons will involve considerable cost, as well as requiring expertise in the technical aspects of chemical demilitarization and dismantlement. The Organization for the Prohibition of Chemical Weapons (OPCW), the entity that will verify the treaty, has taken the position that China and Japan must work this out on a bilateral basis. China does not want to ratify the CWC until the weapons are removed, and the Japanese government has agreed to pay only for removal of weapons that can be identified as Japanese. China estimates that some 200,000 weapons distributed over three provinces are of Japanese origin.³⁴

Because the CWC has not entered into force, it is not possible to evaluate Chinese adherence. However, certain aspects of Chinese behavior to date suggest a willingness to at least try to conform with the requirements of the convention. First, China has begun work on domestic legislation that would spell out the legal obligations of chemical firms and laboratories to comply with treaty provisions.³⁵ Second, when the United States, citing a concern that China might be shipping precursors of chemical weapons to Iran, demanded a search of the ship *Yinhe* in 1993, the Chinese agreed to the equivalent of a challenge inspection. Reports in the press speculated that the crew of the ship had ample time before the inspection to dispose of any suspect chemicals.³⁶ But the fact remains that the Chinese agreed to the inspection on relatively short notice.

Fissile Material Cutoff

After objecting to the establishment of an *ad hoc* committee to study the issue in early 1994, China agreed later the same year in a bilateral agreement with the United States to work towards a multilateral convention that would ban production of fissile material for military purposes.³⁷ Beyond this statement of policy, China has not participated in other discussions on fissile material in a multilateral context. However, China did subscribe to the consensus view on the mandate for the eventual opening of negotiations, which was agreed to in March 1995 at the CD.

Comprehensive Test Ban Treaty

In 1985, China agreed to participate in CD discussions on a CTBT and has been an active participant in the negotiations. If it enters into force as a verifiable treaty, a CTBT will have serious consequences for China, given the disparities in size and sophistication between Chinese nuclear forces and those of Russia and the United States. Because China does not have sophisticated computers to simulate nuclear weapons, testing is critical to weapons modernization, as well as safety and reliability. Since no treaty has been concluded, it is impossible to assess Chinese adherence to any formal legal commitment. Chinese behavior in the negotiations does, nevertheless, provide some indication of future compliance.

In the early 1990s, Chinese leaders posed several preconditions for successful completion of a CTBT. One was that the other nuclear powers adopt a policy of "no-first-use" with respect to nuclear weapons. Another precondition was further reductions in U.S. and Soviet strategic forces, presumably to levels below those stipulated in the Strategic Arms Reduction Talks (START) agreements, although the Chinese generally declined to give specific targets. Chinese discussion of a CTBT has always been in the context of remarks about disarmament generally, and Chinese officials and scholars have emphasized their view that a CTBT is only one part of disarmament, and not necessarily the most important part.³⁸ This view contrasts with recent U.S. policy, which has made the

CTBT negotiations a focal point in arms control policy, especially since the indefinite extension of the NPT.

In practice, however, the Chinese have proceeded with negotiations despite the fact that their pre-conditions have not been met and do not appear likely to be met in the near future. This appears to be a no-win situation for the Chinese leadership: whatever the costs of a fully implemented CTBT, China could not credibly maintain even a rhetorical commitment to ultimate disarmament without supporting the goals and the process of a CTBT.

Chinese negotiators at the CTBT talks have repeatedly emphasized the point that, whereas the United States and Russia have tested thousands of times, China has conducted only 43 tests. This discrepancy is China's primary justification for not observing the U.S.-Russian moratorium on nuclear testing. Until 1996, China did not commit itself to observe the ban, and its continued tests have been a sensitive issue and a target of criticism by the United States, Japan, and other countries. After a test in June 1996, the Chinese announced that they would only conduct one more nuclear test. Their statement was unambiguous and did not appear to be contingent on the conclusion of a CTBT.

China's two main concerns have been the definition of "treaty compliant activities" and the definition of a verification regime. The Chinese have advocated a zero-yield treaty in which no tests, regardless of magnitude, would be permitted. At the same time, China remained

committed to a position that would have permitted PNEs—peaceful nuclear explosions.³⁹ This view was rejected by most other countries, in part because of the difficulty of distinguishing between peaceful and non-peaceful explosions. Finally, in June 1996, China announced that it was dropping its insistence on PNEs, subject to a review of the issue 10 years after the treaty's entry into force.

Verification of a CTBT also poses difficult issues for China. The Chinese have resisted a threshold limit because of asymmetries in verification capabilities. The Chinese claim that if the threshold is low, extremely sophisticated instrumentation and techniques would be required to distinguish a nuclear test from other seismic events. Because only the United States has this advanced technology, it would have the ability to conduct tests very close to this limit, creating an unfair advantage. However, if a high threshold is set, the Chinese complain that many militarily significant events would still be permitted.⁴⁰

In articulating its view of a desirable verification regime, Beijing has put forth a set of principles which could make negotiation of a regime acceptable to all the parties before the end of 1996 extremely difficult, if not impossible. China wants a regime that provides timely evidence of violations during the "preparatory period" before the actual violation occurs, and is accurate and reliable. It also wants a verification system open to all parties to the treaty, enabling all to share in capabilities and in-

formation resources and technologies. The Chinese further stipulate that any verification technology not available to all parties should be considered illegal. Yet, the Chinese solution—the creation of an international (satellite) monitoring system (IMS), presumably under the auspices of the United Nations—would in all likelihood be prohibitively expensive as well as redundant with existing NTM (which are not shared).⁴¹ This would give China free access to advanced U.S. satellite technology. Solution of these and other sensitive verification issues, including on-site inspections, is likely to be postponed until the Preparatory Conference (scheduled to place after the treaty's signature but before its entry into force).

Chinese officials have not confirmed whether they would stop testing if a CTBT were signed, or if they would wait for it to enter into force. The Chinese have repeatedly said that they support the goals of the CTBT and are working to see conclusion of the negotiations by the end of 1996. But they have made no commitment to stop testing after 1996 in the absence of a formal treaty obligation.

CD Ad Hoc Committee on Weapons in Outer Space

China supports the establishment of negotiations to reach an agreement banning the deployment of weapons in outer space. Since the United States, France, and Britain have been reluctant to adopt such a mandate, discussions at the committee have focused on information sharing, establishment

of rules of behavior, notification of space launches, and other confidence-building measures. It is not known if China has any anti-satellite weapons under development.

Strategic Reductions

China has never been part of a formal negotiation to reach agreement on reductions of its nuclear weapons (excluding the vague nuclear disarmament called for in the NPT). The Chinese position has always been that the two superpowers must take the lead, since their stockpiles are so much larger than the other three nuclear powers. In the mid-1980s, Chinese officials stated that China would not seriously discuss strategic reductions until the two superpowers reduced their arms by 50 percent.⁴² After the demise of the Soviet Union when dramatic U.S. and Russian reductions became a real possibility, China restated its position and stipulated that the superpowers would have to reduce by "well over 50 percent" before China would engage in arms reduction negotiations.⁴³

CONCLUSIONS

China's Growing Participation in Nonproliferation Regimes

The extent of Chinese participation in arms control and nonproliferation regimes has been increasing steadily since the mid-1980s. The numbers of treaties to which China is a party, as well as the number of Chinese representatives at different arms control negotiations, have been growing. Chinese are speaking out more often and presenting more technical

papers. One of China's historical complaints about arms control has been that the rules have been made by the great powers and then imposed on the rest of the world. Thus, the Chinese are quite deliberately becoming involved at the negotiation stage in order to reverse the previous pattern.

Why has Chinese activity increased so dramatically in recent years? Chinese scholars and analysts give different reasons, which often differ according to the individual treaty. But the end of the Cold War made it easier to reconcile these regimes with certain Chinese national objectives. First, the post-Mao leadership has been strongly committed to making sure China's voice is heard in the world community when it comes to any significant international issue. The future size, deployment, and development of nuclear, conventional, biological, and chemical weapons are among the issues that China wants to be consulted on before a major international agreement is reached.

A second reason, not often discussed in Beijing, is that the demise of the Soviet Union has brought China into a not very flattering international spotlight. After a period of 40 years during which China could deflect attention from its own behavior by accusing the two superpowers of even worse behavior, Chinese leaders are now forced to accept the fact that the United States and Russia have made substantial progress in reducing bilateral as well as worldwide military tension through negotiated, albeit gradual, steps towards disarmament. The START I and planned START II

arms reductions, as well as the nuclear testing moratorium, are only the most obvious examples. Typically, Chinese scholars and officials acknowledge this progress, but also insist that neither Russia nor the United States has gone far enough. Nevertheless, it is reasonable to assume that Beijing recognizes that some aspects of Chinese behavior now appear less justifiable by comparison to that of the superpowers.

A third and related reason for the increase in participation is China's realization that, absent a major superpower competition, arms control is going forward with or without Chinese participation. Therefore, it is probably wiser to accept that fact and try to influence the process rather than remain aloof from it and hope for the best. For example, a number of Chinese analysts have suggested that the reason China joined the NPT was because of the sense that it could work more effectively for disarmament from within the organization than outside it.⁴⁴

The Chinese, quite naturally, seek to do more than just avoid the negative consequences of non-participation in arms control regimes; certain treaties and conventions offer their members incentives that are very real from China's perspective. Those with intricate verification regimes offer China potential access to technologies (or at least to enhanced technical understanding through participation in experts groups) that might not otherwise be available. They also give Chinese scientists the chance to benchmark their capabilities against other countries. Other regimes enhance China's prestige

both with the major powers (which tend to interpret participation as a commitment to arms control) and with the Third World (whose interests China would like to be able to champion). Thus, China's NPT membership offers it both real and symbolic advantages.

At the same time, the costs of participation are often equally real disincentives that affect the nature of Chinese involvement in certain regimes. One very high cost is the potential exposure associated with any type of intrusive inspection regime. Like many other countries, China is concerned that the access

permitted for these inspections will be used to conduct espionage and reveal state secrets. But above and beyond the possibility that security will be compromised, the very image of foreigners inspecting Chinese facilities has a high symbolic cost in an increasingly nationalistic political climate. It evokes an image of the weak dynastic China that had to cave in to foreign pressure and settle for a compromised standard of sovereignty. It is also likely that China would be embarrassed to reveal the backward state of factories and research institutes. This concern is

especially relevant for chemical plants that could be subject to challenge inspections under the CWC. Another cost associated with some arms control agreements, especially those that seek a comprehensive ban such as the CTBT, is that they could freeze China into a permanent position of inferiority with respect to a given type of weapon system or technology.

Finally, another real, but less widely recognized, cost pertains to the purely logistical and procedural problems of arms control in China. These will not be resolved

Figure 2

NAME OF TREATY OR REGIME	YEAR CHINA JOINED	MEMBERSHIP U=Unilateral B=Bilateral M=Multilateral	VERIFICATION AND ENFORCEMENT U=Unilateral B=Bilateral M=Multilateral N/A=Not Applicable	COST TO CHINA	HAS CHINA BEEN ACCUSED OF VIOLATIONS
No-First-Use Pledge (Negative Security Assurance)	1950	U	None	Low	No
Biological Weapons Convention	1985	M	B	Low	Yes
Sino-Soviet Border Talks	1989(1)	B	B	Low	No
P-5 Talks on Weapon Sales to the Middle East	1991	M	None	Low	No
Transparency in Armament (U.N. Arms Register)	1991	M	None	Low	No
Missile Technology Control Regime	1991(2)	M	B	Medium	Yes
Nuclear Non-Proliferation Treaty	1992	M	B	Low	Yes
Sino-Indian Border Adjustments	1993	B	B	Low	No
Chemical Weapons Convention	1993(3)	M	M(4)	High	Yes
Fissile Material Cutoff	1994(5)	B	None	?	N/A
Comprehensive Test Ban Treaty Talks	1996(6)	M	M(7)	High	N/A

1. The two countries had been talking prior to 1989, but this is the year that serious discussion began on such topics as reducing troop levels and adjusting borders.
2. China is not a formal member of the MTCR, but has pledged to abide by its guidelines.
3. The treaty has not yet entered into force.
4. Specifics of CWC verification procedures are still being discussed. In all likelihood, it will be a multilateral regime.
5. China agreed to discuss the issue with the United States but did not make any formal commitments.
6. Talks are still ongoing.
7. Specifics of CTBT verification procedures are still being discussed. In all likelihood, it will be a multilateral regime.

until there is a centralized agency with an arms control mandate and a sufficient supply of trained people inside and outside the government.

Given the above points, it would be perfectly reasonable to expect China to join those regimes which offer good incentives at minimal cost, and shy away from those with high costs. China has joined any number of conventions that are based entirely on voluntary disclosure and compliance and which have no verification procedures or mechanisms to impose sanctions on those who violate the convention. The U.N. Arms Register and the proposal to establish a no-first-use treaty are two examples of high-benefit/zero cost conventions. However, China has also been a player in two negotiations that may create extremely intrusive verification regimes: the CTBT and the CWC. Since neither has entered into force, it is difficult to predict how the leadership will deal with the costs associated with verifying these regimes. In addition to absorbing the military and political costs of on-site inspections, China will also need to address the substantial technical resources required to participate in inspections and other verification activities.

Patterns of Chinese Behavior

The international arms control treaties and conventions in which China has participated over the past 15 years differ significantly in their scope, permitted activities, required activities, and compliance mechanisms. Chinese activity in these fora has only begun to as-

sume significance in the past five years, and in many regimes the Chinese have kept a low profile. Drawing conclusions about general patterns of Chinese behavior in this context is difficult, especially when many of the regimes themselves are quite new and acceptable international norms are only starting to emerge. Nevertheless, broad patterns are discernible and are worth articulating even at an early stage.

China's participation in a range of arms control conventions over the past 15 years does not demonstrate a clear pattern of either compliance or violation (see Figure 2). Unfortunately, many multilateral arms control and nonproliferation regimes currently in force lack objective and impartial verification or compliance procedures that would enable easy measurement against an established norm. Most of the treaties China has signed have no verification regime, and those that do rely on unilateral use of NTM.

For example, concerns about Chinese missile shipments that might be in violation of MTCR guidelines have been raised not in the context of the MTCR itself, but in the context of U.S. domestic legislation. Chinese commitments to participate in the MTCR were made only to the United States, not to an international regime. This makes it easy for China to flatly deny U.S. claims and protest U.S. sanctions, on the grounds that if the United States does not live up to its promises vis-a-vis Taiwan, China should not be held to a higher standard in its commitments to the United States. Similar caveats apply to charges that

China has acted in violation of its NPT obligations. The issue of compliance is further confused by the tendency of Chinese officials to use two somewhat inconsistent responses to U.S. accusations. On the one hand, they flatly deny any violations. On the other hand, they insist that the terms of the treaty (particularly the MTCR) are discriminatory.

A question that deserves more attention is: if the Chinese *have* violated certain norms, what is the reason for their behavior? Any number of plausible explanations exist. They include philosophical or political objections to the treaty; reluctance to disclose information; imperfect understanding of treaty requirements and provisions; absence of a judicial, legislative, and bureaucratic infrastructure to implement treaties; and knowledge that China can easily shift the terms of debate to bilateral issues in U.S.-China relations, thereby effectively discrediting U.S. accusations. None of these potential sources of noncompliance is easy to address. The simplest is perhaps the absence of information and understanding of arms control in China. Here, the United States can help the Chinese without making accusations or pointing fingers. However, it is also possible that the better the Chinese understand arms control, agreements, and the constraints they impose, the less inclined they will be to become full members of the regime.

Future Evolution of Chinese Arms Control Compliance

In sharp contrast to the success of U.S.-Russian bilateral arms

control measures, it is unlikely that any attempts by the United States to constrain Chinese arms proliferation activities through strictly bilateral channels will enjoy success over time. The Chinese typically prefer a bilateral approach for this reason. Success on a bilateral basis is only conceivable in instances where the United States (or another state, such as Japan) is prepared to apply very significant amounts of sustained pressure. Due to economic reasons, however, this is rarely done.

But Chinese participation in multilateral security dialogues and emerging transparency and confidence-building measures (such as the U.N. Arms Register), despite the limited constraints imposed by these regimes, does constitute progress. It is therefore worth encouraging, albeit with the expectation of modest results. Open channels of communication and dialogue are generally preferable to isolated camps of mutual suspicion. Indeed, any significant changes in China's behavior are likely to emerge through participation in genuinely international regimes, such as the CTBT and the CWC, which entail high costs for the Chinese. At present, it appears that the Chinese are committed to the implementation of both of these regimes, despite the fact that verification will be intrusive and they will put China at a disadvantage relative to countries with more sophisticated weapons and technology. The real test will be whether the Chinese can change their current view of arms control and national security from a zero-sum to a positive-sum game. If the former perception continues, the

Chinese government will strive to create the appearance of active membership in the arms control club, while failing to make the very concessions and restraints required to make arms control and nonproliferation regimes successful. The challenge to other members of the club is to find more effective ways to make China see that nonproliferation regimes, despite their constraints on sovereignty, ultimately support, rather than undermine, the national security of all states.

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²⁰ Testimony of CIA Director James Woolsey to U.S. Senate Governmental Affairs Committee on February 24, 1993. *AFP*, February 17, 1995; in FBIS-CHI-95-033 (17 February 1995), pp. 1-2. *Xinhua*, March 10, 1992; in

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²⁴ "A Brief History of Full-Scope Safeguards - 31 March," *Arms Control Reporter* (1993), p. 602.B.243.

²⁵ This question was repeatedly asked during interviews by the author in Beijing in 1993 and 1995, and never elicited any new information. The author has also visited numerous Chinese facilities that produce various dual-use items and inquired about national security related export controls, and was told that no such procedures exist.

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²⁷ *Xinhua*, February 2, 1994; in FBIS-CHI-94-024 (4 February 1994), p.6.

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²⁹ Author's interview with Chinese Ministry of Foreign Affairs official in Beijing, March 1993.

³⁰ Chinese statements at the Conference on Disarmament, April 6, 1989, and August 10, 1989.

³¹ Author's interview with officials at U.S. Arms Control and Disarmament Agency (ACDA), June 1995.

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⁴⁴ These observations are based on a series of the author's interviews and discussions with Chinese officials and scholars, especially those conducted in Beijing and Shanghai in April 1993 and November 1994.