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Before the Committee on Governmental Affairs  
Subcommittee on International Security, Proliferation, and Federal Services  
United States Senate  
June 6, 2002

I am pleased to appear before this distinguished Subcommittee to discuss the subject of export control and arms proliferation. The Subcommittee has asked specifically that I comment on China and Russia, and how these two countries' exports have contributed to the spread of weapons of mass destruction.

First, I would like to present an overall view of what these countries have been exporting. Then, I would like to make some recommendations concerning the group of Chinese firms that were sanctioned last month by the State Department.

If we look around the world today, and ask ourselves what are the "pacing items" in the spread of mass destruction weapons, the answer is clear: they are Chinese and Russian exports. Sales by these two countries are now fueling the spread of chemical weapons, nuclear weapons and long-range missiles in a number of countries, some of which support international terrorism.

In his testimony this past March, CIA director George Tenet made it clear that this activity is still going on. He told the Senate Armed Services Committee that "Russia appears to be the first choice of proliferant states seeking the most advanced technology and training." He said that "Russian entities continue to provide other countries with technology and expertise applicable to CW, BW, nuclear, and ballistic and cruise missile projects." He further accused Russia of supplying "significant assistance on nearly all aspects of Tehran's nuclear ... [and] ... long-range ballistic missile programs."

He also testified that Chinese firms "remain key suppliers of missile-related technologies to Pakistan, Iran, and several other countries." He said that these exports were continuing "in spite of Beijing's November 2000 ... pledge not to assist in any way countries seeking to develop nuclear-capable ballistic missiles." In addition, he noted that China is selling CW-related production equipment and technology to Iran.

All this has been going on for a long time. If we just look back over the past several years, we see that Russia has done the following:

- \* Helped India develop a nuclear submarine and its missiles;
- \* Helped India develop a cruise missile and improve the accuracy of its surface-to-surface missiles;
- \* Shipped, in violation of Russia's obligation to the Nuclear Suppliers Group, nuclear fuel for India's reactors at Tarapur and begun work on two new Indian nuclear reactors;
- \* Supplied Iran a large nuclear reactor, which will give Iran its first access to fissile material, and sold Iran sensitive heavy water production technology, nuclear-grade graphite production technology, and research reactor design technology, all of which can be used to make nuclear weapons;
- \* Helped Iran develop long-range ballistic missiles by providing materials, components, designs, training, experts and testing equipment;
- \* Sold missile components and/or technology to Brazil, Iraq, Libya and Pakistan.

China's conduct has been roughly the same. China has done the following:

- \* Essentially created Pakistan's nuclear weapon program by supplying a nuclear weapon design,

nuclear materials and nuclear technology, including the design of a clandestine reactor;

- \* Essentially created Pakistan's ballistic missile program by providing entire missile systems, missile components and missile factories;

- \* Supplied Iran's chemical weapon program with poison gas ingredients as well as poison gas production equipment;

- \* Sold Iran missile components and ingredients for missile fuel as well as complete anti-ship cruise missiles;

- \* Supplied, according to the CIA, dual-use missile-related items to Libya and North Korea.

The cumulative effect of these export transactions can work great changes in world security. Millions of people in South Asia now face the risk of sudden annihilation because India and Pakistan – presently on the brink of war – possess nuclear weapons. India's nuclear reactors got a crucial component – heavy water – from both China and Russia at a critical point in India's nuclear development. And if one subtracts China's aid to Pakistan's nuclear program, there probably wouldn't be a program.

India and Pakistan also have missiles that can deliver nuclear weapons. The missiles too were built with help from China and Russia. It is simply a fact that Chinese and Russian exports have made the dispute over Kashmir far more dangerous.

Russia is a member of the Nuclear Suppliers Group, the Missile Technology Control Regime and has adhered to the Chemical Weapons Convention. Russia is also a member of the Wassenaar Arrangement. China is not a member of the Nuclear Suppliers Group, the MTCR, or Wassenaar, but it has adhered to the Nuclear Nonproliferation Treaty and the Chemical Weapons Convention. In 1996, China pledged not to assist unsecured nuclear facilities. And according to the CIA, China has pledged not to transfer missile items covered by Category One of the Missile Technology Control Regime and not to help any country develop a ballistic missile that could deliver nuclear warheads.

Unfortunately, neither of these countries has a good record of keeping its word. The United States has applied sanctions to Chinese and Russian firms many times. The problem is that the bad behavior is still going on.

On May 16, the State Department announced – once again – that it had decided to punish a number of Chinese companies for fueling weapons proliferation. Seven companies and one Chinese individual were listed for selling Iran items useful for making weapons of mass destruction. According to the press, Iran got components for cruise missiles, as well as glass-lined equipment for making chemical agents. The most surprising thing about the list was that it contained a number of repeat offenders.

The State Department had already punished three of the companies and the individual for similar offenses before. And a fourth company on the list was indicted for export offenses in 1999. To anyone familiar with these companies, it is obvious that they have become scofflaws. They don't care a straw about our policies on nonproliferation.

The question is: what are we going to do about it? Under the sanctions law that has just been applied, the companies are only barred from doing what they don't normally do anyway. They are forbidden to sell goods to the federal government, or receive aid from it, or buy arms from the United States, or buy items that are controlled for export under the Export Administration Act. These restraints, however, are not much punishment. The companies don't sell things to our government, or get aid from it, or buy American arms. The sanctions may deny them an occasional item controlled for export, but even that doesn't mean much anymore. The companies are still free to buy as many high-performance American computers or machine tools as they want, so long as the computers and machine tools perform at a level just under the level controlled for export.

It is important to understand what this means. The control levels for most goods have been moved up to the point where they are quite high – so high that little is left under restraint. Today, the value of goods licensed for export is only one-tenth of what it was during the cold war. The reason is simple: Controls have been slashed by ninety percent. The control level for supercomputers, for example, has now been raised to the point (190 billion operations per second) where extremely powerful machines are available from the United States without a license.

These machines can perform tasks that are highly useful for nuclear weapon and missile design. Even a Chinese company that has been sanctioned, or is under indictment, can buy high-performance American computers to boost its production, and then turn around and sell that same production to terrorist-supporting nations, despite the indictment and despite the sanctions.

Thus, the very Chinese companies that are now selling missile and chemical weapon technology to Iran are perfectly free to develop that technology with high-tech American imports.

Two of these companies are instructive examples. First, there is the China National Aero-Technology Import and Export Corporation, known as CATIC. In addition to being sanctioned last month for helping Iran, this state-owned Chinese company was indicted in 1999 and fined last year for diverting American machine tools to a Chinese cruise missile and military aircraft plant. The machines had produced parts for the B-1 strategic bomber and the MX nuclear missile. CATIC was charged with lying to get the machines out of the United States in 1995 by promising to restrict them to civilian use.

Yet, by January 2000, the Commerce Department was trying to get other federal agencies to agree to allow one of CATIC's sister companies, the Xian Aero Engine Company, to buy the same kind of American machine tool that CATIC was indicted for diverting. The sister company makes engines for China's military aircraft, including the nuclear-capable H-6 strategic bomber. Despite the fact that China refuses to allow the United States to verify where controlled American products actually wind up in China, the Commerce Department still lobbied for the export. The point here is that CATIC's illegal acts did not really burden CATIC's organization, which is known as Aviation Industries of China. The organization was still eligible to import sensitive American machine tools, simply by ordering through a different subsidiary.

A second example is the China Precision Machinery Import and Export Corporation. In addition to being sanctioned last month for helping Iran, this state-owned company was sanctioned in 1993 for supplying nuclear-capable missiles to Pakistan. It also sold Iran anti-ship cruise missiles in the mid-1990's, and at least one press report has linked it to Libya's missile efforts. It, too, is part of a large organization – known as the China Aerospace Corporation. If that corporation wants to buy sensitive American equipment, it can still place an order through another subsidiary, just as CATIC's organization did.

Despite the notorious conduct of both of these companies, neither has been put on the Commerce Department's watch list of dangerous companies in China. This "entity" list (Part 744, Supplement No. 4, of the Export Administration Regulations) requires that an exporter apply for a license before shipping to firms that might constitute a proliferation risk. In fact, not a single one of the repeat offenders that the State Department just sanctioned is on this list. It is logical to ask why not. The list contains only nineteen Chinese companies, which is a ridiculously low number in light of the scores of companies that deserve to be on it. Last November, in testimony before this Subcommittee, I submitted a list of fifty Chinese companies that are well-known to be dangerous, and that should be included on the list. By leaving the companies that were just sanctioned off the list, the Commerce Department is preserving their access to American exports, despite their bad behavior.

Congress could take some simple steps to remedy these shortcomings. First, instead of banning only licensed exports to these companies, Congress should ban all American trade with them. A company should not be able to buy high-performance American computers on Monday and send missile parts to Iran on Tuesday. The price of proliferation ought to be a denial of all U.S. trade, both to these companies and from them.

Second, their organizations should be affected. An organization should not be able to proliferate through one subsidiary and buy American goods through another. Our sanctions laws simply do not present a deterrent to China's large, state-owned organizations. Through their recidivist subsidiaries, they are thumbing their noses at us.

The remedy is to bar American exports up the corporate chain as well as down. The corporate parent, as well as the corporate subsidiary, should be included in a total trade ban. By affecting a wider range of companies, we might cause China's military-industrial organizations to take our views on arms proliferation more seriously.

Third, we could extend the duration of the sanctions. The sanctions just imposed will last but two years. Instead of simply ignoring these companies after that time, we should place them on the Commerce Department's warning list. If the companies have done something bad enough to deserve sanctions, they are dangerous enough to be on the list. American exporters should be required to get government approval (an export license) before dealing with them. A minimum period of three years on the list would be reasonable.

Fourth, we could bar the employees of these companies from entering the United States. Before buying the American machine tools that it illegally diverted in the 1990's, CATIC sent a team of specialists to inspect the machine tools at a factory in Columbus, Ohio. This visit was an integral part of CATIC's deception campaign, which included fraud in obtaining the export license. It would have been much better for the United States if these officials had been stopped at the border.

Fifth, we could engage our allies and trading partners. When we cut off trade with a company because of an export violation, we should ask our allies to do the same. A request for assistance should go out immediately, so that our exporters are not undercut. Having our allies join us would increase the pressure on the offending exporter, and push it into the position of an international pariah – which it deserves to be.