

SECTION 2: THE EFFECT OF U.S. AND MULTILATERAL EXPORT CONTROLS ON CHINA'S MILITARY MODERNIZATION

The Commission shall investigate and report on “ECONOMIC TRANSFERS—The qualitative and quantitative nature of the transfer of United States production activities to the People’s Republic of China, including the relocation of high technology, manufacturing, and research and development facilities, the impact of such transfers on United States national security, the adequacy of United States export control laws, and the effect of such transfers on United States economic security and employment.”

Key Findings

- China makes a concerted effort to modernize its military by obtaining military-related systems and technologies from other countries, particularly Russia. China uses legal and illegal means, including espionage, to obtain such technologies from the United States.
- There is only one full-time U.S. export control officer stationed in China to verify that licensed U.S. dual-use items are used in the location and for the purpose for which they are licensed. There also is only one full-time U.S. export control officer stationed in Hong Kong to verify that dual-use items licensed for use there remain in Hong Kong and are used as intended rather than being diverted, possibly to China. As a result, it is impossible to adequately oversee compliance with U.S. export licensing requirements by licensees in China or Hong Kong. This makes it easier for militarily-sensitive U.S. materials and technology to be misused or diverted without detection and without penalty to the licensees and thereby undermines the credibility of the export control process.
- China, in violation of a U.S.-China agreement, often fails to schedule timely end-use inspection visits of dual-use items licensed for export to China. This frustrates U.S. oversight of compliance with U.S. export licensing requirements by licensees in China, and makes it easier for militarily-sensitive U.S. materials and technology to be misused or diverted without detection and without penalty to the licensees and thereby undermines the credibility of the export control process.
- Export controls are likely to be substantially effective only if they are multilateral, if there are no notable sources of the controlled goods and technologies who choose to disregard the controls, and if all source nations administer and enforce the restrictions effectively. While unilateral controls may delay acquisition of controlled goods and technologies by targeted nations, those delays are unlikely to be significant if a targeted nation is intent on acquisition and if other nations possess and are willing to make available the goods and technologies.

- The memberships of most of the existing multilateral export control regimes have not agreed that China should be a target of their efforts and so do not seek to impede Chinese acquisition of the items and technologies of which they try to facilitate and coordinate control by their member nations. Not surprisingly, therefore, these regimes and their controls play no role in preventing China from acquiring items and technologies the United States believes are militarily-critical. This highlights the fact that effectively controlling the acquisition of items and technologies by a particular nation requires multilateral agreement both that possession of the items and technologies should be controlled and that the nation in question should be a target of the controls.

Concerns and Opportunities

To bolster its armed forces and their capabilities, China makes concerted efforts to obtain foreign military and military-related goods and technologies and tries to acquire these through legal and illegal means,¹³⁵ including espionage. According to former Under Secretary of Commerce for Industry and Security David McCormick, “China has a clear strategy to strengthen its military capabilities by acquiring advanced dual-use technologies [those having legitimate civilian and military uses] and incorporating them into defense systems.”¹³⁶ Desired U.S. technologies include those capable of improving China’s command and control, communications, computer, intelligence, surveillance, and reconnaissance (C4ISR) systems, radar systems, and maritime programs.¹³⁷ Over the past year the United States has convicted and sentenced a number of individuals for illegally exporting critical technology to China. For example, in May 2006 four naturalized U.S. citizens originally from China were sentenced in federal court for illegally exporting to Chinese state-sponsored research institutes items that are export controlled because of their military criticality, including items used in radars, smart weapons, and electronic warfare.¹³⁸

It is in the national interest of the United States that China’s military forces not be able to employ our unique, militarily-critical capabilities. Of comparable concern is the possibility that China or Chinese organizations, were they to acquire such technologies and goods, may sell or transfer them to countries of concern or to terrorists. According to a report issued by the Department of Commerce’s Inspector General, “China’s export control system has been criticized in the past by many western nations for its insufficiency in controlling the exports of sensitive technologies and weapons to nations of global and regional security concern.”¹³⁹

The reason for some of China’s failures to control such exports is that its export control system is not well developed and fails to meet international standards, and it simply lacks the ability to effectively mandate and enforce controls. But in other cases it is apparent that China’s leadership for various reasons has not desired to control the export or re-export of some items and technologies the United States believes to be militarily-critical and therefore wants to keep out of the hands of rogue nations, potential adversaries, and terrorists. Even the most effective national export con-

trol system will be effective in controlling only the export of items and technologies the nation's government *intends* to control to end-users that government does not want to receive the items and technologies. Given that China appears not to subscribe to U.S. concerns about the availability of a number of particular items and technologies the United States believes are militarily-critical, nor to some U.S. conclusions about undesirable end-users and end-uses of those items or technologies outside China, it should not be surprising that China has made no visible effort to restrain exports or re-exports of those items and technologies to those end-users and end-uses.

The challenge constantly facing the U.S. government with respect to its own export control system is to effectively prevent China and other nations of concern from acquiring militarily-critical technologies and goods with military applications while not unnecessarily interfering with or impeding U.S. businesses from engaging in profitable trade of goods and technologies determined not to pose significant security risks to the United States. For example, according to former Under Secretary McCormick, "U.S. policy should facilitate sales of American-made semiconductors to companies in China for use in stereos or a child's Game Boy [video game], but not for advanced missile systems or submarines."¹⁴⁰

China presents enormous export opportunities for U.S. companies. Taking maximum advantage of such opportunities is in the interests of individual companies and their owners and workers; it also is in the national interest as we confront the historically large trade deficit with China that shows no sign of leveling off. China is the fastest growing major export market for U.S. companies¹⁴¹ and U.S.-China trade reached \$285 billion during 2005.¹⁴² As a result of China's increasing market potential for U.S. exports coupled with its rapid military modernization, the Department of Commerce is reexamining its China-related export control policy. The Department currently advocates increased trade in goods and technologies with civilian end uses while at the same time further restricting trade of goods and technologies with military applications.

The Chinese government complains that current U.S. export controls are too restrictive and add to the growing trade imbalance. "We hope that the U.S. can take concrete measures to relax or lift its restrictions on high-tech exports to China, to better address the imbalances of China-U.S. trade," explained a spokeswoman for China's Foreign Ministry.¹⁴³ But Administration officials dismiss Beijing's claims that relaxed controls would significantly reduce the \$201 billion U.S. trade deficit with China.¹⁴⁴ This argument is supported by the fact that the total value of U.S. exports to China in federal fiscal year 2005 was roughly \$40 billion and the total value of denied exports—\$12.5 million—was only slightly more than three-hundredths of one percent of that total value.¹⁴⁵

U.S. Export Controls

Currently, the U.S. export control system involves numerous federal agencies in devising, supporting, and enforcing a complex set of regulations that covers both military goods and technologies and dual-use items.¹⁴⁶ During the final decade of the Cold War, the Ex-

port Administration Act of 1979 provided the legislative authority to control and license the export of dual-use items. But the Cold War ended—and with it, the U.S. security focus on the nations of the former Soviet Union and its allies. The Export Administration Act (that controlled the export of dual-use goods and technologies as differentiated from the arms or defense services—technically referred to as “munitions list” items—of which export is controlled under the Arms Export Control Act) expired in 2001, and Congressional efforts to update and reauthorize the Export Administration Act have been unsuccessful.¹⁴⁷ In the absence of the Export Administration Act, the executive branch maintains export controls on dual-use goods and technologies based on authority in the International Emergency Economic Powers Act, but that Act’s authorities are limited, and needed modifications to the U.S. dual-use export control system cannot be made until the Export Administration Act is reauthorized.

The United States maintains an embargo on the export to China of military-use goods and technologies and it also controls the export of dual-use items to China.¹⁴⁸ According to the President of the Coalition For Employment Through Exports, Edmund Rice, “the U.S. [munitions list] embargo is doubtless contributing to the U.S. goal of denying Chinese access to the most advanced U.S. military technologies.¹⁴⁹ But China can and does obtain weapons and technology from other nations such as Russia. Of additional concern, sometimes countries to which U.S. firms are permitted to sell export-controlled, dual-use goods and technologies permit such goods or technologies to be transferred to China.¹⁵⁰ Mr. Rice explained to the Commission that “only Japan has any significant dual-use restrictions for China, which means China has virtually unrestricted access to U.S. dual-use technologies through procurement in third countries.¹⁵¹

Having concluded that the current U.S. dual-use export control system allows export to China of certain U.S. goods and technologies that potentially can enhance China’s conventional military capabilities,¹⁵² the Department of Commerce has worked with the Departments of Defense and State and other federal agencies to devise a new policy on dual-use export controls to China with the objective of easing certain export restrictions while increasing scrutiny of key technology exports to China that later could threaten U.S. security.¹⁵³ The current draft of this new policy requires U.S. exporters to secure a license to export some previously-uncontrolled items to China, including certain computers and electronics, whenever the exporters know or “have reason to know” the items may have a military end-use.

Improving End-Use/End-User Verification

The effectiveness of U.S. export controls depends to a large extent on the ability of the United States to verify the legitimate use of controlled technologies that were approved for export. To enhance the ability of the United States to verify the end-use and end-user of approved exports to China, the two nations signed an End Use Visit Understanding in April 2004. Despite this agreement and continued consultation over end-use visits, Beijing peri-

odically frustrates U.S. efforts to conduct end-use verification visits.¹⁵⁴ Pursuant to the End Use Visit Understanding, China's Ministry of Commerce schedules end-use visits requested by the U.S. export control officer stationed in Beijing. But in violation of that agreement, a majority of the visits are not scheduled for more than 60 days after the export control officer submits a visit request,¹⁵⁵ and any significant delay in conducting such visits affords time for misuse of a licensed item or technology in ways that could inflict damage on U.S. interests, and for concealing evidence of such misuse. Further, the Chinese Ministry of Commerce usually provides short notice to the export control officer that an end-use visit has been scheduled,¹⁵⁶ again increasing the difficulty of accomplishing these important visits.

In addition to these verification problems caused by the Chinese government, the frequency and number of end-use visits pertaining to approved dual-use exports to China are constrained by the fact there is only one American export control officer stationed in China. During fiscal year 2005, the Beijing-based control officer conducted 33 end-use checks.¹⁵⁷ But during that same period the Department of Commerce approved 1,058 applications for export to China of dual-use goods and technologies.¹⁵⁸ In a related matter, the Commerce Department's Inspector General's review concluded that the Department's end-use verification program in Hong Kong—that also depends on one export control officer stationed there—does not adequately monitor the potential diversions of export-controlled items to illegitimate end-uses or end-users, including end-uses and end-users in China.¹⁵⁹ A larger pool of export control officers from which these officials could be selected and placed more rapidly when vacancies occur in either China and Hong Kong could help reduce some of the backlog created by the Chinese.

Multilateral Export Controls

Unfortunately, U.S. export controls are not achieving their objectives as they apply to China; a major reason is that, for the most part, U.S. controls are unilateral. Of the world's leading industrial and technological nations, the only other nation that has any significant China-related dual-use export controls is Japan.¹⁶⁰

There are several multilateral export control regimes. But these regimes are voluntary, and many of their member nations do not apply to exactly the same set of importing nations the export restrictions on which the members agree. Further, some regime member nations operate more effective enforcement mechanisms than do others.¹⁶¹

One multilateral regime, the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-use Goods and Technologies, aims to increase regional and global stability by encouraging member states to increase transparency surrounding their sales of arms and dual-use goods and technologies.¹⁶² By sharing such information regarding their arms transfers, members hope to prevent the accumulation of weapons that could increase tensions or instability.¹⁶³ However, "[t]he decision to transfer or deny a transfer of any item is the sole responsibility of each Participating [member] State."¹⁶⁴ Therefore, discrepancies can and do emerge be-

tween the national export control policies of the member states. For example, Wassenaar members have not agreed that China should be a target of its controls, and therefore the regime does not suggest that its members should restrict exports to China of semiconductor manufacturing equipment that can be used to improve weapons systems¹⁶⁵—restrictions that the United States imposes unilaterally.

After China's 1989 Tiananmen Square crackdown, the European Council, meeting in Madrid, agreed to impose an embargo on arms exports by European Union (EU) nations to China. By imposing this embargo, the Council sought to express its disapproval of China's crackdown.¹⁶⁶ The EU's arms embargo prohibits export to China of lethal equipment and systems. It is binding on all EU member nations, but its precise scope and coverage is vague and interpretations of its restrictions vary. As a result, some EU member nations have exported significant "nonlethal" military items and technologies to China during the embargo, including 1) military helicopters; 2) fire control radars; 3) aircraft engines; 4) submarine technology; and 5) airborne early warning systems.¹⁶⁷ During 2004, EU governments approved the sale of over \$400 million in defense exports to China.¹⁶⁸

Despite loopholes through which EU nations have exported certain technologies to China, the EU embargo coincides with and makes a substantial contribution to U.S. security interests because it complements U.S. export controls and other restrictions directed at China. Over the past few years, there have been calls by some European countries to lift the embargo, and China vigorously lobbies Brussels to repeal it. This would be a very damaging action. According to the Pentagon, lifting the embargo could 'remove implicit limits on Chinese military interaction with European militaries, giving China's armed forces broad access to critical military 'software' such as management practices, operational doctrine and training, and logistics expertise.'¹⁶⁹ In addition, repealing it would send the wrong message to Beijing about its human rights record and increase military-related exports to China, which could alter the cross-Taiwan Strait military balance.¹⁷⁰

To date, the EU has retained the embargo—partly as a result of its displeasure with China's passage in March 2005 of the Anti-Secession Law authorizing use of force to prevent Taiwan from declaring independence, partly as a result of energetic diplomatic efforts by the Administration, and partly as a result of Congressional threats to enact legislation prohibiting European firms from participating in weapons systems projects with the United States or from being given access to U.S. leading-edge military technology.

The bottom line with respect to export controls is that while unilateral controls may delay acquisition of controlled goods and technologies by targeted nations, those delays are unlikely to be significant if a targeted nation is intent on acquisition and if other nations possess and are willing to provide the goods and technologies. As a corollary, export controls are likely to be substantially effective only if they are multilateral, if there are no notable sources of the controlled goods and technologies who choose to disregard the control, and if all possible source nations administer and enforce the restrictions with uniform effectiveness. While there are other

reasons a nation such as the United States may choose to impose unilateral export controls or embargos on a nation such as China, which may include a determination that such restrictions are morally necessary, no nation should do so in the belief that unilateral restrictions will significantly impede the targeted nation; that is very unlikely to be true unless the nation imposing controls is the sole source of the restricted goods and technologies.