

[REDACTED]

4. Major Heavy Industrial Centers

[REDACTED] The four Modernization agenda calls for an economic system for China based on six major regions--north, northwest, east, central south, northwest and southwest. There are, however, no details on the economic infrastructure planned for these regions.

[REDACTED] In earlier years the Chinese government was committed to the decentralization of the country's heavy industry, partly to make it less vulnerable to enemy occupation and partly because the government wished to make the benefits of industrialization more accessible to the country's vast hinterland. The poor performance of heavy industry under decentralization, however, has apparently led the current leadership to aim toward centralizing the country's heavy industry largely according to the six major regions identified above.

[REDACTED] The bulk of Chinese heavy industry is concentrated in the northeast region. The Japanese, who built much of it during their occupation of China more than 40 years ago, chose

[REDACTED]

the site carefully: the northeast contains important deposits of oil, coal and iron. Because present government programs suggest a greater concentration of resources where they already exist, it is likely that the 1985-95 time period, the northeast region will still be at the forefront of importance in terms of its contribution to Chinese industrial growth.

[REDACTED] Geographic centralization could facilitate meeting the targeting requirements posed by the need to deter inimical Chinese actions. Even if the target categories of interest were essentially located in six regions of the country, that would be preferable to a situation where the targets were more uniformly distributed throughout the large land mass of the PRC. To the extent that the northeast region will continue to contain the bulk of Chinese heavy industry in the 1985-95 period, it may be possible in that period to successfully cripple Chinese heavy industry by focusing targeting attention on one geographic region of the country.

[REDACTED]

[REDACTED]

1. Concept Definition

[REDACTED]

[REDACTED] Both deployed systems and inventories as well as facilities capable of rapidly regenerating the strategic force would be prime targets. Since the numbers of such weapons expected to be in the Chinese inventory during the next 15 years is not large, such an attack is likely to 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 [REDACTED]

[REDACTED] has generated predilections for concealment and deception in

[REDACTED]

[REDACTED]

nuclear weapons deployment which could well cause substantial problems in ensuring that all weapons have been destroyed.

2. Generic Target Categories

The following types of weapons systems and reconstitution facilities should be targeted in a [REDACTED] strike against PRC strategic nuclear capabilities:

- . Deployed strategic weapons capable of delivering nuclear weapons on the United States including strategic C³ nodes controlling their activation and launch and other facilities essential to their use.
- . 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.

[REDACTED]

- . Targets identified in the course of continuing post strike reconnaissance looking for extraordinary Chinese measures to deliver nuclear weapons on U.S. Territory.

[REDACTED]

[REDACTED]

[REDACTED]

3. Relevant Chinese Target Categories

[REDACTED] At present the number of targets presented by Chinese strategic weapons systems capable of engaging in a nuclear attack on the United States is very small and is not expected to increase dramatically in the foreseeable future. All possibilities that this might occur can not, of course, be ruled out. Currently the PRC policies seem to rely upon the maintenance of a small nuclear deterrent capability, principally to dissuade Soviet military adventures. Most of the weapons systems which have some utility in this regard are not suitable for use against the United States. Though military modernization is one of the "Four," it clearly is not of top priority and within the area of military improvements, strategic weapons are not of foremost concern. Nevertheless, some specific Chinese categories of targets can be identified and some estimates of the location and numbers likely to emerge during the 1990s can be made based on the information in Section 2. The Chinese target categories are:

[REDACTED]

CSS-4 silos and test range launch facilities, support areas, and final assembly production facilities.

CSS-3 silos and test range launchers support areas, and final assembly production facilities. The CSS-3 is included because its range of 3000-3800 nm would give it some possible utility in attacking Alaskan targets.

Chinese SSBNs - At present only an old converted G-class submarine is at sea with an SLBM launch capability. It is probably only a test platform. Perhaps an SSBN or two is under construction, and more-- probably "a few"--will be built during the time frame of concern. Acoustic detection and localization of these submarines is of course uncertain at this point but it is unlikely that Chinese quietening will be so successful in its early models as to make the task impossible. SSBN port facilities also and operational characteristics (deployment patterns, patrol areas) could also be identified.

SLBM production, storage and test facilities. SLBM testing is only now underway and these facilities could be identified.

Underground facilities - Because the Chinese have constructed massive underground facilities a prudent planner must consider that considerable quantities of nuclear weapons, delivery system, and other war sustaining material could be stockpiled. Thus a critical requirement is the ability to locate these facilities and achieve a high probability of kill upon the underground facilities.

Strategic aircraft and support facilities - The PRC now has no bomber aircraft capable of reaching the U.S. and is unlikely to have any during the period of concern. Should this estimate prove incorrect however, their targeting will be required.

NCA and key strategic C³ nodes - Because of the importance of denying the use of any portion of Chinese strategic nuclear forces

[REDACTED]

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. Adequate targeting of all appropriate C³ elements depends on the availability of information needed to do so.

4. PRC Time-Urgent Strategic Targets

[REDACTED]

At present these are fewer than a half dozen ICBMs in the Chinese inventory and projections for the 1985-95 period range from 5 to 60 missiles. This number represents obviously a manageable set of aim points in terms of available RVs but the targeting problem can be expected to be complicated by mobile and deceptive basing modes. Mobility could seriously erode confidence in a sustained ability to locate and accurately pinpoint the launchers. Deceptive basing through such devices as dummy launchers

[REDACTED]

[REDACTED]

and camouflage of one kind or another would likewise lower confidence levels associated with executing a preemptive strike.

[REDACTED] In addition, fixed or mobile missile launchers could be deployed in the many steep canyon areas of north central China, e.g., in the Lanzhou military district. Mountainous terrain, coupled with extreme contours, could provide opportunities for enhanced silo hardness and possible shielding of weapons effects due to masking by closely spaced peaks and valleys.

[REDACTED]

[REDACTED]

[REDACTED] 1. Concept Definition

[REDACTED] It is clear that the geopolitical position of China is such that it can pose very serious threats to close allies of the U.S. in Asia and to U.S. military installations in the region. Japan and South Korea are notable examples. Chinese capabilities to mount such threats derive from forces other than those which might threaten U.S. territory with nuclear strikes. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Moreover, Chinese pursuit of a position of Asian dominance will enable it to exert primary influence on the policies and behavior of other states in the region. This would be accompanied with significant possibilities of military moves against key U.S. allies. In either of these cases, the U.S. may need the capability to [REDACTED] deny the Chinese both the ability to mount a peripheral nuclear attack and an all-out conventional attack. These represent very difficult objectives and are far more scenario-dependent than the other targeting cases discussed thus far.

[REDACTED] 2. Generic Target Categories

[REDACTED] Fulfilling this objective requires the destruction of Chinese nuclear weapons and delivery vehicles capable of peripheral attack. Because the required delivery ranges are not

[REDACTED]

[REDACTED]

necessarily large, the Chinese have a large number of suitable vehicles for peripheral nuclear attack. Thus, there is particular value to targeting actual weapons stockpiles whenever possible. The difficulty of targeting these nuclear delivery vehicles is increased because of the ease of concealing and moving them.

[REDACTED] It is difficult to target conventional forces with a limited number of nuclear weapons in a way that will prevent their reconstitution over a relatively short period of time. It is possible however to disrupt preparation for a major conventional offensive when its intended thrust is known. Such a move should provide a sufficient period of time to allow the preparation and augmentation of the forces which must counter a Chinese conventional attack. These considerations were taken into account in developing the following list of generic target categories:

- . Peripheral nuclear attack forces

- . Nuclear weapons storage and fabrication facilities

- [REDACTED]
- . Appropriate regional conventional force facilities, depots and marshalling areas
 - . Major C³ nodes.

[REDACTED] Problems arise in trying to target all specific targets that fit into these categories. Since one objective is to disrupt a conventional attack, it is desirable that some flexibility exists in order that only those facilities and military preparations associated with a specific operation of concern be subjected to nuclear attack. U.S. planners would be afforded some selectivity in the targeting of deployed Chinese nuclear weapons in early strikes because of the limited range of many of these weapons systems. In a peripheral attack mission only the forward deployed systems would be of immediate value. There are however opportunities, albeit limited, for the Chinese to rapidly move such weapons from one region of China to another. Thus for deterring a regional attack, it would be prudent to target all nuclear systems that might be made available for regional use.

[REDACTED]

3. Relevant Chinese Targets

[REDACTED] The difficulties in developing an economical target list suitable for accomplishing this mission in China are enhanced by observed Chinese practices. It has been reported that short- and medium-range ballistic missiles have been deployed in ways that emphasize their concealment in natural terrain and leave substantial uncertainties about the numbers available for use. Moreover, Chinese operations could include deployment nodes which employ launch sites at substantial distances from missile support bases and in which entire missile units could be moved at prearranged times or upon command.

[REDACTED] In a regional conflict, it should also be anticipated that the Chinese could possibly deliver nuclear weapons with their tactical combat aircraft and medium bomber force. Because of substantial uncertainties about the number of weapons in the Chinese nuclear inventory, this broad capability for air delivery, even though it would not be sophisticated, means that it will be difficult indeed to take actions that will assuredly deny the PRC the capability to carry out nuclear attacks on its Asian neighbors.

[REDACTED]


Recent Chinese conventional military operations, on the other hand, have been cautiously developed over a period of several weeks during which the build-up and its location could be detected. Given basic targeting flexibility, it should be possible to target key marshalling areas and military facilities supporting the build-up.

Specific Chinese target categories [REDACTED]

[REDACTED]

are:

- . Nuclear weapons storage and fabrication facilities.
- . CSS-1 and CSS-2 deployed sites, missile support bases, and storage and production facilities. As noted above, confidence that all missiles have been targeted will probably not be possible.
- . Medium bomber airfields with particular attention given to those with known nuclear weapons loading facilities.

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- . Regional marshalling areas, depots and supporting military bases associated with a general force build-up preparatory to conventional attack on peripheral states.

 - . Seaports likely to play a key role in power projection or for transferring ground forces from one military region to another.

 - . Airfields located so as to support air operations by the relatively short-ranged tactical air forces of the PRC.

 - . Key nodes in the C³ network providing central command and control of the preparations for conventional attack. Though this is a particularly valuable target set that is apt to be quite vulnerable, Chinese C³ networks could very well be dispersed, mobile and otherwise difficult to identify and target successfully.

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] (4) Massive Retaliation

[REDACTED] 1. Concept Definition

[REDACTED] It is conceivable that in the aftermath of a major Chinese nuclear attack on the United States, the capability for massive retaliation may be wanted. The purpose of such a U.S. response would be to effect punishment by denying the PRC and its leaders any possibility of functioning as a significant world power for the foreseeable future. Its inclusion here is not meant to argue that it is the proper response, a judgment that can only be made at the very highest level of national security policy-making, but to assess its possible impact on U.S. nuclear weapons requirements and policies.

[REDACTED]

[REDACTED]

2. Generic Target Categories

[REDACTED] Since the objective of massive retaliation is to deny a reasonable future to the state being attacked, it follows that the infrastructure and leadership necessary to such a future must be destroyed along with any identifiable mechanism that will support their early reconstitution. Generic target categories include the following:

- . Leadership continuity including command and control mechanisms
- . Key military installations and forces including C³ networks and defense-industrial facilities
- . Basic heavy industrial and chemical plant fertilizer
- . Light industrial plants, transportation and communication sectors
- . Agricultural industry

- [REDACTED]
- . Major cities including centers of the party, government, and military bureaucracies
 - . Major seaports
 - . Major power-generation installations.

[REDACTED] 3. Relevant Chinese Target Categories

[REDACTED] The actual targets would derive from the Chinese targets identified in earlier paragraphs. While the scope would include military, industrial and cultural target categories, the number of such targets would be limited by the inventory of available U.S. weapons.

[REDACTED] 4. Major Power Generation Installations

[REDACTED] At present, China has about 90,000 power plants but most of the power (specific percentage are not available) is generated by several hundred stations. The PRC seems to be leaning toward increasing capacity through a mix of hydroelectric and coal-fired plants that will

[REDACTED]

balance the local availability of water power and coal with a construction pace congruent with its overall modernization effort. China has the world's largest hydroelectric resources and is undertaking a massive program to construct hydroelectric power stations.

■ From a targeting perspective it is important to note that the hydroelectric resources in China are not for the most part co-located with Chinese heavy industry--most of the resources are found in remote areas in western China. However, the Chinese already have the technology necessary to transmit hundreds of thousands of megawatts from these remote areas to their major industrial centers.

■ How many power stations will supply the bulk of China's power requirements in the decades ahead is uncertain. Advances in technology could result in a number less than the several hundred which perform that task today.

[REDACTED]

(5) Disarming Retaliation

1. Concept Definition

On the other hand, it may be concluded that disarming retaliation is a more suitable response to a Chinese attack on the United States. In such an event, the objective would be to end any Chinese nuclear initiatives by destroying the nuclear forces and their production facilities.

2. Generic Target Categories

Target categories appropriate for pursuing this objective are [REDACTED]

[REDACTED]

3. Relevant Chinese Target Categories

[REDACTED]

[REDACTED] Since, in this scenario, the Chinese would have had an opportunity to prepare their nuclear forces for use and may have moved or concealed them, the problem of targeting peripheral nuclear attack forces is even further complicated. Rapid and

[REDACTED]

[REDACTED]

focused reconnaissance prior to attack on remaining strategic nuclear forces would minimize the number of weapons required to attack them. The number of targets involved is likely to be so small, however, that it would also be feasible albeit wasteful, to re-attack the entire target set without any reconnaissance whatsoever.

[REDACTED] (6) Tit-for-Tat Response

[REDACTED] 1. Concept Definition

[REDACTED] It is conceivable that we may wish to react to an unacceptable act by the PRC with a very limited, symbolic nuclear attack. This limited attack could be intended to deprive Chinese leadership of a highly valued target in order to demonstrate our acute displeasure, our willingness to take responsive actions, and our readiness to negotiate a resolution of the conflict. This approach is perhaps reflective of the Chinese approach as illustrated in dealings with the Soviet Union wherein they urge strong reactions to objectionable behavior.

[REDACTED]

2. Generic Target Categories

Because this concept involves slapping one's protagonist where it really hurts but with high selectivity, it is appropriate that a selection be made from among those potential targets apt to be most treasured by the leadership. These potential targets have, of course, been developed in treating the deterrence case above.

3. Relevant Chinese Target Categories

A list of these has also been developed there. The targeting problem in pursuing this objective is essentially one of selecting a Chinese target that is peculiarly appropriate to the stimulus in terms of severity, collateral damage possibilities, the specific segment of Chinese society affected by its destruction, symbolic relationship to the unacceptable act, etc. The range of targets identified as being of high value of the leaders of the PRC should provide ample opportunity to make such a selection.

[REDACTED]

(7) Nuclear Operations in a Protracted War

[REDACTED] In a protracted war which brings the armed confrontation of the PRC and the United States the use of nuclear weapons may be urged by tactical circumstances. Nuclear operations could emanate from a conventional conflict 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. Preparation by the United States for the use of nuclear weapons in such circumstances would thus require both suitable tactical nuclear forces and the ability to undertake [REDACTED] attacks discussed above.

[REDACTED]

[REDACTED]

The type of weapon employed (tactical or strategic) in nuclear operation in a protracted conventional war in the theater would be influenced by such policy considerations as basing rights, arms control range limitations, and third country overflights. These and other policy issues deriving from missions and Chinese target categories are presented in the next chapter.