U.S.- China Economic and Security Review Commission Hearing

June 23, 2005

Draft Testimony of Acting Under Secretary for Industry and Security Peter Lichtenbaum

Mr. Chairman, Mr. Vice-Chairman, members of the Commission. Thank you for inviting me to speak with you today about economic and security issues related to U.S. trade with China. As the acting Under Secretary for Industry and Security at the U.S. Department of Commerce, I am responsible for overseeing the Bureau of Industry and Security's mission to advance U.S. national security, foreign policy, and economic interests by regulating the export of sensitive U.S. dual-use goods and technologies; enforcing export control, antiboycott, and public safety laws; and monitoring the ability of the U.S. defense industrial base to satisfy U.S. national and homeland security needs. Today, I would like to address three aspects of our work that I understand are of particular interest to this Commission:

-- U.S. dual-use export control policy with respect to China.

-- U.S. export control policies relating to the aerospace and semiconductor sectors.

-- BIS's role in analyzing specific industry sectors identified by the Department of Defense, to assess capabilities of the U.S. industrial base to support the national defense.

As background, the Bureau of Industry and Security is responsible for implementing U.S. dual-use export controls. Dual-use commodities are commercial items that, while not designed for use as weapons, delivery systems, or for terrorist purposes, have the potential for these types of misuses. Sensitive dual-use items are identified on the Commerce Control List (CCL), which tracks, but also goes beyond, U.S. commitments under multilateral export control regimes. BIS

works with other U.S. Government agencies, including the Departments of State, Defense, Energy, Homeland Security, and Justice, to protect the national security of the United States. BIS's principal objective is to ensure that direct exports from the United States and reexports of U.S.-origin items from third countries are consistent with national security and foreign policy interests, without imposing unnecessary regulatory burdens on U.S. exporters or impeding the flow of legitimate trade. The ultimate goal is to prevent U.S.-origin items from falling into the hands of those nations, terrorists, and individuals who would use the goods and technologies against us and our allies. In short, the Administration seeks to structure our export control policies to address both the threats and opportunities that the United States faces in today's geopolitical landscape.

U.S. Dual-Use Export Control Policies Relating to China

China poses particular challenges for U.S. dual-use export control policy, because there are immense potential benefits from expanding trade but there are also serious security concerns.

From the standpoint of market opportunity, China is a market with vast potential for expanding trade as it increasingly becomes more open to international investment and foreign presence. In terms of total trade, China became the United States' third-largest trading partner in 2004 with $231.4 billion in imports and exports, behind only Canada and Mexico. U.S. exports to China have continued to rise for the past 20 years, and in 2004, U.S. exports to China went up over 22 percent. The increase in U.S. exports, not surprisingly, has included some dual-use goods, such as semiconductor manufacturing equipment, chemicals, chemical manufacturing equipment, and high performance computers.

From a security standpoint, the U.S. Government remains concerned about China's modernization of its conventional military forces and the risk of diversion of sensitive dual-use items and technology to Chinese military programs. For example, building state-of-the-art semiconductor plants could increase China's ability to apply this technology and equipment in military programs. Advanced telecommunications equipment – if illegally diverted to military end-users – could provide the Chinese missile, nuclear weapons and other military programs with the means to enhance performance capabilities in military radar applications. China has also had limited success in the areas of building and enforcing their export control system and effectively meeting U.S. nonproliferation objectives. The U.S. Government has imposed sanctions on a number of Chinese entities that have exported sensitive items to countries of concern.

Accordingly, the Administration has promoted both our security and our economic interests in controlled trade with China. We seek to implement a policy that ensures that U.S. exports are not diverted to end-uses within China that we do not support, and are not re-exported to other foreign government or terrorist weapons programs that are adverse to our interests. BIS and its interagency export control partners carefully evaluate proposed exports of dual-use items to China on a case-by-case basis, taking into account the type of item to be exported, and the proposed end-user and end-use. BIS does not issue licenses for sales of dual-use items and technology to China if the item or technology will make a direct and significant contribution to the PRC's electronic and anti-submarine warfare, intelligence gathering, power projection, or air superiority. We also deny all items controlled for missile technology reasons that enhance China's Missile Technology Control Regime (MTCR) Category I missile or weapons of mass destruction (WMD) delivery capabilities.

Moreover, this Administration does not approve licenses for military end-users or end-uses within China, consistent with the long-standing U.S. arms embargo. In the coming months, the Department of Commerce will propose a new "catch-all" regulation that will require a license for otherwise uncontrolled exports that could materially assist the Chinese military, and we will review any application that supports the advancement of Chinese military capabilities under a general policy of denial.

At the same time, the great majority of U.S. exports to China does not require a license, and the great majority of licenses are approved. Expanding civil exports to China benefits U.S. firms and workers, and fosters peaceful ties between our countries. The United States has eased export restrictions affecting certain high technology non-strategic trade with China over the past few years. For example, there have been significant liberalizations in controls for computer hardware, general purpose microprocessors and certain semiconductor manufacturing equipment – due to outdated technology control levels and the increasing availability of these items in the global market.

We will continue to support legitimate exports that contribute to U.S. economic growth and facilitate China's peaceful economic development. In this regard, the Chinese government has suggested that U.S. export controls are an important cause of the U.S. trade deficit with China. This is not the case. Export controls are not impeding overall U.S.-China bilateral trade. The total value of denied license applications for China in 2004 was only $10.8 million. Even Commerce approved exports to China in 2004 constituted less than 2 percent of overall U.S. exports to China ($547 million approved out of total U.S. exports to China of $34.7 billion) and less than 1 percent of the value of our trade deficit with China ($162 billion).

Others have suggested that the United States could use export controls to assist U.S. industries, by preventing the export of industrial equipment that is needed by Chinese high-tech manufacturing. However, U.S. export controls have never been intended as instruments of trade policy. Rather, they serve to protect U.S. national security. And in any case, the bulk of such equipment could be provided by other countries eager to make similar sales. Accordingly, we should be cautious regarding such an expansion of U.S. export controls, and only consider such an approach when a U.S. industry is both critical to national defense and is threatened specifically by Chinese competition.

Let me now turn to two sectors to illustrate the complex process of managing our security and economic interests with respect to export control policy and China.

Aerospace Sector

China has been a large customer for U.S. origin civil aerospace systems. U.S. civil aircraft and engines are high-value exports with the added benefit of potential future exports for spare parts to support those systems. U.S. firms are providing the flight control systems, avionics and engines to support the Chinese Regional Jet Airliner (ARJ21) program. Since many aerospace systems are controlled only for anti-terrorism (AT) reasons, they can be exported to commercial end users/end uses in China without the requirement for an export license.

However, other more sensitive aerospace items are controlled for national security reasons and are subject to a much higher level of review. Many of these items are approved unless there is a risk of diversion to military end-uses or third countries. We have seen increasing licensing activity in this area as Chinese aircraft manufacturing firms are becoming a

more important supplier to the U.S. and European aerospace industries. For example, Chengdu Aircraft Corporation has supplied Western aircraft manufacturers with major sections of several commercial aircraft. Looking ahead, China offers the potential to produce certain composite based parts, components, and sections (e.g., rudders) for commercial aircraft. Generally, export licenses for commercial trade in composite materials are reviewed under a policy of approval. However, composite materials also have significant military end-uses. Consequently, these license applications will be denied if there is sufficient information to indicate the items could be diverted to military end-users or third countries.

Semiconductor Sector

The emergence of China as a major player in the semiconductor market has similarly raised security and trade issues that reflect the export control challenges with respect to China. Semiconductors are standard building blocks for the global information infrastructure including computers, communications and consumer electronics. The semiconductor industry also provides much of the technology that underlies modern U.S. military leadership. China's semiconductor industry is growing rapidly. While China is a large consumer of chips, China's production capacity is limited in terms of global market share. However, China's capital spending on semiconductor manufacturing equipment is expected to grow significantly over the next few years. Last year, new semiconductor manufacturing equipment sales in China were $2.73 billion. The United States currently supplies about 50 percent of this growing market. This presents an opportunity for the U.S. semiconductor manufacturing equipment industry in both sales and as a means to finance future R&D in the United States and maintain technology leadership.

While the U.S. no longer controls the export of general purpose chips or microprocessors to civil end users in China, the equipment used to manufacture sophisticated semiconductors is tightly controlled for national security reasons by the United States and other members of the Wassenaar Arrangement. While all Wassenaar Arrangement members control the same equipment and technology, non-U.S. suppliers often have significantly lower license processing times for equipment and technology exports to China. The U.S. government is continuing to work with our regime partners to update control lists and to coordinate export licensing practices and policies.

Under U.S. export control policy, license applications for semiconductor manufacturing equipment and technology are reviewed on a case-by-case basis by the Departments of Commerce, Defense, State, Energy and the intelligence community. The review process is thorough as the interagency vets the end-user to mitigate concerns that the technology will be diverted. There is a policy of denial for exports for military-end users/end-uses in China.

There are no predetermined technology limits or "red lines" set forth in the Export Administration Regulations, but we carefully evaluate the quantity and quality of the equipment and technical know-how proposed for export to assure that it is necessary for, and not in excess of, the civil end-uses stated in the license application. Since 2002, this policy has yielded positive results for U.S. exporters while protecting U.S. national security interests. In 2004, the U.S. approved semiconductor manufacturing equipment (SME) exports to Chinese foundries well in excess of $240 million, making SME the largest single licensed item by dollar value.

Monitoring the Defense Industrial Base

BIS conducts industry analyses, usually at the request of the Department of Defense, to assess capabilities of specific components in the U.S. industrial base to support the national defense. By using industry-specific surveys to provide essential employment, financial, production, R&D, and other data, these reports provide findings and recommendations for government policy-makers and industry leaders. The goal is to enable the private sector and government agencies to monitor trends, benchmark industry performance, and raise awareness of any diminishing manufacturing capabilities.

Since 2001, the Office of Strategic Industries and Economic Security within BIS has conducted 18 studies on a variety of industrial sectors, including munitions power sources, biotechnology, and parachutes. These studies, of course, represent only part of the industries of interest to the Department of Defense. As we conducted these studies, some firms reported that they were unable to adequately maintain sufficient R&D expenditure levels, invest in production and process improvements, or retain qualified engineers and scientists in the face of shrinking markets or as a result of a more competitive marketplace. As a result, some companies that were committed to supplying the Department of Defense have migrated to commercial sectors or have downsized their operations.

As an example of our work, one of the studies that BIS has completed involved a request from the U.S. Army to assess the health of the U.S. parachute industry. This study was requested by the U.S. Army because there were problems with timely delivery of parachute orders from industry. The U.S. Army was concerned that it would not be able to procure parachute systems quickly to deliver sophisticated devices into the modern battlefield. During the past decade, there was significant uncertainty in the parachute industry due to fluctuating demand. As a result the industry was faced with inventory control and procurement issues, diminishing R&D, and

new competition from non-traditional sources. BIS recommended that the Army improve demand forecasting and increase funding for the development of new manufacturing technology.

In conclusion, it serves our common security, foreign policy, and economic interests for the United States and China to expand our economic relationship. At the same time, we continue to have significant differences with China on security and foreign policy issues that dictate a cautious way forward in our overall political, economic, and strategic relationship. While this may slow the entry of certain sensitive U.S. industry sectors into the Chinese marketplace, we must protect U.S. national security and foreign policy interests.

Once again, I thank the U.S.-China Commission for inviting me to speak with you today about these issues. I would be pleased to answer any questions you may have related to my testimony.

Thank you.