U.S. NATIONAL SECURITY AND MILITARY/COMMERCIAL CONCERNS WITH THE PEOPLE'S REPUBLIC OF CHINA

VOLUME I



SELECT COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

REPORT

OF THE

SELECT COMMITTEE ON U.S. NATIONAL SECURITY AND MILITARY/COMMERCIAL CONCERNS WITH THE PEOPLE'S REPUBLIC OF CHINA

SUBMITTED BY MR. COX OF CALIFORNIA, CHAIRMAN

January 3, 1999 — Committed to the Committee of the Whole House on the State of the Union and ordered to be printed (subject to declassification review)

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A NOTE ON REDACTION

The Final Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the Peoples Republic of China was unanimously approved by the five Republicans and four Democrats who served on the Select Committee.

This three-volume Report is a declassified, redacted version of the Final Report. The Final Report was classified Top Secret when issued on January 3, 1999, and remains so today. Certain source materials included in the Final Report were submitted to the Executive branch during the period August–December 1998 for declassification review in order to facilitate the production of a declassified report. The Select Committee sought declassification review of the entire report on January 3, 1999. The House of Representatives extended the life of the Select Committee for 90 days for the purpose of continuing to work with the Executive Branch to declassify the Final Report. A series of further extensions was voted by the House of Representatives until the final declassification review was completed in May 1999. Following an extended series of negotiations between the House of Representatives and the Executive branch, a number of material deletions have been made to the Final Report.

As a result of these deletions, a number of significant events, facts, and analyses have been omitted from this declassified Report. In several cases, important factual examples substantiating conclusions in the report have been deleted. In other cases, explicit findings of the Select Committee have been suppressed. The Select Committee's classified Final Report, therefore, remains the definitive product of its investigation and analysis.

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VOLUME I



SELECT COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

Members of the Select Committee



United States House of Representatives 105th Congress

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OVERVIEW

OVERVIEW

<u>IMPORTANT NOTE:</u> This declassified report summarizes many important findings and judgments contained in the Select Committee's classified Report, issued January 3, 1999. U.S. intelligence and law enforcement agencies within the Clinton administration have determined that other significant findings and judgments contained in the Select Committee's classified Report cannot be publicly disclosed without affecting national security or ongoing criminal investigations.

1.

- The People's Republic of China (PRC) has stolen design information on the United States' most advanced thermonuclear weapons.
- The Select Committee judges that the PRC's next generation of thermonuclear weapons, currently under development, will exploit elements of stolen U.S. design information.
- PRC penetration of our national weapons laboratories spans at least the past several decades and almost certainly continues today.
- A. The People's Republic of China (PRC) has stolen design information on the United States' most advanced thermonuclear weapons.

The People's Republic of China (PRC) has stolen classified design information on the United States' most advanced thermonuclear weapons. These thefts of nuclear secrets from our national weapons laboratories enabled the PRC to design, develop, and successfully test modern strategic nuclear weapons sooner than would otherwise have been possible. The stolen U.S. nuclear secrets give the PRC design information on thermonuclear weapons on a par with our own.

The PRC thefts from our National Laboratories began at least as early as the late 1970s, and significant secrets are known to have been stolen as recently as the mid-1990s. Such thefts almost certainly continue to the present.

- The stolen information includes classified information on seven
 U.S. thermonuclear warheads, including every currently deployed thermonuclear warhead in the U.S. ballistic missile arsenal.
- The stolen information also includes classified design information for an enhanced radiation weapon (commonly known as the "neutron bomb"), which neither the United States, nor any other nation, has yet deployed.
- The PRC has obtained classified information on the following U.S. thermonuclear warheads, as well as a number of associated reentry vehicles (the hardened shell that protects the thermonuclear warhead during reentry).

U.S. WARHEAD	U.S. NUCLEAR MISSILE	CURRENTLY DEPLOYED
W-88	Trident D-5 SLBM	Yes
W-87	Peacekeeper ICBM	Yes
W-78	Minuteman III (Mark 12A) ICBM	Yes
W-76	Trident C-4 SLBM	Yes
W-70	Lance SRBM	No
W-62	Minuteman III ICBM	Yes
W-56	Minuteman II ICBM	No

In addition, in the mid-1990s the PRC stole, possibly from a U.S. national weapons laboratory, classified thermonuclear weapons information that cannot be identified in this unclassified Report. Because this recent espionage case is currently under investigation and involves sensitive intelligence sources and methods, the Clinton administration has determined that further information cannot be made public without affecting national security or ongoing criminal investigations.

The W-88, a miniaturized, tapered warhead, is the most sophisticated nuclear weapon the United States has ever built. In the U.S. arsenal, it is mated to the D-5 submarine-launched ballistic missile carried aboard the Trident nuclear submarine. The United States learned about the theft of the W-88 Trident D-5 warhead information, as well as about the theft of information regarding several other nuclear weapons, in 1995.

The PRC has stolen U.S. design information and other classified information for neutron bomb warheads. The PRC stole classified U.S. information about the neutron bomb from a U.S. national weapons laboratory. The U.S. learned of the theft of this classified information on the neutron bomb in 1996.

In the late 1970s, the PRC stole design information on the U.S. W-70 warhead from the Lawrence Livermore Laboratory. The U.S. government first learned of this theft several months after it took place. The W-70 warhead contains elements that may be used either as a strategic thermonuclear weapon, or as an enhanced radiation weapon ("neutron bomb"). The PRC tested the neutron bomb in 1988.

The Select Committee is aware of other PRC thefts of U.S. thermonuclear weapons-related secrets. The Clinton administration has determined that further information about PRC thefts of U.S. thermonuclear weapons-related secrets cannot be publicly disclosed without affecting national security.

The PRC acquired this and other classified U.S. nuclear weapons information as the result of a 20-year intelligence collection program to develop modern thermonuclear weapons, continuing to this very day, that includes espionage, review of unclassified publications, and extensive interactions with scientists from the Department of Energy's national weapons laboratories.

The Select Committee has found that the primary focus of this long-term, ongoing PRC intelligence collection effort has been on the following national weapons laboratories:

- Los Alamos
- Lawrence Livermore
- Oak Ridge
- Sandia

The Select Committee judges that the PRC will exploit elements of the stolen design information on the PRC's next generation of thermonuclear weapons. The PRC plans to supplement its silo-based CSS-4 ICBMs targeted on U.S. cities with mobile ICBMs, which are more survivable because they are more difficult to find than silo-based missiles.

The PRC has three mobile ICBM programs currently underway — two roadmobile and one submarine-launched program — all of which will be able to strike the United States.

The first of these new People's Liberation Army (PLA) mobile ICBMs, the DF-31, may be tested in 1999, and could be deployed as soon as 2002. These mobile missiles require small warhead designs, of which the stolen U.S. design information is the most advanced in the world.

In addition, the PRC could choose to use elements of the stolen nuclear weapons design information — including the neutron bomb — on intermediate- and short-range ballistic missiles, such as its CSS-6 missiles.

The PRC has the infrastructure and technical ability to use elements of the stolen U.S. warhead design information in the PLA's next generation of thermonuclear weapons. The Select Committee concludes that the production tools and processes required by the PRC to produce small thermonuclear warheads based on the stolen U.S. design information, including the stolen W-88 information, would be similar to those developed or available in a modern aerospace or precision-guided munitions industry. The Select Committee judges that the PRC has such infrastructure and is capable of such production.

The Select Committee judges that the PRC is likely to continue its work on advanced thermonuclear weapons based on the stolen U.S. design information. The PRC could begin serial production of such weapons during the next decade in connection with the development of its next generation of intercontinental ballistic missiles.

A series of PRC nuclear weapons test explosions from 1992 to 1996 began a debate in the U.S. Government about whether the PRC's designs for its new generation of nuclear warheads were in fact based on stolen U.S. classified information. The apparent purpose of these PRC tests was to develop smaller, lighter thermonuclear warheads, with an increased yield-to-weight ratio.

The United States did not become fully aware of the magnitude of the counter-intelligence problem at the Department of Energy national weapons laboratories until 1995. In 1995 the United States received a classified PRC document that demonstrated that the PRC had obtained U.S. design information on the W-88 warhead and technical information concerning approximately half a dozen other U.S. thermonuclear warheads and associated reentry vehicles.

The document was provided by a PRC national, unsolicited by the CIA — a "walk in." This individual approached the CIA outside the PRC, and turned over a number of documents. Among these was an official PRC document classified "Secret" by the PRC.

This PRC document included, among other matters, stolen U.S. design information on the W-88 thermonuclear warhead used on the Trident D-5 missile, as well as U.S. technical information on several other strategic U.S. nuclear warheads. The document recognized that the U.S. weapons represented the state-of-the-art against which PRC nuclear weapons should be measured.

By mid-1996 the CIA had determined that the individual who provided the information was secretly under the direction of the PRC intelligence services. The CIA and other U.S. intelligence community analysts have nevertheless concluded that the classified PRC document contained U.S. thermonuclear warhead design information and other technical information on U.S. nuclear weapons.

The stolen U.S. nuclear secrets give the PRC design information on thermonuclear weapons on a par with our own. Currently deployed PRC ICBMs targeted on U.S. cities are based on 1950s-era nuclear weapons designs. With the stolen U.S. technology, the PRC has leaped, in a handful of years, from 1950s-era strategic nuclear capabilities to the more modern thermonuclear weapons designs. These modern thermonuclear weapons took the United States decades of effort, hundreds of millions of dollars, and numerous nuclear tests to achieve.

Such small, modern warheads are necessary for all of the elements of a modern intercontinental nuclear force, including:

- Road-mobile ICBMs
- Submarine-launched ICBMs
- ICBMs with multiple warheads (MRVs or MIRVs)

The PRC has an ongoing program to use these modern thermonuclear warheads on its next generation of ICBMs, currently in development. Without the nuclear secrets stolen from the United States, it would have been virtually impossible for the PRC to fabricate and test successfully small nuclear warheads prior to its 1996 pledge to adhere to the Comprehensive Test Ban Treaty.

B. The Select Committee judges that elements of the stolen information on U.S. thermonuclear warhead designs will assist the PRC in building its next generation of mobile ICBMs, which may be tested this year.

The stolen U.S. design information will assist the PRC in building smaller nuclear warheads — vital to the success of the PRC's ongoing efforts to develop survivable, mobile missiles. Current PRC ICBMs, which are silo-based, are more vulnerable to attack than mobile missiles.

The PRC has currently underway three intercontinental mobile missile programs — two road-mobile, and one submarine-launched. All of these missiles are capable of targeting the United States.

The first of these, the road-mobile solid-propellant DF-31, may be tested in 1999. Given a successful flight-test program, the DF-31 could be ready for deployment in 2002.

The Select Committee judges that the PRC will in fact use a small nuclear warhead on its new generation ICBMs. The small, mobile missiles that the PRC is developing require smaller warheads than the large, heavy, 1950s-era warheads developed for the PRC's silo-based missiles. The main purpose of a series of

nuclear tests conducted by the PRC between 1992 and 1996 was evidently to develop new smaller, lighter warheads with an increased yield-to-weight ratio for use with the PRC's new, mobile nuclear forces.

The Select Committee judges that the PRC will exploit elements of the stolen U.S. thermonuclear weapons designs on its new ICBMs currently under development. The advanced U.S. thermonuclear warheads for which the PRC has stolen U.S. design information are significantly smaller than those for which the PRC's silo-based missiles were designed. The U.S. designs, unlike those in the PRC's currently-deployed arsenal, can be used on smaller mobile missiles.

The Select Committee judges that:

- The PRC is likely to continue to work on small thermonuclear warheads based on stolen U.S. design information
- The PRC has the infrastructure and ability to produce such warheads, including warheads based on elements of the stolen U.S. W-88 Trident D5 design information
- The PRC could begin serial production of small thermonuclear warheads during the next decade in conjunction with its new generation of road-mobile missiles
- The introduction of small warheads into PLA service could coincide with the initial operational capability of the DF-31, which could be ready for deployment in 2002

These small warhead designs will make it possible for the PRC to develop and deploy missiles with multiple reentry vehicles (MRVs or independently targetable MIRVs).

Multiple reentry vehicles increase the effectiveness of a ballistic missile force by multiplying the number of warheads a single missile can carry as many as ten-fold.

Multiple reentry vehicles also can help to counter missile defenses. For example, multiple reentry vehicles make it easier for the PRC to deploy penetration aids with its ICBM warheads in order to defeat anti-missile defenses.

The Select Committee is aware of reports that the PRC has in the past undertaken efforts related to technology with MIRV applications. Experts agree that the PRC now has the capability to develop and deploy silo-based intercontinental ballistic missiles with multiple reentry vehicles (MIRVs or MRVs).

Experts also agree that the PRC could have this capability for its new mobile intercontinental ballistic missiles within a reasonable period of years that is consistent with its plans to deploy these new mobile missiles. The PRC could pursue one or more penetration aids in connection with its new nuclear missiles.

If the PRC violates the Comprehensive Test Ban Treaty by testing surreptitiously, it could further accelerate its nuclear development.

The Select Committee judges that, if the PRC were successful in stealing nuclear test codes, computer models, and data from the United States, it could further accelerate its nuclear development. By using such stolen codes and data in conjunction with High Performance Computers (HPCs) already acquired by the PRC, the PRC could diminish its need for further nuclear testing to evaluate weapons and proposed design changes.

The possession of the stolen U.S. test data could greatly reduce the level of HPC performance required for such tasks. For these reasons, the Select Committee judges that the PRC has and will continue to aggressively target for theft our nuclear test codes, computer models, and data.

Although the United States has been the victim of systematic espionage successfully targeted against our most advanced nuclear weapons designs — and although the Select Committee judges that the PRC will exploit elements of those designs for its new generation of ICBMs — the United States retains an overwhelming qualitative and quantitative advantage in deployed strategic nuclear forces. Nonetheless, in a crisis in which the United States confronts the PRC's conventional and nuclear forces at the regional level, a modernized PRC strategic nuclear ballistic missile force would pose a credible direct threat against the United States.

Neither the United States nor the PRC has a national ballistic missile defense system.

In the near term, a PRC deployment of mobile thermonuclear weapons, or I neutron bombs, based on stolen U.S. design information, could have a significant effect on the regional balance of power, particularly with respect to Taiwan. PRC deployments of advanced nuclear weapons based on stolen U.S. design information would pose greater risks to U.S. troops and interests in Asia and the Pacific.

In addition, the PRC's theft of information on our most modern nuclear weapons designs enables the PRC to deploy modern forces much sooner than would otherwise be possible.

At the beginning of the 1990s, the PRC had only one or two silo-based ICBMs capable of attacking the United States. Since then, the PRC has deployed up to two dozen additional silo-based ICBMs capable of attacking the United States; has upgraded its silo-based missiles; and has continued development of three mobile ICBM systems and associated modern thermonuclear warheads.

If the PRC is successful in developing modern nuclear forces, as seems likely, and chooses to deploy them in sufficient numbers, then the long-term balance of nuclear forces with the United States could be adversely affected.

C. Despite repeated PRC thefts of the most sophisticated U.S. nuclear weapons technology, security at our national nuclear weapons laboratories does not meet even minimal standards.

The PRC stole design information on the United States' most advanced thermonuclear weapons as a result of a sustained espionage effort targeted at the United States' nuclear weapons facilities, including our national weapons laboratories. The successful penetration by the PRC of our nuclear weapons laboratories has taken place over the last several decades, and almost certainly continues to the present.

More specifically, the Select Committee has concluded that the successful penetration of our National Laboratories by the PRC began as early as the late 1970s; the PRC had penetrated the Laboratories throughout the 1980s and 1990s; and our Laboratories almost certainly remain penetrated by the PRC today.

Our national weapons laboratories are responsible for, among other things, the design of thermonuclear warheads for our ballistic missiles. The information at our national weapons laboratories about our thermonuclear warheads is supposed to be among our nation's most closely guarded secrets.

ounterintelligence programs at the national weapons laboratories today fail to meet even minimal standards. Repeated efforts since the early 1980s have failed to solve the counterintelligence deficiencies at the National Laboratories. While one of the Laboratories has adopted better counterintelligence practices than the others, all remain inadequate.

Even though the United States discovered in 1995 that the PRC had stolen design information on the W-88 Trident D-5 warhead and technical information on a number of other U.S. thermonuclear warheads, the White House has informed the Select Committee, in response to specific interrogatories propounded by the Committee, that the President was not briefed about the counterintelligence failures until early 1998.

Moreover, given the great significance of the PRC thefts, the Select Committee is concerned that the appropriate committees of the Congress were not adequately briefed on the extent of the PRC's espionage efforts.

A counterintelligence and security plan adopted by the Department of Energy in late 1998 in response to Presidential Decision Directive 61 is a step toward establishing sound counterintelligence practices. However, according to the head of these efforts, significant time will be required to implement improved security procedures pursuant to the directive. Security at the national weapons laboratories will not be satisfactory until at least sometime in the year 2000.

See the chapters *PRC Acquisition of U.S. Technology*, *PRC Theft of U.S. Thermonuclear Warhead Design Information*, and *PRC Missile and Space Forces* for more detailed discussions of the Select Committee's investigation of these matters.

2.

The PRC has stolen or otherwise illegally obtained U.S. missile and space technology that improves the PRC's military and intelligence capabilities.

A. The PRC has stolen U.S. missile technology and exploited it for the PRC's own ballistic missile applications.

The PRC has proliferated such military technology to a number of other countries, including regimes hostile to the United States.

The Select Committee has found that the PRC has stolen a specific U.S. guidance technology used on current and past generations of U.S. weapons systems. The stolen guidance technology is currently used on a variety of U.S. missiles and military aircraft, including:

- The U.S. Army Tactical Missile System (ATACMS)
- The U.S. Navy Stand-off Land Attack Missile-Extended Range (SLAM-ER)
- The U.S. Navy F-14
- The U.S. Air Force F-15, F-16, and F-117 fighter jets

The stolen guidance technology has direct applicability to the PRC's intercontinental, medium- and short-range ballistic missiles, and its spacelift rockets.

The theft of U.S. ballistic missile-related technology is of great value to the PRC. In addition to ICBMs and military spacelift rockets, such technology is directly applicable to the medium- and short-range PLA missiles, such as the CSS-6 (also known as the M-9), the CSS-X-7 (also known as the M-11), and the CSS-8 that have been developed for, among other purposes, striking Taiwan.