The Nautilus Institute
for Security and Sustainable Development

THE AWAKENING ASIAN TIGER

CHINA IN US NUCLEAR WAR PLANNING

(A WORKING PAPER)

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November 2000

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Table of Contents

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* This working paper is an excerpt from a larger forthcoming report on China's role in U.S. nuclear strategy. The title "The Awakening Asian Tiger" is derived from a book-review by former Director of Strategic Planning and Policy in the U.S. Pacific Command, Rear Admiral Vogt.[1] Research for this paper was supported by the John D. and Catherine T. MacArthur Foundation and the Ploughshares Fund.

Introduction

China has been a target for U.S. nuclear weapons since the 1950s – even before the first Chinese nuclear test explosion in 1964. The status of the communist nation in U.S. nuclear warfare planning, however, has been a roller coaster ride over the years. Coinciding with various military and geopolitical developments, China was initially viewed as a communist threat against Taiwan and South Korea. Then in the 1970s and early 1980s China became almost a partner to the United States in the effort to contain the Soviet Union and nuclear targeting of China was limited accordingly to lower-priority contingencies.

Most recently, however, Chinese modernization (albeit at a slow pace) of strategic nuclear forces has triggered increased U.S. targeting of China. When the U.S. Senate in May 2000 held a hearing on U.S. nuclear force requirements for its nuclear war plan, military official pointed to China as a justification for maintaining high numbers of nuclear weapons. The commander in charge of U.S. nuclear forces described how, "recent statement by senior Chinese officials also may point towards an increased role for nuclear weapons in their foreign policy."[2]

These are indications that a nuclear arms race between China and the United States has begun and entered a new and dangerous phase. It is impossible to predict the outcome of this development, but an important lesson from the Cold War is that once an arms race has been set in motion and gathers momentum, it can very difficult to stop.

To help identify the factors that drive U.S. nuclear targeting of China in the post-Cold War era, this paper reviews how China's status in U.S. nuclear planning has evolved over the years. As a working paper, it is not intended to be comprehensive but stimulate debate and invite comments and recommendations for inclusion in a more expansive report on the subject.

China Becomes A Target

China first became a target for U.S. nuclear weapons planning in the 1950-1953 Korean War after Chinese forces counterattacked and the Truman and Eisenhower administrations tried to force the war to a conclusion. During this process, both Presidents considered the use of nuclear weapons against China and the war strongly influenced the nuclear planning against China. In the second half of the 1950s, a variety of nuclear scenarios were drawn up, some of which were developed during the Taiwan Strait crisis in August 1958.

Up until 1960, however, nuclear war planning against China was mainly an ad hoc, contingency-based effort. With all the regional commands incorporating nuclear weapons into their increasing number of contingencies, the Pentagon attempted in 1960 to assemble the various strike plans under a single and better coordinated planning system. The result was the Single Integrated Operational Plan (SIOP).

The very first SIOP from December 1960 contained only one “plan,” under which the U.S. would launch all its strategic nuclear delivery vehicles immediately upon the initiation of nuclear war with the Soviet Union. Although the Soviet Union was the focus, the single target

list also included Chinese and satellite cities, as well as airfields and other military bases and facilities within or on the outskirts of these cities. No strategic reserves were planned. There was no provision for an attack on the Soviet Union that did not also involve attacks on China and the satellite states.[3]

For the Pacific Command, this development meant incorporating existing war plans in the region with the SIOP responsibilities. The General War Plan Number 1-61 was the first PACOM (Pacific Command) General War Plan to include the SIOP. Work began in July 1960,[4] six months before the first SIOP took effect, and construction of Command and Control facilities needed to support the new requirements included an alternate communications link between Clark AFB in the Philippines and Taiwan "to ensure adequate back-up to facilities serving 'Quick Strike' and Single Integrated Operations [sic] Plan (SIOP) forces."[5]

Yet the intertwining of Soviet and Chinese strikes soon proved to be an impractical and bulky challenge for the war planners. So during the 1961-1962 revision of the SIOP, attacks on China and Soviet satellite states were separated for targeting purposes from strikes against the main USSR.[6] This compartmentalization of targets in the SIOP has endured to this day. Once the basic SIOP organization was established, analysts and targeters began the meticulous process of identifying suitable targets, calculating the force needed to destroy them, assessing U.S. capabilities to deliver nuclear warheads onto the targets, and designating individual warheads to the aimpoints. This target-focused planning inevitably resulted in an inflation of the number of targets and therefore also the number of required warheads. Needless to say, this demanded better and better platforms to deliver the warheads.

During the first half of the 1960s, this process resulted in several important developments in the region. The first involved the forward deployment of long-range bombers with nuclear weapons to bases in the Pacific within range of mainly China. Although bombers and nuclear weapons had been sent to the region on an ad hoc basis in the mid- and late-1950s, SIOP planning resulted in a more permanent forward deployment. The SIOP-63 plan that entered into effect in August 1963, included forward deployment of 12 B-47 bombers to Anderson AFB on Guam,[7] and ten more bombers were added that fall due to the Cuban Missile Crisis.[8] The new SIOP-64 from January 1964 replaced the B-47s with the new B-52 bombers[9] with much longer range, and by April 1, 1964, coinciding with Revision One to SIOP-64, B-52s assumed a formal and permanent alert status on Guam.[10]

The individual aircraft and the crews would deploy in three-month cycles under the so-called Reflex program in the first half of the 1960s. After completed cycle they would return to their main bases in the United States after a new squadron had taken over alert status in the area. When the Reflex program was discontinued in July 1965, Strategic Air Command instead forward deployed a "dual contingency/SIOP force" of 20 alert aircraft on Guam.[11] This was continued in Revision 8 to SIOP-64, which was introduced in April 1966, a plan that included 20 B-52 alert bombers on Guam and an additional 10 bombers flying on the new Far East Airborne Alert route fully loaded with nuclear weapons. These aircraft provided for "improved coverage of Chinese targets."[12]

SIOP bombers were also forward deployed to Tinian AB in Taiwan, but this requirement was dropped in 1974 and all nuclear weapons were relocated to Clark AB in the Philippines. [13]

Kadena AB on Okinawa also served as a forward nuclear bomber base between 1954 and 1972.[14]

Shorter-range tactical fighter-bombers also provided SIOP strike capability against Chinese forces. Although CINCPAC concluded that Kadena AB by 1974 “for all practical purposes has been lost as a bomber operating base and as a weather evacuation base for WestPact bombers,”[15] the 18th TFW at the base increased its SIOP commitment during 1974, while the 3rd and 8th TFWs in South Korea reduced their commitment. The total SIOP commitment of Pacific Air Forces, however, remained unchanged, and the PACAF SIOP Quick Reaction Alert force of October 1974 was made up of four F-4Ds from the 8th TFW at Kunsan, while the 3rd, 8th, and 18th TFWs overall continued to play a "major SIOP non-alert role."[16]

The Impact of Sea-Based Deterrence

The second development involved the deployment of strategic submarines to the Pacific. When the United States first began deploying ballistic missiles at sea, it did so only in the North Atlantic and Mediterranean Sea. PACOM's analysis in support of the annual Nuclear Weapons Requirements Study from April 1962 for the Fiscal Year 1965 contained a “greater recognition of the Allied nuclear capable delivery vehicles to give fire support in the Taiwan and Korean area.”[17] All of this, however, was provided by aircraft and short-range systems on the ground. For four years between 1960 and 1964, strategic submarines did not patrol in the Pacific at all.

When the Joint Chiefs of Staff asked CINCPAC in January 1963 about the need for medium-range ballistic missiles (MRBM) in the Pacific, CINCPAC replied that a mixture of Polaris-equipped submarines and land-based MRBMs would be better than either of the two systems alone. CINCPAC’s recommendation for the JSOP-68 stated a requirement for as many as 16 SSBNs and three MRBM squadrons. The rationale for this requirement was an estimated 212 high-threat targets during the 1965-1970 period, consisting of missile sites, air bases and air defense headquarters. The unique capability that CINCPAC wanted was the short flight time that SLBMs and MRBMs could provide compared to ICBMs and bombers. Using these forward-based systems with lower yield, CINCPAC explained, would free up SAC aircraft and ICBMs to be retargeted against targets that required the higher-yield weapons.[18]

In May 1964, only four months after CINCPAC's reply, the USS Daniel Boone (SSBN-629) arrived at Pearl Harbor, Hawaii, as the first strategic submarine assigned to the Pacific Fleet.[19] While the crew of the USS Daniel Boone was preparing the submarine to bring onboard the first loadout of nuclear missiles, China detonated its first nuclear bomb on October 16, 1964. Revision 3 to SIOP-64, which entered into effect on October 1, 1964, emphasized using Polaris-equipped submarines in the Pacific to "cover new threat targets,"[20] and on December 25, the USS Daniel Boone departed Guam for the first SSBN deterrent patrol in the Pacific. A new revision was effectuated on January 1, 1965, and within the next four months, four other strategic submarines joined the USS Daniel Boone,[21] providing CINCPAC with its first short flight time long-range nuclear strike capability in the region.

The submarines were not merely considered a reserve force but a less-accurate front-line force intended for strikes against mainly area targets. They were, however, part of attack options that were increasingly considered to be excessive and unlikely to incite reciprocal

restraint from the Soviet Union or China. Through a number of studies in the late 1960s and early 1970s, the Nixon administration eventually issued new guidance for preparing the nation's nuclear war plans. The so-called Schlesinger doctrine, promulgated through the Policy Guidance for the Employment of Nuclear Weapons and the associated Nuclear Weapons Employment Policy (NUWEP-1), resulted in the creation of a wide range of attack options, ranging from limited nuclear options involving only a couple of dozen of nuclear warheads to major attack options launching thousands of nuclear weapons in a single strike. This doctrine provided additional flexibility to deter or to respond to limited first strikes and reportedly was vital in formulating U.S. policy with regard to China because of the spectrum of inimical Chinese activity that could require a nuclear response by the United States.[22]

The new guidance also had direct impact on the number and types of nuclear strike options prepared for the Korean peninsula. SIOP-5A, which entered into effect on November 1, 1976, was added more selective, relatively small attack options in addition to the large-scale options. The first options drawn up were three Regional Nuclear Options (RNO) for the defense of South Korea. The three RNOs (down from eight initially proposed by COMUS Korea) were designed to signal U.S. resolve and enhance the U.S. tactical position in the region and were mainly focused on a large number of fixed targets. In addition to the RNOs, Pacific Command's Nuclear Planning Group also drew up a number of Limited Nuclear Options (LNO) for Korea that were intended “to signal U.S. resolve and ranged in number from a choice of one target to as many as ten or more.” Through selection of a small number of carefully selected targets the U.S. hoped to demonstrate restraint in an attempt to avoid escalation, yet still inflict sufficient damage to the enemy in an attempt to persuade him to cease hostilities and seek a political solution to the conflict.[23]

As the Schlesinger doctrine made its mark on the nuclear posture on the Korean peninsula and against China, the newly elected Carter administration ordered another review of nuclear targeting. The Nuclear Targeting Policy Review, which was conducted during 1978 and 1979 under Secretary of Defense Harold Brown, built on major policy changes initiated in the Nixon administration and completed in the Ford administration,[24] and resulted in President Jimmy Carter signing Presidential Directive (PD) 59 on July 25, 1980. PD-59 deemphasized the targeting intended to impede economic recovery in favor of greater emphasis on targeting the economic war-supporting infrastructure that had more predictable short-term effects. PD-59 also ordered the development of new reconnaissance systems to provide the real-time intelligence capabilities need to support the retargeting necessitated by the new flexibility in war planning. The protracted nuclear wars likely to emerge from this doctrine required further improvements to the Command, Control and Communication (C3) systems to ensure secure communication with the nuclear forces.[25]

As a result of this process, which also studied Chinese views on nuclear war, the concept of a secure reserve force was established.[26] The purpose of this force -- which included those strategic submarines and long-range bombers that were not earmarked for use in any of the SIOP options -- was to reserve a portion of the strategic forces, safe from destruction in an initial nuclear exchange, that could be used if the nuclear war became relatively extended to ensure that secondary nuclear powers such as China could not pressure the United States after an exchange with the Soviet Union.

How to Target China?

Although part of the Strategic Reserve Force was specifically linked to China, the principles that guided targeting of Chinese targets were not as clear as those that directed planning against the Soviet Union. Instead targeting of China appeared basically to mirror targeting of the Soviet Union. A report prepared for the Director of the Defense Nuclear Agency (DNA) in February 1981 found that the concepts used in targeting of China were "almost exclusively the product of the U.S.-Soviet relationship." Given the differences between the two countries, however, the report concluded that "the relevance to the Chinese case of such concepts is not evident."[27]

In an attempt to develop recommendations for targeting China to better influence that country in case of war, the study identified three different hypothetical scenarios for U.S.-Chinese nuclear confrontation and generated a set of target categories that would be better suited to impact China. The three scenarios were not portrayed as being official and the ones actually used by U.S. nuclear targeters, but they nonetheless provided some insight into the philosophy and assumptions that guided U.S. nuclear planning at the time. The three scenarios -- none of which envisioned a crisis over Taiwan or a direct U.S.-Chinese continent-to-continent confrontation -- were:

> 1st scenario: Korean War Re-visited: Involves a possible replay of the Chinese decision to intervene in the 1950-53 Korean War. The fact that Korea remains divided and that the long-range prospects for reunification do not appear particularly high, according to the study, "suggests the possibility of U.S. Chinese conflict in the future patterned after events which took place 30 years ago, including the possible use of U.S. nuclear weapons against installation on mainland China."[28]
>
> 2nd scenario: Proxi-State Crisis: Concerns the possible development of a client or proxy state of China in the third world or perhaps even in a more developed region analogous to the client/proxy status of Albania with respect to China after the Sino-Soviet rupture in the early 1960s. Proxy wars are not an unusual feature of contemporary international relations and there is no reason to believe they will not continue to be a prominent aspect of world politics in the next 20 years.[29]
>
> 3rd scenario: Catalytic War: The premise here is that, under certain circumstances the Chinese may be convinced that their single best option in a deteriorating political or military situation would be to incur the risks attendant to trying to precipitate a U.S./Soviet nuclear exchange. This scenario assumes a deteriorating Chinese relationship with either the Soviet Union or the United States, one in which the Chinese were expecting intervention or armed conflict.[30]

On the 1st scenario the study observed that if an inter-Korean conflict should erupt, the U.S. would find itself involved immediately. China's willingness to get directly involved would to a certain degree be constrained by the existence of U.S. strategic and tactical nuclear options. Even if China did decide to get involved directly, the existence of U.S. nuclear options in the Asia theater "would enable the U.S. to convey to the Chinese that the PRC might not remain a sanctuary as it did in 1950-1953."[31] In the late 1990s and early 21st century such a scenario has clearly become less plausible.

The basis for the 2nd scenario was envisioned as a pragmatic attempt by China to strengthen its economic situation or denying the superpowers "unchallenged monopoly" in various geographical regions around the globe. By creating a dependency on Chinese assistance to unstable areas like Africa or Latin America, a Cuba missile crisis-type could develop in which installation of Chinese weapons in some Latin American country could be responded to by U.S. targeting of facilities in China.[32] In the early 21st century, a proxy-type scenario could be Pakistan aided by Chinese nuclear assistance against an gradually closer U.S.-Indian partnership.

From the three hypothetical scenarios, the study outlined seven overall nuclear missions and associated target categories, although conceding that the boundaries between them in some circumstances may become blurred:[33]

> Deterrence of inimical (hostile) Chinese actions: Putting at risk those things the leadership values most, although "determining just what these things are apt to be is more difficult in the case of China than it is elsewhere." The Chinese willingness to sacrifice may mean that, "deterrence in the usual sense is not an effective ploy," although value targeting may be easier the more China builds up its infrastructure. Eight target categories were identified:
>
> * Nuclear weapons production capabilities: plutonium production reactors and associated chemical separation plants, uranium enrichment facilities, and weapons assembly facilities;
> * Intercontinental ballistic missiles (ICBM) (DF-4 and later), production, test and launch facilities including deployed launchers;
> * Major military installations supporting Chinese deployments along Soviet border;[34]
> * Advanced research and development (R&D) facilities involving defense technology;
> * Major seaports;
> * Major heavy industrial centers;[35]
> * Population in 20 most populated cities;[36]
> * National Command Authority (NCA) relocation facilities.[37]
>
> [Deleted] probably Preemptive Strike: Primary targets would involve both deployed systems and inventories as well as facilities capable of rapidly regenerating the strategic nuclear force. Since the number of Chinese nuclear strategic forces is not high, such an attack would likely involve the precise targeting by a limited number of U.S. weapons with great importance put on achieving high confidence kill. "The acute consciousness developed over a number of years by Chinese leaders of the possibilities [deleted] has generated predilections for concealment and deception in nuclear weapons deployment which could well cause substantial problems in ensuring that all weapons have been destroyed." Specific target categories would include:
>
> * Deployed strategic weapons capable of delivering nuclear weapons on the United States including strategic Command, Control, and Communications (C3) nodes controlling their activation and launch and other facilities essential to their use. This includes:

- DF-5A (CSS-4) silos and test range launch facilities, support areas, and final assembly production facilities;
- DF-4 (CSS-3) silos and test range launchers support areas, and final assembly production facilities;
- SSBN force, including SLBM production, storage and test facilities;
- Strategic aircraft and support facilities;[38]
- Underground facilities;
- National Command Authority (NCA) and key strategic C3 nodes;[39]

* Possible sources of additional weapons in storage or in final stages of fabrication that might be employed in the immediate aftermath of a U.S. strike.
* Targets identified in the course of continuing post strike reconnaissance looking for extraordinary Chinese measures to deliver nuclear weapons on U.S. territory.
* [several other items are deleted].

[Deleted] possibly Peripheral/Regional Attack: This mission involves nuclear strikes against a Chinese regional attack by destroying Chinese nuclear weapons and delivery vehicles capable of "peripheral attack." Because the delivery ranges are not necessarily large, China has a comparatively large number of suitable strike platforms. This means that there "is particular value to targeting actual nuclear weapons stockpiles whenever possible." Early use of nuclear weapons against a major conventional offensive would provide sufficient time to allow the preparation of the forces needed to counter the Chinese attack. Only those facilities and military preparations associated with a specific operation of concern would be subject to nuclear attack, although "for deterring a regional attack, it would be prudent to target all nuclear systems that might be made available for regional use." The following target categories would be envisioned:

* Peripheral nuclear attack forces, including short- and medium-range missiles, medium bomber airfields with focus on those with nuclear weapons loading facilities;
* Nuclear weapons storage and fabrication facilities;
* Appropriate regional conventional force facilities, depots and marshalling areas;
* Seaports likely to play key role in power projection or inter-regional transfer of troops;
* Air fields for short-range tactical air forces;
* Major C3 notes.

Massive Retaliation: The objective of this mission is to effect punishment after a Chinese attack on the United States by denying China and its leaders any possibility of functioning as a significant world power for the foreseeable future. In order to destroy the infrastructure and leadership along with any identifiable mechanism that will support their early reconstitution, the scope of targeting would include military, industrial and cultural target categories, may identified under previous options. This includes:

* Leadership continuity including command and control mechanisms;
* Key military installations and forces including C3 networks and defense-industrial facilities;

* Basic heavy industrial and chemical plan fertilizer;
* Light industrial plants, transportation and communication sectors;
* Agricultural industry;
* Major cities including centers of the party, government, and military bureaucracies;
* Major seaports;
* Major power-generation installations.[40]

Disarming Retaliation; The objective would be to end any Chinese nuclear initiatives by destroying the nuclear forces and their production facilities. This may be a more suitable response to a Chinese attack on the United States than massive retaliation. Yet since the mission is retaliatory rather than preemptive, China would have had the opportunity to prepare its nuclear forces and conceal them thus making targeting even more complicated. Although prompt reconnaissance prior to attack on remaining strategic nuclear forces could minimize the number of weapons required to attack them, the number of targets involved is likely to be so small that it would be feasible, albeit wasteful, to re-attack the entire target set without any reconnaissance whatsoever.

Tit-for-tat Response: This mission envisions a very limited, symbolic nuclear attack in response to an unacceptable Chinese act. The objective could be to deprive Chinese leadership of a highly valued target in order to demonstrate acute US displeasure, its willingness to take responsive actions, and its readiness to negotiate a resolution of the conflict. A limited target list would be most likely to include those targets apt to be most treasured by the leadership.[41]

Nuclear Operations in a Protracted War: This scenario involves a protracted war between the United States and China in which the use of nuclear weapons may be urged by tactical circumstances. Nuclear operations could emanate from a conventional conflict between the two countries by the anticipation of the conflict's moving to a stage which seems to require "preemptive actions" to protect the U.S. or its close allies from nuclear attack. This would require both tactical nuclear forces and the ability to undertake strategy preemptive attacks mentioned in options 2 and 3 above.[42]

The implication of these hypothetical scenarios and missions for U.S. nuclear policy, the DNA study said, is that the assured destruction doctrine – with its policy of deterrence and retaliation – "may not be suitable with regard to China because of its large population and the dispersion of industrial and agricultural capacity at least through the mid 1990s."[43] Yet China is also changing and the study suggested how China's drive to attain superpower status also meant that it was making itself more "vulnerable" to strategic attack by doing away with the inefficient and decentralized economic planning mode and replacing it with more high-value and centralized facilities.[44] This development, coupled with China's "doctrinal and pragmatic inability to engage in sophisticated 'limited strategic' warfare planning," should dictate what the "most threatening targeting option" for the United States should be.[45]

Limitations and constraints that targeters are forces to take into account when planning nuclear missions further limit operations against China. Certain targets are simply off-limit under international law but there are also self-imposed constraints intended to advance the outcome of a conflict on terms favorable to the United States. *Any* U.S. nuclear operation

against China, the DNA report stated, would take place against the background of latent or overt Soviet hostility toward the Chinese. To that end, it added, it may be advisable under most circumstances not to target those Chinese weapons that are thought to be dedicated to the destruction or engagement of Soviet forces.[46] Doing otherwise would assist the Soviet Union in a conflict with the United States.

Given the capability of the U.S. nuclear posture and the characteristics of Chinese targets, the DNA study concluded that it should "not be difficult to meet" the hard-target kill requirements for U.S. nuclear war planning against China in the period 1981-1995. To that end no modernization or acquisition programs were underway to meet the requirements of the particular Chinese target categories. Nonetheless, the study said, there could be "more than a few score targets" which may require weapons with very high accuracy and, in some cases, earth penetrating capability.[47]

China's Removal From the SIOP

Beyond such considerations, nuclear planning against China seemed somewhat disconnected from the political realities of the time. At the same time PACOM continued to fulfill its SIOP responsibilities and refine its strike options, it acknowledged that China "no longer opposed U.S. presence in East Asia" but instead saw the United States as "a stabilizing influence and a counter to the Soviet Union and North Korean adventurism." Indeed, PACOM saw China as "a restraining force on North Korea" and although there were signs of impatience in Peking over the Taiwan issue, there was "no indication" that China would attempt to use force against the island. In a report from July 1977, the Commander of the U.S. Taiwan Defense Command Vice Admiral E. K. Snyder told CINCPAC that China "could not, for the foreseeable future, invade Taiwan successfully."[48] Confident, the United States withdrew its military forces from Taiwan in 1979.

Nuclear deterrence appeared to have outlived its usefulness as the Carter administration was trying to normalize relations with China. Both countries saw real benefits in replacing their former rivalry with a defense partnership against the Soviet Union. While the Soviet Union regarded the United States as its major competitor in the world, PACOM said in 1980, it looked on China as its "most intractable opponent."[49]

Coinciding with these developments, the U.S. Navy announced in April 1980 – only a few months before PD-59 was published -- that all remaining Polaris-equipped strategic submarines operating in the Pacific would be withdrawn over a 15-month period beginning in July 1980.[50] Instead of replacing each Polaris-submarine with Poseidon-equipped SSBNs, however, the Pacific ballistic missile submarine fleet was allowed to virtually disappear. By 1981, the last five Polaris submarines were withdrawn from service and only a single SSBN remained assigned to CINCPAC.[51]

The new Reagan administration began a review of U.S. targeting policy in the spring of 1981 to re-focus its nuclear strategy against the Soviet Union. This review resulted in President Reagan signing National Security Decision Directive (NSDD) 13 in October 1981, which in turn prompted Secretary of Defense Caspar Weinberger to issue a new Nuclear Weapons Employment Policy (NUWEP-82) in July 1982. The guidance in these two documents was

used to develop a new SIOP, designated SIOP-6, which emphasized the development and planning for prolonged nuclear conflicts.[52]

China was, presumably in response to NUWEP-82, removed from the SIOP altogether. Instead a separate and less prominent war plan was prepared for nuclear war with that country.[53] Initially, because of the dramatic reduction in the Pacific SSBN fleet in the early 1980s, B-52 bombers were almost exclusively earmarked for that plan. As more and more new Ohio class submarines armed with Trident I C-4 missile were added to the Pacific fleet, however, strategic submarines gradually took on a more central role vis-à-vis China. One rationale for this choice, according to one source, was that the use of U.S. ICBMs to target China would necessitate flight-paths “over the pole” (and the Soviet Union) in order to hit Chinese targets. In order to avoid Russia thinking it was under attack if U.S. ICBMs were launched against China over Russian territory, SSBNs were seen as a better choice to engage China independently.[54]

Outside the SIOP, the nuclear planners were challenged with how to target China and for what purpose. The Joint Strategic Capabilities Plan (JSCP) for Fiscal Year 84, for example, directed that a CONPLAN[55] be developed for the employment of nuclear weapons against China's "power projection capabilities."[56] Since China had no such capability against the United States, this presumably involved targeting forces that could be directed against Japan and South Korea. The requirement was short-lived, however, and was dropped again in the JSCP for the following Fiscal Year.[57]

In the Pacific Command, the planners were keenly aware of the beneficial role China played in tying down Soviet Forces in the Far East that would otherwise have to be countered by U.S. and Japanese forces. By 1984, for example, approximately 90 percent of Soviet ground forces in the Far East were directed against China and preoccupied with the "growing Chinese nuclear capability."[58] China on the other hand maintained about 50 percent of its ground forces along the Soviet border.[59] The Soviet-Chinese stand-off had resulted in "the largest single concentration of forces along any bi-national border."[60] After Defense Secretary Caspar Weinberger's visit to China in 1983 and Defense Minister Zhang Aiping's reciprocal visit to the United States in 1984, Sino-American military relations had "reached a new threshold of cooperation,"[61] according to CINCPAC. China had in a very real sense become a partner in the containment of the Soviet Union.

De-Nuclearization of South Korea

By the mid-1980s, the United States had approximately 150 nuclear warheads deployed in South Korea for use by Army and Air Force units against targets in North Korea.[62] First deployed in January 1958[63] to deter against a Chinese supported attack from the north, this purpose of the nuclear force in South Korea was rapidly eroding with China's attention focused elsewhere. Although PACOM believed in 1984 that North Korea would be able to sustain "an extended conflict" against the south for a period of "several months, virtually independent of outside assistance,"[64] the U.S. nuclear option on the peninsula appeared less linked to China than at any time before.

The North-South military balance was also changing. In August 1989, for example, the U.S. commander in Korea, General Louis Menetry, reportedly stated that he anticipated that by the mid-1990s South Korea would be able to stand on its own feet but that a residual U.S. force might stay in South Korea for "symbolic" reasons.[65] To the extent that his statement concerned nuclear weapons, however, it would soon be overtaken by dramatic world events that swiftly nullified any residual requirement for maintaining nuclear weapons in South Korea.

On September 9, 1991, the Command of U.S. Forces Korea received a telegram from CINCPAC in Hawaii that directed him to evaluate the contribution of non-strategic nuclear forces as they related to deterrence and warfighting strategy in Pacific Command. The telegram, which all component commanders in the region received, was sent in anticipation of President Bush's unilateral disarmament initiative to be announced later that month. In his telegram, CINCPAC noted that non-strategic nuclear forces had played an important role in U.S. policy over the last 35 years, with their principal rationale being the U.S.-Soviet Cold War confrontation, but that the dramatic international changes required that the commanders assess whether the weapons were still required and in what role.[66]

For the Commander of U.S. Forces Korea, "the status of nuclear weapons located in Korea, became moot on 27 September 1991,"[67] when President Bush ordered that all non-strategic naval and ground-launched nuclear weapons be returned to the United States. In total, this involved over 2,000 nuclear weapons in Europe, South Korea, and dozens of warships and attack submarines deployed around the world. Preparations in Pacific Command involved drawing up a plan for the removal of all Artillery Fired Atomic Projectiles (AFAPs), Tomahawk land-attack missiles, nuclear strike bombs, and nuclear depth bombs. While the weapons on the vessels would be offloaded when the ships next returned to the United States as part of their normal cycle, transport of the ground-launched weapons would begin immediately. The first priority was the return of the nuclear artillery in South Korea, and Chairman of the Joint Chiefs of Staff General Collin Powel informed CINCPAC that the withdrawal of all weapons from Korea had highest priority for transportation aircraft. Powell wanted weapon movements to commence before the next meeting of the U.S.-South Korean military and security committees scheduled for November 20-22, 1991.[68]

To ease South Korean concern of being left vulnerable to North Korean attack, Bush's initiative initially did not include approximately 60 air-delivered nuclear bombs at Kunsan Air Base, but only about 40 nuclear artillery shells.[69] At the same time, U.S. officials went public with assurances about U.S. non-nuclear capabilities to deter Pyongyang. "If it comes to

military capability, to deter an attack on South Korea," Under Secretary for Defense Paul Wolfowitz told reporters three days after President Bush's announcement, "I think we demonstrated amply in the Persian Gulf that we have extraordinary means, including extraordinary conventional means…I hope the North Korean leadership, isolated though it may be, has noticed that kind of American strength and is not going to try any aggressive actions."[70]

Both up to and during the security consultations in November, U.S. officials went out of their way to assure North Korea that the U.S. nuclear umbrella over the country remained intact and would be covered by other nuclear forces.[71] With South Korean concerns eased, the full withdrawal was finally implemented by President Bush signing National Security Directive 64 (NSD-64) on November 5, 1991, which ordered the removal of *all* nuclear weapons (ground- and air-launched) from South Korea.[72]

Finally, on December 18, South Korean President Roh Tae Woo declared on national television: "As I speak, there do not exist any nuclear weapons whatsoever anywhere in the Republic of Korea." In Washington, D.C., State Department spokesman Richard Boucher supported Roh's call for a "non-nuclear peninsula," and pledged to cooperate in mutual inspections "to verify the absence of nuclear weapons"[73] on the peninsula.

Beyond the historical dimensions of the denuclearization South Korea and the reassurance of Seoul about the future U.S. nuclear umbrella over the peninsula, the most noticeable other issue was the absence of the Chinese factor. The Joint Chiefs of Staff annual Joint Military Net Assessment from March 1991 only mentioned in general terms that, U.S. forces in the Pacific region would "continue to support deterrence on the Korean Peninsula while balancing Soviet and Chinese influence in the area." In their assessment of nuclear forces in both 1991 and 1992, however, the Chiefs continued their focus on the Soviet Union and even included proliferation to Third World nations. China, however, was not mentioned at all.[74]

A New China Paradigm

During the remainder of the 1990s, a combination of traditional nuclear target planning, missile defense system development, and emphasis on regional scenarios gradually brought China back into focus. In January 1992, a new Pentagon study on the role of nuclear weapons in the post-Cold War era characterized China as "a wild card" to U.S. security interests. It pointed out that China "has a nuclear arsenal that continues to grow and which is capable of striking the U.S. and its friends and allies," and was concerned over China's leadership and its future control of the nuclear forces. It predicted that China might adopt "newly aggressive policies, especially with respect to outstanding problems like Taiwan," and warned against a nuclear confrontation between China and India. It concluded that U.S. strategic nuclear weapons would continue to serve a "moderate role" in deterring a Chinese nuclear attack on the United States and its allies. It also found that both strategic and tactical nuclear weapons would continue to deter China from trying to coerce the United States and its allies.[75]

Despite its semi-civilian appearance, the study was the product of a Strategic Deterrence Study Group within the Joint Strategic Targeting Planning Staff (JSTPS),[76] the official

institution responsible for developing the SIOP at the time. Both the authors and virtually all of the contributors to the study came from the JSTPS itself or its affiliates that advised the Command in Chief of Strategic Air Command, the Joint Chiefs of Staff, and the Secretary of Defense about the future development of the U.S. nuclear posture. Perhaps not surprisingly, many of the study's findings and philosophy were apparent in subsequent nuclear planning toward China.

The establishment of Strategic Command (STRATCOM) in June 1992, which assembled control of all U.S. strategic nuclear weapons under a single commander, initiated a number of force structure studies to determine the best composition of U.S. nuclear forces in the future in expectation of much deeper reductions in the arsenal under new arms control agreements. During this effort -- which took place amidst an increasing number of clashes over Taiwan, arms sales to proliferating countries, military espionage, and human rights issues -- the status of China gradually increased.

The Sun City Extended study, for example, which was completed by STRATCOM in early 1994 in the middle of the Nuclear Posture Review, contained an extensive analysis of various nuclear strike options against China. Previous force structure studies had focused on U.S.-Russian nuclear relations and only mentioned China in passing, but Sun City Extended dedicated a total of thirteen pages to examining various "China Scenarios." Although most of the details were deleted from the declassified version, two specific "potential US/China adversarial scenarios" were described in detail, one evolving from a conflict over North Korea and the other being a purely US-Chinese confrontation:[77]

* 1st scenario depicts a US/North Korea/China excursion:
    - regional as opposed to global concern;
    - calls for an "adaptively planned response against North Korea;"
      >>Not a full-scale attack against China;
    - DPF (Deliberate Planning Force), NSNF (Non-Strategic Nuclear Force), or conventional air-launched/sea-launched cruise missiles.

* 2nd scenario focuses on a China/CONUS (Continental US) confrontation:
    - "implies a need for a major-attack response plan."

China's prominent status was important for several reasons. First, the China factor had played no apparent role in the decision to denuclearize South Korea, but Sun City Extended reaffirmed China's role on the peninsula. Second, and more significantly, while China had been removed from the SIOP in 1982 and nuclear planning confined to a small number of contingency options, the need to develop a "major-attack response plan" in the context of a *continental* confrontation reflected the U.S. intelligence community's concern over China's increasing (albeit slowly developing) capability to reach targets in North America with long-range missiles.[78] This new capability, some military planners argued during the 1994 Nuclear Posture Review, necessitated a more generic targeting of China and Sun City Extended appeared to be partly intended to support this view.

STRATCOM didn't get the go-ahead to draw up a major attack option against China at this time, but efforts to bring China more firmly into mainstream nuclear planning were eased by intelligence reports about Chinese nuclear modernization and China's sable rattling against

Taiwan. Despite the potential threat, however, the U.S. military was not impressed with what it saw in the 1996 Taiwan crisis. The Air Force called the exercise an “unqualified success,” and observations revealed that although the exercise managed to test new equipment and demonstrate concern over internal developments in Taiwan, to the extent it sought to demonstrate joint capability of Chinese military forces, it failed. The Chinese military “demonstrations were set pieces and lacked realism, and very little inter-service cooperation was in evidence,” the Air Force concluded. It discounted any negative impact from the exercise on Taiwan’s internal affairs or independence, and predicted that China would "now need to factor in a US military response in its further development of PRC war plans.”[79]

Even on the less much demanding territorial dispute with Vietnam and the Philippines over the Spratly Islands, the U.S. military concluded that China's inadequate military capability prevented any aggressive action. In a secret special report from July 1996, the U.S. Navy's Joint Intelligence Center in the Pacific (JICPAC) concluded that one reason China did not force the issue was "the fact that it does not now have the power projection capability to establish control over Spratly Island." Even for the foreseeable future, JICPAC predicted, "China will probably allocate just enough naval forces to support its claims, but not enough to provoke an engagement into an international dispute."[80]

Neither Taiwan nor Spratly Islands seemed within China's military reach, and although its "relatively small nuclear forces are intended for retaliation rather than a first strike," the Pentagon later concluded,[81] concern over China's long-term strategic modernization significantly influenced the Presidential Decision Directive 60 (PDD-60) that President Clinton signed in November 1997 -- the first new comprehensive presidential guidance issued for U.S. nuclear forces in 16 years. Although PDD-60 deleted "all previous references to being able to wage a nuclear war successfully or to prevail in a nuclear war," it also permitted targeters to broaden the list of facilities that might be struck in a nuclear exchange with China. Although Robert Bell of the National Security Council declined to give any details about what those facilities were, another source told *Washington Post* that there was "no debate with respect to the targeting of China" as such.[82]

Although the details are unclear, the language in PDD-60 was vague enough to allow STRATCOM to formally bring China back into the SIOP with the completion of SIOP-99 in October 1998. As a result, the SIOP now includes two Limited Attack Options (LAOs) involving a handful of Trident submarine and bomber weapons in each case assigned to attack Chinese leadership, nuclear targets, and critical industries. In addition to these two LAOs in the SIOP, there are dozens more non-SIOP targets in China that are assigned to Strategic Reserve Forces,[83] that is missile submarines and bombers that do not have SIOP responsibilities. Moreover, in September 1999, the *New York Time* reported that the U.S. Navy had begun adding the W88 warheads – the most powerful in the arsenal – on strategic submarines operating in the Pacific. “So in the next few years," the paper said, "the W88 is likely to be aimed at China.”[84]

Endnotes:

[1] Rear Admiral Larry G. Vogt, U.S. Navy (Ret.), "China's Strategic Seapower," *The Submarine Review*, July 1997, p. 47.
[2] Admiral Richard Mies, Commander in Chief U.S. Strategic Command, statement before the Senate Armed Services Committee hearing on U.S. Strategic Nuclear Force Requirements in the DOD Strategic Integrated Operational Plan (SIOP), May 23, 2000.
[3] Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), pp. 62, 82.
[4] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1960," 1961, pp. 19-20. Secret. Partially declassified and released under FOIA.
[5] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1960," 1961, p. 42. Secret. Partially declassified and released under FOIA.
[6] Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), p. 82.
[7] U.S. Strategic Air Command, "History of Strategic Air Command January-June 1962," Historical Study No. 91, Vol. I, p. 86. Partially declassified and released under FOIA.
[8] U.S. Strategic Air Command, "History of the Strategic Air Command July-December 1963," Historical Study No. 93, Volume I, August 1964, pp. 102, 103. Partially declassified and released under FOIA.
[9] U.S. Strategic Air Command, "History of the Strategic Air Command January-June 1964," Historical Study No. 95, Volume I, January 1965, p. 106. Partially declassified and released under FOIA.
[10] U.S. Strategic Air Command, "History of the Strategic Air Command January-June 1964," Historical Study No. 95, Volume I, January 1965, p. 107. Partially declassified and released under FOIA.

The program, however, was effected on a scheduled basis, and the B-52 Reflex operation did not completely replace the B-47 Air Mail force until the second week of April 1964.
[11] U.S. Strategic Air Command, "History of the Strategic Air Command July-December 1965," Volume I, December 1966, p. 200. Partially declassified and released under FOIA.
[12] U.S. Strategic Air Command, "History of the Strategic Air Command July-December 1965," Volume I, December 1966, pp. 200, 201. Partially declassified and released under FOIA.
[13] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1974," Volume I, n.d. [1975], pp. 150, 263. Partially declassified and released under FOIA.
[14] Office of the Assistant to the Secretary of Defense (Atomic Energy), "History of the Custody and Deployment of Nuclear Weapons: July 1945 Through September 1977," February 1978, p. B-3. Partially declassified and released under FOIA to Robert S. Norris.
[15] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1974," Volume I, n.d. [1975], pp. 150, 263. Partially declassified and released under FOIA.
[16] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1974," Volume I, n.d. [1975], pp. 263, 264-265. Partially declassified and released under FOIA.
[17] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1962," Volume I, April 30, 1963, p. 38. Partially declassified and released under FOIA.
[18] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1963," April 27, 1964, p. 34. Partially declassified and released under FOIA.
[19] Department of the Navy, Strategic Systems Programs Office, "Facts/Chronology: Polaris-Poseidon-Trident," 1996, p. 32.
[20] U.S. Strategic Air Command, "History of the Joint Strategic Target Planning Staff: Revisions 1-8 to SIOP-64," January 1967, p. 28. NOFORN/TOP SECRET. Partially declassified and released under FOIA. Available at National Security Archive, Washington, D.C.
[21] Department of the Navy, Strategic Systems Programs Office, "Facts/Chronology: Polaris-Poseidon-Trident," 1996, p. 33.

Subsequent deterrent patrols in 1965 in the Pacific included: USS Tecumseh (SSBN-628) departing Apra Harbor, Guam, on January 24; USS Ulysses S. Grant (SSBN-631) departing Pear Harbor, HI, on February 6; and USS Stonewall Jackson (SSBN-634) departing Bangor, WA, on April 9. Ibid, pp. 34-35.
R. B. Byers, ed., *The Denuclearisation of the Oceans* (Kent: Croom Helm, 1986), p. 244.
[22] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 88. Partially declassified and released under FOIA.
[23] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1976," Volume I, October 18, 1977, pp. 160, 161. Partially declassified and released under FOIA.
[24] Leon Sloss, "Nuclear Policy, Then and Now," *The Washington Post*, December 9, 1997, p. A24; Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), p. 76.
[25] Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), pp. 77, 78.

[26] Leon Sloss, "Nuclear Policy, Then and Now," *The Washington Post*, December 9, 1997, p. A24; Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), p. 76.
[27] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 11. Partially declassified and released under FOIA.
[28] China's increasing emphasis on economical development may make it easier in the future to project "traditional" deterrence strategy onto that country. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 37. Partially declassified and released under FOIA.
[29] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 37-38. Partially declassified and released under FOIA.
[30] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 38, 45. Partially declassified and released under FOIA.
[31] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 42. Partially declassified and released under FOIA.
[32] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 43-44. Partially declassified and released under FOIA.
[33] Though the identification of these would be difficult, the importance of threatening continuity of PRC leadership argues strongly for developing the basis for targeting facilities expected to house and protect key leaders whose loss would disrupt party, government, and military functioning in the aftermath of a U.S. attack. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 53. Partially declassified and released under FOIA. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 46. Partially declassified and released under FOIA.
[34] Whether or not these and MR/IRBMs would be targeted would depend on the triangular relationship between the U.S., China, and the Soviet Union. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 52. Partially declassified and released under FOIA.
[35] Most of China's heavy industry is concentrated in the northeast region, which also contains important deposits of oil, coal and iron. This geographical centralization simplifies the targeting requirements to deter inimical Chinese action.
[36] Though the percentage of total population is low, this represents a particularly valuable element since it comprises a very large portion of the higher technological skills within China which are assuming growing importance to the leadership. As current policies continue, this population is likely to become the focus of the revolutionary movement. This population is likely to be included in other military and industrial targeting but should be identifiable on its own right as a potential cost and deterrent to unacceptable acts by the PRC. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 52-53. Partially declassified and released under FOIA.
[37] Though the identification of these would be difficult, the importance of threatening continuity of PRC leadership argues strongly for developing the basis for targeting facilities expected to house and protect key leaders whose loss would disrupt party, government, and military functioning in the aftermath of a U.S. attack. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 53. Partially declassified and released under FOIA.
[38] No Chinese bomber currently have the capability to reach targets in the United States. "Should this estimate prove incorrect, however, their targeting will be required." Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 60. Partially declassified and released under FOIA.
[39] Because of the importance of denying the use of any portion of Chinese strategic nuclear forces "after U.S. preemptive actions have been recognized," these targets could be important in slowing Chinese response times and thus easing requirements for "achieving simultaneity in force destruction." Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 60-61. Partially declassified and released under FOIA.
[40] In 1981, China had about 90,000 power plants, although most of the power was generated by several hundred stations. Advances in technology could reduce that number to less. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 72. Partially declassified and released under FOIA.
[41] This approach may be reflective of the Chinese approach when dealing with the Soviet Union, where they urge strong reactions to objectionable behavior. Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 74. Partially declassified and released under FOIA.
[42] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 76. Partially declassified and released under FOIA.
[43] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 87-88. Partially declassified and released under FOIA.
[44] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 17. Partially declassified and released under FOIA.

[45] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 26. Partially declassified and released under FOIA.
[46] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, pp. 80, 81. Partially declassified and released under FOIA.
[47] Jack Kangas, et al, "U.S. Nuclear Weapons Policy Toward China 1985-1995," DNA-5895F, February 10, 1981, p. 80. Partially declassified and released under FOIA.
[48] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1976," October 18, 1977, Volume I, pp. 91, 92. Secret. Partially declassified and released under FOIA.
[49] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1980," Volume I, September 17, 1981, p. 71. Secret. Partially declassified and released under FOIA.
[50] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1980," Volume II, September 17, 1981, p. 612. Secret. Partially declassified and released under FOIA.
[51] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1981," Volume I, September 30, 1982, pp. 11, 221. Secret. Partially declassified and released under FOIA.
[52] Desmond Ball and Jeffrey Richelson, ed., *Strategic Nuclear Targeting* (Cornell University Press: 1986), pp. 79-80.
[53] William M. Arkin and Robert S. Norris, "Nuclear Alert after the Cold War," Natural Resources Defense Council, NWD 93-4, October 18, 1993, pp. 6, 11 (footnote 38); Bruce Blair, "Global Zero Alert for Nuclear Forces," Brookings Occasional Papers, the Brookings Institution, Washington, D.C., 1995, p. 7.
[54] William M. Arkin and Robert S. Norris, "Nuclear Alert after the Cold War," Natural Resources Defense Council, NWD 93-4, October 18, 1993, pp. 6, 11 (footnote 38).
[55] A CONPLAN is an operational plan in an abbreviated conceptual format that requires expansion into an Operational Plan (OPLAN) or Operational Order (OPORD) prior to implementation.
[56] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1984," Volume I, September 27, 1985, p. 171. Partially declassified and released under FOIA.
[57] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1984," Volume I, September 27, 1985, p. 171. Partially declassified and released under FOIA.
[58] U.S. Pacific Command, "Pacific Area Update," No. P4080.1P1-4, February 17, 1984; as referenced in William M. Arkin and Richard W. Fieldhouse, *Nuclear Battlefields: Global Links in the Arms Race* (Cambridge: Ballinger, 1985), p. 117.
[59] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1984," Volume I, September 27, 1985, p. 77. Partially declassified and released under FOIA.
[60] James A. Kelly, Deputy Secretary of Defense for East Asian and Pacific Affairs, "Statement before the House Foreign Affairs Committee," May 6, 1984; as referenced in William M. Arkin and Richard W. Fieldhouse, *Nuclear Battlefields: Global Links in the Arms Race* (Cambridge: Ballinger, 1985), p. 117.
[61] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1984," Volume I, September 27, 1985, p. 77. Partially declassified and released under FOIA.
[62] William M. Arkin and Richard W. Fieldhouse, *Nuclear Battlefields: Global Links in the Arms Race* (Cambridge: Ballinger, 1985), pp. 120-121.
[63] Office of the Assistant to the Secretary of Defense (Atomic Energy), "History of the Custody and Deployment of Nuclear Weapons, July 1945 Through September 1977," February 1978, p. B-4. Partially declassified and released under FOIA to Robert S. Norris.
[64] Commander in Chief, U.S. Pacific Command, "CINCPAC Command History 1984," Volume I, September 27, 1985, p. 70. Partially declassified and released under FOIA.
[65] "Need for U.S. Forces in South Korea May Pass by Mid-90s, General Says," *Reuters-Kyodo*, August 14, 1989; cited in Peter Hayes, *Pacific Powderkeg: American Nuclear Dilemmas in Korea* (Massachusetts: Lexington Books, 1991), pp. xliv-xlv.

This view was echoed in the Joint Chiefs of Staff's annual Joint Military Net Assessment from 1990 which stated: "As ROK forces grow stronger, a reduction of US forces may be warranted. However, continuous retention of US troops in Korea will be required as long as the US and Korean governments and people want them there." U.S. Joint Chiefs of Staff, 990 Joint Military Net Assessment," January 20, 1990, p. IV-3.
[66] Commander in Chief, U.S. Pacific Command, "USCINCPAC Command History 1991," October 30, 1992, p. 90. Secret. Partially declassified and released under FOIA.
[67] Commander in Chief, U.S. Pacific Command, "USCINCPAC Command History 1991," October 30, 1992, p. 90. Secret. Partially declassified and released under FOIA.
[68] Commander in Chief, U.S. Pacific Command, "USCINCPAC Command History 1991," October 30, 1992, pp. 91-92. Secret. Partially declassified and released under FOIA.

[69] Don Oberdorfer, "Airborne U.S. A-Arms To Stay in South Korea," *Washington Post*, October 12, 1991, p. A20; Don Orberdorfer, "U.S. Decides to Withdraw A-Weapons From S. Korea," *Washington Post*, October 20, 1991, p. A1.
[70] Deborah Zabarenko, "Pentagon Official: U.S. Can Still Defense Against North Korea," *Reuter* (Washington), September 30, 1991.
[71] "Seoul Certain Of Remaining Under U.S. Nuclear Umbrella," *Reuter* (Seoul), October 19, 1991; David E. Rosenbaum, "U.S. to Pull A-Bombs From South Korea," *New York Times*, October 29, 1991, p. 3.
[72] Commander in Chief, U.S. Pacific Command, "USCINCPAC Command History 1991," October 30, 1992, pp. 91-92. Secret. Partially declassified and released under FOIA.
[73] Paul Blustein, "U.S. Nuclear Arms All Withdrawn, South Korea Says," *Washington Post*, December 12, 1991, p. A43; Robin Bulman, "No A-Arms In S. Korea, Roh Says," *Washington Post*, December 19, 1991, p. A38.
[74] U.S. Joint Chiefs of Staff, "1991 Joint Military Net Assessment," March 1991, pp. 44, 6-1 to 7-2; U.S. Joint Chiefs of Staff, "1992 Joint Military Net Assessment," March 15, 1992, pp. 7-1 to 7-12.
[75] Thomas C. Reed and Michael O. Wheeler, "The Role of Nuclear Weapons in the New World Order," January 13, 1992, p. 13 and Appendix B.
[76] Joint Strategic Target Planning Staff, "Minutes of the Forty-Seventh JSTPS Strategic Advisory Group Meeting 2-3 April 1992, Offutt AFB, Nebraska," May 1, 1992, p. v. Partially declassified and released under FOIA.
[77] USSTRATCOM, "Sun City Extended: A USSTRATCOM Study of Future Force Structures," February 1, 1994, p. 39. Secret. Partially declassified and released under FOIA.
[78] U.S. Senate, Armed Services Committee, "Threat Assessment, Military Strategy, and Defense Planning," 102d Congress, 2d Session, January 22, 1992, p. 34.
[79] Brfg (S/US & Japan Only/Formerly OADR, 14 Jul 96), PACAF/AIS, "Chinese Exercise Summary (U)," 14 Jul 96; as cited in U.S. Pacific Air Forces, "History of Pacific Air Forces, 1 January 1996 – 31 December 1996," Volume I (Narrative), n.d. [1997], p. 14. Secret. Partially declassified and released under FOIA.
[80] Department of the Navy, Joint Intelligence Center Pacific, "South China Sea: Spratly Islands Summary," OS-021-96, July 19, 1996 (reviewed on February 1, 1997), n.p. [page 4]. Secret. Partially declassified and released under FOIA.
[81] Department of Defense, "Annual Report on the Military Power of the People's Republic of China," June 22, 2000, n.p.
[82] R. Jeffrey Smith, "Clinton Changes Nuclear Strategy," *Washington Post*, December 7, 1997, page A1.
[83] See: Bruce Blair, "Removing The Hair Trigger On Nuclear Forces," *The Brookings Institution*, remarks at the Carnegie International Non-Proliferation Conference, January 12, 1999, p. 3; Elaine Grossman, "SIOP List Reportedly Grew 20 Percent: Nuclear Weapons Expert Says U.S. Warfighting Plan Now Targets China," *Inside the Pentagon*, Volume 15, Number 2, January 14, 1999.
Bruce Blair, "Cold War Era Assumptions Drive U.S. Nuclear Force Levels: Why the Target List Should Shrink," *Coalition to Reduce Nuclear Dangers/Center for Defense Information*, Issue Brief, Volume 4, Number 7, May 18, 2000.
[84] William J. Broad, "Spies vs. Sweat: The Debate Over China's Nuclear Advance," September 7, 1999, p. A14.