CHINA'S PROLIFERATION AND THE IMPACT ON TRADE POLICY ON DEFENSE INDUSTRIES IN THE UNITED STATES AND CHINA

HEARING

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CONTENTS

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THURSDAY, JULY 12, 2007

CHINA'S PROLIFERATION AND THE IMPACT ON TRADE POLICY ON DEFENSE INDUSTRIES IN THE UNITED STATES AND CHINA

PANEL I: ADMINISTRATION PERSPECTIVES

PANEL II: THE IMPACT OF CHINA'S PROLIFERATION ON U.S. NATIONAL SECURITY AND NONPROLIFERATION INTERESTS

PANEL III: HOW TO IMPROVE CHINA'S NONPROLIFERATION COMPLIANCE AND ITS ROLE IN THE GLOBAL SECURITY ENVIRONMENT

FRIDAY, JULY 13, 2007

PANEL IV: CONGRESSIONAL PERSPECTIVES

PANEL V: ADMINISTRATION PERSPECTIVES

PANEL VI: THE STATUS AND ACCOMPLISHMENTS OF CHINA'S THREE-PRONGED "GRAND STRATEGY" FOR DEFENSE INDUSTRIAL BASE MODERNIZATION

PANEL VII: CHINA AND THE U.S. DEFENSE INDUSTRIAL BASE: U.S. NATIONAL SECURITY AND FORCE READINESS

CHINA'S PROLIFERATION AND THE IMPACT OF TRADE POLICY ON DEFENSE INDUSTRIES IN THE UNITED STATES AND CHINA

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THURSDAY, JULY 12, 2007

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

Washington, D.C.

The Commission met in Room 385, Russell Senate Office Building, Washington, D.C. at 9:50 a.m., Chairman Carolyn Bartholomew, Vice Chairman Daniel A. Blumenthal and Commissioners Mark T. Esper and William A. Reinsch, Hearing Cochairs, presiding.

OPENING STATEMENT OF CHAIRMAN CAROLYN BARTHOLOMEW

CHAIRMAN BARTHOLOMEW: Good morning. Welcome to the fifth hearing of the U.S.-China Economic and Security Review Commission's 2007 reporting cycle. We are very pleased that you could join us today. At this hearing, we are continuing the Commission's assessment of U.S.-China relations by exploring two topics: China's proliferation practices and nonproliferation compliance and the impact of trade policy on the development of the defense industries in both the United States and China. Tomorrow, the Commission will hear testimony on the defense industrial base.

Today's panels will assess the impact of China's proliferation on U.S. national security and nonproliferation interests and witnesses have been asked to delve into the question of how to improve China's nonproliferation compliance and its role in the global security environment.

During this hearing, we hope to hear suggestions of strategies for mitigating any negative effects of China's proliferation practices and for exploring new opportunities to engage China on nonproliferation initiatives.

Key officials from executive branch agencies and expert witnesses have been invited to present testimony on these important issues, and I'm very much looking forward to their remarks.

I'll now turn the proceedings over to Commission Vice Chairman Dan Blumenthal for his opening statement. Welcome again to all of you and thank you for your interest in the Commission's work.

OPENING STATEMENT OF VICE CHAIRMAN DANIEL A. BLUMENTHAL

VICE CHAIRMAN BLUMENTHAL: Good morning. Thank you, Madam Chairman. Welcome to the U.S.-China Commission hearing on "China's Proliferation and Impact of Trade Policy on Defense Industries in the U.S. and China."

We are mandated by the Congress to examine the role of China in the proliferation of weapons of mass destruction and other weapons and actions the United States might take to encourage China to cease such practices and also to examine the qualitative and quantitative nature of such transfers on the United States' national security, and this hearing is part of the Commission's effort to obtain the information we need to fulfill this portion of our mandate.

As we look at the topic of proliferation today, it is important to examine the primary and secondary effects of China's proliferation on U.S. national security. Last year, Assistant Secretary of Defense Peter Rodman testified before the Commission and confirmed that during the conflict between Israel and Hezbollah and Lebanon at this time last year, Hezbollah used a Chinese designed C-802 missile in its attacks on an Israeli naval vessel.

We see the willingness of Chinese arms sales partners to retransfer weapons that have serious consequences for global security. I look forward to hearing from our witnesses today and for appearing today and for providing their insights into the questions raised by the Commission.

At this time, I'd like to turn the microphone to the cochair for today's session, Commissioner Bill Reinsch.

OPENING STATEMENT OF COMMISSIONER WILLIAM A. REINSCH, HEARING COCHAIR

HEARING COCHAIR REINSCH: Thank you. I'm happy to cochair this hearing with Mark Esper who has a meeting elsewhere and

will be along in a little bit.

Our day today is about the proliferation and nonproliferation compliance piece of the hearing as outlined by the two previous commissioners. We're doing this because we think that, as do most people, that it has significant implications for U.S. security and for international peace and security.

China's participation in nonproliferation regimes and its ratification of nonproliferation treaties creates obligations for it to prevent the use of weapons of mass destruction and also to prevent the spread of WMD technology, materials and delivery systems.

As China's economic power grows along with its political influence in global affairs, monitoring proliferation activities that are contrary to its commitments and policies is vital to promoting and ensuring China's compliance with international nonproliferation norms and goals.

The United States can play a positive role in encouraging China's compliance through the continued monitoring of its activities and the pursuit of cooperation in global nonproliferation efforts.

In the past year, China has played a positive role in the Six-Party negotiations with North Korea, and China has supported U.N. resolutions sanctioning both North Korea and Iran for their pursuit of nuclear weapons and disregard for IAEA nuclear safeguards.

It's important to recognize these positive steps, but it's also important to document that Chinese-made conventional arms have been found in both Sudan and Iraq, contributing to the conflicts in these areas. This demonstrates that while China has supported some international nonproliferation efforts, there is more that it can and should do.

The purpose of this hearing is to examine the impact of China's proliferation practices on U.S. national security and to assess China's nonproliferation compliance.

However, this hearing is also an opportunity to define what the United States can do to encourage China to more fully and vigorously implement the commitments that it's undertaken. I look to the testimony of our expert witnesses and at the recommendations that I hope they're going to provide for consideration by the Commission. Thank you all for being here, and we are awaiting the arrival of our first "victim," Congressman McCotter. So I think we'll take a short recess until he gets here. Yes. Thank you.

[Whereupon, a short recess was taken.]

HEARING COCHAIR REINSCH: We've been informed that Representative McCotter has a conflict and is not going to be able to be here. So the hearing will recess until the first panel arrives, which will be approximately 10:30.

[Whereupon, a short recess was taken.]

PANEL I: ADMINISTRATION PERSPECTIVE

HEARING COCHAIR REINSCH: I gather our witnesses have arrived so if they'll take their seats, we'll start a few minutes early and hope that we can then let you go a few minutes early.

For our first panel today, we'd like to welcome the Honorable Donald Mahley, Acting Deputy Assistant of State for Threat Reduction, Export Controls and Negotiations, and Mr. David Sedney, Deputy Assistant Secretary of Defense for East Asia.

Why he's honorable and you're not eludes me, but that's the way it's written so--

MR. SEDNEY: It's true. It's true.

HEARING COCHAIR REINSCH: Once an honorable, always an honorable, regardless of what you do later.

MR. SEDNEY: Actually Don is an ambassador so he is honorable.

HEARING COCHAIR REINSCH: Ah, I see. That explains it. Well done. Please also turn your microphones on.

Ambassador Mahley is Acting Deputy Assistant Secretary for Threat Reduction, Export Controls and Negotiations at the U.S. Department of State. As such, he has the responsibility for chemical and biological weapons threat reduction, missile threat reduction, conventional weapons threat reduction and export controls.

Mr. Mahley also heads the United States Delegation to Biological Weapons Convention activities and is the Managing Director of the United States National Authority for implementation of the Chemical Weapons Convention.

Mr. Sedney is Deputy Assistant Secretary for East Asia at the U.S. Department of Defense. Mr. Sedney has over 25 years of experience as a Foreign Service officer working with the issues that surround China and Central Asia. From 2004 to 2007, he was the Deputy Chief of Mission at the United States Embassy in Beijing and served as the Deputy Director of the State Department's Office of Chinese and Mongolian Affairs from 1999 to 2001.

I'd also say, Mr. Sedney, I've been instructed by your wife to be nice to you and not to ask you any hard questions, and I will do my best to--

MR. SEDNEY: That doesn't sound like her actually.

HEARING COCHAIR REINSCH: --honor that. She's on my board and I asked her for hard questions and she said don't do that. He's--

MR. SEDNEY: I get hard questions everyday, I'll tell you.

HEARING COCHAIR REINSCH: Well, she said he was too busy adjusting to being home with her. And that I shouldn't add to your burden so I will attempt not to do that, but I can't speak for anyone else.

Anyway, we're deeply grateful that both of you are here with us to discuss China's proliferation and to share the viewpoint of the administration and your respective agencies, and I think since I introduced Ambassador Mahley first, why don't we begin with him, and then we'll go to Mr. Sedney, and then we'll go to questions.

We're aiming here for seven minute statement and then commissioners will have five minutes each for questions. Thank you.

STATEMENT OF AMBASSADOR DON MAHLEY
DEPUTY ASSISTANT SECRETARY OF STATE FOR
INTERNATIONAL SECURITY AFFAIRS, WASHINGTON, D.C.

MR. MAHLEY: Thank you, Mr. Reinsch. Thank you very kindly. I'll try to make my actual oral comments less than seven minutes. You all have a written testimony which I've submitted for the record which certainly indicates the general line of our observations about China's proliferation and the impact of trade policy on defense industries in the United States and China.

Let me try to summarize what I've put in my written statement in just a few words and then we can get on to the questions.

As a general overview, I think the comment I would make is, is that China is certainly a major international player; a Permanent Member of the Security Council; a member of a number of international regimes, although not all; an economic force to be reckoned with, and someone who is a political force of growing strength in the Asian arena.

We certainly need China's cooperation to accomplish many of our global security objectives including our nonproliferation objectives.

Now, I'd divide my comments really into good news and bad news, and I'll start with the good news. The good news is, is that the China of today is not the China of ten years ago, the China of 20 years ago, or the China of 1949.

In many ways, its attitude toward proliferation has evolved and improved, and I would argue that some of that improvement is coming as they begin to recognize themselves as a more major player on the international stage and therefore they believe that there are some areas in which they've got to be more responsible than they have been before in terms of their activities.

Now what do I mean by some of the ways in which their attitude has improved and evolved? Number one, it has acknowledged that the

acquisition of nuclear weapons by Iran and North Korea is not in China's interest. It has supported Security Council resolutions aimed at preventing that from happening. It has become a party, as I indicated before, to many international nonproliferation regimes.

It has over the past several years enacted a somewhat vast array of export control laws. In many ways, it has demonstrated an openness of recent years to address nonproliferation concerns that would have been difficult to envision a decade ago.

Some of the times I've had interactions with the Chinese, they've told me that they would not have been able to have that kind of a conversation a decade ago.

Now, that's the good news. But there is bad news with it. The bad news is, is that despite those kind of improvements, they are very far from where we would like them to be. There is in China a very serious lack of transparency. We therefore don't know and cannot be sure of what activity is going on, and we do not know and cannot find a way to discover, for example, whether or not China is aggressively pursuing enforcement of the very laws that they themselves have enacted and put in their books.

We do know that there are Chinese entities that continue to sell raw materials and dual-use items needed in WMD and missile production to places that we would like them not to be sold. That is to say they are proliferating and continue to proliferate those kinds of materials.

We do not in these transactions have evidence of witting compliance or encouragement by the Chinese government as a government. We simply lack the transparency. Therefore, what we can't say on the other side of that coin is we cannot say that there is not witting compliance or encouragement by the Chinese government.

We do know that there have been in a number of instances a lack of action where we have alerted Chinese authorities to suspected proliferation activity either ongoing, anticipated or past. There have been a number of occasions where we have provided very detailed information about what we knew to have occurred with respect to proliferation activities and the Chinese government has simply not acted.

Now where does all that leave us? Right back where I started. China is a very big place. They've done a number of good things, but there are a number of matters that continue to trouble us very deeply. We have no realistic option but to continue to work with China to improve transparency, to strengthen enforcement and to root out increasingly sophisticated proliferation networks and proliferation activities.

We have some tools to do that with. Frankly, sanctions work. I am, for example, aware of sanctioned companies that are seeking to

change their proliferation behavior I would argue because of the impact of those sanctions.

We should and are working cooperatively in conducting training programs and initiatives like Megaports and Export Control and Border Security Training. Those are ways in which we can make sure that there is training and competence on the part of Chinese officials that would be able to enforce the laws if they wished to, and that they would have the equipment to be able to detect some violations of those laws if they did occur.

We are going to continue to encourage China to join the Proliferation Security Initiative. We think there are a number of ways in which they could be very useful if they again were a willing and cooperative partner. So I do not want in any way to make this sound like there is a really completely negative report on China, nor that there is a completely positive report on China.

There are ways in which they are apparently and legally working toward trying to improve the situation. Whether or not those are effective is yet to be proven. As Mao Zedong supposedly said to Henry Kissinger about the length of the American experiment in democracy in 1974, Mao's answer was it's too soon to tell whether or not the United States was any good, and I would say that in terms of China's proliferation activities, exactly the same thing is true: it's too soon to tell whether or not they really mean some of the things that they've now put on the books.

Thank you very much.

[The statement follows:]

Prepared Statement of Ambassador Don Mahley
Deputy Assistant Secretary of State for International Security Affairs, Washington, D.C.

Mr. Chairman and Commissioners of the U.S.-China Economic and Security Review Commission, thank you for the opportunity to appear before you today and discuss China's nonproliferation practices, their impact on U.S. national security, and how to improve China's nonproliferation record. My name is Don Mahley, and I serve as Acting Deputy Assistant Secretary of State for International Security and Nonproliferation, the bureau whose mission it is to lead U.S. diplomatic efforts to prevent the spread of weapons of mass destruction, their means of delivery, and advanced conventional weapons.

The Nonproliferation Agenda

Mr. Chairman, the President is committed to working toward a relationship with China that enhances America's security, China's concerns, and the security of our friends and allies. To that end, we continue to engage China on nonproliferation matters in a constructive and candid manner. As the President stated during the visit of President Hu Jintao on April 20, 2006:

> Prosperity depends on security – so the United States and China share a strategic interest in enhancing security for both our peoples. We intend to deepen our cooperation in addressing

threats to global security – including the nuclear ambitions of Iran, the genocide in Darfur, Sudan, the violence unleashed by terrorists and extremists, and the proliferation of weapons of mass destruction.

The President has been clear in his desire to work with China to address our common nonproliferation agenda and has made this an important part of the bilateral relationship and our overall nonproliferation strategy. We continue to work with China to expand our areas of common interest and to improve our existing cooperation on nonproliferation. However, the U.S. continues to have serious concerns about the proliferation activities of certain Chinese entities and we continue to take action in response to these activities. We have worked productively with China on a number of important proliferation issues, yet we also have made it clear that China can, and should, be doing more to halt the spread of WMD, missiles, and conventional weapons and related technologies.

Chinese Export Controls

Over the years, China has taken a number of steps to improve its export controls. China, a party to the Nuclear Nonproliferation Treaty, the Biological and Toxin Weapons Convention (BWC), and the Chemical Weapons Convention (CWC) has also become a member of the Nuclear Suppliers Group (NSG) and the Zangger Committee. In 2002, China adopted export controls similar to the Australia Group control lists on chemical and biological related items and technology. In addition, in August of 2002, China promulgated comprehensive missile-related export controls that approximate those of the Missile Technology Control Regime. In November and December of 2006, China's State Council approved two sets of revised export control regulations that harmonized China's nuclear export control regulations with the Nuclear Suppliers Group (NSG).

China also has produced two official white papers outlining Chinese nonproliferation policy. The December 2004 *China's National Defense in 2004* and the September 2005 *China's Endeavors for Arms Control, Disarmament, and Nonproliferation* stated China's opposition to the proliferation of weapons of mass destruction and their means of delivery and outlined China's commitment to support the international community's effort to stem such proliferation.

These are steps in the right direction that this Administration supports.

Chinese Cooperation on North Korea and Iran

China has played an increasingly positive role in responding to some of the world's most pressing proliferation problems. Nowhere is that more evident than with regard to the North Korean nuclear program. As you know, China has long had a close relationship with North Korea, and for decades was a key source of military technology and hardware. However, following North Korea's provocative missile launches of July 2006, and its October nuclear test, China joined in the Security Council's vote to enact strong measures under UNSCR 1695 and UNSCR 1718. With these resolutions, China has sent a message to North Korea that it must agree to the complete, verifiable and irreversible elimination of all of its existing weapons of mass destruction and ballistic missile programs. With its vote for resolution 1718, China supported the imposition of sanctions under Chapter VII of the UN Charter requiring all Member States to prevent the transfer to North Korea of WMD, ballistic missiles, a broad range of conventional arms, and related items, and prohibiting North Korea from exporting those items. UNSCR 1718 also requires Member States to freeze immediately financial assets that are owned or controlled, directly or indirectly, by persons or entities designated by the Security Council or the 1718 Sanctions Committee as being engaged in or providing support for North Korea's WMD and ballistic missile programs. UNSCR 1718 also requires Members States to prevent the transfer of luxury goods to North Korea.

Beijing has served as host to the Six-Party Talks, and has played a constructive role in the September 2005

Joint Statement, where North Korea committed to abandoning all nuclear weapons and existing nuclear programs and returning to the NPT and to IAEA safeguards, and the subsequent February 13 Initial Actions agreement, where North Korea committed to "shut down and seal for the purpose of eventual abandonment the Yongbyon nuclear facility, including the reprocessing facility, and invite back IAEA personnel to conduct all necessary monitoring as agreed between the IAEA and the DPRK." As we now begin the process of ensuring that North Korea honors its commitments, Chinese support is absolutely essential in maintaining a united front.

It is worth noting that, while the focus of the Six-Party Talks is on denuclearization, these talks are establishing an important precedent for multilateral cooperation on proliferation matters around the world. For example, the February 13 Initial Actions Agreement formed a Working Group on a Northeast Asian Peace and Security Mechanism, which we hope will develop strategies to further regional cooperation.

With regard to Iran, China shares our goal of preventing Tehran's acquisition of a nuclear weapons capability. In June 2006, China joined with the other Permanent Members of the Security Council and Germany in offering a generous package to Tehran in exchange for it suspending its proliferation-sensitive nuclear activities and entering into negotiations. Although that offer remains on the table, regrettably Iran has refused to accept. China has been a reluctant supporter of sanctions as a mechanism to increase pressure on Iran. However, China, in response to Iran's failures to comply with its obligations, did join the rest of the UN Security Council in the unanimous adoption of Chapter VII sanctions in UNSCR 1737 and UNSCR 1747. These resolutions prevent Member States from supplying Iran with certain items, technology, training or financial assistance that could contribute to Iran's nuclear program or its development of a nuclear weapon delivery system. The resolutions also require States to freeze certain financial assets of entities identified in the Annexes of the resolutions as having a significant role in Iran's nuclear and missile programs. China has also joined with the P5+1 in reiterating that should Iran continue to refuse to walk down the path of negotiations, additional sanctions will be necessary to augment those already in place.

We expect all States, including China, to implement fully and effectively their obligations under UNSCRs 1718, 1737 and 1747, and we maintain an active dialogue to support the universal implementation of these resolutions. The entire international community, including China, must be unified and consistent in its message to North Korea and Iran that those two countries cannot hope to engage in business as usual until international concerns regarding their nuclear and missile ambitions have been resolved.

Continued Outstanding Concerns

China's nonproliferation record is improving gradually, but some Chinese entities continue to supply items and technology useful in weapons of mass destruction, their means of delivery, and advanced conventional weapons programs of concern, despite the UN Security Council resolutions, I just mentioned. China has some important deficiencies in its export control system that it needs to address, particularly in enforcement and implementation, and, possibly, willingness. We still observe Chinese firms and individuals transferring a wide variety of technologies to customers around the world – including to Sudan, Burma, Cuba, Syria, and Iran.

Mr. Chairman, you asked that I address the question of the extent to which the Chinese government is knowledgeable of and participating in proliferation activity. Certainly we have witnessed over the years an improvement in the behavior of the Chinese government and its ability and willingness to prevent proliferation sensitive transfers to countries of proliferation concern. Nonetheless, Chinese companies, including some state owned enterprises continue to proliferate despite repeated notifications and discussions by the United States with Chinese officials. The extent to which the Chinese government or Chinese officials are witting of the proliferation activity of non-state owned Chinese entities is difficult to estimate. We do know that economic decentralization is a key feature of China's economic reform.

However, we simply do not know enough about the practical, every day workings of the decision-making process or structure of China's export control regime to ascertain the level of control or awareness that Chinese officials have over increasingly free-wheeling Chinese companies that trade in materials related to WMD and their delivery systems. Nor do we understand the extent to which the Chinese government may be witting in the exports to certain countries. These transfers remain a serious concern, and we will continue to press Chinese officials to act vigorously to investigate and enforce their export control regulations.

Chinese firms have continued to supply Iran with a range of conventional military goods and services in contravention of the restrictions within these resolutions. The United States has sanctioned a number of Chinese companies under the Iran and Syria Nonproliferation Act for the sale of items on multilateral control lists or items with the potential to make a material contribution to ballistic or cruise missile programs or WMD programs. Nine Chinese companies currently are under ISNA sanctions. The three Chinese entities to be sanctioned most recently (April 2007) include:

- China National Precision Machinery Import/Export Corporation (CPMIEC);
- Shanghai Non-Ferrous Metals Pudong Development Trade Co. Ltd.; and,
- Zibo Chemet Equipment Company.

The continued imposition of sanctions on Chinese entities clearly shows that China needs to do more to ensure effective and consistent implementation and enforcement of its export controls. With specific reference to conventional weapons, China, like many other countries, views its trade in conventional weapons as helping nations to meet their perceived defense needs and notes that there are no international agreements preventing these sales. China makes this assertion, despite evidence that Iran has transferred weapons to Shia extremists in Iraq terrorist groups and to Hizballah and the Taliban. China appears generally to accept end-use assurances it receives from countries that purchase Chinese arms, including from countries such as Iran, Syria, North Korea, or Sudan. Nevertheless, China has demonstrated sensitivity to growing international concerns about recipients of some of its arms sales, notably Sudan. China's recent designation of an experienced senior diplomat as its special envoy for African issues, with an emphasis on Sudan, is an encouraging, positive step. We maintain an active dialogue with China about conventional weapons transfers, and will continue to seek greater cooperation in curtailing transfers to state sponsors of terrorism and in stricter and more uniform application of export control safeguards.

China must do more to bring the enforcement of its export controls up to international standards. It needs to implement effectively its export control regulations and rein in the proliferation activities of its companies. It needs to address continuing deficiencies in its system, particularly in enforcement, holding violators accountable. China needs more uniform implementation of its export controls, including its catch-all controls, particularly for missile related transfers, and needs to be more willing to share information on actions the government has taken in response to U.S. demarches. We will continue, as warranted, to impose sanctions against Chinese companies engaged in proliferation and highlight our ongoing concerns about China's proliferation record with the Chinese government.

Areas of Cooperation

Sanctions remain a deterrent tool in the U.S. nonproliferation toolbox. But we also seek to make China a willing partner in addressing our common proliferation concerns by engaging cooperatively in a number of areas. To this end, the U.S. will continue to urge China to revise its policies and practices to meet international standards.

Over the past few years, the United States and China have begun working together to further our nonproliferation objectives. We are working to maintain a line of communication, permitting both sides to exchange views and concerns in a frank and candid manner. In particular, we regularly discuss with China

our concerns about certain proliferation-related activity. It was a subject when the President met with President Hu in April 2006. It was a topic when Deputy Secretary Negroponte met with Chinese Executive Vice-Foreign Minister Dai Bingguo just last month. The Department of State also serves as the American lead on an ongoing Nonproliferation Dialogue with the PRC, led at the Assistant Secretary level, and also a Strategic Dialogue, led at the Undersecretary level.

Chinese officials have indicated that they welcome the discussion of these specific activities and report to us that they regularly investigate, based frequently on our information, to ascertain whether Chinese companies are not violating Chinese law or relevant UN Security Council Resolutions.

Beyond discussing our shared interest in preventing proliferation, there are a number of instances where the Chinese have expressed an interest in export control cooperation, including technical exchanges and training. To the extent that it is permissible within the law, we have endeavored to provide such assistance.

One such example of cooperation is found in the State Department's Export Control and Related Border Security (EXBS) Program, which has supported training for Chinese licensing and enforcement officials. The EXBS effort is designed to help key source, transit and transshipment countries to establish or enhance strategic trade control systems, including border control capabilities, that meet international standards for controlling items on the control lists of the nonproliferation export control regimes, prevent the authorization of transfers to end-uses and end-users of proliferation concern, and detect and interdict illicit transfers at the border. Our EXBS cooperation with China is funded from funds appropriated for the Nonproliferation and Disarmament Fund (NDF). In addition, in coordination with the EXBS program, the Department of Energy conducts Commodity Identification Training aimed at training Chinese frontline Customs enforcement officials and technical experts responsible for assessing exports of shipments for nuclear proliferation concerns.

The Department of Energy is also actively engaged with the Chinese in areas related to physical protection for and the control and accounting of nuclear materials. In the past two years, there have been several bilateral workshops and seminars on a range of important nuclear security topics, including the highly successful Integrated Nuclear Material Security Technology Demonstration at the China Institute of Atomic Energy in October 2005. This effort has productively built upon the clear and shared interest of both countries in utilizing recognized best practices for protecting their nuclear material from potential threats of theft or diversion.

Other examples of our effort are the Container Security Initiative and the Megaports Initiative, where the Department of Homeland Security and the Department of Energy are working with China to improve detection of radiological and nuclear items at seaports.

We also believe China should join the Proliferation Security Initiative (PSI), which was created by the President to facilitate cooperation in the interdiction of nuclear, chemical and biological weapons, their delivery systems, and related technologies. The hallmark of the PSI is the close and innovative interaction between diplomacy, military, intelligence, and economic tools to combat proliferation. PSI has become an important tool to interdict shipments, disrupt networks, and hold companies accountable for their activities. Beijing has thus far been reluctant to join with the more than 80 nations participating in the PSI, citing legal concerns. It also is quite possible that Beijing feels it must take into account North Korea's likely reaction to China's participation in the PSI, a program that the North Koreans believe targets them directly. Notwithstanding any possible North Korean objection, China's commitment and participation in this program would be invaluable and we have been seeking to address Beijing's concerns, emphasizing that PSI actions are taken in accordance with states' domestic authorities and international law.

Recently, we have seen another promising development that merits mention. Certain Chinese companies that are currently subject to U.S. nonproliferation sanctions have reportedly adopted measures to ensure

their adherence to China's export control laws and regulations. For example, the China North Industries Corporation (NORINCO) reportedly has adopted an internal compliance program that will help ensure its exports are consistent with Chinese law, and has engaged the advisory services of the University of Georgia Center for International Trade and Security (which, as I understand it, has been invited to testify to this Commission). Getting NORINCO, a firm that has been sanctioned seven times since 2001, out of the proliferation business would be a very positive development and one that could serve as an example to other Chinese companies. We remain guardedly optimistic that these efforts are sincere and long-lasting.

Conclusion

Mr. Chairman, China has made much progress in the area of nonproliferation, but more needs to be done. The United States will continue to press China to implement effectively its export control regulations, eliminate loopholes, and reign in the proliferation activities of certain companies. Continued proliferation by Chinese entities to countries of concern is not in the U.S. interest, nor is it in China's interest. China's success in stopping proliferation by certain entities is critical to ensuring that sensitive items and critical technology do not end up in the hands of terrorists or other programs of proliferation concern. It is in our common interest to work together to ensure an end to such proliferation activity.

HEARING COCHAIR REINSCH: Thank you. Mr. Sedney.

STATEMENT OF THE HONORABLE DAVID SEDNEY DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR EAST ASIAN AFFAIRS, WASHINGTON, D.C.

MR. SEDNEY: Thank you very much, Madam Chairman, commissioners, Commissioner Reinsch. I really appreciate the opportunity to be here. As I think a number of you know, I've had the opportunity, the honor to host and meet with a number of members of the Commission over the years in my capacity in China, and I really am happy to be back here, not just for the reasons that Commissioner Reinsch mentioned, but also because I'm now at a job where I have a chance to have the kind of exchange I look forward to having today.

Like Ambassador Mahley, whose remarks I very much endorse, I'll aim to finish under the seven minutes in order to maximize the time for questions and back and forth because that's an opportunity for me to learn from you as well as for us to discuss these really important issues.

Nonproliferation, the prevention of proliferation, is a hugely important and has been a hugely important national priority for us. President Bush has made that clear both to us in the administration and to our international partners, colleagues, including the Chinese. I particularly appreciate the opportunity today in the letter you sent to focus on the consequences of China's proliferation and especially to your interest on China's policies on conventional weapons transfers and their impact on the United States and global security.

As Ambassador Mahley said, there's a mixed picture with China, but there is one area--and I've been involved in working on

proliferation issues for China for a good part of my career. I delivered my first proliferation-related demarche to the Chinese almost 16 years ago to the day in 1991. They didn't fix that problem, by the way.

But especially over the last several years the issue of conventional arms proliferation has loomed larger and larger for us, and in particular its conventional proliferation relating to the country of Iran. The Chinese have been a major supplier of conventional arms to Iran for decades. They continue to be so.

Congress has passed what is now the Iran and Syria Nonproliferation Act--it had other names earlier--which includes sanctions for companies who proliferate dangerous conventional capabilities. The whole issue of conventional capabilities to Iran is something that we've discussed, that I've personally discussed with the Chinese many times. The Chinese tend to hide behind what I would call a legalistic interpretation. Their response is there's no international treaty, no international regime that does this. It's only U.S. internal domestic law that addresses this issue.

However, at the same time, we have the Chinese leaders saying that they wish to be a cooperative partner to the United States. They claim they already are a responsible stakeholder in the international system, and that the standards that they have set for themselves by those claims are called into question by the activities that they carry on in the conventional sphere with Iran.

China is supplying conventional weapons to Iran at a time when Iran is supplying and funding groups in Iraq, Lebanon and Afghanistan that are confronting and sometimes killing American troops and our allies. That is not the activities that I would expect of a strategic or of a cooperative partner or of someone or of a country that would claim to be a responsible stakeholder in the international system.

I'm highlighting this area, first of all, because the Commission asked me in the invitation to look at that conventional area, but also because for us in the Department of Defense, as we look at the threats that we're confronting around the world, as we carry out very difficult tasks in especially Iraq and Afghanistan and other areas, we look for other countries to behave responsibly, to go beyond what might be the minimal standards that there might be an international regime for, and look at the impact on regional security of the kinds of transfers that in many cases we have China do to Iran on the conventional side.

Again, I thank the Committee for this opportunity to speak. As Ambassador Mahley, I have a longer prepared statement which we put out that I'd like to ask you to put in the record. It has a lot about the wider issues of proliferation, Chinese proliferation behavior, but I wanted to use my spoken testimony to focus on this one particular area because I think it's an area that we need to be looking at even more

closely right now.

Thank you very much.

[The statement follows:][1]

Panel I: Discussion, Questions and Answers

HEARING COCHAIR REINSCH: Thank you for that, and I'm glad you did because I think it's an area that we have not yet focused on as intensively as some others. So it's good that you've put it on the table and I hope we'll have a good exchange, and thank you both for staying within the time limits. You have no idea how rare an event that is.

Let's now turn to questions. By the way, your full statements will be put in the record without question. Commissioner Blumenthal.

VICE CHAIRMAN BLUMENTHAL: Thank you. Thank you both very much, appreciate your candid testimony. I think you both rightly point to North Korea and Iran, the threats they pose to the international system today, not in the future, but today, and I'm wondering if you can shed light on this, on Chinese behavior and Chinese intentions and what might really be going on because for a few years now the Chinese have said they share the goal on North Korea and Iran of denuclearization?

Both of you mentioned the amount of food and fuel they supply to North Korea, and the fact that trade is actually increasing with North Korea. I wonder if you could point to a single risky or costly action the Chinese have taken to actually denuclearize the Korean peninsula.

And can answer this question: if the Chinese wanted the North Koreans to abandon their nuclear program, wouldn't it be done by now?

MR. SEDNEY: The question that you asked, especially your final question, commissioner, is one that has continued to draw a lot of our attention because China has done a lot dealing with North Korea and especially its hosting of the Six-Party talks, the role it has played in moving those forward, and also I think changes in the Chinese internal position on North Korea, especially since the missile launches of July of 2006, and then North Korea's nuclear tests in October of last year.

It's a matter I think of some contention within China itself--in terms of what the Chinese have done, again, as in the area of nonproliferation we spoke about before. The rhetorical statements the Chinese have made have been very good. Their commitment to denuclearizing North Korea, they say the entire Korean peninsula, but they focus very much on North Korea, are I think very important and

[1] Click here to read the prepared statement of Mr. David Sedney

we take them very much at their word.

In terms of actual steps that they've taken, there have been I think some steps. I don't think I can go into detail here in this hearing on that. But are they all the steps that they could take? Certainly not. Are they all the steps that we would like them to take? Certainly not.

We would like them to have done more. Would they have been successful in affecting North Korean behavior if they had taken stronger steps? That's a matter of some debate both within our own analytical establishment and within the Chinese analytical establishment. When we discuss this with the Chinese, and I've discussed this with the Chinese, they raise the specter of the collapse of the North Korean regime, of chaos on their borders, of millions of North Koreans on the move, and activities that are damaging to China's economic growth, which is the key driver in many of their policies.

Certainly those are real possibilities. How likely they would be if China were to cut by 50 percent its subsidized fuel oil shipments to North Korea, that's a lot harder to say. The degree to which they could put pressure on North Korea without causing that kind of chaos/instability is something that I personally think they could do a lot more, but they're very risk averse and the words that you used, what kind of risky behavior has China taken, and I think the answer broadly speaking is they haven't. They are very risk averse in this area.

VICE CHAIRMAN BLUMENTHAL: I'm sorry. My time is running out.

MR. SEDNEY: I'm going on too long and it's your question.

VICE CHAIRMAN BLUMENTHAL: Is it your assessment then that they assess that the situation, the status quo, is more stable than we think it is? So, in other words, their calculation is they're not going to take any risks to make the problem go away because they're afraid of instability, so then I would infer from that that they think that the situation is more stable and safer than we think it is right now?

MR. SEDNEY: It's interesting the way you phrased that because the fears they raise about instability would lead you to think that they think the situation is less stable than we do. But at the same time when we ask them the question about stability, they say they think the regime in North Korea is very stable. So there's a dichotomy between what they tell us when we talk about the issue of stability directly where they say they think North Korea is stable and their actions which act as if they think the North Korean regime is very unstable and cutting off, reducing fuel oil or food shipments would lead to this chaos and exodus of millions of people.

VICE CHAIRMAN BLUMENTHAL: So they're really having it both ways on that question then.

MR. SEDNEY: They are having it both ways, and I think they're conflicted about it to a certain extent. But in many ways, as in many other situations, the Chinese would prefer others to take the leading role and they're often more prepared to take a supporting role than a leading role, and in the Six-Party Talks over the last two years, they've taken more of a leading role. They've pushed harder in the sessions that I've been in, but in terms of really hard risky actions that you take, there's very few that I might point to and only one or two that I might want to discuss somewhere else.

VICE CHAIRMAN BLUMENTHAL: Thank you.

HEARING COCHAIR REINSCH: Thank you. Commissioner Wortzel.

COMMISSIONER WORTZEL: Gentlemen, thank you for being here. Thank you for your testimony and for your service to our nation. I have really three questions, and I'd be happy for either of you or both of you to respond as you can.

One will reveal my ignorance, but I think it's an important point. Does the Iran and Syria Nonproliferation Act have any criminal penalties attached to it that would prohibit U.S. companies from engaging in any business of any type with a sanctioned Chinese company?

Are we certain that sanctioned Chinese companies are not in any way involved in U.S. capital markets or banks in the United States?

The third one really relates to the nature of the security system in China. China has 39,000 people devote to policing the Internet so it will arrest people who use the words "Taiwan" and "democracy" in the same e-mail.

China has 500,000 people devoted to ensuring public order so there are no demonstrations by a breathing cult. Do we know how many people are devoted to nonproliferation activities or policing nonproliferation companies? Some of these companies have been cited seven times over the years.

MR. SEDNEY: I can take a go at the second question and I think it's an excellent one. The amount of effort, the amount of real dollars or Chinese money or people that China would put into the nonproliferation effort over the years has increased since I delivered that demarche I mentioned back in 1991, but it has never come close to matching the scale of effort they would have to put in place in order to be successful. They haven't put the kind of national level commitment behind the rhetoric that they've put in place.

They have improved. We have had cooperative programs with them, export control training, and we've worked with them, and others have worked with them, Europeans. The United Kingdom has worked with the Chinese, and a lot of those efforts are ongoing. I agree with what Don said. There's been a huge amount of change, but it's still far

from enough because at the same time that's been happening, the Chinese economy has been just exploding in areas where it matters to the Chinese.

For example, the recent issues relating to food and drug safety. You may have read that a couple of days ago, they executed the former head of their Food and Drug Administration for accepting bribes to approve antibiotics that were unsafe and ended up killing people.

I'm not advocating that they should execute people who are responsible for proliferation issues at all, but clearly they have a wide range of tools to send really strong messages to people that certain kinds of behavior are not tolerated. In the proliferation area, their efforts have been behind those even in the food safety area, and in the food safety area, as we've seen here in the U.S., there continues to be huge problems in China.

So they face a big problem. The resources they need are very large and they're not putting them into place, and that's one of the problems for the continuing lack of success that Ambassador Mahley described in his testimony.

MR. MAHLEY: Let me simply echo that to say that when you talk about 39,000 in terms of the Internet policing, for example, our Export Control and Border Security Program is trying desperately now to get finished the training for the cadre to try to train 5,000 people for their border controls and so that's a different order of magnitude.

To go back to your first question, the first thing I would simply note for the record is that we have made an amendment in the Iran-Syria Nonproliferation Act so it's now the Iran-Syria-North Korea Nonproliferation Act, so that we have an even broader range in terms of that.

The answer in terms of criminal penalties for the United States is, yes, there are for United States companies, but that's not what we're really trying to sanction with those particular laws. What we're trying to do there is we're trying to make sure that other entities in foreign countries are forbidden to trade with United States companies.

Now, in the question of are we satisfied that they're not involved with United States banks, the answer to that is yes, because the United States end of that would have serious penalties on to it.

Now what we're not satisfied with, of course, is that those particular entities that we have sanctioned, that we are hurting them as economically as hard as we could because frankly they don't do business with the United States. I'm going to take a little time over and tell you there is one instance that I will give you just as an anecdote that's a little different.

NORINCO is probably one of the greatest serial proliferators in China. It is very interesting that NORINCO has been to us, not to the Chinese government, but to us, recently trying to argue that its

reorganization has really tried to change its mode of operating, and could we please give it more things that it can do to try to get it off the list. So the issue is it knows it can't get those kinds of United States markets as long as it's still with sanctions. So that's one of the reasons that I would argue sanctions work.

Thank you.

MR. SEDNEY: If I can just second what Don said because I actually had the opportunity, I was part of those negotiations and discussions with one or two other companies as well. And what the people on the marketing side of these companies realize is that looking ahead, as China becomes more a global player, which markets are you going to make the most money in over the long term? Is it going to be selling stuff on the margins to Iran or is it going to be having access to the U.S. market and to other advanced economies?

And that tug and pull us going on right now, and so the existence of our sanctions which prevent people from entering a market which they really want to is beginning to have an effect. We have to be very careful as we go down this road, but on the other hand, if we can hold out the prospect of real rewards for good behavior, and as long as we have the monitoring capability in place to make sure it's true. I think we have the start of something, but just a start.

HEARING COCHAIR REINSCH: Let me seize that moment for just a second if Commissioner Wessel will give me 30 seconds. On NORINCO specifically, I met with them and I think some of the other commissioners, have met with them as a Commission at one point in the past. Is it your judgment that beyond their request for advice on how to proceed, as you just described, that they are actually doing any of this stuff? Are you seeing a behavioral change or a rhetorical change?

MR. MAHLEY: We're certainly seeing structural changes. And certainly structural changes are a necessary precursor to behavioral changes so that they now have in place some structures internally to the company in which they could indeed police their own activities for nonproliferation much better than they could.

I would have to say, however, Commissioner Reinsch, that the jury is very much still out on that. Have I seen NORINCO actually cut down a potential export that would have been a proliferation export and therefore not do it. No, I have not seen that. So I don't know. They've given themselves a structure and they have certainly given themselves a PR program in which they've got every opportunity to try to make amends for some of the things that they have done, but I have not yet seen the action.

HEARING COCHAIR REINSCH: Thank you. Commissioner Wessel.

COMMISSIONER WESSEL: Thank you for being here today.

We appreciate your testimony and all the work you've put into this important topic. I'd like to follow up on the intent of Commissioner Wortzel's questions as it relates to what China knows and what they in fact want to do. Ambassador Mahley, you talked about transparency. I think in some ways we give China too much credit for opacity, that, in fact, when you talk about the 39,000 Internet cops, the fact that with intellectual property violations being rampant, we I think so far have seen no violations of the Olympic mascot by Chinese companies. They've been able to rein that in.

You're saying that there are companies that may be proliferating that the government doesn't know about. Can you really separate the operations of most of those companies, the larger ones that are doing this, the serial proliferators, from state involvement? Many of them have party members on them. Many are either state-owned or state-invested enterprises. So are we giving them too much credit for opacity?

MR. SEDNEY: If I can just take a quick crack at that? It's something I've been working on for the last 16 years, and it's all there. The answer to your question is sort of yes, yes and yes.

The situation in China is changing and there are without getting into specifics because then I'll be getting into classification, I would say there are companies which I would be happy to--there are instances where we've sanctioned companies that were working entirely outside the government.

I think we currently have 23 active sanctions against Chinese companies under five different U.S. laws. There are also instances of sanctions that we have imposed upon companies that are working very much in the context of the government and there's everything in between. And the situation changes, has changed over the years.

The problem with the opacity is that we have worked very hard to try and establish a collaborative relationship with the Chinese on enforcement efforts. So we give them this information. I personally have given them information that they say they've taken seriously and acted on, but they won't tell us what they've done. For us to see any impact on that depends upon a lot of factors. I mean there are ways we can find out things, but maybe we find out something two years later, five years later. Maybe we never find out something.

What we're seeking from them is to sit down on the other side of the table and say we gave you this information and they respond by saying we went to the company, we investigated. Persons X, Y and Z were interviewed. They did A, B and C. We went through the invoices. Here are some of the records relating to the companies you talked about. This kind of cooperation with we have with many other countries around the world. We do a lot of nonproliferation cooperation, a lot of nonproliferation export control cooperation with

other countries where we get into the details.

With the Chinese, there's a wall, and until they pull that wall down, it's going to be impossible to fully answer your question and there's very legitimate suspicion that a large proportion of these transfers are government directed. So that's the picture that I've seen over the last, say, 15, 16 years.

MR. MAHLEY: The only thing I would add to that, is that we have seen some evidence, for example, of companies that we're hunting down as proliferators that have gotten into much more complex front organization transfers and reestablishment of new front companies and the like in an effort which is expensive to them and more complicated to them in order to continue to try to make their activities happen.

Now, I would argue logically that that wasn't going to happen unless they were afraid that their previous company had been exposed either by us or by the Chinese government and therefore that was a necessary step. If the government were fully complicit in that, they wouldn't have bothered to make that kind of a change, but that's real inferential.

COMMISSIONER WESSEL: But it may also just be a cost of doing business at this point.

MR. MAHLEY: Yes.

COMMISSIONER WESSEL: Thank you.

HEARING COCHAIR REINSCH: Thank you. Commissioner Fiedler.

COMMISSIONER FIEDLER: One quick factual question and then I want to address the sanction question that Commissioner Wortzel raised. Is Polytechnologies, the PLA company, still in business--their weapons trader?

MR. SEDNEY: Polytechnologies, the company, is still very much in business. They just built a new headquarters. If you go two blocks from where I lived in Beijing up until a month ago, you can see their new headquarters which I think is going to open this year. They're no longer part of the PLA. The PLA formally divested itself of all interest in commercial activities some years ago.

However, the people who run Polytechnologies are almost entirely former military, people who are related to the military, and I would say without getting into the detail too much, that they are certainly very closely aligned with many parts of the military industrial complex area

COMMISSIONER FIEDLER: Are they still trading weapons?

MR. SEDNEY: They still trade weapons.

COMMISSIONER FIEDLER: So are they a proliferator? Are they classed as a proliferator?

MR. SEDNEY: I do not know offhand. I don't think--I saw the list, but I don't know if I have the list with me of the companies that

are currently under sanction.

COMMISSIONER FIEDLER: They are not currently under sanction?

MR. SEDNEY: I don't believe they're currently under sanction.

COMMISSIONER FIEDLER: On the sanction question, I have two sort of technical questions. One, the sanctions do not include prevention of continuation of U.S. joint ventures with the sanctioned companies; right? NORINCO has joint ventures with, say, an automobile company in the United States inside China. That was not affected by the sanctions; correct?

MR. MAHLEY: I'll get back to you on that. I think that is incorrect. But you have said it as a fact and so--

COMMISSIONER FIEDLER: Yes.

MR. MAHLEY: --I will get back to you on that question.

COMMISSIONER FIEDLER: I would ask you, it is not just an automobile company. There are a number of joint ventures that China North Industries has had with U.S. companies over the years including on optics, automobiles, motorcycles, all kinds of commercial vehicles and commercial business. Now, the next question is, we have heard every witness on the part of the Defense Department and the State Department and others talk about Chinese lack of transparency, which we understand. We really do understand it. What I don't understand is how we overcome the lack of transparency.

So let's just take the proliferation issue. You, Ambassador, said that sanctions worked. The question now becomes if we have known proliferators and we sanction them over a much longer period of time and perhaps more extensively after you look into the joint venture question that is targeted at the transparency issue itself with the Chinese government, if we're talking economics, then it seems to me we have to up the ante on the dollar impact.

I would argue to you that NORINCO's dollar impact was significant, to at least make them want to talk a better game. The question of whether or not it was significant enough to actually cease the activities, you say yourself remains to be seen. And so is there any way we can force transparency not generally but specifically on the proliferation question? Have we thought about it?

MR. MAHLEY: Certainly we have debated that question. Let me go back and clarify one point. The clear sanctions issue is that they're forbidden from doing business with the United States government. Now, I'll have to go back and look at joint ventures. So that will, again, I'll get back to you with that.[2]

But the other question that I would say is, is that can we force transparency by doing that, I would go back to something that Mr.

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[2] Click here to read Ambassador Mahley's response regarding sanctions.

Sedney said earlier in his testimony. That's all a question of risk because certainly we can pass laws which are more draconian and make them hurt more in terms of the U.S. market. What we can't do is we can't do that with the international market. And the question you have to ask there in terms of today's global economy is does that simply drive the Chinese to do their business elsewhere than the United States when we can't get other countries to impose the same kind of prohibitions and therefore does that simply mean that we're not really hurting the Chinese?

Now that's really a question that the Commerce Department is going to have to answer for you in more detail than I can answer for you, but I can simply say that we have debates about that in the United States executive branch, and what we don't do is we don't come to clear conclusions about it.

COMMISSIONER FIEDLER: May I just add a comment? Preempt Commissioner Reinsch. We've always had this political argument, which is a political economic argument that if we don't do business with them, somebody else will. If we don't sell it to them, somebody else will, and therefore we'll lose the market and this, that, and the other thing. But these are, on the issues of proliferation, it's a different level of magnitude in my view politically and economically. We just don't want to.

If somebody else is going to do business with them, we'll take care of that as a separate problem. The issues, I think that I would like to continue this discussion off-line if you will on the question of what these sanctions really do and really mean, and whether or not, we can force some sort of transparency by looking at companies that are extremely important to them especially since they've now determined absolute control companies and heavyweight companies and other such things.

In other words, it is a changing political and economic dynamic inside China that our policies ought to reflect. Thank you.

HEARING COCHAIR REINSCH: Ambassador Mahley, that also raises the question of what are we doing to multilateralize the sanctions that you've described?

MR. MAHLEY: That's pretty easy. What we're trying to do there is we're trying to get obviously a number of multilateral mechanisms to work better.

We've got the Missile Technology Control Regime. We've got the Nuclear Suppliers Group. And China is a member of the Nuclear Suppliers Group, and we've got the Australia Group. The difficulty with China is, is that again there's a threshold in terms of their own participation, and we aren't convinced that China has met that threshold for their own participation, and so therefore they are not members of the Missile Technology Control Regime. They are not a

member of the Australia Group. They're not a member of the Wassenaar Arrangement which is the one that deals with that.

But what you can do is, is you can with the imposition of, for example, “no undercut” policies and some of the rest of those ensure that when we've got a problem with the Chinese in terms of the transfer of materials, that we can therefore get other countries to also not transfer those same materials to China and to these firms on the basis that they are known proliferators.

We have a case that we're doing, just today as an anecdote, in which we are looking at a particular firm in which they ask for a commodity which otherwise would be a transferable commodity, licensable commodity, but we are refusing the license on the basis that they use it with Chinese military in the end. Once we make that refusal, we will then be able to go to other countries and make sure that they also refuse to transfer the same commodity to this Chinese firm as part of the “no undercut” policy, and that therefore multiplies the pressure on the Chinese.

What it doesn't do is it doesn't multiply the pressure on the Chinese in terms of proliferation itself.

HEARING COCHAIR REINSCH: That's very helpful. I was thinking both about that, but also a more particularized effort. The administration has been fairly aggressive, and I think in some respects effective, in trying to persuade some of our friends and allies elsewhere in the world to impose specific sanctions with respect to companies that are doing business with Iran directly.

Why haven't we done that in the Chinese context as well, try to persuade the Europeans, for example, not to do business with the Chinese companies that we've sanctioned, just on a one-by-one basis outside the regimes?

MR. MAHLEY: Let me backtrack for just a second, too, and also say one of the other things we have gotten China to do itself is in their export control laws. We've at least gotten them to parallel the things that are banned in some of these other regimes, even though they're not members of the regimes, and so therefore there's at least a certain parallelism in what they're supposed to be doing.

Now, with respect to your direct question about the issue of can we go to other countries and specifically apply pressure? We only generally do that through the regimes. Certainly we have the ability to do individual retail diplomacy in terms of going to people and saying we really would appreciate it if you did not trade with this company--

HEARING COCHAIR REINSCH: Exactly.

MR. MAHLEY: --because they're a serial proliferator and we think that what you're doing, even though it's not banned, and the way we're trying to do that in a more institutional fashion is with catch-alls. We are getting into these regimes now catch-all provisions that

say even if it's not something that's on the list, if it's something that's going to the wrong place, you can ban it.

Then it becomes a question of us providing information on a retail basis frankly to the Europeans and others in terms of we have this information and we therefore want you to try to do that. We do it. The results are mixed.

HEARING COCHAIR REINSCH: Well, that certainly didn't go in the direction I was hoping it would go. But we'll come back to that. Commissioner Houston.

COMMISSIONER HOUSTON: Thanks again to both of you for being here this morning. One of the things Commissioner Fiedler mentioned a minute ago I think is something that is a concern to all of us, and that is how do we make it stop? How do we fix this?

We hear about the lack of transparency. Mr. Sedney, you mentioned the legalistic explanations for some of the behaviors. So my question kind of goes to motivation. With any behavior, you can't really change it until you figure out exactly what the motivation is and address it.

It seems that the motivation to proliferate either nuclear or conventional arms has got to be either economic or military or some combination of the two. So we had a hearing last month about energy issues, and how important the energy, oil, supply of oil and other energy technologies to China is so hugely important, and it's an enormous part of their going-out strategy.

So my question is their reluctance to stop on any proliferators at whatever level in China, within China, is that an economic decision? And if it is an economic decision, how much is that related to energy? Or is it a military decision? Is it positioning them better in the world? By giving quarters to every kid in the schoolyard, in case there's any kind of a problem ever, they've made friends with all these regimes? So I'd be really interested both from the diplomatic and the defense strategy side what you see their motivation being, either economic, military or something in between?

MR. SEDNEY: I'd maybe take a somewhat similar line as I did in my answer to Commissioner Wessel and the answers are yes, yes, and yes. The motivations that exist here are all of the above, and they take place in a historical context, and believe me, I'm not going to give an historical lecture although I might like to. It's a weakness I have.

But historically, China, as Ambassador Mahley pointed out, in the area of proliferation was much worse. For example, the most sort of devastating example I think of this is the assistance on the nuclear side that the Chinese gave to Pakistan over many decades, which we worked to stop, but was very far advanced and played a major role, perhaps even determining role in the Pakistani acquisition of nuclear

weapons.

And then the Pakistani nuclear establishment turned around and became a proliferator itself to North Korea, to Libya, we know, perhaps to other countries. So that was the historical background of the Chinese on this was that they felt no compunctions about this at all. And over the last several decades, they've begun to change and the change has gone more quickly in some areas than others.

In the area of nuclear weapons, I think they've made some really major strides and during the '90s, this was a huge focus of our work with China. In the area of other weapons of mass destruction and especially in the area of missiles, the picture is a lot more mixed, and it's mixed by country because of exactly the kind of factors you mentioned.

In some countries, it is a mixture of economic and military. In the case of Iran, the country that I was discussing earlier, one of the arguments that I think not just we make to the Chinese, but I think some Chinese internally are making to their government themselves, that China's security interests in the Middle East, their interest in energy stability in the Middle East, are not well served by contributing to Iran's conventional military capabilities because Iran and the role that it plays in that region is not one that's positive for stability.

And what China needs for continued economic growth, for continued secure energy supplies, really is a stable Middle East, not one where Iran is able to be more aggressive. That calculus has been changing, continues to change, and I think that we could impact it.

The calculus for other countries such as Sudan, for example, are different. But the same interplay of factors are at play. But clearly, China's standing in the world, China's ability to do business in the world, both the business of business and diplomatic business, plays a role as well. If you look at China's recent appointment of a Special Envoy for Sudan and some of the things that China has started to say on Sudan, there was a big change on that issue after a number of things happened. For example, several candidates in the French election started talking about things that might happen to China if things didn't get better in Sudan.

The Chinese pay attention to their international reputation and it has to be more than just the United States because in many ways we carry I think an inordinate share of this burden in dealing with it.

So I wish I could give you a straightforward answer on this, but I think it's very complicated and I think it's changing and I think we have the capability to impact it, both through sanctions but also through holding out of possible good outcomes for the Chinese. I think it has to be a mixture of that.

COMMISSIONER HOUSTON: Ambassador, do you have anything to add to that from the diplomatic perspective?

MR. MAHLEY: Only to say that I can't emphasize too much the accuracy of what Mr. Sedney has said in the sense that it is a mixed bag. It's a complex interaction. Some places it's an economic question. Some places it's pure opportunism on the part of some firms. Some places it's because the Chinese PLA has a view that they really want to help some military capabilities occur some places that we would like to not seem them happen, and when that happens, that's probably the most difficult one for us to overcome at all.

But you have to analyze it on a case-by-case basis almost, and that gets very complicated.

COMMISSIONER HOUSTON: Which I guess is the challenge that you have to do that. From our perspective you're approaching it in a patchwork approach then rather than sort of a blanket approach.

MR. MAHLEY: Yes. In terms of what's effective.

MR. SEDNEY: I would like to say targeted rather than patchwork, but yes. A differentiated approach.

HEARING COCHAIR REINSCH: Thank you. Commissioner Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you very much and thank you to both of you for being here. I'll echo Commissioner Wortzel, thank you also for your service to our nation. I know that people who serve overseas often make a lot of sacrifices. Mr. Sedney, five years apart from your wife and the rest of your family is a sacrifice that I think is more then many other people have made. So thank you very much for doing it. I hope your reentry and adjustment goes well.

I want to follow up a little bit with what Commissioner Houston was asking. I understand we don't understand it--but the nature of the relationship between the Chinese government and the companies, some of which are state-owned enterprises, some of which are state-affiliated enterprises, and some of which are purportedly private, though I'm still trying to understand how privately held companies in China are.

We have heard relatively recently about the possible tension, particularly in the case of Sudan, that the Chinese government is being put in an embarrassing and difficult public relations position around the world because of the activities in Sudan and that it might not have the kind of control over the Chinese oil companies that are participating there. It might or it might not.

But the possibility of increasing tension between companies and the state as the companies pursue profit and that the state has other interests. Could you just explore that a little bit more. Does that provide leverage for us in trying to deal, get the Chinese government to handle these companies that are proliferating?

MR. MAHLEY: Again, I would argue on that question it's a yes and a no, and it is one of those things in which you have to in one

respect understand the complexity of China as a whole. I'm probably not the best person at the table here to answer this question, but I'm on that line.

The difficulty is, is that China gets very embarrassed about the fact that it can't do some things and at the same time, it's also the case that it's a very big country with a lot of dynamism out there, and there are things that go on that the government doesn't know about. Now, the problem we have in trying to deal with that and to try to get the government to do something about it is that when you go to the government and say look at what these bums are doing that you don't know about, that you really ought to stop, you run into a blank wall frequently because the Chinese government is unwilling to admit that it doesn't know what's going on out there and therefore that there is something that it ought to go out and stop.

Now, then, you've got to convince them that it really is worth stopping, then you've got to be able to stand back and stand aside for a little bit until they finally get around to doing something about it. That's why you get very mixed results because you can never tell or at least I can't ever tell in my dealings with them about whether or not this is something in which they really don't know what's going on and they are then going to do something once they get the story figured out or whether they perfectly well know what's going on and are going to use that as an excuse to not do something that they didn't want to do to begin with.

How to predict the way to try to break that to get better results uniformly across the board is frankly just beyond my ability to predict at least.

CHAIRMAN BARTHOLOMEW: Ambassador Mahley, though, sometimes it's an excuse and sometimes it's an explanation. One of the questions that a number of us have had is every time a new agreement is signed, if essentially we're being told the Chinese government doesn't have the power or the ability or the willingness to implement the agreements, then what is the value of the agreements in the first place?

In other words, what you do--take credit for the Chinese signing yet another agreement and at the same time when people say but what about implementation, then it's the, well, implementation is a little bit difficult? So we're at the stage where it's like we can't have it both ways.

MR. MAHLEY: It's my experience, at least, they don't sign agreements that they're simply trying to sign something which they're blatantly going to go out and ignore then. What you're trying to do is to put in place a framework by which they can find themselves means to operate in an acceptable fashion for the international community and for joint interests and therefore to try to in some ways gain an

educational aspect as well as everything else.

So, in that sense, another agreement is useful because it gives the Chinese something else in language which they've agreed to and in fashions which they've agreed to which they can now use as a means of directing their behavior. And I would have to say I don't consider that to be a step backward when we do that.

CHAIRMAN BARTHOLOMEW: Presuming, of course, that they want to stop the behavior?

MR. SEDNEY: If I can add a little bit just briefly from my background of working with the Chinese.

HEARING COCHAIR REINSCH: Briefly.

MR. SEDNEY: I think there are many Chinese in the Chinese government at very high levels who do want to do something about this. But there are also others in other bureaucracies, sometimes competing bureaucracies, who don't.

I think it's essentially a continuing battle. The trend has been positive, but it continues to be a difficult issue within the Chinese government. As I said before, we've seen some really significant progress in areas such as nuclear issues over the decades, but in other areas we haven't. Certainly there are places like that I mention in my written testimony, Zibo, a city in China which almost dominates the glass-lined reactor vessel business in the world. These are pieces of equipment that are useful for a wide variety of chemical applications including, of course, the production of agents related to chemical weapons.

There are a number of companies in that city who do business around the world, and some of them, and one in particular that we sanctioned and we sanctioned repeatedly is, quite frankly, an embarrassment to that city. Shining a light on that city's inability to control that particular company I think will help us in terms of regulating what happens to that company because the central government often doesn't have the reach to get down to some of these small companies unless they make the decision to go and, as Commissioner Wortzel said, at things the way they do with the Internet, but those are things that they see as going directly to the safety and security of their country.

I can't say that there's been no progress. There's been a lot of progress and I think we have a big role to play in that. Sorry.

HEARING COCHAIR REINSCH: Thank you. Commissioner Videnieks.

COMMISSIONER VIDENIEKS: Good morning, gentlemen. A very simple question. How do the two departments define proliferation? And two, where does PRC rank in the world both in terms as a percentage of GDP and absolutely as a proliferator or transfer or of sales? That's basically the question I have. Is there a

difference between the way the two departments define proliferation?

MR. SEDNEY: I don't know of any difference in the way we define proliferation.

COMMISSIONER VIDENIEKS: How would we define proliferation? What is proliferation? I heard the words "transfer" said, a "sale." Can we define the term?

MR. MAHLEY: I'm going to try to not make it like the old Supreme Court Justice, "you know it when you see it." But I guess I would define proliferation as the spreading or transfer of capabilities or the technology and knowledge to support capabilities of the particularly production of weapons of mass destruction, but also of the enhancement of military capabilities to areas that did not previously possess it and particularly in which we do not have a clear indication that it will be responsibly used once it is acquired.

COMMISSIONER VIDENIEKS: Thank you. Any addition to that?

MR. SEDNEY: I think we have the same definition of proliferation, and I think on that issue we work very closely together.

COMMISSIONER VIDENIEKS: The second point, where does China both absolutely and as a percentage of GDP in terms of transfers, to the extent that it's transparent, what we know?

MR. SEDNEY: There's proliferation that occurs from everywhere. There's proliferation that occurs from companies in the U.S. That's why we have laws and we sanction and we prosecute firms in the U.S.

COMMISSIONER VIDENIEKS: In this case, aside from U.S., PRC basically? Where does PRC stand globally if one were to rank proliferators?

MR. MAHLEY: There are a couple ways I would try to parse that question in terms of responding to it. The first is, is that the quantity and, for instance, dollar value of proliferating items, and I'm not sure where I would rank China absolutely on that basis because again it's a question of where--well, in one respect, it's a question of what don't you know that you're trying to evaluate because proliferation activities that we know about, we try to stop.

One of the things that we are concerned about is the fact that there are proliferation activities we don't know about, and so therefore once we then find out about those, we then try to trace it back and try to figure out where it came from, but that's again an after-the-fact point, and I don't think anything I say would be current on that.

I would say probably simply by its magnitude that China is still despite any progress that they've made certainly in the top six or seven proliferators in the world in terms of the quantity of material that gets out of China to places that we would prefer that it not go.

In terms of both if you take an attitudinal look at it, in terms of trying to rank proliferators, I would say that I would at least probably put China down in the second quartile or probably about 11th or 12th in the world, but that's--

COMMISSIONER VIDENIEKS: That would be in aggregate terms, you're saying? Or percent?

MR. MAHLEY: In attitudinal terms, yes.

COMMISSIONER VIDENIEKS: Attitudinal?

MR. MAHLEY: Yes.

COMMISSIONER VIDENIEKS: Okay.

MR. MAHLEY: But that second one is pure guess on my basis. Don't misunderstand that for anything that looks like a government opinion.

COMMISSIONER VIDENIEKS: But one could say, then, that we don't really know and there are various judgments as to where they stand globally?

MR. MAHLEY: That is correct. It's a subjective judgmental assessment.

COMMISSIONER VIDENIEKS: Sir, any additional comments?

MR. SEDNEY: I would agree with Ambassador Mahley. I don't have any different view.

COMMISSIONER VIDENIEKS: Thank you both.

HEARING COCHAIR REINSCH: Thank you. Commissioner Brookes.

COMMISSIONER BROOKES: Thank you. Thank you both for appearing today. I had a quick question. I noticed in Ambassador Mahley's written comments here something that caught my eye, and it's not a gotcha question. It's on page three, and where you say that China's nonproliferation record is improving, but there appears to have been some sort of lack of compliance with U.N. Security Council resolutions, and I believe you're regarding the ones above as related to North Korea and Iran.

This is at the bottom of the page.

MR. MAHLEY: Right.

COMMISSIONER BROOKES: There were some continued outstanding concerns. Did I read that correct, that there have been, so within the last year, to your knowledge, there have been violations of these U.N. Security Council resolutions by the Chinese since the North Korean one goes back to about the fall, and then the other one, the Iran sanctions I believe are December? Am I reading that correctly, that there have been violations of those U.N. Security Council resolutions by the Chinese since they were implemented, passed by the U.N. Security Council?

MR. MAHLEY: There have been transfers which we have addressed with the Chinese in which we believe that the transfers were

not permitted by U.N. Security Council Resolution 1737 and 1747.

COMMISSIONER BROOKES: What about 1718?

MR. MAHLEY: 1718, I do not know of any instances involving the Chinese over the last year. That's a different issue.

COMMISSIONER BROOKES: So as regards to North Korea, none, but some as regards to Iran?

MR. MAHLEY: Correct. And the argument frankly that we have had with the Chinese on the particular instances that I'm aware of are arguments in which the Chinese are arguing that these are not prohibited by the U.N. Security Council resolutions because the U.N. Security Council resolutions are not blanket. They are focused resolutions, and we believe that the materials involved are things that ought to be banned under 1737 and 1747 and the Chinese disagree with that.

COMMISSIONER BROOKES: Can you tell us what those materials or equipment are?

MR. MAHLEY: In this circumstance, I cannot, no.

COMMISSIONER BROOKES: Okay. Mr. Sedney, do you have anything to add to that?

MR. SEDNEY: I think it goes along with the comments we described earlier, the Chinese approach to this is what I call a legalistic one. In other words, they try and parse the exact words rather than acting in the spirit of these, and so just the fact that we have these discussions with the Chinese over whether this is allowed or not allowed, very clearly the transfers that Ambassador Mahley is talking about are things that are not consistent with the spirit of those U.N. resolutions and the purpose and intent of them.

COMMISSIONER BROOKES: So the Chinese acknowledge these transfers that you've confronted them with which we don't have any specifics on in this forum?

MR. MAHLEY: That is correct I mean that--

COMMISSIONER BROOKES: They acknowledge them?

MR. MAHLEY: --the transfers involved, the Chinese have not denied occurred. The issue was an argument about whether or not these would have been banned by 1737 and 1747.

COMMISSIONER BROOKES: And I assume that these are related to the Iranian nuclear program?

MR. MAHLEY: Not necessarily, sir.

COMMISSIONER BROOKES: Can you tell us which programs?

MR. MAHLEY: They might well be involved with the Iranian missile program as well as the Iranian nuclear program.

COMMISSIONER BROOKES: Okay. Could you provide information to our staff at the classified level on this because this would be interesting for us to know? There's ways that we can do that;

right?

CHAIRMAN BARTHOLOMEW: We can get a briefing. I think might be the way to do that.

COMMISSIONER BROOKES: Okay. I'd like a little bit more specifics, but the bottom line here, I don't want to characterize your words, but the fact is that you believe within the last year, the Chinese have violated these two Security Council resolutions regarding Iran's nuclear and missile programs since implementation of 1737 and 1747?

MR. MAHLEY: I would say that violation is a very strong term. I would say that they have made transfers which we would have challenged under those resolutions.

COMMISSIONER BROOKES: Okay. Thank you very much.

HEARING COCHAIR REINSCH: Thank you. I would just add that the Commission has had a couple briefings on this at the classified level, and we have some information already. I think what we'll do is figure out if those briefings have been responsive to Commissioner Brookes' question, and if they have, we'll get that information to him directly. If they haven't, we'll ask you for some more information, and then we'll go from there and see what happens.

Let me take a couple minutes to return to the question of regime since Ambassador Mahley raised them. They don't belong to the MTCR or the Australia Group. Do we want them to? And what are we doing to persuade them to if we do want them to?

MR. MAHLEY: First of all, they want to. They have applied for membership.

HEARING COCHAIR REINSCH: In both?

MR. MAHLEY: Yes.

HEARING COCHAIR REINSCH: They've applied for membership in the MTCR?

MR. MAHLEY: Yes. And the answer is, is that we have a set of criteria which we believe that they need to meet before we're going to be prepared to allow them into that organization. And we keep encouraging them very strongly in bilateral discussions to do the things that we think would be necessary in order to do that, and as soon as they have done that, then I think we would be prepared to welcome them into the organization.

HEARING COCHAIR REINSCH: And their response has been to begin to undertake those things or to argue that they don't need to in order to join?

MR. MAHLEY: Their response has been in a couple of instances to say that they aren't sure that they can do those things, that we're asking them to do the impossible, in which case we say we'll be happy to tell you how you might be able to do this if you'd like to get some training from us.

But the other part is, is that there are some cases in which there

are some instances in which they have argued that they have met the criteria. We have indicated why we do not believe that to be the case, and so therefore, we'll continue to work on that basis.

HEARING COCHAIR REINSCH: And the criteria in general are their ability to police themselves; is that really what we're focused on or getting necessarily laws in place or implementation processes in place?

MR. MAHLEY: Again, at this level, I can't give you the specific criteria, but I can say generally that the issue is, is that we expect them to demonstrate both their ability to fully implement all of the elements of the regime, which would include, for example, the ability to ban the export of all the kinds of things that they're supposed to ban the export of under the regime.

And as I mentioned before, as a matter of fact, that is something they have done in terms of making a roughly parallel set of export control regulations for both the Australia Group and the Missile Technology Control Regime.

But also it involves a question that we have good confidence that they will, indeed, actually enforce those activities so that in addition to having them on the books, they will actually not proliferate those materials.

HEARING COCHAIR REINSCH: Okay. Let me then ask--maybe Mr. Sedney is a more appropriate person to ask in this case--you decide between you--the same set of questions with respect to the Wassenaar Arrangement. Do we want them in? Are we having discussions with them? Have they applied in that case?

MR. SEDNEY: The Wassenaar Arrangement is an organization that again the State Department is responsible for.

HEARING COCHAIR REINSCH: So you're dropping it on him.

MR. SEDNEY: That's based on my past knowledge from having worked in the State Department in the past. But maybe Ambassador Mahley would be the correct person to answer on this.

MR. MAHLEY: I was going to say the answer in the first instance is no, they have not applied for membership in the Wassenaar Arrangement. The answer in the second question is that the Wassenaar Arrangement in the conventional arena is a place in which we again would like to have the Chinese coordinate their policies, but until they have gotten coordinated policies, I don't think we're going to be asking them to join the organization and the arrangement, and there were other internal political reasons with the Wassenaar Arrangement why that would not necessarily be a propitious thing to do.

Remember, all of those regimes operate on consensus. So that it's not only us but a number of other people that have got to get in alignment with that.

HEARING COCHAIR REINSCH: I understand that. I'm tempted

to pursue that, but let me ask Mr. Sedney a related question. You spoke in your testimony about conventional weapons, which re an element of Wassenaar along with dual use. It seemed to me from your description, and correct me if I'm wrong, that the issue here is not so much an argument about whether or not they fulfilled their obligations, but an argument over whether they're pursuing the policy that we would like them to pursue and they appear not to be.

It seems to me that if they were in Wassenaar, wouldn't that help on the conventional weapons front?

MR. SEDNEY: It would help, but the threshold question here, and I agree very much with Ambassador Mahley on this, is the Chinese attitude and their attitude is the evidence by the actual policies they carry out. The Wassenaar Arrangement, as Ambassador Mahley described it, is a consensual regime. It's a consensual regime of like-minded countries, and I think that's really where we have the problem, both with the Wassenaar and perhaps with the MTCR, like-minded countries.

For China to get to the place where we would feel comfortable with it being a like-minded country in these proliferation regimes, there still is a way to go including very much the issue of transparency of their enforcement activities, effectiveness of their enforcement activities.

Chair Bartholomew, you raised the issue of the worth of having China be in regimes, and we agree with that. We only want China to be in regimes when that improves the functioning of the regime and improves China's performance. Again to speak personally--because this is a State Department issue--I think in both those regimes China still has a way to go before it meets that criteria of being essentially a like-minded country.

MR. MAHLEY: I would agree with that.

HEARING COCHAIR REINSCH: Thank you. Now, we've completed the first round. Four commissioners, Blumenthal, Wortzel, Fiedler and Wessel, have indicated they have some additional questions. If you can confine yourself to one or two, we ought to be able to fit everybody in. And so we'll go in the order that I've been informed that they have questions which means we'll start with Commissioner Blumenthal.

VICE CHAIRMAN BLUMENTHAL: Thank you both and thank you for taking so much time with us. I know you have important jobs to do. This question of motivations that we touched on, that we think that the denuclearization of North Korea and Iran are the clear and present dangers, but the Chinese perhaps may not, would like them to, but perhaps they have other motivations, perhaps they have higher priorities, perhaps, as we talked about before, they believe that the risks of taking action are greater than the risks of inaction.

But certainly we have the power to reshape their risk/benefit analysis. In the case of North Korea, I'll just use one example. The Banco Delta Asia case, it's my understanding the Chinese banking system was somewhat concerned that we would start to go after the banking system in general throughout, not only in Macao, but in China, anyone who was a money laundering concern, and it's my understanding that they actually were provided some motivation, let's say, to rethink the risk/benefit analysis on taking action with respect to China.

I wonder given the extent we went to to find a way to get the money from Banco Delta Asia back to the North Koreans, no private bank in the world would take the money, so we had to go through our Federal Reserve System, I wonder if it is in both of your opinions, it's going to be more difficult, after we went around the world trying to convince other countries to take action against their own banks or other banks that are laundering money and involved in proliferation, if now that we've taken such strong action to go back and give the North Koreans back their laundered money, if we want to set about creating the right types of motivations once again for the Chinese or other countries with respect to sanctioning Iran and North Korea, how much more difficult is that going to be now?

Have we really taken a credibility hit when we go back and say that that bank is no longer a concern?

MR. SEDNEY: I'm guessing that for both of us this is a bit out of our, or fairly far out of our areas of responsibility. In terms of the overall hit on credibility, I don't see that right now. I think that the, as we said and as the administration has said, the resumption of the Six-Party talks, we have a heads of delegation meeting scheduled in Beijing for next week, I believe. That's something that we believe holds a prospect for forward movement towards the denuclearization of the Korean peninsula.

We are putting a huge amount of effort and support to it. We in the Department of Defense will have somebody who will be accompanying Ambassador Hill to the heads of delegation meeting.

VICE CHAIRMAN BLUMENTHAL: Yes.

MR. SEDNEY: So we're moving forward for that. In terms of the broader impact on the financial system, I'd have to say that I'm not qualified to do that.

VICE CHAIRMAN BLUMENTHAL: Let me put a finer point on it. Wouldn't it be difficult now to go to countries and say please follow us in cleaning up your own banks and sanctioning banks that are using money for proliferation purposes now that after we went through that effort one time, we essentially lifted that all together in a way that, again, no private bank in the world would take that money. We had to go through our own Federal Reserve System. Wouldn't be

more difficult--wouldn't you think some countries would have reservations now about joining us in that effort?

MR. MAHLEY: The banking question is completely outside my area of competence, and I'm not going to try to answer that. But in terms of the general question of did our movement on BDA, Banco Delta Asia, cause other credibility problems in terms of people supporting our nonproliferation regimes. In places I've gone, I have not seen any of that because I think that is generally taken as an element of one thing that was on the mix, and that having gone one thing in the mix, it's now something that did its job when it did its job, and we're now on to a different issue.

So I have not seen that with respect to other proliferation questions that I've raised with other countries.

VICE CHAIRMAN BLUMENTHAL: Thank you.

HEARING COCHAIR REINSCH: Thank you. Commissioner Wortzel.

COMMISSIONER WORTZEL: Gentlemen, which Chinese companies can sell equipment directly from People's Liberation Army materiel stocks, you know, as opposed to off of a corporate production line, and how does that relate to this whole problem of government control over proliferation?

And then for Mr. Sedney, you brought up a very interesting issue of the embarrassment that Zibo Chemical's activities bring to the city. And it struck me as you said that that many of these cities in the provinces they're in have sister relationships with American cities and American states. What do you think would be the reaction, if you think Zibo city would be concerned about this embarrassment or is concerned, to actually going to state governors or mayors and city populations in the United States and using that sister city or sister state relationship and the trade that comes from that relationship as a means to pressure localities in China as opposed to the central government?

MR. SEDNEY: Commissioner Wortzel, one of the reasons I said I like coming to things like this, in the past, to hear the exchanges, and now to be part of them, is to learn from you. And the second thing you mentioned, that's a new door, a door I hadn't thought about before, and I will think about that, and I think we'll look into that.

In terms of the answer to your first question, I think to give you a really good answer, we'll have to get back to you on that because I don't know the specifics on that. It's a good question, but I just don't know the answer.

HEARING COCHAIR REINSCH: Commissioner Fiedler.

COMMISSIONER FIEDLER: Just a quick follow-up question on my earlier PLA Poly question. One, how do we know that the PLA is out of business given the lack of transparency other than the fact that

they've told us they're out of business?

MR. SEDNEY: It's an issue that I've been following closely for the last 15 years, and especially the period of time after the PLA was ordered out of business. All the information that we had then, without getting too specific on that, was that there was some resistance, there was some slowness. There were people that had to make choices about whether they went with the business side or they stayed with the PLA.

There are still continuing close personal connections, but it was a policy decision, and along with what Ambassador Mahley said, and it was a policy decision that I think was made for a lot of good military reasons. The reason that they divided it was not because of some idea that this was morally wrong; it was because they thought that the involvement of the PLA in business was making the PLA a less efficient military, and I think that we would agree with that.

So they have carried it forward, and I think they've carried it forward fairly effectively, and they have built a stronger and better PLA as a result.

COMMISSIONER FIEDLER: Okay.

MR. SEDNEY: So I think it's actually been fairly effective, but what I'm doing is I'm giving you an impressionistic answer rather than a detailed answer because I think we could actually give you a detailed answer in a different setting.

COMMISSIONER FIEDLER: Is He Ping still a high official of Poly?

MR. SEDNEY: There are a number of people with very close PLA connections who are officers in Poly.

COMMISSIONER FIEDLER: Is He Ping among them? Deng Xiaoping's son-in-law, former head of Poly?

MR. SEDNEY: I haven't looked at the leadership structure lately. The last time I looked at it, which was probably about a year ago, that was the case, but I don't know the answer now.

COMMISSIONER FIEDLER: Okay. Do you know?

MR. MAHLEY: I don't know the answer to that in today's terms.

COMMISSIONER FIEDLER: The one concern I have about whether the PLA is in business or not is if Poly is buying their AK-47s to sell to the Sudan, say, clearly, they got to pay them for the weapons. They're not getting them for free. So there is still a business relationship between the PLA if they're selling them from PLA stocks?

MR. SEDNEY: If they're selling them from PLA stocks or if they're selling them from--

COMMISSIONER FIEDLER: Versus the production line at NORINCO.

MR. SEDNEY: Or if they're selling them--well, Poly is primarily a broker, and so there a lot of relationships among those

firms that they're engaged in, and they're a good broker so they make a lot of profit from each part of the sale.

COMMISSIONER FIEDLER: Thank you.

MR. SEDNEY: But I think as we get back on Larry's question, that might answer part of yours.

COMMISSIONER FIEDLER: Thank you.

HEARING COCHAIR REINSCH: Thank you. Commissioner Wessel.

COMMISSIONER WESSEL: Thank you. Mr. Sedney, I'd like to go back to your testimony if I could, and you refer to conventional weapons, the fact that their supplies could be used on battlefields that target and kill Americans in Afghanistan and Iraq.

Can you, hopefully, in this setting, if not, in another setting, let us know what weapons have found their way to the battlefield? What Chinese-made weapons may have proliferated and leaked through Iran or somewhere else and found their way to the battlefield, RPGs or whatever else they might be? And what efforts have been made to trace the serial numbers or whatever other means we might have to determine where the leakage is coming from and how we might do something to address that problem?

MR. SEDNEY: Let me just say, first of all, in the specifics of your question, I can't answer that in this setting. You've probably seen some public statements by administration officials along these lines. Under Secretary Burns in the State Department made a statement along these lines relating to this issue, but to the kinds of details you're talking about, we'd have to be in a high classification setting. So we will work with the Commission to arrange that.

COMMISSIONER WESSEL: Okay. That would be great. Thank you.

MR. SEDNEY: But let me just add on this, the conventional transfers to Iran, that's not just the only issue. There is another issue as well, and that's giving conventional support to an Iranian regime which is not playing a stabilizing role in what is a very instable region, and by doing that, as I said, we believe that China is acting against the region's interests, against our interests and against their own interests.

COMMISSIONER WESSEL: I clearly understand and agree. And we need to look at both that question as well as what direct armaments may, in fact, be jeopardizing the lives of our troops, and I think Congress would like to know what can be done about that. Thank you.

HEARING COCHAIR REINSCH: Thank you. Commissioner Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you very much. Not a question but a comment on my end. Thank you, again, gentlemen, for

appearing before us and thank you for what I think is quite frank testimony about the nature of the challenges.

Ambassador Mahley, I was particularly struck by what you said at the very beginning about we're seeing increasingly sophisticated proliferation networks, and that combined with the lack of transparency makes it seem as though the problems facing us are going to be getting harder and not easier. So we really look forward to continuing discussion with you, suggestions that you might have of how we can improve the tools that you have in order to be able to carry out the important work that you're doing.

Thank you.

HEARING COCHAIR REINSCH: To conclude, we're on a roll. This is the second hearing in a row where the administration has sent us two exceptionally knowledgeable and competent witnesses, and we're grateful to you for your time and also for your knowledge and grateful to your superiors for having the wisdom to send you. Thank you very much. We'll be back to you if there is follow-up to be done. We appreciate your time.

I'm to announce to the room that the Commission is going to close the room now for lunch. So we're going to ask our guests to leave. We'll reopen the room at 12:55 in time for the next panel. Thank you very much, and we're in recess.

[Whereupon, at 11:55 a.m., the hearing recessed, to reconvene at 1:00 p.m., this same day.]

AFTERNOON SESSION

PANEL II: IMPACT OF CHINA'S PROLIFERATION ON U.S. NATIONAL SECURITY AND NONPROLIFERATION INTERESTS

OPENING STATEMENT OF COMMISSIONER MARK T. ESPER HEARING COCHAIR

HEARING COCHAIR ESPER: Good afternoon. Our second panel today will discuss the impact of China's proliferation on U.S. national security and nonproliferation interests.

We are pleased to welcome two panelists to speak on this issue, and excuse me if I get pronunciations wrong, but Dr. Jing-dong Yuan is the Director of the Education Program at the James Martin Center for Nonproliferation Studies, where his research focuses on Asia-Pacific security, global and regional arms control and nonproliferation issues, U.S. policy toward Asia, and China's defense and foreign policy. Dr. Yuan is also an Associate Professor of International Policy Studies at the Monterey Institute of International Studies.

Second is Dr. Brad Roberts, who is a member of the research staff at the Institute for Defense Analyses in Alexandria, Virginia, with expertise on the proliferation and control of weapons of mass destruction. In his current position at the IDA, he regularly provides analytical support to the Office of the Secretary of Defense and other U.S. government agencies. Additionally, he is an adjunct professor at George Washington University.

Gentlemen, we are very pleased to have both of you with us today and we look forward to your remarks. In terms of procedure, just so you know, what we'll do is give you approximately seven minutes for opening oral remarks, and when you see the yellow light--you have two minutes left. And then with regard to Q&A, we'll go five minutes each for each commissioner.

Dr. Yuan, you have the floor, sir.

STATEMENT OF DR. JING-DONG YUAN DIRECTOR OF EDUCATION PROGRAM, THE JAMES MARTIN CENTER FOR NONPROLIFERATION STUDIES, MONTEREY INSTITUTE OF INTERNATIONAL STUDIES, MONTEREY, CALIFORNIA

DR. YUAN: Thank you very much, Commission Chairperson, hearing cochairs, members of the Commission and professional staff. Thank you, again, for the invitation to testify before this Commission. I testified about five years ago, almost six years ago, right after 9/11 in 2001. I think over the last five years, certainly a lot has taken

place with regard to China's policy in the areas of nonproliferation and arms control and regional security.

I would submit that these are positive changes because if you look at the overall trend, that is China has made a commitment to fulfill its international multilateral and bilateral nonproliferation obligations and responsibilities.

There are still issues to be sure, and these in a way continue to irritate U.S.-China relations. I think the Chinese government clearly is aware of the importance that the U.S. government attaches to nonproliferation and arms control, and is making effort to address some of the issues that are of concern to the U.S., especially in areas that can affect U.S. national security interests.

So given that I have a prepared written statement, so my remarks will be mainly to highlight a few points and then I'm happy to respond to questions.

Basically the overall assessment of China, if you look at China's commitments and obligations, its international commitments obviously is the NPT, the Nonproliferation Treaty. In the chemical and biological areas, they are the CWC, Chemical Weapons Convention, and the Biological and Toxin Weapons Convention. China is also a party to and the 1967 Outer Space Treaty.

China has been participating in a number of international forums such as the U.N. First Committee Conference on Disarmament on ongoing arms control, disarmament and nonproliferation issues. And recently China has signed on and certainly supports the United Nations Security Council Resolution 1540 which commits all member states to establish and strengthen domestic export control regulations to prevent the sensitive materials from falling into the hands of terrorist groups or other non-state actors.

Secondly is China's commitment to the multilateral regimes. Here I think it's interesting to note that there has been a noticeable change with regard to Chinese attitudes. If you read the Chinese arms control white paper or the defense white paper, maybe five or six years ago, you will see the language regarding the multilateral control regime such as MTCR, Australia Group, Wassenaar Arrangement, or Nuclear Suppliers Group, in less than positive terms.

China regarded these arrangements as pretty much discriminatory, nontransparent and very arbitrary. But since 2004, when China applied for and became a member of the NSG, the attitude has changed, and China now conducts regular consultations with all these multilateral export control arrangements.

I would just like to quote from the 2005 Chinese Arms Control and Nonproliferation White Paper. Basically, "China values the important role of the multinational export control mechanism in the field of nonproliferation."

What is most important-- again, I quote--"China has conducted active dialogues and exchanges with these mechanisms, learning from and drawing on their useful experience and practices for its own reference."

To that effect, I think if you look at the Chinese domestic control regulations, the control lists pretty much mirror those maintained by the multilateral export control arrangements.

And there are other developments. For instance, the domestic developments of an export control system, manpower, and infrastructure. But some issues still remain. For instance, if China has made the commitment to international and multilateral nonproliferation arrangement, why is there still reported activities by Chinese entities and companies in the areas of proliferation, especially transfers of sensitive and dual use items as reported by the U.S. intelligence and U.S. media?

So this raises two questions basically. One is what is the Chinese capacity to enforce its own domestic laws? And what are the Chinese intentions because there are entities which are considered to be state-owned? So they in a way should be easier for the Chinese government to control.

I think a lot of U.S. sanctions have been imposed on entities engaged in chemical or some missile component exports. Some of the companies are relatively small and in one case there's one individual who has received five or six times. So there are still problems.

In the last two years, China has strengthened its existing export control regulations by amending the nuclear, nuclear dual-use and chemical and biological regulations, and now China has introduced the so-called "catch-all" regulation, and is conducting a wide array of workshops and training to better inform industries of their responsibilities in nonproliferation.

Thank you.

[The statement follows:][3]

HEARING COCHAIR ESPER: Good. Thank you, Dr. Yuan. Dr. Roberts.

[3] Click here to read the prepared statement of Dr. Jing-dong Yuan

STATEMENT OF DR. BRAD ROBERTS
RESEARCH STAFF MEMBERS, INSTITUTE FOR DEFENSE ANALYSES, WASHINGTON, D.C.

DR. ROBERTS: I would like to add my thanks for the opportunity to be here. I am also obliged to add the usual disclaimer that the views I express are my own and shouldn't be attributed to my employer or any of its sponsors, and indeed the views I will express aren't even really my own.

I'm here to help you answer one of the questions on your list of seven. At least my formal presentation addresses directly one specific question. I'm happy for the discussion to go wherever helpful. But that was question four, which is essentially why does China behave the way it does? What is the thinking that underpins a strategy that disappoints us?

I think there are essentially two main explanations for this. The first is that Chinese decision-makers don't quite see the problem the same way we do. The Bush administration, in a way that is not all that different from the Clinton administration before it, gives very significant prominence to the proliferation problem in the US security environment. Indeed, for the Bush administration, the nexus, the crossroads of tyranny and technology, is the fundamental challenge in our security environment, and the fundamental test of what a responsible stakeholder does. And further in the Bush administration's view, this is a fundamental international problem for which responsible powers must employ their full power purposefully.

This isn't how China looks at proliferation. China has obviously attached rising importance to proliferation in its security environment and rising importance to nonproliferation in its bilateral relationship with the United States.

But its perception of its security environment doesn't quite align with ours. China's fundamental challenge is the United States. And the United States is a two-sided coin. On the one side, the US is China's biggest partner as we can help China achieve the stability it needs, the development it needs. But we're also potentially the spoiler in all of that. So there's a fundamental Chinese ambivalence about the United States and there's a perception that we live in different security environments and therefore have different commitments to working the problem.

Of course, there is a Chinese debate on China's security environment, just as there is an American debate. Many of those participants in that debate see more cooperation with the United States on nonproliferation as helpful to China for various reasons, including to improve its

security environment.

But many would argue that there's already enough cooperation. In their view, more cooperation just helps America extend its hegemonic unipolar moment, and when the world is headed towards multipolarity, that's just helping American bide time. These different perspectives on China's security environment lead to different choices about policy.

The second main reason for the gap between US expectations and China's nonproliferation performance is that even where we see the problem the same, we don't always see the solution the same. On both North Korea and Iran, for example, China and the United States are more or less lined up behind the IAEA's definition of what the problem is. But we have different senses of what the right solution is.

From the U.S. perspective, given our historical concern about nuclear Armageddon, our regular wars with, "tin-pot dictators," we're urgent about having real solutions to proliferation problems. (At least we say we are.)

China, on the other hand, has a different history. It's been coerced. It's been compelled. It's been invaded. It's been treated to the tender mercies of coalitions of the willing. Therefore, it is a lot more skeptical about US-preferred solutions when it comes to noncompliance problems. They prefer persuasion over coercion. They prefer taking time because sooner or later the problem is going to get worked out, in their view. We're not so ready to give up time on these problems.

The implication of these differences of view and historical experience is that China is not willing to sign up uncritically to strategies crafted in Washington to deal with proliferation problems.

Now, what are the implications of these two factors? Well, I think the main implication is that when we go to China to try to talk with Chinese experts and policymakers about China's nonproliferation performance, they don't share the common US perception that there's a problem with China's nonproliferation performance. There was a time when they would have. Mao's view was that nuclear proliferation was good and after Mao and through the 1980's and 1990's, many Chinese analysts came to the view that foreign complaints about China's nonproliferation performance were valid. But that sense seems to be gone, and not just among hard-liners.

The average Chinese policy analyst sitting in a think tank or an academic institution who's informed on these topics would say today that China has assumed all of the expected treaty obligations of a responsible stakeholder in the WMD realm, and where its performance continues to disappoint America, it's in those areas where America is asking things of China that go beyond what the treaty regime requires.

In response to US complaints, they make the following

arguments:

First: "You Americans want us to sign up to your coalitions of the willing. But from the Chinese perspective, that undermines the treaties and works against multipolarity."

Second: "You Americans want to come along and talk to us about the virtues of your policies towards Israel, India, Japan—(well, let me leave Japan off the list for a moment)-- your policies towards countries that are outside the treaty regime. Well, we perceive your policies towards them as double-standards."

"You're saying nonproliferation, but you're helping them. So is the final American test of China's commitment to nonproliferation that we Chinese are willing to sign up for your double-standards? Why should we go that far?"

-These are the kinds of arguments we hear from them.

The closing question on your list focuses on what to do about this? I've sketched out a series of misperceptions of American policy and interests, and criticisms of American policy. I wouldn't suggest that those are all of the reasons that they don't participate fully with us, but when you have misperceptions and criticisms, there's an opportunity to go out and talk and persuade.

Some of you will recall Secretary Rumsfeld's remarks at the Shangri-La conferences of the last two years. Two years ago, he said we need to get the Chinese to be more transparent on military affairs. Then, he went to China. At the next Shangri-La conference, he said something to the effect of "you know, it's not that simple. We need mutual demystification." Now that's an interesting word choice. It conveys a notion that as China does better, the US too needs to do better. The US needs also to do a better job of articulating what its complaints are, hearing their complaints and building consensus, not just brow-beating.

Let me stop there and hope I've stirred the pot enough.

[The statement follows:]

Prepared Statement of Dr. Brad Roberts
Research Staff Members, Institute for Defense Analyses,
Washington, D.C.

The focus of my remarks is on the proliferation policies and practices of the People's Republic of China. I will not describe these in detail, as I understand that the administration witnesses on the first panel will already have done so. As a general characterization, China has moved over the last 15-20 years to bring those policies and practices into closer alignment with international norms and U.S. preferences. But some important gaps remain and U.S. officials have registered concerns about:

- aspects of China's trade in proliferation sensitive dual-use materials and technologies;
- its lack of participation in the Proliferation Security Initiative and other ad hoc coordinating mechanisms;

- and its failure to fully support U.S. strategies vis-à-vis specific countries of proliferation concern.

What explains these gaps? Why does China not do a better job on nonproliferation? How can its future performance be improved?

My insights into these matters derive from a decade of interaction with experts in the Chinese think tank community at conferences, seminars, and other gatherings in China, the United States, and elsewhere. Some of those experts are from the academic world but others are a part of the PRC government, including uniformed military personnel. Their views are not necessarily fully reflective of the thinking of senior decision-makers in the Party, military, or state institutions. But they provide useful insights into the context in which Chinese policy is made. Reported below are their ideas as best I understand them. In reporting their views, I am not endorsing them. Where a conclusion or opinion of my own is expressed, please understand that these are my personal views that should not be attributed to my employer or any of its sponsors.

The gap between U.S. expectations and Chinese performance in the nonproliferation realm has two primary explanations:

1. China does not see the proliferation problem in quite the same way as the United States.
2. It sometimes prefers solutions to proliferation problems different from those of the United States.

An obvious result is that China's expert community assesses China's nonproliferation performance more positively than does the U.S. expert community. Understanding these different perceptions can help to bring into focus opportunities to continue to narrow the gap. I will address each of these points in turn.

First, China and the United States have overlapping but not identical views of the problem posed by the proliferation of weapons of mass destruction.

For the Bush administration, the acquisition of WMD by rogue states and non-state actors is *a fundamental challenge* to U.S. security and to international order more generally. The "crossroads of tyranny and technology" poses a threat to U.S. security of sufficient magnitude to warrant the full use of U.S. power to confront "gathering threats," including the preemptive use of military means to remove those threats when other means have failed. The "crossroads" also poses a threat to international order of sufficient magnitude to warrant an unprecedented level of cooperation among the major power based on common interests and common responsibilities. Proliferation is thus a test of other stakeholders in international order in terms of their willingness to accept and exercise power to defend order. These core concepts are well articulated in the administration's National Security Strategy and National Strategy to Combat WMD.

The People's Republic of China takes a different view of the international security environment. To be sure, proliferation has steadily grown in salience in China's views of its security environment, as recent Defense White Papers attest. Over the last decade or so, there has been a broadening and deepening of Chinese consensus around the proposition that the proliferation of nuclear weapons is harmful to China's security and to its interests in stability in the Middle East and elsewhere. There is also a rising willingness to exercise Chinese responsibilities as a stakeholder in international order to inhibit proliferation and deal with problems of non-compliance with the nuclear Non-Proliferation Treaty.

But proliferation is not THE central problem for China in the way that the Bush administration perceives it to be for the United States. For China, the central challenge is the United States—the only foreign actor with the potential to make or break China's quest for peace, development, stability, and power. Will the United States be partner or spoiler in this quest? Will it be (in Chinese eyes) a careful steward of common

interests in peace in the Taiwan strait or a witting or unwitting partner of Taipei's in precipitating war? China's experts are deeply ambivalent about a U.S. dominated world order, which both serves China's interests in stability but also threatens to contain China's power. They prefer instead the emergence of a more multipolar order. This ambivalence makes it difficult for China to fully join the Bush administration in the aggressive use of all means at its disposal to confront challenges at "the crossroads of tyranny and technology." Some Chinese experts argue that cooperation with the United States on nonproliferation should be more far-reaching because it pleases Washington and thus contributes to a friendly, steady hand on China policy there. Other Chinese experts argue that such cooperation only extends American hegemony and the "unipolar moment" and thus works against China's long-term interests. A few even argue that some continued proliferation in regions not neighboring China helps to keep the United States focused on those areas rather than on China's rise.

Their debate is influenced significantly by a broad skepticism in China about the durability of the U.S. commitment to nonproliferation. Many Chinese experts see China as moving closer to the nonproliferation regime just as the United States moves away. A few, especially cynical observers even worry about a U.S. ruse to trick China into not helping its friends acquire nuclear weapons at the same time that the United States quietly encircles China with new nuclear-armed allies. In defense of their claim that the U.S. commitment to nonproliferation is weakening, they argue that:

- The Bush administration undertook a series of initiatives in 2000 and 2001 to loosen arms control restraints and to undermine multilateral processes aimed at strengthening existing multilateral mechanisms.
- The 2002 Nuclear Posture Review signaled U.S. intent to abandon its Article VI commitment under the nuclear Non-Proliferation Treaty and to increase its reliance on nuclear weapons while also lowering the nuclear threshold.
- Counterproliferation has gained the upper hand over nonproliferation in terms of the time, attention, and focus of senior U.S. policymakers. Bush administration officials have spoken about the likely collapse of the nonproliferation regime.
- The United States continues to assist its friends and allies to acquire nuclear weapons or to increase their nuclear potential. Around China's periphery, these conspicuously include India and Japan.
- The United States has been unreceptive to PRC initiatives to reduce the risks of strategic military competition, including its proposals for a bilateral agreement on no-first-use of nuclear weapons and for a multilateral agreement banning the weaponization of outer space. Indeed, they argue, the Bush administration writes openly about dissuading Chinese competition by maintaining supremacy and increasing its freedom of strategic maneuver.

[To repeat: these are Chinese arguments about U.S. policies, not mine.]

In sum, China and the United States have different perceptions of the proliferation problem and of the ways in which nonproliferation can contribute to the achievement of national objectives. But these differences have not precluded a significant convergence of policies and practices over the last two decades.

The second primary explanation for the continued gap between China and the United States on proliferation is that the two countries sometimes prefer different solutions to specific proliferation problems.

Even where the two countries can agree on the need to tackle a specific proliferation problem, as for example in instances of noncompliance with the NPT as confirmed by the International Atomic Energy Agency, the two often differ on the means of doing so. The United States approaches its responsibilities as a security guarantor with a sense of purpose born of decades of worry about nuclear war and a century of worry about "tin-pot dictators" emboldened by military prowess. It seeks solutions to problems of treaty

noncompliance that are prompt and definitive. China approaches its responsibilities as a permanent member of the United Nations Security Council from a different historical experience. As a country with a deep and abiding grievance against the injustices done it by major powers willing to intervene in its internal affairs, China has a strong antipathy to interference in the affairs of another state and to the use of force, or threatened use of force, to compel a sovereign entity toward some externally imposed purpose. Thus it is hardly surprising that China's expert community is generally skeptical of the effectiveness of coercion by major powers, whether political, economic, or military. Those experts tend to see the United States as overly reliant on coercive policy tools and as unwilling to work with political tools of persuasion. They see the former as unpromising of success and the latter much more certain of success over time. Those experts also perceive the United States as overly eager to act in response to intelligence that it won't share with others and that is sometimes unreliable.

These perceptions translate into an unwillingness to sign up uncritically to country-specific strategies crafted in Washington. On North Korea, for example, Chinese experts have generally seen the time as not ripe for exercising China's influence in a bid to end the nuclear program there, on the argument that neither Pyongyang nor Washington is ready for such a final deal. On Iran, China has generally taken the European and Russian view that more can be done within the nonproliferation regime to bring Iran into full compliance with its treaty obligations. But even on these two cases it sometimes seems that policy disagreements overshadow the significant convergence of policy that has occurred.

In sum, even where the two can agree on a problem, they don't always agree on the solution.

Drawing China's policies and practices more closely to U.S. preferences would be easier if there were a significant constituency in China arguing that China's behaviors are falling well short of what is required. But few in China make this argument, and not simply because criticizing their government can be costly. China's experts generally see China's nonproliferation policies and practices as very well aligned with China's international obligations. They hold up the development of institutional capacity over the last decade, in the form of a regulatory system supported by an interagency process, as testament to China's commitment to police its behaviors and ensure its compliance with its self-accepted treaty obligations. [The development of that capacity deserves U.S. recognition and praise.] China's experts acknowledge that Chinese policies and practices sometimes fall short of U.S. preferences even when they meet China's international obligations. They emphasize this distinction between international obligations and U.S. preferences and argue that most if not all of the U.S. complaints about Chinese nonproliferation policies and practices stem from China's reluctance to meet U.S. demands that exceed China's treaty obligations. Of course they then ask why China should be held to standards written unilaterally in Washington and not to China's own self-accepted obligations.

For example, the United States has been disappointed by China's reluctance to formally participate in activities such as the Proliferation Security Initiative and the Missile Technology Control Regime. As a general matter, Chinese experts oppose "coalitions of the willing" because they perceive them as unhelpful—in Chinese eyes, they slow the development of a multipolar system and undermine the legitimacy of standing multilateral institutions.

The Bush administration has also been disappointed with China's lack of enthusiasm for the proposed U.S.-India nuclear agreement. China's position reflects a long-standing concern about U.S. nonproliferation policies that they perceive as providing special nuclear benefits to U.S. friends outside of the treaty regime. Chinese experts criticize what they perceive to be a double-standard in U.S. nonproliferation policy. On the one hand, U.S. adversaries are treated to tough U.S. policies, sustained coercion, and even preventive war. On the other hand, U.S. friends get a helping hand to develop their nuclear potential—think of Israel, India, and Japan, they argue. Chinese experts ask if America will only be happy with China's nonproliferation performance when China has fully signed up to support these double standards.

China's experts generally see no reason other than deference to the United States to join in special American projects that fall outside the internationally-defined regime. This deference comes hard when many of those experts see the United States as unwilling to reciprocate with deference of its own to some important Chinese interests.

This brings us to the final question: what more can be done to narrow the gap between U.S. expectations and Chinese performance in the nonproliferation realm?

Some of the barriers to improved Chinese performance derive from misperceptions of U.S. policies and intentions. The U.S. expert community has tried to dispel those misperceptions but there is no substitute for a serious effort by U.S. officials to understand Chinese perceptions and to dialogue about them in a way that creates mutual understanding.

But some of the barriers to improved Chinese performance derive from complaints about U.S. policy that are held by other stakeholders in international order with a commitment to nonproliferation. It is conceivable that more can be done to persuade skeptics of the utility of coalitions of the willing and of exceptional policies for exceptional situations. But it is also conceivable that something can be learned from this criticism that can inform continued U.S. policy development in a way that enhances the prospects for success in dealing with proliferation over the longer term.

To deal effectively with Chinese misperceptions and criticisms, it is important to understand them. This requires dialogue. From this outsider's perspective, it appears that the process of communicating between the two countries on proliferation has been a largely one-way flow of U.S. complaints, demands, and threats. It has also been episodic. But dialogue is a two-way street. And it must be sustained if its value is to be cumulative. Secretary of Defense Donald Rumsfeld went to China in autumn 2005 in part to persuade China of the virtues of greater transparency and came back to praise the virtues of "mutual demystification." A process of articulating and exploring the different perceptions and underlying beliefs that guide policy choice in each capital may help to narrow gaps in valuable ways. Continuing progress in bringing China's nonproliferation policies and practices into alignment with U.S. preferences seems to require a closer convergence of:

- perceptions of the security environment;
- beliefs about the potential for deeper China-U.S. cooperation to influence that environment in ways that serve the interests of both;
- expectations about the long-term viability of nonproliferation; and
- thinking about how carrots and sticks can best be employed in multilateral efforts to deal with current and emerging problems of treaty non-compliance.

Such an agenda seems well aligned with the objectives of an administration committed to strategic dialogue with Beijing and desirous of enhancing China's contributions to international order as a "responsible stakeholder."

Panel II: Discussion, Questions and Answers

HEARING COCHAIR ESPER: Thank you, Dr. Roberts. We're going to go into a round of five-minute questions per commissioner. Commissioner Reinsch, do you have any?

HEARING COCHAIR REINSCH: Not yet.

HEARING COCHAIR ESPER: Good. I actually had Dr. Wortzel first and then Mr. Wessel.

COMMISSIONER WORTZEL: Gentlemen, thank you both for coming out there and, Jing-dong, thanks for taking the time to fly all the way out from the west coast and you for negotiating the bridge, Brad.

DR. ROBERTS: All the way across the Potomac.

COMMISSIONER WORTZEL: We heard in the last panel from the government perspective that China is actually taking the time and making the effort to restructure some of its companies that have been sanctioned for proliferation, and one of the points you make in your testimony, your written testimony, Dr. Yuan, is that there is not really a sufficient structure for that.

Is this restructuring merely a legal maneuver that would get existing companies that are under sanction off the sanctions lists, while creating new government-related companies that can then continue the proliferation without concerns about sanctions? I mean that's something I worry about.

It certainly indicates that there might be a difference in national interests and why you might find this effort going on. So that would be my first question of you.

And then, second, Dr. Roberts, you recommend that there has to be or there should be a dialogue, and that dialogue is going to be important to mutual understanding. Yet, the Strategic Command commander, the STRATCOM commander, has invited the commander of the Second Artillery Corps of China to the United States for exactly such a dialogue, and the Second Artillery Corps Commander has declined that twice.

Yet, during the same periods of the invitation by General Cartwright, the Second Artillery Corps Commander transited the hemisphere and had meetings in Latin America, I think in Cuba and Brazil or Argentina. So how should we understand this Chinese reluctance to engage in any form of strategic dialogue about these questions of nuclear doctrine and proliferation?

DR. YUAN: Thank you very much, Dr. Wortzel, for that question. I think the restructuring is still going on in terms of both China's own domestic export control regulation and who would be doing what in interagency processes between different government departments.

What is also important and interesting is where is the role of the military and also military affiliated companies. Even though in 1998-99, there was a divestment from business engagement by the PLA, I think if you look at the history of those defense companies, especially those huge companies such as NORINCO, China Great Wall, they inherited and basically made the transition from government agencies to commercial entities, and are still holding very powerful clout within the Chinese government structure because all the heads of those

companies, big corporations, carry ministerial or at least vice ministerial weight, rank, so they are very powerful individuals.

Secondly, I think Dr. Roberts alluded to, is there's a difference in interpretation of what should be exported and what should not? And I think for China, its first obligation is to international treaties, the NPT and all these treaties. Its second obligation is to its own commitment to the multilateral arrangements such as the Nuclear Suppliers Group. And then the third, i.e., domestic relations.

So some items are of a dubious nature, especially if you look at NORINCO or some other company, they do trade a lot of dual-use items. So these items may not be on China's list or the international or multilateral lists, but they may be under sanctions by U.S. domestic legal requirements such as the Iran Nonproliferation Act of 2000.

U.S. has its own domestic legislation. So because of these, the U.S. government imposed sanctions following its laws. Now, the issue is how to get China to move toward addressing U.S. concerns, I think if you look at the last two years, NORINCO is doing a lot of public relations activities in the U.S. and is also addressing some of the problems by adopting its own internal compliance program.

So, hopefully, over time some of these questions will be dealt with, if not completely removed. Thank you.

DR. ROBERTS: The dialogue you referenced, just for the benefit of the group who may not be familiar, the presidents agreed, Presidents Bush and Hu agreed, to three military confidence-building measures at their Summit, and one of the three was a dialogue on nuclear matters. The White House asked General Cartwright at STRATCOM to take the lead on this, and 15 months later, they have not even signed up General Jing to come kick the tires in Omaha. What explains this?

As an aside, let me note that this is not quite the dialogue about nonproliferation that I was discussing in my introductory remarks. And what it is remains unclear. I think in both China and the United States, there's a sense that you don't want to have General Jing go to STRATCOM without knowing what comes next. If that's the first step, what's the second step and what's the third step, and where do you think you're headed with this? Answering this question tells you what to do in the first step. Are you going to raise expectations, lower expectations? Rather than just have a visit for visit's sake, what are you trying to accomplish? We are still trying to figure that out on our side and I think they're still trying to figure that out.

What else explains the delay? There are some institutional factors here. The head of STRATCOM is used to talking to a lot of foreigners about a great many topics. The head of the Second Artillery doesn't talk to anybody. He goes on--

COMMISSIONER WORTZEL: Brazil, Argentina.

DR. ROBERTS: Yes he does, but he doesn't have strategic nuclear dialogues. I believe there has been no such Chinese dialogue with a Russian counterpart, for example.

There's also a possibility that they are waiting to have better capabilities to show. This would be standard behavior that we've seen in other dimensions of their military transparency.

The short answer is that I don't really know. We can conjecture a lot about what explains their behavior. But what we can do something about is our behavior. I have the impression that the Chinese see us as sending mixed messages about nuclear dialogue. They saw the two presidents make the commitment; then months went by before a formal invitation came; indeed, a half year went by before a formal invitation came.

As one former senior NSC official put it, there seems to be something of a convergence of disinterest in a lot of parties here, and so the Chinese get the mountains' worth of the blame because they're the ones who aren't willing to go the next step, but I'm not sure it's just a responsibility of theirs, as I think we're still a bit hamstrung here.

Thanks.

HEARING COCHAIR ESPER: Good. Thank you, both. Commissioner Wessel.

COMMISSIONER WESSEL: Thank you both for being here. I want to follow up on Commissioner Wortzel's comments and your comments, Dr. Roberts, and also going back to your testimony indicating that there are two primary explanations for some of the issues we have as to whether there is a clear and consistent policy by the U.S. government that the Chinese understand and see. I mean if you look across the board, and this is not a partisan comment because I think we had the same problems during the Clinton administration, as you look at currency, as you look at many other issues, we speak tough and then we sort of back up and don't take sufficient action at times.

We've had serial proliferators that there have been demarches, there have been periodic sanctions, but we have joint ventures, as I understand it, between U.S. companies and some of those proliferators. We have failed to take action against parents and up the standard, if you will.

Do you think the U.S. is being clear and consistent enough in how it approaches these or is the inconsistency adding to our problems? For both witnesses, please.

DR. ROBERTS: We worry about China as a strategic partner and just imagine what it is to be America's strategic partner on something. We've got to be the master of inconsistency.

It would be hard to argue the case that no, we're consistent enough. The key question is: how much does our inconsistency harm

us? I don't think that our inconsistency explains the basic choices China has made in this area. I think its basic choices are driven by internal domestic factors. Its basic choices vis-à-vis its exports of certain things, and its membership of treaty regimes, for example, are driven by internal factors to the party and the way the economy works, and by an overall sense of China's main foreign policy themes, peaceful rise, and that tells them what sort of macro level choices to make.

So in the interest of time, I think I would just say sure, we can always be more consistent, but I don't see our inconsistencies as having contributed much to the problem that's in front of us here.

COMMISSIONER WESSEL: Okay. Dr. Yuan.

DR. YUAN: I think that ever since the Clinton administration, the U.S. government has always been debating which would be the most effective strategy, whether it's sanctions or engagement or a mixture of the two.

If you look at the practice and application of those U.S. policies regarding Chinese behavior over a decade and a half, I think there's a slow shift at least with regard to China's behavior. But China still is reluctant to respond every time the U.S. government raises something, especially in the context they don't want to share information, intelligence, so sometimes there is frustration for the Chinese officials, those diplomats. They have to go to those companies to investigate what's going on without proper intelligence.

Secondly, I think the Chinese economy today is not what it was 20, 25 years ago. You could have maybe 90 percent or 95 percent under state control. Today, over 50 percent of the Chinese economy is private non-state control. And there are thousands and thousands of companies of private individually-owned, foreign-owned, and joint ventures, and they all engage in trade one way or another, especially in the chemical-biological area.

It's very difficult. Even if the government is willing to do something about it, it still takes time and a lot of resources, and then I think that also creates the problem for the U.S. government, and that's why they cannot decide which is the most effective way of dealing with Chinese behavior.

COMMISSIONER WESSEL: Thank you.

HEARING COCHAIR ESPER: Great. Thank you. Commissioner Fiedler.

COMMISSIONER FIEDLER: I have two questions. First, Dr. Yuan, you made reference to military affiliated companies.

DR. YUAN: Yes.

COMMISSIONER FIEDLER: Could you give me three or four examples of what you mean, sort of names of companies?

DR. YUAN: Well, there's still a conglomerate, so-called New

Era Group.

COMMISSIONER FIEDLER: Xinshidai.

DR. YUAN: Xinshidai, yes. It's part of it. But it is more of a group that has a lot of entities and corporations a part of that, so it's kind of an umbrella. And that umbrella has something to do with the PLA General Staff Department. But then you move down, these are the companies, like Great Wall, NORINCO, defense corporations which actually manufacture and trade in different defense items.

COMMISSIONER FIEDLER: Thank you very much. A general question for both of you. NORINCO was sanctioned for proliferating with Iran, twice I believe, on two different separate occasions. Do you believe that NORINCO was a lone actor or do you believe that the proliferation was a matter of Chinese government policy? Unless there's a third choice somewhere. I only see two choices.

DR. YUAN: No, I don't think it's Chinese policy for NORINCO to proliferate because NORINCO does a lot of business in the conventional arms trade. And there's no international ban on conventional arms trade. There's the U.N. Arms Registry that highlights if there's dramatic accumulation of arms in a particular region of concern, but that's not a ban on conventional arms.

So a lot of the activities that NORINCO engages are in the conventional arms trade, or defense trade.

But I think the reason that NORINCO receives sanctions from the U.S. government probably five or six times, if I read the Congressional Research Service report correctly, is because its customer is Iran. NORINCO is building subways in Tehran, and it's engaged in a lot of commercial activities, and because of the U.S. government policy of Iran Nonproliferation Act, a lot of the dual-use items that NORINCO is involved in trading are subject to U.S. sanctions. That's why NORINCO is being sanctioned.

COMMISSIONER FIEDLER: So you think they're a lone actor? You?

DR. ROBERTS: Are they acting outside of Chinese policy, I think the answer is obviously yes in those behaviors. But it's clear that different parts of the Chinese government and state and party apparatus bring different levels of enthusiasm to the policing of the behaviors of state entities with regard to China's commitments.

COMMISSIONER FIEDLER: Okay. Actually that's an interesting distinguishing characteristic. So let me rephrase the question. Do you think they were in tune with the PLA's policy vis-à-vis Iran?

DR. ROBERTS: This is entirely conjectural on my part.

COMMISSIONER FIEDLER: I'm asking for the conjectural.

DR. ROBERTS: My sense is that a lot of that behavior is what we might think of as mercenary. It is driven more by the personal

private interests and the associated institutional interests than it is by a senior leadership decision-maker saying “I'm trying to pin America down in the Gulf, I'm trying to strengthen Iran's hand, and therefore I want this friend of the PLA to go off and do something that's contrary to policy.” I don't think that explains it.

COMMISSIONER FIEDLER: I can understand that in the first instance, but let's take multiple instances. So NORINCO gets sanctioned by the United States. China becomes aware that the United States doesn't like the behavior, and as a matter of fact, really doesn't like the behavior, and then NORINCO does it again and again and again, and the Chinese government does nothing.

Why am I not to believe at this point beyond the fact that everybody is claiming that they're unable to enforce? At this point, why is any reasonable person actually not to believe that it's a matter of policy that they don't crack down on them?

DR. ROBERTS: It's a rhetorical question. At this point, after this much behavior, but who's going to do the cracking down? Which part of the government?

COMMISSIONER FIEDLER: We always talk about the government, but you were quite correct in correcting me about what part of the government.

DR. ROBERTS: Yes.

COMMISSIONER FIEDLER: So is it the security services; is it the CMC; is it the PLA itself; is it the State Council? I'm somewhat frightened that we don't have a better view of that as a matter of government analytics. That bothers me a great deal. Thank you.

HEARING COCHAIR ESPER: Commissioner Bartholomew, do you have some questions?

CHAIRMAN BARTHOLOMEW: Thank you, gentlemen. This is very interesting, getting us to think about these things in some slightly different ways. I'd like to follow up on Commissioner Fiedler thought, but start out by saying the struggle we have in understanding this is what kind of control, if any, does the Chinese government have over companies that are state enterprises or associated with the state or even private. And, is it that there is an inability for them to crack down, an unwillingness? Is it a lack of political will?

Is there a lack of knowledge? I'm also struck by the fact that when you ask, Dr. Roberts, essentially what part of the government should be doing the cracking down, then the question I have is what part of the government are we talking to about these things, and are we talking to the wrong part of the government?

I think frustration is over a number of years of hearing that they'll sign agreements and then the agreements aren't enforced. And people then say, well, they don't have the ability to control what's going on. Then you start questioning, well, then what's the value of

the agreement that they sign? If we're talking to certain groups of people, and they aren't the people who have the ability or the willingness to do the crackdown?

I'm not exactly sure what my question is, but it's still that struggle to understand. Do we really understand why they aren't doing the things, first, why are they allowing NORINCO to do this seven times in a row?

DR. ROBERTS: I don't know. I have an opinion which is that it's harder to crack down on big companies like NORINCO that are highly influential in the system and very important to the advance of various Chinese interests around the world than it is to crack down on little companies that are sort of operating normally in their economy.

So my perception, as the occasional reader of the information on these problems, is that they've basically brought a lot of the actors into line, but they've got a few big actors who get to determine where the line lies a lot of the time, and particularly in a system that operates not just on top down party authority, but on the principle of graft and connections and all of that, you can imagine that there's a lot more at stake. There's a much more complex process involved in bringing that entity into compliance with state policy than in bringing a small entity into compliance.

So are we talking to the right people? I think we're talking to the right people who can deal with the majority of the problem, I mean who can deal with most of the actors, but who can actually bring the most influential actors into line are only the people at the top of the system.

CHAIRMAN BARTHOLOMEW: Yes.

DR. ROBERTS: And if there's chronic misbehavior, it would seem that the people at the top of the system aren't willing to pay whatever price is involved vis-à-vis that large actor to compel its compliance.

CHAIRMAN BARTHOLOMEW: And how do we reconcile that, Dr. Yuan, with what you said that there are lots and lots of small companies out there, and essentially they can't keep track of all of the small companies? If I put these two pieces together, there is the they-can't-act or won't-act- against-the-big-companies because of the leverage that the big companies have, and then they can't act or won't act against the small companies because they don't necessarily know what the small companies are doing.

DR. YUAN: I think the Chinese government exactly in responding to this kind of a problem is introducing or strengthening its existing structure. In the past, more focus was on license application review, approval, disapproval, but now I think there is a growing recognition of the role of the so-called "border control," the General Administration of Customs. They now check against what is on the

bill, on the document, against the list of controlled items.

They're also introducing the so-called "harmonized system." They introduced digital, like eight digits, and if items are under export control on the list, they will have an extra two digits. So that would make it easier for the custom officials to verify, and they also have screening machinery that can see through cargoes. But obviously, you can't check every cargo container so you randomly check. But then you check all the documentation. So it's slowly trying to address those problems.

But with regard to NORINCO, in addition to the fact that NORINCO is big and influential, I think there's a question about whether the Chinese government agrees to the U.S. premise these are controlled items because they are not on Chinese lists; nor are they on the multilateral regimes' lists of which China is part.

So here the question is should China take the extra step to prevent a company from making profit because the U.S. government raises concerns? So there's something extra. So I think there are some differences in interpretation and enforcement as well.

CHAIRMAN BARTHOLOMEW: Thank you. I'm going with the agreement of the chair to take a few more minutes to follow up on that. Our previous witnesses talked, of course, about the difference between complying with the letter of the law or agreement and complying with the spirit of the agreement, and that there are arguments that can be made that the Chinese are complying with the letter and not the spirit and that's a matter open to interpretation. That gets into Dr. Roberts' interesting comments about they view things differently than we do, and that's not surprising, and we have to figure out how to try to change that dynamic.

Do you think that if there's an embarrassment factor that comes along, and I'm asking this particularly because it has come up in discussions of what Chinese companies and Chinese state companies are doing in Sudan, that is carrying a huge public relations problem with it for the Chinese government that could very well--I mean it is starting to overlap into the Beijing Olympics--that whether there is opportunity to encourage the Chinese government to change its actions vis-à-vis some of these companies based on the fact that there are embarrassing consequences that happen? Is that a possibility or is this just not going to matter?

DR. YUAN: I think China is a rising power, and China does care about its international image as a responsible and peacefully rising power, and China cares about its relationship with the United States. What China is doing in Sudan or in a number of countries is pretty much driven by its growing demands for energy. So there is a commercial reason for China to expand these activities in these countries. So this is number one.

Number two, I think to its credit, I mean in a way the Chinese government does not like to interfere in other countries' internal affairs. Normally this isn't what Chinese government does, but increasingly I think over the last few months or even half a year, China is beginning to sense this stakeholder responsibility where I think Robert Zoellick, the former Deputy Secretary of State, in his statement he mentioned that China should be a responsible power so its actions can have influence and impact on a number of important international issues. China has appointed an Envoy for African Affairs, and now is supportive of expansion of U.N. peacekeeping operations in Sudan and is joining the peacekeeping operations.

Gradually I think China recognized that you can't just focus on commercial interests. There are moral, more important political responsibilities that an emerging power carries and assumes. So I think China is already shifting toward a greater recognition of this problem.

CHAIRMAN BARTHOLOMEW: Dr. Roberts, any comments?

DR. ROBERTS: To say I largely agree with the argument by Dr. Yuan. I think the responsible stakeholder argument is very appealing to a lot of Chinese, though not all of them, by any means. The notion that their behavior should be seen by themselves to be responsible is something that I hear widely expressed.

They're a little less enthusiastic for the notion that it's somehow America's job to determine whether they're responsible. They also ask who gets to assess whether America is acting responsibly on the world stage.

But I find in general a desire to be seen to be responsible and an openness to having their behaviors discussed in a way that critically, but not ideologically, challenges them to adapt those behaviors in a way that comports with the general understanding of what responsibility involves internationally. I find also some support for the notion that responsibility is not limited to a treaty undertaking. Some Chinese analysts support the argument that there are norms of international behavior that are not necessarily expressed in a treaty, and thus that responsibility sometimes requires of China that it go beyond the letter of the law to address the common need to create an international order that's stable.

HEARING COCHAIR ESPER: I'd like to ask a couple questions. Going back to China’s interests, and you've each talked about this, how would you characterize their proliferation of items and materials to Iran? Is it therefore a matter of corruption? Is it a matter of pursuing their own strategic interest to build a relationship with Iran because of Iran’s energy resources, or as some might propose, is it a means by which to keep the United States off balance in the Gulf? Any of the above, all the above, how would you characterize this?

DR. ROBERTS: My view is that there are few decisions of governments made at high levels that don't involve multiple factors, and my answer to your question would be all of the above. I think that there is definitely a constituency in China for the view that creating trouble for America elsewhere in the world is a good thing, particularly if it focuses American military planning on those challenges rather than China's rise. Definitely that camp exists.

I think there is also a camp for currying favor with Iranians as obviously future contenders to a major factor in the Asian balance of power. By their view, China should have a positive relationship with a regime that's not going to go away.

There are also clear economic interests that play to developing this relationship, including in the energy realm. Here there is also Dr. Yuan's very important point- that they don't perceive most of the behaviors for which we sanction them as inconsistent with their obligations, and what America is doing is asking for special deference on China's behalf to bring Chinese behaviors into compliance with our expectations as opposed to anybody's commitment, anybody's treaty obligation. So naturally it's then harder for us to come along and say "please change."

HEARING COCHAIR ESPER: Let me bring this back to one of the fundamental questions, and that is notwithstanding their perceptions of their treaty obligations or the United States' perceptions of their treaty obligations--China's that is--what are the treaty partners' collectively view of China's nonproliferation performance?

Do other treaty partners, either the NPT or the multilateral regimes, see China as living up to its obligations or falling short in some areas?

DR. YUAN: Various other parties in general have the view, positive view, of the evolution of Chinese behavior, and also they don't normally have their own domestic laws that require them to impose sanctions if they consider Chinese behavior as a violation of their domestic laws. I think the U.S. probably is the only country that does that because it has maybe far more interest in global and regional contexts.

Other partners normally will engage in diplomatic dialogue and consultation and to encourage China to move forward more in a positive manner to address some of the concerns rather than to impose sanctions.

HEARING COCHAIR ESPER: It sounds to me like you're suggesting that, collectively treaty partners don't see China has fully living up to its obligations, but are more willing to approach the problem in a different way.

DR. YUAN: If China violates or a Chinese entity violates international treaties--

HEARING COCHAIR ESPER: Right.

DR. YUAN: --or multilateral commitment, then member states will express concerns publicly. For instance, the January test, a lot of countries expressed concerns publicly, but in the nuclear area, even in the chemical area, because it's really difficult to demonstrate that Chinese entities violate their international commitment, so I don't see member countries expressing strong opposition there.

HEARING COCHAIR ESPER: Okay. Dr. Roberts, any thoughts?

DR. ROBERTS: On the Biological Weapons Convention, I think the United States is the only state party that has raised consistently a question in this area, but other states are not in the habit of raising questions publicly. The U.S. has raised this obligation because it was required for a long time by the Congress to have arms control impact statements—an annual report from the executive to the Congress on treaty compliance.

Other state parties to treaties usually don't do that. So the BWC, I'm not sure how much to read into the fact that the US has been the only party to raise that challenge.

On the CWC, the Chemical Weapons Convention, in general, I think the perception is that China has brought its behaviors into compliance with its treaty obligations. But Australia Group members, who have some more transparency into China's trade practices express a little frustration now and again.

On the NPT, the common perception is that China signed up to everything; it's doing what it's supposed to do. According to this perception, all of China's nuclear assistance to bad Pakistan preceded its assumption of a legal treaty obligation.

I think those are the common perceptions. That's the beginning and the end of the treaty list.

Now, a lot of the things that trouble us are in the conventional weapons realm, and the missile realm where we'd like to suggest there's a global norm against missiles, but there isn't.

But there's also the fact that a great many countries are suspicious of China and doubtful of the desire and capacity of a one-party highly militarized system to honor its commitments and of a society that lacks the transparency to give us confidence.

So even if there are not many countries making specific charges about China's behavior, there is I think a large dose of suspicion that what we see isn't always what we're getting out of China on these things.

HEARING COCHAIR ESPER: Okay. Thank you. At this time, we're going to go to Commissioner Reinsch and then Commissioners Houston, Wortzel and Fiedler.

HEARING COCHAIR REINSCH: Thank you. I'd like to continue the line that Mark just started. It seems to me in the light of

what you've been saying that one of the ways to deal with the Chinese reaction to some of the things that we've been pressing them to do is to try to multilateralize the approach and make the case to them that everybody wants them to proceed in certain ways; it's not just the United States. That may not be possible for a lot of reasons, but I'd like you to reflect for a couple minutes, not on the conventions and treaties you mentioned, but on the regimes.

The previous witnesses for the administration indicated, for example, that China had applied to join the Australia Group and the MTCR and suggested that it really had been the United States that was holding that up because we had some reservations about whether or not they could adequately implement the commitments that would be required of them were they to join.

We then had a discussion about Wassenaar, which would address the conventional weapons issue, which was sort of along similar lines, that there was some doubt as to whether they would be able to do the things they had to do were they to join, although they haven't applied there.

Can either of you or both of you comment, first, on whether it would be a good strategy for us to continue to encourage them to join, and whether that is feasible or whether we're asking too much of them, and whether it would make any difference if they did?

DR. YUAN: I think, as I discussed, the shift in Chinese attitudes towards those multilateral regimes over the last few years. The irony is that in the late '90s, the Clinton administration was actively encouraging China to participate and to join the MTCR, and China at the time, the response was we will seriously study this. Now, China has turned around, showing interest in joining the MTCR, and then the U.S. is basically saying, well, can China meet its obligations, commitments once it becomes a member?

My perspective is to encourage China to become a member. That will actually encourage more positive behavior because as a member within the MTCR, it has to comply with additional obligations and commitments.

So I think the concerns over whether China can enforce its own obligations is related more to this perception that once China becomes a member, it will allow other member states to have more flexibility in transferring technology to China now that China is a part of the MTCR. I don't think that is a foregone conclusion because all these other members still have their own international obligations or domestic regulations so it's not necessarily that China will suddenly become a customer of a lot of those important technologies.

So if that is not a concern, if we remove that, and then encouraging China to become part of the MTRC will facilitate China's becoming a more responsible player in the missile area.

HEARING COCHAIR REINSCH: I want to follow on that, but, Dr. Roberts, do you have a comment as well?

DR. ROBERTS: Sure. I think it's in our interest to encourage them to join. I believe they will join. I'm not conversant with the administration's understanding of their capabilities to comply. I have thought the issue was their will to comply, and as I've heard the issue expressed by Chinese experts, this is a chicken and egg problem, by which I mean the following. China's experts assert that China is willing to bring its behaviors into line with what's expected of participants in these regimes when China is a member, but not before. And Americans want China to bring its behavior into line with the regime before signing up. Which comes first, the egg (full compliance) or the chicken (membership)? The Chinese would say we know where we're going to end up, in complying, so let's just get there.

Let me answer your other question quickly here. Does it make any difference if they join? I think it will make a difference in the sense that they will comply with the letter, although maybe not fully the spirit, meaning there will be transfers that come right up to the definitions.

Let's keep our eye on the ball here, which in my view is Pakistan's missile program.

Pakistan and India are both poised to move forward with significant expansions of their nuclear weapons capabilities. Pakistan is debating its role as a guarantor or extended nuclear deterrence to others in its neighborhood, and of course we worry very much about who controls the government in Pakistan.

I would like us to live in a world ten years from now in which they don't have lots of long-range missile capability to go along with all of that. China doesn't want to live in that. China wants to live in the world where they don't have that capability, too. We should secure their partnership in some way. Doing so will make a direct impact on Pakistan's nuclear future and that world ten years hence.

HEARING COCHAIR REINSCH: If I can continue for a minute--that really answers in a way the next question. I was in the last administration negotiating with them on this subject, and I appreciate and agree with the evolution in their thinking and ours that Dr. Yuan mentioned.

I guess having listened to the last panel and now you, the issue probably is what Dr. Roberts just specified, which is the chicken and the egg. Are we better off trying to bring them into these regimes and then working with them to make sure that they have adequate compliance procedures once that's done, or are we better off insisting that they do a bunch of things before we do that?

This morning's witnesses seemed to be suggesting the latter. You at least, Dr. Roberts, seem to be suggesting the former is worth

considering. Is that a fair statement on your part?

DR. ROBERTS: I'd buy a little bit off the list.

HEARING COCHAIR REINSCH: Pardon me?

DR. ROBERTS: I'd buy a little bit off the list, meaning I don't think it's necessarily in America's interests to just say “come sign up for all of this and we'll see how you do.” Let's take a step and see how they do and then we'll see about the next part.

HEARING COCHAIR REINSCH: Okay. Thank you.

HEARING COCHAIR ESPER: Thank you. Commissioner Houston.

COMMISSIONER HOUSTON: Thank you and thanks to both of you for being here. This has been a great panel. I have a question that encompasses a lot of what my fellow commissioners have asked already. We talk a lot about whether China has the capability to comply or the willingness to comply to either international norms or multilateral treaties or agreements that they've signed.

And, I'm sitting here thinking about how just this week they shot somebody in China who didn't comply with their version of our FDA. He misbehaved and he got shot. I'm not suggesting shooting people is a good way to make people comply, but it does show that they do have the ability to move on something important when they want to.

In the last panel I asked a question about motivation. What motivates China to either directly proliferate or turn a blind eye to any proliferation that's going on? Is it economic motivation? It is military motivation?

In this panel, the question would be is a commercial interest or a military interest? And the answer is probably the same as the last panel, which is both, and it depends on who you're talking about.

But both of you have really demonstrated an ability in this panel today to think outside the American bun, which is really helpful, because we're concerned about our national security, and we see things from our perspective, and both of you seem to be able to step out of that and look at things from the Chinese perspective.

So here in America we have a lot to keep us up at night. We worry about al-Qaeda. We worry about Iran. We worry about Venezuela. There's lots of things to worry about, and that to a great degree, even if it's subliminal, it defines our position on a lot of things.

So my question is what do the Chinese worry about? What is their security concern? Is there any fear of aggression? Is it hegemony that keeps them going on the path of either directly proliferating or, again, turning a blind eye to it? What keeps them up at night and what things that they worry about should we worry about because they're worrying about them, I guess is the way to put it?

DR. YUAN: I think number one on their list is the social

stability and continued economic development because regardless of the phenomenal rate of economic growth, China is a country of over 1.4, three or four billion people and still you have 300 to 500 million people living close to the poverty line. So there's still a gap in the developed coastal area and underdeveloped interior region.

Every year maybe 15, 20 million people who want to get jobs there, so social stability is a key for China. So a lot of the Chinese foreign policy today is driven by this need to create and contribute to a peaceful environment.

So that's why China has tried to settle its disputes with a number of countries, territorial disputes and other disputes, just to maintain a peaceful or stable environment.

That also explains why China values its relationship with the U.S. and the European Union, and Japan because these are important economic partners with China.

I think the U.S. made a tremendous impact in the late '90s because the Clinton administration at the time was really making a point of nonproliferation, proliferation issues, very high on the agenda, and China recognized at the time. So it moved towards developing its own domestic system and also coming into compliance with a lot of international systems.

The next step is to help China to strengthen that system because if you look at the U.S. government, even within the State Department, maybe several hundred people would be working on arms control verification and nonproliferation.

China’s Foreign Ministry has one department responsible for the same areas, maybe 40 or 50 people, and in the commerce, Ministry of Commerce, they may have 20 people, and we at the Monterey Institute, James Martin Center, we train, and also with the University of Georgia, we're training a lot of officials in China who are to be assigned responsibility in the areas of export control.

They are still building up this infrastructure and capacity, but in terms of the government priority, I think nonproliferation and export control is pretty much down on their list. First domestic economic development and then maintaining a peaceful environment and then relations with key powers, and then maybe down the list export control and nonproliferation.

DR. ROBERTS: I think that's a very good characterization of what keeps them up at night. The key issue is social stability. And to the extent the international environment impacts that, 90 percent of that sort of world view is America. Where is America going to stand on all of the problems that are potentially threatening to China's domestic transformation?

Where is it going to stand on trade? Where is it going to stand on investment? Where is going to stand on technology transfer?

Where is going to stand on Taiwan? Is America going to be foolishly tricked into war by somebody in Taipei?

Is America going to have the skill to avoid that war? What's America doing about Japan's return to normalcy? Is America helping Japan to define its international role properly? The common Chinese view is that we are not helping Japan to find the right way to become a normal power.

Let me talk for just a moment about the military elite, which I think is more troubled than the party elite by the prospect of nuclear proliferation in Asia. "Onesies" and "twosies," so to speak, a country that gets a minimum deterrent, okay, the Chinese military can live with that because its has an overwhelming position militarily vis-à-vis those actors.

But when South Asia erupts into an arms race that leads to 200, 300 deployed nuclear weapons in each country, that doesn't look so good from China's perspective.

But in China's security environment, the one actor that seems tempted to do something to alter the strategic relationship with China is the United States. Let's do a quick tour of the horizon of China's security environment. Does Russia want something fundamentally different in the way of a security relationship with China? No.

India? Not really. Any of the Southeast Asians, something different? No. Japan talks about changes but has made none. From China's perspective, it is the United States that expresses the occasional temptation to develop a strategic military posture that would fully negate China's deterrent – a situation in which the US would have the ability to coerce China in the way it did in the 1950s and would be seen to have the ability to coerce.

And that's unacceptable and that's fundamentally challenging to China's sense of balance in the international system. So the US is the wild card. They don't stay awake because we're a threat. They stay awake because we're a wild card and we're unpredictable.

HEARING COCHAIR ESPER: Thank you. We're going to go to Commissioners Wortzel and then Fiedler, but let me just ask one quick question because you both touched on a couple of things with regard to how the Chinese react and to whom they react. Then you mentioned, Dr. Roberts, about China's concern about nuclear security in Asia.

With regard to North Korea and the Six-Party talks over the last few years, it's fair to say that there was an expectation that China could have, should have, done more to bring the North Koreans around, and that maybe they were holding back. Others would say that, no, China exercises as much influence as it can.

But that dynamic there with North Korea's pursuit and acquisition of nuclear weapons, the Six-Party talks, touched on several of those issues that you just mentioned. Do you have any insights you

can offer us with regard to the questions I raised?

DR. ROBERTS: I attended a very interesting conference in China, a year or so ago, in which a Foreign Ministry person asked a think tank to gather experts from the six countries for a discussion of how the Six-Party Talks are going. There were two things that were interesting about the discussion.

One was that we Americans didn't have to say anything in the way of criticizing the Chinese government for its lack of vigor in applying the tools of leverage available to Beijing. The Chinese participants were absolutely thrilled to have the opportunity to do that and to express their view that their government was not doing all that it might.

The other part that was interesting was the statement by the senior-most participant from China, who said finally in response to the criticism, “yes, of course, we have more influence than we've so far applied, but why squander our influence? We should use it when the moment is ripe [a very Chinese way of thinking]. We should use it when the moment is ripe and the moment is not ripe.”

In China’s view, Washington and Beijing have not yet found their way close to the point where they're willing to cut a deal. And so long as they're not there, China can apply all the pressure it has, and it won't make the deal happen. When they get close, China can apply pressure and make a difference. So when the time is ripe, China will be ready, or so they argue.

HEARING COCHAIR ESPER: You said Beijing. You meant Pyongyang, not Beijing?

DR. ROBERTS: That Beijing could apply the pressure on Pyongyang and Washington both.

HEARING COCHAIR ESPER: When Pyongyang and Washington are close.

DR. ROBERTS: Yes, sorry. So I do think they are motivated. I think we no longer need to argue to China that a nuclear-armed North Korea is a bad thing. They get it that that means sooner or later, not immediately, new nuclear questions in Japan, and they would not like to see a nuclear-armed Japan. They would not like to see a nuclear-armed reunified Korea.

Again, to put it in the context of the prior remark, "onesies" and "twosies," okay, but to see this country really go, see North Korea go in the direction of India and Pakistan with the potential to build up hundreds of long range missiles, all of that risks dragging China into a nuclear confrontation with America, and that's not in their interest.

DR. YUAN: Yes, I think I agree with Dr. Roberts' assessment. Basically China and the United States both share this common goal, that is denuclearization of the Korean peninsula, but there are differences in approaches and tactics and this is because of a different

history, historical experience and different interests. The U.S. cares more or maybe singularly about nonproliferation, this North Korean nuclear development.

But China has to think about stability, refugees, military conflict, a lot of other things, in addition to denuclearization. So I think it's a demonstration of different tactics and different uses of your diplomatic resources rather than fundamental differences in the goal between these two countries.

HEARING COCHAIR ESPER: Good. Thank you. Dr. Wortzel.

COMMISSIONER WORTZEL: Thank you for allowing me a follow-up. Dr. Roberts, on page three of your testimony, your written testimony, you got a bullet that says that China is concerned that the United States continues to assist its friends and allies to acquire nuclear weapons or increase their nuclear potential.

My question for you there is what specific actions by the United States do your Chinese interlocutors mention and is that with respect to--I mean is it Israel, India, Japan? I just don't know any specific actions that the United States has taken to encourage other countries to acquire nuclear weapons that I know of. So what are they complaining about?

But then I have a second question that both of you might be able to respond to. So I'll give you that one, too. Where in the Chinese system, in the government, are disputes resolved? If there's a dispute about whether to export a controlled item or something that constitutes proliferation or not to do it, and different elements of the Chinese government or party are arguing in different ways, where in the Chinese political system are these disputes resolved?

Here it would be at the National Security Council. They don't have one. Is it the Central Military Commission? Is it Politburo Standing Committee, and when, particularly Dr. Yuan mentions that certain ministerial rank officials of military conglomerates are also--they're able to influence that decision system. Are they doing that because of their ministerial equivalent rank or their party position? Well, that's the gist of it.

DR. ROBERTS: I'm happy to leave the second question to Dr. Yuan because I don't know the answer. On the first, their complaints are about Israel, India, Japan. And the argument I hear is not that we are, to use your word, "encouraging" their nuclear acquisition, but we are perfectly happy to stand back and say in the case of Israel and India, “okay, you got there, you're a friend of ours, we'll accept you as a part of the nuclear club even if you're outside the regime because it serves our interests. Nothing we can do about it.” This criticism ties to an old argument about Israel that went away and then came back when the U.S.-India nuclear deal was back on the table. And it dovetails nicely with their perception that, although we may not be

encouraging Japan to be a nuclear weapons state, we're doing everything possible to get it right to the brink of breakout.

And not just breakout by having one nuclear weapon, but breakout with lots of fissile material, lots of engineering infrastructure, delivery systems in the form of their space launch capability, intelligence targeting, reconnaissance systems in the form of their space-based intel capabilities. As they argue, "if you Americans don't believe us Chinese, just look at what you say about your 'new triad' and what you're doing with offense and defense.

You're building integrated systems with your allies. So why shouldn't we think that you're readying them for nuclear breakout." And that's not a sort of fantasy argument of the fringe outsiders to these debates. It's a surprisingly widely held view and this is a part of the complaint about that America is helping Japan to emerge as an abnormal country. Thanks.

DR. YUAN: I think regarding who is the final arbiter in China's enforcement of export control regulations, the State Council is supposed to be the overarching final arbiter.

China does not have an equivalent of the National Security Council. There were discussions a few years ago about establishing one because not just for export control, there is EP3, the ASAT tests, who in which part of the Chinese government that you can address your concerns, and because there's a disjuncture between the civilian stovepipe and then the military lines of command.

So far I think they have pretty much delegated different responsibility areas. If it's nuclear and nuclear related, this normally is both Commerce and COSTIND. So first, COSTIND under China Atomic Energy Authority, and then COSTIND and in consultation with Commerce as the final license grantor.

If it's conventional arms, it's normally the military, the General Armament Department. If it's dual-use items, most of the dual-use items would fall under the Ministry of Commerce.

And then you have the chem-bio items, that is a particular office under the State Development and Reform Commission. So we have those individual government agencies responsible for various aspects of regulations, but then there's a perceptional kind of a State Council and Central Military Commission if really there's a problem. They are supposed to be the ones to resolve the problem.

The second question about this ranking thing, the ministerial, is because in China—the head of the Department of Arms Control and Disarmament is only a director-general, and he's in the American system, at the assistant secretary level. You don't carry weight in challenging the head of a company that carries a ministerial or vice ministerial weight. That's just Chinese culture, ranking and authority.

So you have to go up the ladder to request a dispute resolution

mechanism. Until China establishes a sort of coordinating agency, these problems will remain.

COMMISSIONER WORTZEL: But I infer from what you're saying then that you really have to go to something like the Politburo Standing Committee where you can begin to bring together the military and the civilian leadership, the CMC. It's a party level, very senior party level.

DR. YUAN: That only occurred, reportedly, when China decided whether to sell the Dong Feng DF-3 to Saudi Arabia, so there were different perspectives, from Ministry of Foreign Affairs, from the military, and then finally the buck moved to Deng Xiaoping and Deng Xiaoping gave the authorization.

HEARING COCHAIR ESPER: Thank you, Dr. Yuan. We have about five or six minutes left so I'm going to turn to Commissioner Fiedler and then maybe Commissioner Bartholomew if she has any final questions.

COMMISSIONER FIEDLER: I'll actually keep it short. Dr. Yuan, you mentioned in response to Commissioner Houston's question about what keeps the Chinese leadership up at night, as the number one item was social stability. You put social stability ahead of party survival?

DR. YUAN: Pardon me?

COMMISSIONER FIEDLER: Social stability is higher ranking that party survival?

DR. YUAN: I think these two are related because nowadays I think economic development, economic growth, prosperity and social stability are very much that can sustain the party's continuing in power.

COMMISSIONER FIEDLER: So social stability is a euphemism for party survival?

DR. YUAN: I think for a party to survive and to retain its legitimacy, that you need to continue economic growth and to address those social problems. Otherwise, you will have unrest and because in the final analysis it's the government under the party that is responsible in different level, in the central level, provincial and local level, to deal with those social problems.

HEARING COCHAIR ESPER: Good. Thank you. Commissioner Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you and thank you, gentlemen, for really very interesting and thought-provoking testimony. In some ways this is a comment as much as a question. Dr. Roberts, you clarified a little bit what you were saying when Commissioner Reinsch was asking about Chinese entry into the regimes to which they do not yet belong.

It was interesting that this morning, our Administration

witnesses raised some questions, especially about the consensus-based nature of the regimes. I think that we always have the question of will entering one of these regimes change Chinese behavior or will the Chinese participation end up changing the regime, just as that question is remaining about the WTO. Was WTO membership changing Chinese practices or is Chinese participation going to change the WTO? It's still unclear on that one.

So how important is Chinese entry into the remaining regimes? How much ability they would have to change them or weaken them, in effect? On the overall impact of them joining these regimes, where should that line be?

DR. ROBERTS: In my view, the Australia Group is more vulnerable to weakening by a weakly complying participant than is the MTCR because in the Australia Group, a great deal of sensitive information is shared about suspicions of diversions or illicit purposes associated with ostensibly legitimate commercial activity.

In the missile realm--well, the global chemical trade in both the production and consumption realms is huge. This can't be said of the missile realm where the transfers in technology, trade are much more modest as a portion of global economic activity and where essentially the MTCR comes down to discussing a few hard cases every now and again.

It seems that China's general practice is to come into these activities and comply with the letter of the law and not always the spirit. Accordingly, the risk we would be taking is twofold: either they're really not complying with the letter or we actually meant that complying with the spirit was really important to us and their shortcomings there are somehow crippling to our objectives. I don't know how I would balance those risks.

But it seems to me these regimes need to be seen to be flexible to adapt to a changing economy. The membership of these regimes must evolve as the global economy changes, and if we demonstrate increasingly that there are people who are good and in and others who are bad and out, we're going to capture ever less, an ever-shrinking portion of the trade that's of concern to us.

So it seems to me you run some risks. That argues in favor of running a few risks in the hope that over the medium and long-term, the benefits are going to outweigh the costs that might have been with leaving them out.

CHAIRMAN BARTHOLOMEW: Dr. Yuan, anything?

DR. YUAN: I think the current practice of ongoing consultation between China and the MTCR and the Australia Group should continue. And through this process and consultation, I think the Chinese government will also get a sense of what is expected of them once they become a member of these regimes. But I don't think you

can expect 100 percent leak-proof even after they become a member--you say all the problems should be solved, and there should be no more problems, that is unrealistic expectation.

But you, in general, encourage their behavior and set the markers and once they are moving close to that marker, you should integrate China into these two multilateral regimes.

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR ESPER: Good. Thank you both. And thank you both for coming here today. It's very interesting testimony and your questions and answers were very insightful. So thank you both for everything, and for the Commission, we'll take a five minute break.

[Whereupon, a short recess was taken.]

PANEL III: HOW TO IMPROVE CHINA'S NONPROLIFERATION COMPLIANCE AND ITS ROLE IN THE GLOBAL SECURITY ENVIRONMENT

HEARING COCHAIR ESPER: Good afternoon, everyone. This is our third and final panel of the day and in it we are honored to welcome Dr. Gary Bertsch of the Center of International Trade and Security at the University of Georgia and Mr. Joseph Cirincione, Vice President for National Security at the Center for American Progress, to discuss how to improve China's nonproliferation compliance.

Dr. Bertsch is the Founder and Director of the Center of International Trade and Security, an organization which strives to address dangers posed by the security of and trade in weapons of mass destruction, technologies and materials and other military-related transfers.

He's also the University Professor of Public and International Affairs at the University of Georgia. He has authored or edited over 20 books including International Cooperation on Nonproliferation Export Controls. Dr. Bertsch, welcome.

Mr. Cirincione is Senior Vice President for National Security and International Affairs at the Center for American Progress. In addition to previously serving for eight years as the Director of the Nonproliferation Project at the Carnegie Foundation for International Peace and having taught at the Georgetown University Graduate School of Foreign Service, Mr. Cirincione is a sought- after commentator in the media on the subject of weapons and international arms control.

Of course, you're sought after today for your insights on this topic. Thank you both for coming here today, and we will begin with Dr. Bertsch for a seven-minute introduction, and then we'll proceed to Mr. Cirincione.

Gentlemen, thank you both for coming. The floor is yours, Dr.

Bertsch.

STATEMENT OF DR. GARY K. BERTSCH
UNIVERSITY PROFESSOR OF INTERNATIONAL AFFAIRS, AND DIRECTOR, CENTER FOR INTERNATIONAL TRADE AND SECURITY, SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS, UNIVERSITY OF GEORGE, ATHENS, GEORGIA

DR. BERTSCH: Thank you, commissioner, and thank you all for the invitation to testify. My colleagues and I at the Center for International Trade and Security conduct research, analysis, and international outreach to promote better trade and security policies and practices worldwide from our two offices in Athens, Georgia and in Washington, D.C.

We've worked in over 40 countries and focused considerable attention on nonproliferation export control issues in China during the past decade.

I'm pleased to share these observations with the Commission. As we enter the second half of 2007, China's trade controls and U.S.-China cooperation on nonproliferation are at a critical juncture.

The United States and China are global leaders, though in a world facing serious state and non-state weapons proliferation threats. Over the last several years, China has been working to advance its export control system to address those common threats and become a more responsible international actor. Yet, it continues to encounter many challenges.

Moreover, despite mutual and international security concerns, U.S.-China engagement on nonproliferation export controls has yet to gain traction. Meanwhile, U.S. nongovernmental entities have been working with Chinese partners to establish U.S.-China cooperation in this area.

Indications are that those efforts have helped produce notable advancement in China's export control systems. Avenues to more robust U.S.-China cooperation on export control and nonproliferation do exist, in my opinion, and need to be exploited and enhanced to a greater degree.

While legal and political restrictions currently limit the extent of government-to-government cooperation on nonproliferation and export control, there have been recent attempts to expand the scope and level of engagement in these areas.

In addition, U.S.-based nongovernmental entities in conjunction with their Chinese counterparts have forged productive pathways towards more fruitful cooperation in recent years.

These pathways have helped fill the gaps left by the limitations on government-to-government engagement and have laid the

groundwork for greater cooperation in the future.

My center's research on China's export controls began in 1996 when the Chinese system was nascent and largely opaque. Since then, we have conducted several studies on China's export control development. Each successive analysis demonstrated discernable progress, yet each report also noted significant disparity between China's export controls and international standards.

In our most recent report, which covered the development of China's export controls through 2004 and was published in early 2005, 2005, we observed that capacity and political will were the key remaining shortcomings and challenges to improving China's system.

Before offering my own observations on the most recent developments in Chinese export controls, I would first like to provide a brief overview of some of the U.S. governmental initiatives of which I am aware, and then I will focus on the work of our center at the University of Georgia has done and is doing in China.

Overall, there has been relatively little government-to-government engagement or cooperation between the United States and China on export controls, largely due to political and statutory restrictions. Those restrictions stem from legislation passed in the early 1990s in response to Tiananmen Square that limited the types and amount of assistance the U.S. government could provide to China.

Recently, there has been some efforts to promote government-to-government cooperation on export control. In 2004, for example, the Chinese Ministry of Commerce and the U.S. Department of Commerce reached an agreement on end-use verifications for export of controlled items from the United States to China under the Joint Commission on Commerce and Trade.

Subsequently, MOFCOM and the Department of Commerce established a U.S.-China High Technology and Strategic Trade Working Group under the Joint Committee in April 2006 and held a joint export control workshop for Chinese industry in Shenzhen in January 2007. There also has been some bilateral cooperation between U.S. and Chinese Customs services with Shanghai and Shenzhen becoming Container Security Initiative ports in recent years.

NGOs have been more active during this period and my written testimony outlines some of these efforts.

Allow me to focus just for a few moments on our experience at the Center for International Trade and Security. We began our work, as I said, just over ten years ago. Our initial focus was China's developing trade control system, which we first evaluated in 1996. Since then, we have updated the evaluation on roughly a biennial basis and have expanded our activities from research into training and outreach.

We rely primarily on the support of private foundations such as

the Carnegie Corporation of New York, the Ford Foundation, the MacArthur Foundation, and the Japan Center for Global Partnership.

The Chinese Arms Control and Disarmament Association has been our primary partner in China, and this group known as CACDA has been instrumental in making much of our work there possible.

Our work supported by the Center for Global Partnership, Ford and MacArthur has focused primarily on training Chinese companies to comply with export control regulations. With CGP support, for example, we have collaborated with the Japanese organization, the Center for Information on Security Trade Control, on training workshops in Tokyo and Beijing. These workshops provided training to select industry representatives in China on developing and employing internal compliance programs.

I believe one of the most important activities institutions in the United States can undertake is to work with Chinese industries and companies to enhance their awareness and compliance with international nonproliferation and export control standards.

Our center's experience with the China North Industries Corporation, NORINCO, which has been discussed here today, is illustrative of the benefits of this sort of cooperation. Our University of Georgia Center is now actively promoting strategic trade and awareness and compliance in NORINCO.

We have reviewed the company's existing internal compliance procedures and offered insights to its executives on how to institute comprehensive internal controls on strategic exports.

We have provided training to company executives to familiarize them with internal developments in export controls in their company in the short and long term. Our center also provides comprehensive export control and internal compliance training to company employees who are engaged in strategic trade operations. In the near future, we will provide export control training to a broad spectrum of NORINCO employees to raise nonproliferation awareness and understanding throughout all levels of the company.

In addition, NORINCO is supporting our efforts to conduct industry outreach for Chinese industry more broadly in the form of seminars, workshops and briefings, and by translating into Chinese and disseminating our center's export control newsletter to audiences in China.

Now, a few comments on recent developments in China. There have been significant and positive changes in many facets of Chinese export control system over the last 18 months. While these changes have occurred primarily in the legal regulatory sphere, with the introduction of new measures and amendments to existing ones, there have also been noteworthy developments in the areas of industry compliance, international participation and implementation.

Recently, China has also been more involved in bilateral and multilateral cooperation on export controls. They participated in a series of bilateral conferences and exchanges on export controls with the European Union, Japan and the United States and held discussion with representatives from various multilateral regime representatives in 2006.

With regard to my own center's role in this engagement, I am convinced that a number of positive outcomes have resulted from our cooperation with Chinese industry, nongovernmental organizations and universities.

Industry is the first line of defense in restraining proliferation, and we are witnessing many positive developments. For example, NORINCO's corporate leadership has expressed an unmistakable commitment to a responsible corporate export control program. Its representatives are receptive to the ideas and training that we and other U.S. experts are providing, and they have worked diligently to inform their workforce about the need for export controls, to educate their regulatory officials and to upgrade their internal compliance program.

The NORINCO experience will have positive influence on other Chinese enterprises. More Chinese firms are recognizing that responsible export control behavior, informed corporate officials and an effective internal compliance program can be thought of as trade enabling. That is, export control compliance is good for business in the global economy of the 21st century. Those companies that have and are developing a responsible corporate culture and internal export compliance systems will be more likely to avoid U.S. sanctions and be more competitive in more markets than their less responsible counterparts.

Let me conclude with two brief points. Number one, there is much that the U.S. government and nongovernmental institutions can do to encourage and assist China in complying with its nonproliferation obligations and implementing stronger export controls. Furthermore, I believe that positive engagement produces the most successful outcomes.

Number two, there is also much we can do to encourage China's growing participation in the global nonproliferation agenda. Again, like the participants in the former panel, I believe that positive engagement with China's leaders and institutions on these multilateral issues is critical.

The U.S. government was wise to support China's accession to the Nuclear Suppliers Group. It should continue to encourage China to develop its export control capacities and performance so it can become a full-fledged and responsible member of all of the multilateral export control regimes.

Thank you.
[The statement follows:][4]

HEARING COCHAIR ESPER: Good. Thank you, Dr. Bertsch. Mr. Cirincione, the floor is yours.

STATEMENT OF MR. JOSEPH CIRINCIONE
SENIOR FELLOW AND DIRECTOR OF NUCLEAR POLICY
CENTER FOR AMERICAN PROGRESS, WASHINGTON, D.C.

MR. CIRINCIONE: Thank you very much for the opportunity to testify before the Commission today. I will keep my opening remarks very brief so we can have a dialogue and I can more directly answer your questions. I've submitted my written testimony for the record. I would appreciate the opportunity to correct some of the typos I've just noticed in that statement.

Let me summarize this briefly. I think that the testimony you're hearing today fairly represents the consensus view of the nonproliferation community: while there are serious issues with China's commitment to the international nonproliferation regime, in general, the trends are positive, that China's performance has improved dramatically in recent decades, and that the issues that we still have are manageable and can be worked out through a policy of constructive engagement with China.

It is very useful to understand the evolution that has taken place, that China has moved from a posture beginning in the 1960s that actively promoted proliferation, that was in favor of proliferation, to one in the '70s and '80s that was basically neutral on the issue of other countries getting nuclear weapons, to one that actively has opposed the proliferation of nuclear, chemical and biological weapons to other nations.

China has steadily, particularly in the '80s and '90s, been integrated into the international frameworks, has joined almost all of the relevant agreements, has, in fact, acted sometimes quicker than the United States. For example, they were the first of the nuclear weapon states to ratify the additional protocol to the Nonproliferation Treaty, the one that requires additional verification measures by the IAEA.

The issues we have now with China's provision of sensitive technologies to other countries are comparable to the issues we have with some of our close allies. In fact, I would say China performs better than many of the other countries in the world. China, for example, is about ten times the size of Pakistan, but Pakistan is ten times the proliferation problem to us than China is. The A.Q. Khan

[4] Click here to read the prepared statement of Dr. Gary K. Bertsch

network has done far more to damage U.S. national security interests than anything that China has done, certainly in the past decade.

China has increasingly cooperated with the United States on some of these issues, not just issues of general export control, but specific cases of concern. For example, in March 2005, I visited the Isfahan uranium conversion plant in Iran. I happened to be visiting it as a guest of the Iranian government, and I was with Gary Samore, who as a member of the National Security Council staff had been instrumental in convincing China to end its aid to Iran for the construction and operation of this plant.

The plant I visited had machinery with Chinese markings on it, and the Iranians I spoke to were bitter at the abrupt end of the Chinese cooperation for that plant. It was China that was giving Iran the technology to produce zirconium, for example, a metal that one needs to clad fuel rods. The Chinese had sold them the equipment, had provided the instruction books, had been training the Iranian technicians. The U.S. was very concerned about this assistance in the zirconium production facility and the uranium conversion facility, convinced China in the late 1990s to end that cooperation, greatly complicating Iran's ability to actually produce both zirconium and uranium hexafluoride.

In fact, to this day, Iran still has technical issues involved in the production of uranium hexafluoride, the gas one injects into the centrifuges for enrichment.

In my recommendation to the Commission about what one should do about this, the first thing I say is don't exaggerate the problem. There is a long and somewhat depressing congressional history of exaggerating the Chinese problem. I detail in particular the dismal history of the Cox Commission, which succumbed to what I think was hysteria over allegations of Chinese nuclear espionage.

I would encourage the Commission members, if you haven't already, to go back and look at that Cox Commission report. Almost everything said in that report was completely wrong, completely wrong about the Chinese nuclear espionage.

So understand the problem, understand there are real issues here, but don't exaggerate it to the point where you as a Commission start to lose credibility on this issue. I'm not saying you have yet, just a warning of what to avoid.

The second is to place this in context to understand that the way we're going to get improved cooperation, or I should say continued cooperation, with China is that if this is done in the context of a general movement of the nations of the world towards the implementation of all of the goals we all share, which is to reduce the numbers of nuclear weapons in the world, reduce their role in security

issues, and to move towards a world that is free of nuclear weapons, China will march with us on this road if we engage China and if we are leading in this struggle. China has shown repeatedly that it is willing to cooperate not just with the international norms, but with U.S. specific concerns as long as it feels that China is a partner in this effort and isn't being coerced into cooperation and as long as China feels that there's a certain equality here of the prices being paid and the work being accomplished.

One short example of what I'm talking about is this issue of export controls that Dr. Bertsch is really the expert on, but these export controls, the additional protocol to the NPT requires that countries declare their exports of these sensitive technologies. So China is now agreed to that additional protocol and its entities are making those declarations.

What we'd like to do is have every country sign the Additional Protocol and we've made recommendations in the Carnegie Endowment study called "Universal Compliance," that we add to that and make a requirement that countries declare their imports. So we have transparency in not just who's providing the technology but also in who is getting the technology. This would have been of tremendous value in the A.Q. Khan cases, for example.

But you're never going to get countries to agree to those kind of additional burdens unless they feel it's part of a process where everybody is universally committing to this process, is bearing an equal burden. And that requires that the United States as the founder of this nonproliferation regime, as the leading power in the world today, to be leading by example, to be doing its part to reduce the role and saliency of nuclear weapons in international relations.

That concludes my oral remarks. Thank you.

[The statement follows:][5]

Panel III: Discussion, Questions and Answers

HEARING COCHAIR ESPER: Very good. Thank you, Mr. Cirincione. We'll now turn to Commissioners Wessel, then Fiedler, then Wortzel, in that order. Gentlemen.

COMMISSIONER WESSEL: Thank you, gentlemen, for both being here. Joe, as I said earlier, good to see you again, having worked together in the House for many years.

I'm intrigued, Dr. Bertsch, by your comments about NORINCO, and the NGO private sector participation. How did that come about? Did NORINCO approach the center? Did you approach NORINCO? Is that a fee-for-service approach that the center is going to be engaging

[5] Click here to read the prepared statement of Mr. Joseph Cirincione

in with a number of other companies as they get invited in?

DR. BERTSCH: Right.

COMMISSIONER WESSEL: What's the sponsorship of the Chinese government, those kinds of things?

DR. BERTSCH: I've been involved in this nonproliferation and export control work for approximately 25 years and this is frankly the most fascinating and I think rewarding activity that I've come to be closely engaged in—that is, with NORINCO specifically and China more broadly.

I'll tell you our NORINCO story. About four or five years ago, I was in Beijing, and I requested a meeting with NORINCO to discuss their sanctions, and I went in and sat down with them, including one of their vice presidents, and heard them out, and then I told them what I thought about the issue. That was our first exchange.

A couple years later, in discussions with the China Arms Control and Disarmament Association, their General Secretary said that NORINCO could use some help in better understanding U.S. thinking, U.S. standards, and export control internal compliance programs. Subsequently, a NORINCO vice president came to Athens to the University of Georgia, and sat down and said we want to talk with you about this.

I first I simply didn't know what to make of this. We hadn't engaged in that kind of activity with foreign firms before although we operate--we did a lot of work in the '90s, particularly in Russia and Ukraine and elsewhere, but we never had a company come to us and say we'd like to talk and understand.

So we started talking and that went on for about a year, and then NORINCO said would you advise us and assist us, and we signed through our university--which has a foundation for administering our research programs and so forth--what we call a technical service agreement, a one-year agreement with NORINCO, to bring some of their experts to our campus, some of their officials in charge of internal compliance, and to promote their export control understanding generally. In addition, we went to Beijing and their corporate headquarters, and I participated with four or five of my colleagues in a full morning briefing on what we saw as the challenges and issues that they ought to be sensitive to, and so we just completed one year of cooperation on information sharing, export control development and compliance.

We've just recently signed a second year technical service agreement, which is basically an agreement for us to provide services. My university and myself individually, looked at this very carefully and said is this the kind of behavior that we should engage in at the University of Georgia, which is a research university, a land grant university that's committed to public service.

We also talked with key officials in the U.S. government, all along the way, and said is this something that you would recommend, and all of the lights were green. Everybody said this would be useful. Do it. We're doing it, and we have been very pleased.

Just a recent example. In April, I was in Beijing, and we put on an industry outreach workshop, and NORINCO got up and gave a very fine presentation on what they're trying to do. I thought it was informative, honest and so forth.

Other Chinese companies came up to us and to NORINCO afterwards--and I witnessed this--and said, how do we learn more about this? I think that there's a real interest in learning more about export controls and export control compliance which I take as a very positive development.

COMMISSIONER WESSEL: Okay. I see my time has expired. If we have another round, I'd like to get back on the list.

HEARING COCHAIR ESPER: Absolutely. And I ask everybody, both commissioners and panelists alike, to keep your questions and answers brief so we can move through them quickly.

Commissioner Fiedler.

COMMISSIONER FIEDLER: Mr. Cirincione, could you give us a quick refresher on the Chinese role in assisting the Khan network do its deeds?

MR. CIRINCIONE: It started with China.

COMMISSIONER FIEDLER: In what year?

MR. CIRINCIONE: So Pakistan got its technology--

COMMISSIONER FIEDLER: What year?

MR. CIRINCIONE: --from China. I think I actually have this in my testimony. The nuclear technology that we're worried about started in the 1980s. We believe that China supplied Pakistan with the plans for one of its earlier nuclear bombs, and it looks like it aided the plutonium production reactor at Khusab in the early 1970s. So it goes back quite a way, and this was the big problem we had with China in those periods where they actively promoted proliferation. Pakistan as one of their allies was one of the primary beneficiaries of that technology.

COMMISSIONER FIEDLER: Do we have time that we think it ended?

MR. CIRINCIONE: It dribbled out. As far as we know, they're not, they're not providing Pakistan with nuclear technology currently, and I would say--I don't know if we have a date when it stopped. The last sort of documented instance that I know of was in the mid to late 1990s over the issue of the ring magnets for Pakistan's centrifuges. So it was still going on in the mid-'90s.

COMMISSIONER FIEDLER: So it was in recent history--

MR. CIRINCIONE: Yes.

COMMISSIONER FIEDLER: Not decades ago, but recent history.

MR. CIRINCIONE: Right.

COMMISSIONER FIEDLER: Thank you very much. Dr. Bertsch, have you advised NORINCO subsidiaries in any countries other than China?

DR. BERTSCH: No, I have not and we have not. We have just dealt with NORINCO headquarters in Beijing.

COMMISSIONER FIEDLER: So have you thought about it at all in terms of their very significant international presence in many other countries?

DR. BERTSCH: I think that the key decisions that affect NORINCO behavior are made in Beijing, and I think given our limited time and resources, that starting there is important. And we've just started.

COMMISSIONER FIEDLER: One of the things that is very clear to me today and from earlier hearings is I don't think anybody is clear about how the decisions got made or how the decisions are made today even? In other words, we heard testimony that it probably wasn't Chinese policy, that NORINCO was a powerful actor acting on its own, i.e., a rogue, that it might not have been in Beijing, it may have been somewhere else.

So the question I have is really is the training level at the top sufficient? It's like what we heard on the energy the other day, which is everybody is talking to environmental regulators in Beijing, but nobody is talking to the guys at the local level who are supposed to regulate the factories that are spewing the stuff.

This is a much more dangerous stuff. What about NORINCO's people in Iran today? Are they involved in the training process?

DR. BERTSCH: You may not be aware, and I think it's very interesting, that NORINCO has stopped almost all of their trade in Iran, one of their major trading partners. We had at the University of Georgia in two weeks of intensive training the head of their marketing program for Iran, and I was told when I went back to Beijing, that he came back and talked to people in NORINCO and said we have to think about this business in Iran. What kind of company are we?

The president of NORINCO said to me: that when I came home from work one night--this is the president of NORINCO speaking--my son had seen a feature about the NORINCO sanctions on television, coming out of Hong Kong, and said to me, Dad, how can your company be involved in that sort of thing? And the President then said to me: we want to be a company with the social responsibility.

So I think some interesting things are going on. I agree with you, we don't know a lot about what's going on in a country as big and

complicated as China, but when I talk to Boeing in this country and GE in this country, and other large corporations, this is complicated business in the United States and China, and it's part of a long process of trying to develop a corporate culture. And I'm hopeful that that might be happening in some Chinese entities.

COMMISSIONER FIEDLER: Thank you.

HEARING COCHAIR ESPER: Good. Thank you. Dr. Wortzel.

COMMISSIONER WORTZEL: Gentlemen, thank you both for coming here today and testifying. Dr. Bertsch, NORINCO--I quickly read through the CRS report--has been the subject of sanctions it looks like seven times between 2003 and 2006, and all it looks like for missile related exports to Iran.

Do you know what specific program or contract with Iran was being carried out and the status of that project, if you know it? Is it complete? Are there NORINCO technicians? if there was a project, there's spare parts, repairs, follow-on training, tech training? So is that going on? That's one question that I think is kind of relevant because if you had a single program and it's over, it's never over.

You've always got spare parts, repair and replace and training, even though new business may not go on. So what's NORINCO really up to there?

Second, my contacts with the Chinese Arms Control and Disarmament Association are limited. I've been to a couple of their conferences in China. The most interesting one was one I went to in England with them, and all four representatives of the Chinese Arm Control and Disarmament Association were actually intelligence officers. You may know I was assigned to the American Embassy in China. I'm a military intelligence officer. I was with the Defense Intelligence Agency.

Three of the CACDA representatives were PLA Second Department military intelligence officers with whom I had contact in China and one of the CACDA representatives at the meeting was a Ministry of State security intelligence officer with whom I had had pretty regular contact in China. They all begged me not to--they hadn't revealed to the British their real affiliation.

So what kind of organization is CACDA? Who in the Chinese government does it respond to? And what do you make of the fact that it provided really official cover for active intelligence officers?

DR. BERTSCH: Thank you, Dr. Wortzel, for those two good questions. On the first one, NORINCO's business in Iran, I believe that all sensitive trade and contacts with sensitive entities in Iran has stopped. My understanding is that it has stopped.

Secondly, on CACDA, I don't know everybody that works in CACDA. I work directly with the Secretary General who's a former Foreign Ministry official who has been to the University of Georgia

four or five times. I've met with him in Beijing an equal number of times, and we've worked together in these industry outreach seminars and the only--the best intelligence is that that I'm picking up on what kind of questions these Chinese companies are asking? Are they doing their homework when we send them readings and materials?

Are they implementing internal compliance programs and are they interested? And my intelligence gathering is saying, yes, this is good news, and there are no secrets in the kind of work that we're doing. I think our Chinese colleagues have been surprisingly transparent about where they are in this business and what they've got to do. There may be others that are going around the country doing other things, but I have no concerns, and I hope, you know, I'm not being naive about these issues, but in the work that we are doing and my discussion with people who I have a great deal of respect for their advice, they say this is useful to U.S. national security and U.S. national interests.

COMMISSIONER WORTZEL: Thank you.

CHAIRMAN BARTHOLOMEW: Thank you, gentlemen, both of you. It's interesting testimony that you've provided. Dr. Bertsch, I was struck by this social responsibility you say that NORINCO has found, and I'm wondering why a company that was sanctioned seven times, most recently in 2006, has decided that social responsibility is an important thing for them to be fulfilling. And also given all of the discussion about how we view what responsibility is in terms of responsible stakeholder and how the Chinese government might view what responsibility is in terms of responsible stakeholder, and they differ quite significantly, how do you see NORINCO defining a socially responsible role?

DR. BERTSCH: I think NORINCO looks at companies that are respected around the world and in the United States and says we want to be like them. NORINCO is now over 80 percent non-military exports. They've gone from an exclusively defense company to a company that is competing around the globe for getting goods into the market, and in order for them to succeed as a company in their longer-term vision, they have to viewed as a responsible company.

They do not want to be sanctioned again, and I think they are doing everything that they can to avoid sanctions. And therefore, it doesn't surprise me when they talk about social responsibility. Their president did a stint at the Harvard Business School, was in Cambridge last summer for a month, talking with other corporate leaders, and they share stories and impressions about what you've got to do to succeed in the international marketplace.

I think China is on a very steep learning curve about how to participate in the global economy and we've read in recent days in our newspapers about some of their transgressions that are coming at great

cost in other areas, and I think the NORINCOs and others want to avoid this kind of stigma that's been attached to their past behavior.

HEARING COCHAIR ESPER: Thank you. We'll now turn it to Commissioner Houston.

COMMISSIONER HOUSTON: I am going to join my friend, the chairwoman, and respectfully submit yet another devil's advocate question. If I were going to run through a mine field, I would want a map before I started stepping on boulders.

So my first devil's advocate question for both of you is how do you know what's export compliance and not export avoidance? Hang on. And one other one. Dr. Bertsch, you mentioned that NORINCO, in particular, had stopped doing business with Iran. My question is a little bit broader than NORINCO, but does include it, stop doing business with whom in Iran? With private contractors in Iran? With the government of Iran?

As late as 2002 and 2003, we were hearing reports that China was still giving uranium to the Iranians, through Iranian front groups, and there were even Chinese feet on the ground in some uranium mines that were assisting Iran. So twofold: one, how do you know? Is there a mechanism in China? How would a Chinese company know if it were an Iranian front group? Is there any kind of government or private sector mechanism to prevent that from happening?

And again, how do you know that it's not export avoidance? That it's just a really smart way of getting the U.S. perhaps off China's back (a), and (b) making sure they know where the land mines are in export controls?

DR. BERTSCH: I'll take it first and then, Joe, I'd be delighted if you would jump in. Concerning the second question, Iran and NORINCO and beyond NORINCO, in 2002, yes, some of these things were going on. 2007, I think things are changing. I really do think that the NORINCO made some corporate decisions that said we are going to change our behavior, and they to my knowledge have done that, although I think these are the kinds of things that different groups, institutions have to follow very closely, and check on. I personally and our center does not have the capacity to do that kind of work.

Secondly, on the issue of export compliance or avoidance, I think you have to look at what's going on and I don't think the problem has been solved. I think there are significant challenges, but our research, as best as we can do it, tells us that there's real progress towards greater compliance or an interest in complying, learning about how you comply.

Here you have a country that had no participation whatsoever in international export control affairs. They didn't even have people working these issues, when I went there the first time and my

colleague who went there before. Export controls was all very new terrain to them.

When I compare China with some of the other countries that I've worked in of significant size and importance in the world, I think I give China maybe higher marks than any other country for being serious about learning.

Now, complying is another issue, and I talk in my written testimony that implementation and enforcement is not spotless. There are shortcomings, but again progress in my opinion has been made.

MR. CIRINCIONE: I would be careful about two things. One is confusing China's cooperation with U.S. security objectives and China's cooperation with international obligations. There's nothing wrong with China trading with Iran. Most of the world trades with Iran.

There's nothing wrong with China selling weapons to Iran. Many countries sell weapons to Iran. So you have to distinguish between what we would prefer other countries do or not do and what's their legal rights to do.

The second thing you have to be careful of is cherry-picking, is presenting in reports only the information that supports your conclusion. In looking at the 2006 report, I think the Commission has cherry-picked on China's nonproliferation activities. This reads more like a prosecutor’s brief than a judge's finding.

You've presented the things that China, that we're concerned about with China. But I don't care how many assistant secretaries say they're deeply concerned about China's nonproliferation record. China is simply not a major proliferation problem in the world today. It's not even on the top ten list.

Are there things we want to improve? Absolutely. Are these people one of the major problems we have? No, they are not. I would hope that in your next report, you correct some of these mistakes.

For example, “China has refused to cooperate in efforts by a number of nations to persuade or force Iran to halt its military nuclear program, and instead has offered political and moral support for Iran and obstructionism in the United Nations.”

I don't think that was true when you wrote it, and it certainly isn't true now. They have just signed on to two U.N. resolutions that are powerful sanctions resolutions. They are actively cooperating in resolving the North Korean nuclear problem. In fact, if it were not for China, we couldn't resolve the North Korean nuclear problem.

So I hope in your next report, you present a balanced picture of the things that China is doing right, as well as the areas where we think they're doing wrong. That's a little more than you asked for.

HEARING COCHAIR ESPER: Any further questions?

COMMISSIONER HOUSTON: No.

HEARING COCHAIR ESPER: We'll turn next to Commissioner Reinsch and then come back around to Mr. Wessel. I do have a quick question, Mr. Cirincione. Who would you list as the top ten proliferators?

MR. CIRINCIONE: Pakistan is the most dangerous country in the world today by far, by far. That network has not been rolled up.

HEARING COCHAIR ESPER: Right. But who would you list as two through ten then?

MR. CIRINCIONE: Proliferation problems I said.

HEARING COCHAIR ESPER: Right. Oh, I see.

MR. CIRINCIONE: Nuclear terrorism is our number one nuclear threat. The Pakistan is probably the number one proliferating nation in the world today. The existing arsenals that we have in the world is a major proliferation problem. We have 26,000 nuclear weapons, et cetera. There's a lot more. The nonproliferation regime itself is teetering on the edge of collapse. Those are serious proliferation problems.

HEARING COCHAIR ESPER: Sure. In terms of states, though, and as you know the CIA publishes a report every six months on proliferating countries, I recall. Who would you list as the top five countries with which we have concerns, either because they are participating or supporting or not actively enforcing their proliferation obligations?

MR. CIRINCIONE: This is tough. I haven't actually listed them this way in the past, but I would say North Korea, number one, primarily because it's the only country exporting ballistic missiles currently. Pakistan, number two, because its networks continue on nuclear.

Iran is not so much exporting, but they're certainly part of the problem. There are a major customer for this so they're a part of the problem. India is probably up there as number four. I'd be hard-pressed to find a fifth country at this point that is in that same category. I would say those would be my top four countries of concern.

HEARING COCHAIR ESPER: Commissioner Reinsch.

HEARING COCHAIR REINSCH: Thank you. I apologize for missing much of this panel. I particularly apologize because of what you've been saying, some of it at least is what I've been saying in the past, with about as much success as you're probably going to have in what you said.

But I am happy to have the panel. I'm happy to have this laid out because I think it is a more complicated question than our reports in the past have suggested it is, and we'll see what happens this time around.

Our report writing is a public exercise. Maybe, Mr. Cirincione,

you might want to stop in and observe when we get to this particular chapter.

MR. CIRINCIONE: Is that a challenge or an invitation?

HEARING COCHAIR REINSCH: I'm not the chairman. I can't invite, but just letting you know it's a public exercise. We've had visitors before.

Let me ask you a question about resources and if it's redundant and someone else has asked it, then just say so and we'll save some time. And this might be better directed to Gary, but suit yourselves.

I guess the first question is simply do you think the Chinese last couple of years currently are putting in enough or have put in enough resources in terms of money and therefore people simply to do the kind of enforcement and compliance they need to do to meet the obligations that they've already taken on? I'm sorry. I mean the Chinese government, not the companies.

DR. BERTSCH: Yes. I think that's a good question, and my general response would be no, but on the other hand, I recently visited, for example, the Shanghai Customs College and they're now putting into their curriculum export control training. And there I saw the high quality of students that go through that program, and they're trying to prepare these people to go out and do border control and customs work, and I think they're trying to train a resource base that will meet this need in the future.

I think in the past and today, they are understaffed in everything from the Ministry of Commerce to other agencies that have responsibility in their custom service. So I think we should encourage the Chinese to continue to ramp up the number of people and quality of people that are needed for —this work.

HEARING COCHAIR REINSCH: Do you have a, looking at MOFCOM and dual use and MOFCOM, in particular, do you have a count of how many people are there now doing this?

DR. BERTSCH: It's a growing number. It's a much smaller number than we have here in Washington.

HEARING COCHAIR REINSCH: Are we into double digits yet?

DR. BERTSCH: Yes, I think we are in China. I think they've moved into the double digits. Five or six years ago, it was four or five people doing what we have hundreds of people doing here. Many of the current people doing export control work, or a number of those people have come through our training programs at the University of Georgia, and they're very talented bright young people that I think go back and do a good job.

HEARING COCHAIR REINSCH: I think I asked the question because for all the companies, what the companies may or may not be doing at the end of the day, I think having an aggressive government

enforcement and licensing process is critical to this. As you've seen in this country, ultimately, it's critical to the development of competent company efforts because they steal the people from the government who have had the good training in order to do the private compliance, and I think that's probably a chain that you'll see.

Let me ask one more question if I've got a few seconds. As you know, Gary, I used to have some involvement in this stuff and watched the same kind of progress we had with numerous other countries in terms of helping them develop competent systems, particularly former Soviet Union countries, in the '90s.

The general path that you've been talking about has been a lot shorter in the cases of other countries, and quite long in the case of China. Is that simply because a big country, a lot of people, a lot of problems, and if the Lithuanians do it, it's just simpler? Or is there more to it than that?

DR. BERTSCH: Let me ask for clarification. You're saying that the process, the path of developing export controls has been longer in China?

HEARING COCHAIR REINSCH: I think it's been longer. What you've described--it seems to me that we've been talking with them about this at some level for more than ten years, probably 12 years, and they are where you've described them as being, having made progress, but--you've both described them as having made progress, but with more progress needed.

There are other countries where we've I think--correct me if I'm wrong--but I think we've gone sort of from start to finish in less than half that time.

DR. BERTSCH: That may be true, but I think that the progress in China has been fast in recent years, and I have the impression that they have made some decisions that will maintain that trajectory.

HEARING COCHAIR REINSCH: Okay. Mr. Cirincione, do you want to comment?

MR. CIRINCIONE: No, it's beyond my expertise.

HEARING COCHAIR REINSCH: Okay. Thank you.

HEARING COCHAIR ESPER: Good. Thank you both. Chairperson Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you. Thank you, gentlemen. Mr. Cirincione, I find it interesting that you take us to task for a statement in our report and can't resist the urge to take you to task on the fact that hyperbole might have entered into something that you've said that you say that China isn't even in the top, but when asked to give ten, you gave four.

I wondered what happened to five through ten in terms of the list of what you think the big problems are? That's my first question.

The second question is you mentioned specifically North Korea,

Pakistan and Iran. And I'd like to know where you think the North Koreans, the Pakistanis and the Iranians got the technology and expertise by which they've built or are building the equipment that makes them countries of concern to you?

MR. CIRINCIONE: Sure. I said that China isn't one of the top ten proliferation problems in the world today. The four major proliferation problems we have in the world today are, number one, nuclear terrorism, the possibility that al-Qaeda or a similar terrorist group could acquire nuclear material and use it. That is a major proliferation issue, requires much more attention and resources than we're devoting to it.

The second major proliferation problem we face in the world today is the danger from existing arsenals. There are 26,000 nuclear weapons in the world and thousands of them still pointed at us on hair-trigger alert in Russia. That is a major problem that we have.

India and Pakistan's nuclear arsenals are a major proliferation problem. This is in a subcontinent where the two countries have gone to war three times in the last 50 years. There are real regional concerns over the possibility of use of nuclear weapons.

The third biggest issue we have is that new states acquiring this technology. North Korea and Iran are the two cases in point. If we do not solve those crises, they acquisition of nuclear weapons is likely to lead to the acquisition of nuclear weapons by their neighbors. That's how proliferation spreads, neighbor to neighbor.

And then the fourth biggest problem we have is the weakened condition of the international nonproliferation regime and its possible collapse. So those are the big categories of problems. In all of those, China plays an important role in trying to prevent those problems. In some of those, China is part of the reason that we have those problems.

So Pakistan. Pakistan got a good portion of its nuclear technology from China. That's absolutely correct, and as I say, this started as early as the '70s and continued up until the mid-1990s, and we still have some isolated cases of concern going into this decade where there is certain trading going on we would prefer not to see. This involved primarily the use of dual use items rather than actual supply as it occurred in the past of entire reactors or ring assemblies, things like that.

So China has been a major proliferation problem. I think the trajectory, however, is extremely important and everything you've heard from the witnesses today indicates that China has come a long way. It's a very different situation now than it was 20 years ago, even ten years ago, even five years ago, and the arrows are clearly pointing in the direction that we want them to go in.

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR ESPER: Good. Thank you. We'll now turn

to Commissioner Fiedler.

COMMISSIONER FIEDLER: I'll have two questions. The first one, I mean it's quickly answered by both of you, so sanctions worked on NORINCO?

MR. CIRINCIONE: I don't know.

COMMISSIONER FIEDLER: You don't know that sanctions worked on NORINCO? Do you think they might have worked on NORINCO?

MR. CIRINCIONE: No, no, I honestly don't know. I'm not that familiar enough with it.

COMMISSIONER FIEDLER: You think they did?

DR. BERTSCH: I think that sanctions certainly got their attention on this issue.

COMMISSIONER FIEDLER: So you don't think that the United States should drop sanctions as a tool in its arsenal of--

DR. BERTSCH: No, I think there are certain times in history that sanctions are a useful instrument of foreign policy.

COMMISSIONER FIEDLER: Do you agree?

MR. CIRINCIONE: Sanctions are an absolutely essential tool for U.S. foreign policy. The mistake is thinking that sanctions are sufficient, that sanctions can somehow compel a country into compliance or collapse. That has never been the case.

COMMISSIONER FIEDLER: Okay. Now I would like to get back, Mr. Cirincione, to a couple of comments you've made. I wasn't a commissioner last year so I can't address the specifics of your criticism. I will take somewhat umbrage at the characterization of--well, although it's your opinion, that there was cherry-picking. The consensus process of 12 of us having listened to multitudes of people necessarily means that we have to make judgments about the credibility of various witnesses, not intending any personal thing.

So everybody's credibility is an issue here when they testify. So we have to weigh people's testimony. So in trying to weigh your testimony, I want to get under the factual basis of your statements, that you've made an unequivocal statement, China will march with us, in your oral statement to us about 30 minutes ago. Who? Who's China? We have listened all day on the proliferation question and every witness, and the serious witnesses who are charged with the responsibility of keeping us safe at night and during the day are not quite certain who's making the decisions on anything related to proliferation that we've heard.

In other words, they don't know if the CMC is doing it. They don't what the dynamic is because China won't tell us. So I'd like to know who is it is factually you think is going to march with us? The Foreign Ministry, the CMC, all of them together, the Politburo?

MR. CIRINCIONE: Sure. There's no question that China is an

authoritarian regime and its decision-making processes are not transparent and we don't understand quite often who's making the decisions and why. But this is true even of the most democratic countries in the world. It's true of the United States. We don't understand who has made some of the key decisions of our own critical national security issues and why.

So I'm not sure that that's a criticism or an observation that applies uniquely to China. So when I talk about developing multinational mechanisms where the countries of the world can march together down that non-nuclear road, I of course am talking about cooperation between the U.S. Department of State and the Chinese equivalent, between the U.S. Department of Defense and the Chinese equivalent, cooperation at the U.N. Security Council, at the Conference on Disarmament, at the IAEA Board of Governors, those sort of instruments with the Chinese participants in those organizations.

COMMISSIONER FIEDLER: Let me rephrase my question. Do you believe that as an authoritarian state that China is more or less dependable than say India, a democratic state?

MR. CIRINCIONE: Dependable?

COMMISSIONER FIEDLER: Yes. Like when they say they're going to do something, they're going to do it on proliferation?

MR. CIRINCIONE: I would say that currently India and China would have sort of comparable dependability.

COMMISSIONER FIEDLER: Neither of them are dependable?

MR. CIRINCIONE: They're dependable--well sometimes they cooperate with you and sometimes they don't. Sometimes they fulfill their promises. Most of the time, both of the countries do what they say they're going to do.

COMMISSIONER FIEDLER: So sometimes they'll march with us and maybe sometimes they won't?

MR. CIRINCIONE: Of course.

COMMISSIONER FIEDLER: Okay. You said earlier that they will march with us unequivocally.

MR. CIRINCIONE: No, sir. I'm saying that that's what we want to do, that we want to develop a multinational framework where the countries of the world are marching together down this non-nuclear road, and unless you do that, trying to play nuclear wacko-mold just isn't going to work. Trying to hammer down China's compliance on this or that particular regime isn't going to work.

Trying to resolve the Iranian nuclear problem in isolation isn't going to work. It has to be a comprehensive solution that takes place with a number of countries on a number of fronts all at once.

COMMISSIONER FIEDLER: How do you think it is that we get the Chinese to be more transparent? If, and I think we can all agree to

the following, that miscalculation through ignorance is a major defense problem; right? Which by the way, just personally, the risk of miscalculation, because of the lack of transparency on proliferation, on defense issues, on Taiwan, on a lot of things, scares me. Just generally speaking because I like to know what the other side is doing.

So we tell the other side more or less what we're doing. We claim we do. And they tell us virtually nothing. So we can't even tell today whether or not it was the Chinese government that endorsed the sale of ballistic missiles to Iran or that NORINCO was a rogue actor and is now a socially responsible stakeholder.

I am not leavened and comfortable in this environment that we have vis-à-vis the United States and China with the lack of transparency. So how would you propose that the transparency be improved with the Chinese? Isn't it a relatively reasonable measure to say to the Chinese you should make the world comfortable by telling us what you think and what you do and how you make decisions and--

MR. CIRINCIONE: I think those kinds of things happen, you know, in specific instances. So, for example, Chinese ratification of the additional protocol, which requires greater verification mechanisms, that is greater transparency in some of their nuclear activities.

That's a step in that right direction. I would say the overall answer to your question is engagement. An example of what I mean by that is, for example, the National Security Council's work to get China to stop aiding Iran in the late 1990s. And we required very patient, detailed, persistent work to first understand exactly what they were providing Iran that we had to get through both our national intelligence means and our diplomatic discussions with them and then to get them to stop supplying that equipment which happened piece by piece, and it took several years to get them to completely stop doing that. That's the kind of knowledge I think you're talking about.

COMMISSIONER FIEDLER: By the way, I don't think there's anyone around this table--there's Jim Mann in his book and his testimony here, words are very important. There's nobody around this table that I have heard ever say that we shouldn't engage China. That's not the question. The question is how we engage him and what we get out of it.

MR. CIRINCIONE: Right.

COMMISSIONER FIEDLER: And what we expect to get out of it and how we change them permanently so that the miscalculation risks in the world are diminished.

MR. CIRINCIONE: Let me just give one other example. The former Command of the Pacific Command, Admiral Dennis Blair, often talked about his desire to build a Pacific strategic community. You see this reflected, now in his role as the chairman of the Council on

Foreign Relations Task Force Report on China, promoting those same ideas. That what you want to do is build up international mechanisms that integrate China into the world community, integrate it into a Pacific security community, and foster the kinds of exchanges and cooperation that you're talking about. I think those are the kinds of mechanisms we should be stressing.

COMMISSIONER FIEDLER: We all want the Chinese to join every international organization dealing with proliferation and comply with all of those provisions. I don't think that is an argument. I think it is a very serious argument about knowing what the reality is in China today on serious defense issues including proliferation.

I have not heard testimony from you or from the government today that has explicitly and factually said we know who's making the decisions. That, sir, frightens me. Look, we heard Secretary Lawless tell us or actually it was Stephen Hadley who reported, said to the New York Times, we're not sure if Hu Jintao knew about the ASAT test.

We heard Lawless tell us he knew, and we heard the Chinese tell us when we visited Beijing, oh, of course, he knew. All right. And it took them eight or ten days to tell us, to answer our first inquiry about the question. That does not make me comfortable. And I'm looking for a comfort level in the relationship between our two countries that ensures peace for both of us.

I am not yet satisfied factually that the guardians of our democracy and of our defense are adequately informed about the Chinese process of decision-making on any military or serious issue related to proliferation that would increase our safety.

MR. CIRINCIONE: The Congress of the United States has very serious concerns about the decision-making process of the Vice President's Office. So these kinds of concerns are not unique to China. We don't completely understand why we have made some of the decisions we have--

COMMISSIONER FIEDLER: The Vice President of the United States in one year and a half apparently will be gone. I have no idea when Mr. Hu Jintao will be gone or who will replace him or by the way what the real process will be in order to replace him.

MR. CIRINCIONE: Right.

COMMISSIONER FIEDLER: That does not a dependable partner make.

MR. CIRINCIONE: No, and we have similar concerns about some of our allies. For example, Pakistan. Who's going to be the next leader of Pakistan and what is the process? We don't really know.

COMMISSIONER FIEDLER: My time is up. I'm sorry, Mr. Chair.

CHAIRMAN BARTHOLOMEW: May I just make one quick factual point?

HEARING COCHAIR ESPER: Yes, we've got about five minutes left.

CHAIRMAN BARTHOLOMEW: --and that is that the apartheid government of South Africa was brought down by sanctions. You mentioned not knowing any governments that--

MR. CIRINCIONE: Oh, I respectively disagree. I think sanctions played a role in isolating that regime and increasing their difficulties, but in the end this was a negotiated process that brought the transition to majority rule.

CHAIRMAN BARTHOLOMEW: That would not have happened without the sanctions being in place.

MR. CIRINCIONE: That's why sanctions are an incredibly important role and you always want them in your toolbox. And I believe, for example, we should be sanctioning Iran, both multilaterally and unilaterally, and in fact increasing the sanctions on Iran. Absolutely. It's just a mistake to think that that's going to fix it for you, but in the end, there's got to be sanctions as a tool to help steer a country towards a negotiated solution.

CHAIRMAN BARTHOLOMEW: Recognizing that sanctions have to be used because other tools have been failing. It is a piece of putting solutions together.

MR. CIRINCIONE: I see it that you're doing these things together. For example, the sanctions that the U.N. Security Council has imposed on Iran. That's part of a diplomatic effort to negotiate an end to Iran's nuclear program.

COMMISSIONER HOUSTON: Mark, can I just ask one quick follow-up?

HEARING COCHAIR ESPER: Did you have questions as well, Dr. Wortzel?

COMMISSIONER WORTZEL: I was just going to add a little bit of information to the discussion between Dr. Bertsch and Commissioner Reinsch on how long we've been trying to work with the Chinese on export controls.

My own exposure and experience to it is when Secretary Weinberger was going to sell weapons to the Chinese in 1986, I was a party to discussions with the State Secrets Bureau of China and the Commission of Science, Technology and Industry for National Defense, to begin developing export regulations and policies. So that's '86, and in '88, COSTIND claimed that it had put together its first working group with the State Council and the Ministry of Foreign Affairs to implement export controls.

HEARING COCHAIR ESPER: Thank you. Commissioner Houston.

COMMISSIONER HOUSTON: I wanted to ask my original question, and it's kind of a yes or no question when a definition at the

end.

Mr. Cirincione, you mentioned that you thought there was nothing wrong with China selling weapons to Iran. On behalf of all the mothers of America including myself, I have to tell you that doesn't make me sleep any better at night. So my question, which goes back to the notion of let's just say non-identified rogue states or rogue actors, people that in America we're concerned about, Venezuela, Iran, al-Qaeda, whomever, we can't pretend that we're not concerned about aggression by these rogue actors or rogue states.

My question, my original question was, and I really am wondering if there is an answer to this at all, is there any mechanism within the Chinese government to identify those who are buying widgets from China, whether they be nuclear or conventional arms or whatever, by front groups who are pretending to be who they aren't in order to sell to rogue states and rogue actors? Is there any kind of security system, any kind of mechanism either in the economic side, the banking side, the military side, anywhere in China, is there anything that we know of?

MR. CIRINCIONE: Let me just answer the first part. There's nothing illegal about China selling weapons to Iran. In fact, we're hoping that we can reach agreement at the U.N. Security Council in the next resolution to actually put a ban on military imports, Iranian military imports. And that would then change the picture.

But many countries do business with Iran obviously. So that's what I'm talking about, and that's what I mean, we can't confuse our political or security objectives with international standards and you can't accuse a country of doing something wrong simply because we didn't want them to do that. That's the distinction I make.

So, Russia, for example, is the major arms supplier for Iran currently and it's a multi-billion dollar business for them, and until there's a U.N. Security Council prohibiting that, presumably that practice will continue.

I don't know the answer to the second part of the question.

DR. BERTSCH: If I understand it correctly, I would say that this is a continuing challenge globally to avoid the possibility that front companies and other illicit trading players get their hands on things and put them in the hands of the Iranians and others who are going to use them to develop nuclear weapons or ballistic missile programs.

That's why so much effort is being invested in the United States by the U.S. government and others to try to work multilaterally because we can't solve that problem in the United States alone, and therefore getting the cooperation of supplier states around the world, and I think a lot of progress has been made since this A.Q. Khan case, but, as Mr. Cirincione has said, this network has not been fully

dismantled.

COMMISSIONER HOUSTON: So the answer to the question are we aware of any CFIUS type mechanisms or any at all government mechanisms in China to identify down-line purchasing, the answer is we don't know yes, we don't know no. We just don't know.

DR. BERTSCH: I think the Chinese are concerned about it as we are. They probably have not done nearly as much as we have because we're more concerned than anyone, but the Chinese are part of the solution to solving this, and I think, again, I would suggest that we try to work with them to motivate them to work more closely with us and other countries in determining what kind of networks are being established that they may have intelligence and would be willing to share with others.

COMMISSIONER HOUSTON: Okay. Thank you.

HEARING COCHAIR ESPER: Gentlemen, thank you very much for your time today and your important insights. We appreciate your presence today.

The panel is hereby concluded and the hearing for the day. The hearing will resume tomorrow morning at 8:00 a.m. Thank you very much.

[Whereupon, at 3:55 p.m., the hearing recessed, to reconvene at 8:00 a.m., Friday, June 13, 2007.]

CHINA'S PROLIFERATION AND THE IMPACT OF TRADE POLICY ON DEFENSE INDUSTRIES IN THE UNITED STATES AND CHINA

FRIDAY, JULY 13, 2007

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION
Washington, D.C.

The Commission met in Room 385, Russell Senate Office Building, Washington, D.C. at 8:00 a.m., Chairman Carolyn Bartholomew, Vice Chairman Daniel A. Blumenthal, and Commissioners Peter T. R. Brookes and Michael R. Wessel, Hearing Cochairs, presiding.

OPENING STATEMENT OF COMMISSIONER PETER T.R. BROOKES, HEARING COCHAIR

HEARING COCHAIR BROOKES: Good morning. Today, the U.S.-China Economic and Security Commission is pleased and honored to welcome Congressman Duncan Hunter. Congressman Hunter was first elected to Congress in 1980 and is currently serving in his 13th term. He's a Vietnam veteran who served in the 173rd Airborne and 75th Army Rangers. He represents the people of the San Diego area, having a number of military bases in his district. He has extensive experience on defense-industrial base issues.

He's currently serving as the ranking Member of the House Armed Services Committee, and he served as chairman of that committee from 2003 to 2007.

Congressman Hunter, thank you for appearing here today and for sharing your views. You may proceed.

PANEL IV: CONGRESSIONAL PERSPECTIVES

STATEMENT OF DUNCAN HUNTER, A U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

MR. HUNTER: Commissioner Brookes and Chairman Bartholomew and Commissioners Wessel and Houston and Reinsch, thank you for letting me join you today. I appreciate it. I've got a prepared statement, but I thought what I might do is just summarize it, offer it up for the record, and give you some informal statements and then maybe respond to any questions, and have a discussion.

Very simply, I think my perspective on China developed over the last number of years simply and updated to the present time is that China is arming, that they are stepping into the superpower shoes that have been left by the Soviet Union and unfortunately they're doing a great deal of this with American trade dollars, and they're buying essentially the array of systems that I think you could expect a modern nation to purchase when it comes into lots of cash.

Most of you have seen the road mobile missile development, the DF-31, that they have undertaken, which fits their country well because of the vastness of the country. They can run the track line, so to speak, with road mobile missiles which obviously are much less vulnerable than static silo-based systems.

They have a few ICBMs that are targeted on the United States, but they also have the ability to develop a lot of missiles in a short period of time. They have about 1,000 short-range missiles right now, most of them staged in such a way that they could be utilized in a Taiwan operation, and they're adding to that collection of short-range ballistic missiles at the rate of about one hundred to 200 a year.

A number of submarines are under development, under construction, including some nuclear attack submarines, and obviously the Kilo purchases that they've made from the Soviet Union, the Sovremenny class missile destroyers, a high-end surface vessel. In fact, that's some of them trying to get in right now.

High-end surface vessel that is equipped with the extremely effective high speed anti-ship missiles that have the ability to take evasive maneuvers at the terminal phase which make them extremely difficult to defend against by American naval forces. And really the Sovremenny class was designed, we think, by the Soviet Union, to be able to attack American carrier battle groups.

In the old days, this array of military systems was available because the Soviets like to sell stuff. Soviets like cash, and particularly the SU-27 co-production agreement that they've entered into with the Chinese, I think, is an example of their (Russia's) tendency to want to engage with the Chinese for hard dollars and to sell military equipment.

But in the old days, the government of China didn't have much money, and the Russians weren't interested in IOUs. Today, they have lots of money and the money is American trade dollars. So they have co-production agreements or operations being undertaken right now. They have purchases of military systems, and they also have lots and lots of production.

Now, let me tell you one thing that I'm concerned about is this: we have an anemic shipbuilding base in this country, which is supported almost solely by warship and naval production. The Chinese have a robust ship production capability, domestic production

capability, and they could at some point translate that into the ability to produce lots of warships in a fairly short period of time.

There's kind of a mixed review on where they're going with aircraft carriers. They've got some production, we think some initial production that's being undertaken inside closed shops. We don't have a good window into. They've purchased, as you know, an old carrier from the Russians that's being upgraded to some degree. But where they're going with carrier aircraft we're not exactly sure.

But across the board, they're modernizing--classified briefings have reflected that they're going after American strengths--electronic warfare. They obviously took this space shot January 11 that knocked a satellite out of space that I think heralded a new era of military competition in space between us and the Chinese whether we want it or not. In the military, you protect your eyes, and a lot of our eyes are in space, and so we're going to have to continue to undertake actions that will give us the ability to compete militarily in space with the Chinese.

Now, this army that China is undertaking, I think, is expected of a nation that is coming into lots of cash, and it doesn't necessarily manifest a strong strategic plan or vision by the government of China.

On the other hand, a military threat is comprised of capability and intent, and the intent of China, as evidenced by our miscalculation with respect to China in 1950, is that intent is always somewhat obscure.

So I think we're proceeding down a path which will result--with our industrial policies or lack thereof--which will result in China being the preeminent manufacturer of goods in this country, at some point in the future in this world, and having with that massive industrial base and the cash that accrues to it the ability to match the United States militarily in lots of areas, lots of key areas, and to give us enormous problems in areas where they bring asymmetric capabilities to bear.

So what we're doing with China, there's two problems with China with respect to our supporting and aiding their industrial base, and I think disserving to a large degree American manufacturers and American jobs.

First, I think all of you are aware of the fact that after World War II, we signed up to the General Agreement on Tariffs and Trade, which had several charitable aspects to it from the United States' perspective. One of those was that we allowed all the other nations in the world except ourselves to be able to rebate to their manufacturers their taxes, their VAT taxes, and in the days after World War II, when a lot of the world was burned out from the war, we allowed them, we inked the deal in which we agreed that no other nation could subsidize its manufacturers by refunding their direct taxes. So the United States

couldn't subsidize our manufacturers by rebating our direct taxes, our income taxes to our manufacturers, but we allowed a loophole.

That loophole was that any other nation could rebate its value added taxes, which at that point were only utilized by a small number of nations, and value added taxes were fairly small taxes, in the three, four, five percent range at the max when we created that loophole.

Practically every other trading nation in the world now has developed a VAT tax, and VAT taxes are now 15 to 20 percent, meaning that if China sells one of those microphones to us, when it goes to the water's edge to be exported to America and that microphone is $100, the government of China gives their manufacturer a cashier's check, so to speak, a refund, 17 percent of the value of that microphone, which was the amount of VAT tax that was collected.

If a microphone is made here and shipped to them, and it costs a hundred bucks, our guys have a $17 penalty assessed when it gets to the water's edge. Outside of that, we call it free trade.

So they have a subsidy of 17 percent. They subsidize their guys 17 percent. They penalize our guys 17 percent. That means if you were going to compare this to a football game, they essentially have 34 points on the scoreboard before the opening kickoff in every game. Just to ensure that the Americans never win the trade competition, China then devalues its currency by 40 percent, and that has the effect of undercutting American products around the world by 40 percent and taking our goods off the shelf.

The hundreds of billions of dollars in trade surplus that accrue to China as a result of those two dynamics are to some degree used to buttress their military base and certainly what you'd call this vast area of dual-use technology, that is technology that in some way accrues to the efficiency and the benefit of the military while it lies primarily in the domestic area.

I think the United States is going to have to change its policy or have a policy with respect to maintaining manufacturing or we're going to lose what I call "the arsenal of democracy," and I just give you one anecdote, and that is that a couple of years ago when our guys started to get hurt with roadside bombs in Iraq, and I sent our staff teams out to try to find one company left in this country that could still make armor-grade steel plate, we found precisely one that could still make high grade steel plate that we could pin on the sides of our Humvees.

When the Swiss cut us off from the small guidance device that we use in our JDAMs because they didn't like our policy, we found precisely one company left in this country that could still make that particular system.

So China represents a couple of things. One is an extraordinarily large industrial base which has the capacity to get

much bigger and to translate itself into a large military production capacity which could be a threat to the United States because while the intent of China is not clear--in fact, one expert said the other day, he said essentially he doesn't think that China knows exactly where it's going militarily.

But it does know that it's got lots of cash, and big strong countries with lots of cash and with a need to extend sea lanes and to acquire lots of natural resources, especially petroleum, tend to want to build a military that will accommodate those ends.

So I think China is one country that can represent a real threat to the United States, and I think it's high time that the United States did a couple of things. One, stop China from cheating on trade. I think it's absolutely inexcusable that we allow them to devalue their money by 40 percent. That obviously is a government subsidy. It's a specie of government subsidy.

Secondly, we are going to have to talk to the rest of the world that we gave this great deal to shortly after World War II, in which we said we are going to allow American producers of manufactured products to be double-taxed, taxed with their income taxes in the U.S., and then pay your VAT tax when our products get to your water's edge, and you pay no taxes. That is your manufacturers pay a VAT tax, they get it refunded to them when they send their products to the United States, and we of course have no tax when their products get to our shore.

It's tough to compete with a guy across the street who pays no taxes while you pay double taxes. You have to hit a home run everyday to stay even, and you know I think that's reflected anecdotally.

I talked to a businessman the other day who went to Wall Street to try to get a little more funding for his production, and the first question they asked him when he walked in, and I think it's such an illustrative anecdote--well, anecdotes never tell the entire story--they said before we even get started and open up your portfolio and look at your operation, we want you to explain to us when you're going to take your production to China.

That's the threshold question today for American industry. When are you going to take your production to China? And you have hundreds of major companies today, which today will be talked to by their financial advisors, who will tell them that even if they have a great workforce, even if they're highly modernized and they have an excellent product, it makes sense from a tax and tariff standpoint to take their production to China and then ship their product back to the United States.

So that dynamic at some point in the future will have a major impact on the relevant military postures or the relative military

postures of China and the United States, and I would be happy to take any questions.
[The statement follows:]

Madam Chairman Carolyn Bartholomew, Vice Chairman Daniel Blumenthal, Commissioner Mike Wessel, and Commissioner Peter Brookes, thank you for the opportunity to offer my perspective and concerns regarding the impact of trade policy on defense industries in the United States and China.

This is an important topic—one that I have considered as a Member of Congress, as the Chairman and now Ranking Member of the House Armed Services Committee and as an American. I commend you for your focus and commitment to addressing the "tough" issues. Your work is important to Congress' oversight role and informs the policy direction of this nation.

I appear before you this morning to share my perspective on our current trade policy with China; the implications for the U.S. defense industrial base; and how China is using American greenbacks to modernize its military.

This issue is complex and often viewed through different lenses—on one end of the spectrum, there are folks like myself who see a near-peer economic and military competitor and those on the other end who see China as a vast economic opportunity.

Those who share my view have watched China expand the pace and scope of its economic and military modernization efforts, have focused on China's near and longer-term strategic aspirations in the region and around the world, and have likely asked the following questions and reached the same answers:

First, is China's rapid economic growth, its devaluation of the yuan, and its military modernization efforts "gouging" the American defense industrial base? The answer is *Yes*.

Second, is China using proceeds from its growing wealth and gains from trade with the United States to develop military power projection, anti-access and aerial denial capabilities? The answer is another *Yes*.

Third, has the United States exported critical defense components and technologies to China, which increases our dependency on China for our own defense needs? The answer is another *Yes*.

Lastly, by moving defense factories and businesses abroad to nations such as China, have we jeopardized America's domestic capability to rapidly increase defense production during a time of war? The answer is a final *Yes*.

While I will likely address some of these questions today, my purpose this morning is to share my views and raise additional questions that I hope this Commission will consider in follow-on discussions.

China is cheating on trade by devaluing its currency

In 2006, China's trade surplus rose from $30 billion in 1994 to $232 billion—almost an eight-fold increase—and is expected to increase this year. This trading deficit is now larger than that with any other U.S. trading partner. One element that contributes to this trade deficit —China is cheating. China's currency—the yuan—is significantly undervalued by 40%, making it difficult for American manufacturers to compete fairly in the global market. It is this uneven playing field that undercuts American markets and wipes American products off the world's shelves. We've lost high-paying manufacturing jobs in the U.S. to China. One example that I use to illustrate what I call "China's one street advantage" is the following: If this table was made in China, and cost $100, and it's exported from China to the U.S., when it goes to the water's edge to be exported, the government gives a check to that company, for all their taxes. They give their taxes back at about 17%. So if this table was $100, they give them back $17 in cash. When an American table arrives to be sold in China, they give our exporters a bill for $17.

Recently, Democrat Congressman Tim Ryan and I introduced the *Currency Reform for Fair Trade Act of 2007,* legislation aimed at China's "one street advantage" and leveling the playing field for American companies. I think this an area that requires attention and I encourage the Commission to identify other opportunities to ensure a fair market playing field for American businesses to compete.

China is using American "greenbacks" to fund its military modernization efforts

China is using billions of American trade dollars to modernize its military force—from purchasing

foreign weapons systems and technologies to indigenously building its own ships, planes, and missiles. China's economic growth has enabled it to sustain a trend of double-digit increases in defense spending. In March 2007, China announced that it would increase its annual defense budget by 17.8% over the previous year to $45 billion.

This figure is widely accepted as a low estimate of China's defense spending. The recent Department of Defense's *Annual Report on The Military Power of the People's Republic of China* estimated that China's total military-related defense spending is more likely in the range of $85 to $125 billion.

What is China buying? Here is a short shopping list of how China is spending its U.S. trade dollars: Russian-made SOVREMENNY II guided missile destroyers fitted with anti-ship cruise missiles—providing China with a capability to challenge American aircraft carriers; submarines, such as the KILO-class diesel submarine; a battalion of S-300PMU-2 surface-to-air missile systems with an intercept range of 200 kilometers; AWACS aircraft with air-to-air refueling capability; and sophisticated communications equipment.

On the other side of the military modernization equation—American trade dollars are facilitating China's ability to mature their domestic defense industrial base. During a June 2007 House Armed Services Committee hearing, I shared by concerns with Deputy Under Secretary of Defense Richard Lawless regarding China's maturing and massive commercial industrial capability, especially in the area of its ship construction capacity which could likely be translated into a warship construction capability and could threaten our ability to maintain a naval dominance in the Pacific region. In response, Secretary Lawless noted that countries such as Japan and the Republic of Korea, currently the world's leaders in shipbuilding capacity and capability, are now readjusting their projections from a belief that China will be a top-rank ship-building competitor in the next six years rather than the fifteen originally projected.

What are the Chinese building? The Z-10, which is their first domestically produced attack helicopter; the Su-27SMK/Flanker through a co-production agreement with Russia, which is a high performance aircraft capable of effective warfare against America's top-line fighters; second-generation nuclear submarines, such as the JIN-class nuclear-powered ballistic submarines; the LUYANG II class destroyer with a vertical launch air defense system; the JL-2 submarine-launched ballistic missile; and the road-mobile DF-31A intercontinental-range ballistic missile. China also continues to show interest in developing an indigenous aircraft carrier capability.

It is clear that China's economic growth is fueling its capacity to purchase foreign weapons and technology while improving its indigenous capacity for a self-sufficient defense industrial base. In addition to the Pentagon's efforts to understand China's military modernization efforts, I believe that this Commission can provide a vital role in helping Congress and the American people better understand the linkage between China's economic growth, its expenditures of foreign military systems and technologies, and its intentions to develop a sophisticated domestic industrial base.

The erosion of the U.S. Arsenal of Democracy

A large portion of America's industrial base is now moving to China**,** including part of the industrial base that we rely on for the American security apparatus. This nation is at war and our brave military men and women are conducting missions around the world. But today we defend freedom in the absence of a robust U.S. "arsenal of democracy". Beginning with my father's generation through the Cold War—we depended on an American manufacturing base to produce the tanks, armored vehicles, and rounds of ammunition to equip our troops, and depended on American research and development (R&D) to ensure our military technologies kept our forces on the cutting edge. Today, if you want to find where critical elements of our arsenal of democracy have gone, you must look beyond America's shores to places like China.

The following are two examples of our dependence on foreign suppliers for critical components for U.S. weapons systems: First, is the migration of manufacturing plants of top quality semi-conductor materials and printed circuit boards. Because the U.S. military's most cutting-edge microelectronic

components use technologies that are no longer widely available in trusted domestic industries—the U.S depends on Chinese and other foreign suppliers. In a 2006 Institute for Defense Analysis report, analysts found that several Chinese companies "openly advertise their availability to reverse engineer microcircuits and recover sensitive data and intellectual property." The report also identifies a number of Pentagon programs that have been impacted by counterfeit microelectronics manufactured by China. The possible scenarios for inserting malicious content into the microelectronics that control our combat systems, communications equipment, or weapons are limitless.

A second example is the neodymium or "rare-earth" magnet used in a number of military guidance systems. The last U.S. firm that produced this high performance magnet was bought in 2003 and moved to China in 2005.

These examples are not exclusive but reflect a trend in which the United States has outsourced some of its arsenal of democracy to foreign lands—and this is a trend that concerns me. As Chairman of the Armed Services Committee, we established a Strategic Materials Protection Board, charging the Department of Defense to create a process to identify items that are critical to national security and to identify those materials, should they be unavailable domestically, that would severely impair our national security.

Unfortunately, the Department has not met its statutory requirement to meet and identify a plan to protect such materials. I welcome the Commission's thoughts on this topic.

Conclusion

Much of the public's attention is focused on the ongoing military operations in Iraq and Afghanistan, but it is also important that we remain focused on all U.S. security interests.

Over sixty years ago, in March of 1941—it was a Member of Congress—Rep. Carl Anderson from Minnesota who warned America about the danger of arming potential adversaries. A few months later on December 7th at Pearl Harbor, American ships were sunk, hundreds of planes destroyed, and thousands of Americans killed and wounded by a Japanese fleet that was indeed built with American steel and fueled with American petroleum.

While we are in an age of "economic globalization," we must not forget the history lessons of America's past.

Panel IV: Discussion, Questions and Answers

HEARING COCHAIR BROOKES: Thank you very much. I have a few commissioners that do have questions. If anybody hasn't let me know, please do so. We'll start with Vice Chairman Dan Blumenthal.

VICE CHAIRMAN BLUMENTHAL: Thank you very much, Congressman Hunter, for your testimony and for your concern with these very important issues. I'm trying to work my way through a dilemma we have in the sense that we're pushing for better balances of trade with China and for them to revalue their currency for that reason and to open up market access.

But, on the other hand, we're concerned about what we sell them. So if they went ahead and actually leveled the playing field in terms of accepting our exports, our best exports are obviously in the high

technology area where we have concerns about what they acquire.

So we may be the victims of our own success if we keep pushing on the market access issues and on the currency issues because all of a sudden the Chinese will want to buy more of our products or be able to buy more of our products, and those products will be some products that concern us in terms of their military applications.

I'm trying to work my way through that dilemma. So, on the one hand, we want freer and fairer trade with the Chinese and we're pushing on that.

On the other hand, as you mentioned in your testimony, some of the microelectronics and other types of things that we're very successful and have a comparative advantage in, we don't want them to acquire. And I'm wondering how to reconcile that.

MR. HUNTER: When you have the items that are deemed to have a critical military application, and I think these supercomputer sales that have been a subject of debate over the years are probably a good example, the Chinese are very effective at targeting precisely what they want, and they get most of what they want.

As I recall, during the Clinton administration, I was always raising, and during this administration we've been raising, an alarm over the end use of supercomputers. We've had this discussion and we've had this movement of how many MTOPS, million theoretical operations per second, should be the level for supercomputer sales to places like China.

And as I recall, at one point, there were over 150 supercomputer sales to China and the U.S. had only checked out the end use of something like three of them, and so the point is that China very carefully targets technology that they want.

Now, technology, militarily sensitive technology, we don't allow them to go as a matter of law. But the other question is as we draw down our industrial base, and I think this was pointed out fairly effectively in Clyde Prestowitz' book, Three Billion New Capitalists, and it's basically the saga of the movement of the industrial base to Asia, particularly China and India.

But he points this out very clearly, that even if you, as we move our industrial base to China, which we've done largely, if you took American manufacturing to full production right now, absolutely full production right now, you wouldn't come close to being able to knock back this massive trade deficit. We don't have the capacity because we've wrapped up so much industry and sent it over, that if you said we go to 100 percent, we wouldn't be able to take down the $200 billion plus trade deficit.

So we have not just a problem of our products being undersold and undercut, which they are, but the fact that a lot of our industry is

migrating, has migrated and continues to migrate. So our capacity continues to go down.

Let me just say this, Mr. Commissioner. You know this world never works the way it's planned to work. The whole idea of free trade, which was really a simplistic idea, the idea of Ricardo and Adam Smith, was the idea that it was almost based on climate. As Adam Smith said, let the Spanish grow, let them make their fine wines in Spain because they've got the climate for it. We're going to curry our sheep in the Scottish highlands. We're good at that. We're going to make textiles. We'll let the Italians make their fine brocades. They're good at that. And we're all going to be happy.

It was almost a Marxian utopian idea. We're all going to work happily under this umbrella of what is known as comparative advantage.

Now, the problem with that is that it's mostly climate based, and today, as Peter Drucker pointed out in one of his books, we live in an age of predatory trade where you can move a production line halfway around the world in a couple of weeks, and there's a lot of elements like the basic cost of commodities, like chromium and steel and tantalum and titanium, are the same worldwide.

So, in many cases, the only factors that are variables in the equation of efficient manufacturing are labor, and as Prestowitz points out in his book, you can get in some cases pretty skilled Chinese labor for 25 cents an hour upward, but also the way the nation treats their products, and we've got this World War II, post-World War II dynamic, which was almost in my estimation a form of foreign aid.

We told every nation in the world, we're going to allow you to rebate your taxes in some cases to your manufacturers, but we can't do it. In fact, if we do that with our manufacturers, you can sue us. If we try to do that with our--and that has grown.

In fact, as I recall, I think NAFTA, I think after NAFTA passed and Mexico adopted the VAT tax, so for people today to say we have trade with Mexico, if you go down to Mexico today, you'll pay 15 percent to get this microphone exported into Mexico. There's only free trade coming in our direction.

So, the question, if your question is, is this going to hurt us in some way if we get tough with China on trade, first, they're going to have a major advantage. Even if we have a level playing field with respect to taxes and tariffs, they still have the 25 cent an hour labor available in regimented fashion and with good discipline.

They've got a ton of good engineers and they're graduating lots of engineers, and they've got lots of engineers in our universities, and they are--the interesting thing is the idea of free trade, the idea that we were going to make high- end stuff for the rest of the world, they were going to make low-end stuff and ship it to us, has reversed. A lot

of high-end stuff has gone over and the smart people that are running China's industrial policies are giving enormous benefits to companies that will go to China.

They've given them the same thing that a lot of states try to give to induce companies to come in--free land, free trading programs, in some cases almost free manufacturing facilities--and the idea that we meet that with vague prayers about the unseen hand of free enterprise is troubling.

So the fact that we have no industrial policy, that we're meeting basically a very aggressive industrial policy, which at some point imparts a military capability that will be difficult to confront, that we are facing that basically with a lack of policy, is I think in the end going to accrue to our detriment.

Does that answer your question?

VICE CHAIRMAN BLUMENTHAL: My question was a little different, but other people have questions.

HEARING COCHAIR BROOKES: Chairman Bartholomew.

CHAIRMAN BARTHOLOMEW: I'm just simply going to say thank you both for appearing here today and for your clear and concise explanation of what is going on. We have been seeking more information. In fact, the rest of today we're focused on the defense industrial base and what the decline of the U.S. manufacturing base means for our ability to arm our warriors, and if there's any specific information that your staff can provide to us about--

MR. HUNTER: Sure.

CHAIRMAN BARTHOLOMEW: --what you've found out about the steel plating, for example, and things like that, we found it very difficult to be able to document and quantify these stories.

MR. HUNTER: Okay. Thank you, Madam Chairman, and as to that point, as chairman of the Armed Services Committee, I put in language in our defense bills in the past that established a Strategic Materials Protection Board which charges DoD to create a process to identify items that are critical to national security and identify those materials should they be unavailable domestically that would handicap our national security.

I think everybody, regardless of their thoughts on trade, agrees with that, that we need to be able to identify what's critical to national security and those things that we have to have in some quantity or some productive capacity in this country, and so I would hope that you could support that. I think that's something that makes common sense and that will make sure that we have what I would call the basics. So if you could help us on that.

The other thing, Tim Ryan and I--Tim's a Democrat from Ohio--we have, of course, the Currency Act that I think in some form will be passed at some point by this Congress. I think we had 178 cosponsors

last year.

But you know what's extraordinary about this whole thing is that instinctively you would think that the trade dynamic with respect to our tariffs and our taxes, would be going the other way. It's extraordinary that the country that has labor rates of 25 cents to $1.50 an hour is the one that has the 40 percent currency devaluation and it has the tax rebate.

You'd think that the high labor country would have those practices in an attempt to level the balance of trade. What's extraordinary is that we have the high labor costs, and yet we've acquiesced to this extraordinarily unfair playing field. So we've got two things going against us.

One last thing I think you should look at, too, although aside from China, is simply this: because of this VAT tax, the fact that every country in the world now--it's like 132 of them now--have it. They've all broken the code. That's how you put up a de facto tariff against the United States and you ship your stuff to us for free.

If you look at all of the nations of the world and their trading surplus over us--practically every one has a trading surplus over us--we have countries that pay significantly higher labor rates that have trading surpluses over the United States as a result of that dynamic. 34 percent is much higher than the profit margin of most exporters. So you might want to look at that, maybe make a recommendation with respect to that.

But I think the Strategic Materials Protection Board would be a good thing for you folks to look at and decide whether you want to endorse that. In fact, it's actually in the law, and what you might do is you might pull in some of our fine friends from the Department of Defense and ask them why they haven't got it in place yet. That might be a good thing to do.

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR BROOKES: I think we'll conclude. It's 8:30. Congressman Hunter, you've been very gracious with your time. Thank you for sharing your thoughts and your ideas, and we look forward to staying in touch with you on these important issues.

MR. HUNTER: My pleasure. Thank you very much. Appreciate it.

HEARING COCHAIR BROOKES: We'll move on to the next panel. Commissioner Wessel.

OPENING STATEMENT OF COMMISSIONER MICHAEL R. WESSEL, HEARING COCHAIR

HEARING COCHAIR WESSEL: We are very pleased to have before us on this morning's first panel four representatives from the Department of Defense. Thank you to each of you for taking the time out of your busy schedules to participate in this hearing and, unusually, myself and Commissioner Brookes, who are cochairing this, will dispense with our opening statements so that we can hear from our panelists and give as much time as we can. We'll have our comments inserted in the record.

First, we'll hear from Mr. William Greenwalt, who is Deputy Under Secretary of Defense for Industrial Policy. Before serving in this role, Mr. Greenwalt was a professional staff member of the Senate Armed Services Committee for many years and was also a lead staff member for the Subcommittee on Readiness and Management Support. We are looking forward to his testimony today.

We are also fortunate to have a representative from the procurement and acquisition offices of the Army, Navy and Air Force on this panel as well. From the Army, we have Ms. Tina Ballard, Deputy Assistant Secretary for Policy and Procurement. From the Navy, we have Deputy Assistant Secretary for Acquisition, Logistics Management, Rear Admiral Kathleen Dussault. And from the Air Force Office of the Assistant Secretary for Acquisition, we have Mr. Terry Jaggers, who is the Deputy Assistant Secretary for Science, Technology and Engineering.

We look forward to the unique perspectives on the U.S. defense industrial base that each of our service branch representatives will offer this morning.

Finally, let me remind all of the witnesses that our general approach here is to have about seven minutes of oral testimony from each of the panelists. We will have all of your prepared testimony, for which we are very appreciative of, inserted into the record. We have timing lights to assist you so that we will be able to have a good give and take. When the green light turns yellow, there will be two minutes remaining.

Mr. Greenwalt, if you could proceed, we'll go in the order of introduction. Thank you.

PANEL V: ADMINISTRATION PERSPECTIVES

STATEMENT OF MR. WILLIAM C. GREENWALT DEPUTY UNDER SECRETARY OF DEFENSE FOR INDUSTRIAL POLICY, DEPARTMENT OF DEFENSE, WASHINGTON, D.C.

MR. GREENWALT: Thank you to the cochairmen and other members of the Commission. I have prepared formal answers to the questions asked by the Commission which I have already submitted for the record. The bottom line is that DoD buys no military significant items from China. In fact, we are prohibited by statute from doing so in Section 1211 of National Defense Authorization Act of 2006.

If we needed to buy a munitions list item from China, we'd be required to obtain a waiver and no waivers to date have been given. We are examining one potential case where it appears that the U.S. or reliable foreign sources may no longer be available to supply a munitions list item, and a source in China may be the only one available. We are working to mitigate this case and develop a reliable U.S. or allied source before we're put in the situation of buying from potential Chinese sources.

This case involves a chemical used in various missile programs. We currently have a sufficient amount of this material on hand for the near term, but are exploring our options for the midterm.

There are also statutory prohibitions against acquiring Chinese commercial items. For example, there are no exemptions to the Buy America Act for China and, thus, DoD is precluded in most cases from directly buying commercial products from China because we must increase the price by 50% for evaluation purposes.

At the sub-tier level, it gets a little bit more complicated. As I stated before, we are prohibited by law from incorporating Chinese munitions items at any tier in the contracting process. There is, however, the potential of buying commercial products that incorporate Chinese parts at the sub-tier level from either U.S. or foreign sources who are statutorily exempt from the Buy America Act.

However, in the latest studies the department made in 2001 and 2004 of the foreign subcontractor content in weapon systems, we found no use of Chinese parts in these weapon systems.

Now could there be Chinese parts in other commercial items that are not in traditional weapon systems the DoD buys? Perhaps. For example, there may be some Chinese content in commercial off-the-shelf auto parts we buy.

As commercial companies set up manufacturing operations in China, it is possible that some of these products will turn up in the DoD supply chain. If they do, DoD needs to do the risk/benefit analysis necessary to ensure that these products do not pose any

national security risk through, for example, tampering and then mitigate those risks if necessary.

My biggest concern for the future is in the microelectronics area, and my concerns don't stop with China. To address this issue, DoD has established a defense-trusted integrated circuit strategy to reduce risks related to the microelectronic supply chain and life cycle management.

The commissioners may ask the question why are we buying commercial items at all? Can't we insulate ourselves from commercial supply chain globalization trends? I believe that we cannot affordably do so.

Globalization of supply chains is the reality of the 21st century and the department has to develop a strategy to reap the benefits of this globalization and mitigate the risks. This is because even though DoD spends significant sums of taxpayer dollars, these sums put in perspective in the global economy are small.

The DoD budget is the equivalent of the gross domestic product of the Netherlands, and like the Netherlands, we cannot afford to replicate what is widely available in the commercial marketplace.

While DoD has limited resources and does not have the purchasing power to drive mature global markets, we do have the research and development funds and the requirement to push the technological envelope that we can create new markets for technology. This is where we need to put our resources in the future.

DoD has historically been the genesis and the driver of many global commercial businesses, microelectronics, satellite communications, GPS, the aerospace industry, and materials such as titanium and composites, to name a few. When these industries take off commercially, DoD gets to take advantage of global market forces, which frees up resources to invest elsewhere.

The tradeoff is that we have to accept commercial standards and business supply chain decisions, but in return we get to buy these products at a fraction of the cost to produce a military-unique solution.

Buying commercial items allows us to save money to support those defense-unique, defense-dominant markets that don't take off commercially or are not expected to take off commercially. This is our unique-defense industrial base.

These suppliers have very little if any commercial business. DoD is the sole or predominant customer, and this base requires active management. If we have a sole source for a capability we need in the future, we have to ensure enough work is going to go to this source. We cannot afford for these sources to go out of business and sometimes are forced to pay for excess capacity to maintain those capabilities.

Because of the cost to maintain them, it is not in DoD's interests

to have too many defense-unique suppliers. To free up dollars for research and development and to support the unique defense industrial base, Congress in past administrations and this administration have recognized the need to leverage the commercial marketplace.

The acquisition reform initiatives of the 1990s resulted in legislation, Title X, Section 2377, which required DoD to take maximum advantage of the commercial marketplace. DoD needed to reach out and change how it did business to entice commercial manufacturers to do business with DoD. Congress provided legislative authorities and incentives to support this goal.

As a result, we have been very successful in incorporating commercial items into DoD systems. However, as commercial markets evolve, it is likely that foreign content in commercial items, to include Chinese commercial subcomponents, will increase. Thus, the Commission raises a very important issue today, and the department will need to address the risks and benefits of these potential transactions in the future.

Thank you. I turn to my colleagues.

[The statement follows:]

Prepared Statement of Mr. William C. Greenwalt
Deputy Under Secretary of Defense for Industrial Policy, Department of Defense, Washington, D.C.

What key defense-related U.S. industrial capabilities have moved substantially or entirely to China? How has that affected the dependability of the United States' supply of those industries' products?

The Department of Defense (DoD) sees little defense industrial vulnerability regarding China for the foreseeable future.

By law, the Department is precluded from procuring goods or services on the munitions list of the International Traffic in Arms Regulations from Communist Chinese military suppliers. Section 1211 of the National Defense Authorization Act for FY 2006 (Public law 109-163) prohibits the Department from procuring such goods or services from any "Communist Chinese military company." The Department has implemented this prohibition via DoD Federal Acquisition Regulation Supplement 225.770 and 252.225-7007. Because of the difficulties in identifying "Communist Chinese military companies," the prohibition applies to solicitations and contracts involving the delivery of items covered by the United States Munitions List from any entity that is "A part of the commercial or defense industrial base of the People's Republic of China" or "Owned or controlled by, or affiliated with, an element of the Government or armed forces of the People's Republic of China."

With the two possible exceptions discussed below, the Department is not aware of any key defense-related U.S. industrial capabilities that have moved substantially or entirely to China.

- There are certain commercial microelectronics for which domestic production has largely ceased in favor of foreign production, including production in China. To address risks associated with such overseas production, the Department is developing a comprehensive approach for managing microelectronic and related electronic hardware risks to assure both material reliability and

availability. This initiative is a continuation of the work begun when the Deputy Secretary of Defense established a Defense Trusted Integrated Circuit Strategy in October 2003. The Department's objective is to align current initiatives and related recommendations into an overarching microelectronic strategy that includes trust, diminishing sources, and product assurance; and that addresses both Government and Industry risks related to microelectronic supply-chain and life-cycle management. It will consider the perspectives of the Department's Acquisition Technology and Logistics, Intelligence, and Network Information and Integration Communities, as well as those of the U.S. defense, aerospace, and electronics industries.

- China dominates the market for production of certain high performance magnets (primarily rare earth and aluminum-nickel-cobalt magnets) that are important to defense applications such as radar systems, submarine valves, missiles, military aircraft, inertial devices, and precision-guided weapons. Domestic production of these magnets has declined over the past decade. However, DoD demand for these magnets is less than 0.5% of worldwide demand, and the Department is able to access the high performance magnets it requires from domestic sources. The Department is examining whether there is any likely future risk to the domestic high performance magnet industry that would require DoD action.

The Department does not consider Chinese suppliers to be reliable sources for important defense products, and it acts accordingly. The Department of Defense procures very few defense articles and components from foreign suppliers at all. In Fiscal Year 2005 (that last year for which data has been reported), the Department awarded contracts to foreign suppliers for defense articles and components totaling approximately $1.9 billion, only about 2.4% of all such contracts. None of these procurements were from suppliers located in China.

The Department periodically evaluates the foreign content of selected defense systems to determine the extent to which defense systems use foreign suppliers. The two most recent assessments were conducted in 2001 and 2004. These assessments have indicated there is relatively little foreign content at the subcontract level either (only about 4% of the value of contracts for the systems studied in 2004), and neither study identified any Chinese suppliers. Other DoD analyses have yielded similar results.

The Department is not aware of any Chinese sources of importance for DoD systems. There may be some relatively few, globally-available, commercial off-the-shelf items such as standard, non-military, auto parts that are incorporated into DoD systems that may have been produced by Chinese manufacturer far down the supply chain. The Department has no specific information that such suppliers have been incorporated into DoD systems; but, in any case, would not normally consider such incorporation to constitute a foreign vulnerability or national security risk.

If the Department does become aware of an instance where it is reliant on China for an important defense item or component, it will take steps as necessary to secure another source.

Of what analytical studies or research projects in the public or private sectors are you aware that have produced data about the degree to which U.S. military systems rely on components and replacement parts manufactured in China, either by Chinese domestic industries or foreign-owned corporations?

Other than the studies noted above, I am not aware of any public or private sector studies that have produced data that specifically addresses the degree to which U.S. military systems rely on components and replacement parts manufactured in China.

If there were to be a need to surge production of defense articles, in which categories of materiel on which U.S. armed forces depend would U.S. industry likely find it difficult to meet increased demand?

The industrial base capabilities supporting defense generally are sufficient to meet current and projected DoD requirements. However, the Department occasionally encounters difficulties when it needs to rapidly surge production of critical defense products in defense-unique or defense-dominant industry segments where broader commercial industrial capabilities cannot be leveraged. The Counter Radio-Controlled Improvised Explosive Device electronic warfare program and the Mine-Resistant Ambush Protected vehicle program are two current examples. In such cases, the Department works closely with its industry partners to prioritize its requirements and to increase production capacities where appropriate. To do so, it uses all of the tools at its disposal including authorities under the Defense Production Act and the Defense Priorities and Allocations System (DPAS). In no such cases has the Department identified Chinese firms within the supply chain.

If Chinese sources of supply were cut off or constrained, which U.S. national security/military capabilities would be most affected and how?

As indicated above, the Department has no information to suggest it relies upon suppliers located in the People's Republic of China

What steps do you believe the U.S. Government should take to ensure that the U.S. military will have reliable, uninterrupted access to all parts and equipment it requires?

The most important action the Department of Defense can take to ensure uninterrupted access to parts and equipment is to continue with its current practice of using only reliable suppliers. Under most circumstances, reliable foreign suppliers can be domestic or foreign.

Where possible, the Department also should increase its use of commercial items because this will improve its ability to secure increased production when needed. As previously discussed, the Department generally faces surge difficulties only when attempting to rapidly increase production of defense-unique or defense-dominant items. Production capabilities for these items generally are sized to meet DoD program-of-record requirements, and if emerging operational conditions lead to rapid and significantly increased requirements, there can be a lag in expanding industry to meet the new demand. The Department is better able to surge production when it can draw from a much larger commercial market that has inherent "extra capacity."

When absolutely necessary, the Department can intervene directly in the marketplace to create or expand domestic production capabilities as necessary to meet military requirements. The Department is doing so now to ensure it will continue to have access to high purity Beryllium metal. Because of it unique properties (including high stiffness and strength to weight ratios, thermal conductivity, and reflectivity to infrared wavelength) high purity Beryllium metal and its primary high Beryllium content alloy (Aluminum-Beryllium metal matrix composite or AlBeMet) have wide ranging defense applications including in sensors, structures and components in missiles, satellites, fighter and rotary aircraft, and nuclear weapons. Brush Wellman is the only Beryllium metal producer worldwide that can meet the Beryllium quality requirements of the highest purity defense and essential civilian applications. However, Brush Wellman mothballed its 40 year-old primary Beryllium metal production facility in October, 2000 for economic and occupational health reasons. Since then, Brush Wellman has relied on Beryllium vacuum cast ingot from the inventories of the National Defense Stockpile at the Defense Logistics Agency for the highest purity Beryllium material applications; and on less pure Beryllium metal acquired from Kazakhstan for

production of AlBeMet. To rectify this situation, the Department initiated a Defense Production Act Title III project to jointly fund with Brush Wellman the design and construction of a new Beryllium metal production facility, scheduled for completion in 2010.

Finally, the Department must continue to be prepared to use its existing authority under 10 U.S.C. 2304 (c)(3) and implementing DoD Federal Acquisition Regulation Supplement provisions. The Department can, and has, formally established restrictions within the DoD Federal Acquisition Regulation Supplement on the use of foreign products for certain defense applications, when necessary to ensure the survival of domestic suppliers required to sustain military readiness. These restrictions are imposed by administrative action (that is by a DoD policy decision, not statute). Currently, the Department has administratively-imposed foreign product restrictions for periscope tube forgings, ring forgings for bull gears, and ship propulsion shaft forgings.

STATEMENT OF MS. TINA BALLARD
DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR POLICY AND PROCUREMENT, DEPARTMENT OF DEFENSE
WASHINGTON, D.C.

MS. BALLARD: Good morning, Madam Chairman, Vice Chairman and members of the Commission. On behalf of the Army, we thank you for the opportunity to be here today. The Army is well aware, of course, of the proscription on buying from the People's Republic of China, and we are complying with that proscription.

In response to a recent HACD question, we did a search of our databases and determined that in 2006, we have purchased nothing from China, and also based on our review, we've determined that we, in fact, purchase very little from non-U.S. sources in terms of percentage of overall procurement dollars.

We are aware, as Mr. Greenwalt has iterated, of some very minor issues related to the People's Republic of China, and one of those is butanetriol, which is a chemical used in Army rocket motors, but as he has said, we are looking into this for options. We currently have a 12 to 18 month supply of that chemical.

We have also been, of course, surging the industrial base since September 11, and we have focused primarily on things such as steel and tires in that surge. We have not relied on China for anything that we need to surge in response to the September 11 attacks.

If Chinese sources were cut off at this time, there's no impact that I know of or that the Army has identified. We agree with Mr. Greenwalt's assessment that we are not, to our knowledge, buying anything or very minimally indirectly or directly from China.

That's all I have.

STATEMENT OF REAR ADMIRAL KATHLEEN M. DUSSAULT
DEPUTY ASSISTANT SECRETARY OF THE NAVY FOR
ACQUISITION AND LOGISTICS MANAGEMENT
U.S. DEPARTMENT OF DEFENSE, WASHINGTON, D.C.

REAR ADMIRAL DUSSAULT: Good morning. Cochairmen Brookes and Wessel and members of the Commission, thank you very much for the opportunity to be here today to talk to the U.S.-China Economic and Security Review Commission. As Deputy Assistant Secretary of the Navy for Acquisition and Logistics Management, I am responsible for acquisition contracting and logistics policy and advice to the Assistant Secretary.

As my colleague, Mr. Greenwalt, stated earlier, the Department of the Navy does not buy any end-use products from suppliers located in China. We have, however, established contracts for services and supplies associated with ports of call in China. The Navy does not have visibility into commercial items indirectly purchased via second and third-tier producers.

We are concerned with the health of the United States' defense industrial base and uninterrupted access to material, parts and equipment in support of our war fighting capability for the Navy and Marine Corps. Our nation's shipbuilding industrial base is a critical domestic resource. The Navy is successfully partnering with industry to maintain its capabilities under global pressures.

Despite having experienced a 40 percent reduction in workload since the end of the Cold War, the industry has adjusted their workforce to meet the Navy's shipbuilding requirements. It is essential to work with industry if we are to retain a viable U.S. shipbuilding industrial base to meet the Navy's requirements for an affordable and capable force structure.

The Navy continues to analyze operational requirements, ship designs, and costs, acquisition plans and tools, and industrial-base capability to further improve its shipbuilding plan.

Full funding and support for execution of this plan is crucial to transforming the U.S. Navy to a force tuned to the 21st century and its evolving requirements. We also recognize that the industrial base must rely on foreign sources for access to some raw materials and manufactured products.

Fair and effective trade policies are inherently critical to maintaining that flow of goods. Through adherence to the Barry Amendment, use of diminishing manufacturing sources and material shortages identification, notification and flagging operation system, we are monitoring items and sources of supply that may be critical to

our nation's security.

As my colleague also stated, we are prepared to use our existing authority under the Federal Acquisition Regulations and the implementing Defense Federal Acquisition Regulation requirements to restrict procurements to domestic sources if such action is required for national security reasons and no other viable alternatives exist.

With weapon systems that operate across the spectrum of warfare, land, sea and undersea and air, the Department of the Navy relies as well across a spectrum of the entire industrial base. A surge in requirements straining available resources or a denial of access to sources of supply in any category of material could significantly impact our capabilities.

Close monitoring of the industrial base and the availability of critical resources is required to ensure our ability to respond and mitigate the impacts should those conditions occur.

Exercising the capability of the large commercial item industry has added robustness to our surge capability. As previously discussed, it has conversely reduced our visibility into sources of supply at the sub-tier levels in the supplier chain.

However, the Navy is not aware of any studies other than previously mentioned today of the extensive supplier base for components and replacement parts manufactured in China either by Chinese domestic industries or foreign-owned corporations.

Our success in planning for and avoiding such contingencies is directly attributable to the very close working relationship that we have with the Deputy Under Secretary of Defense for Industrial Policy.

We are especially appreciative as well of the Defense Contract Management Agency's Industrial Analysis Center which has provided many timely and useful analytic studies and reports on industries and material sources vital to producing and sustaining our systems.

With their assistance, we have been able to recognize potential chokepoints and take appropriate action. Sometimes that action may be the need to find alternative sources of material to include foreign sources. As mentioned earlier in my statements, however, to our knowledge, this does not include sources in China.

Thank you for the opportunity to talk with you today, and I turn the chair over to my colleague.

STATEMENT OF MR. TERRY JAGGERS
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR SCIENCE, TECHNOLOGY AND ENGINEERING
DEPARTMENT OF DEFENSE, WASHINGTON, D.C.

MR. JAGGERS: Thank you. Ladies and gentlemen of the Commission, good morning and thank you. I'm pleased to have the

opportunity to participate on this panel and offer a brief opening statement on the Air Force industrial base as it relates to trade with China.

The Air Force faces many challenges in the coming years. While fighting the Global War on Terror, we are experiencing a modernization and recapitalization of our total force unparalleled in Air Force history. Key to this recapitalization is the acquisition strategy focused on providing innovative best value solutions to the warfighter.

In this context of best value, the Air Force recognizes the potential for cost savings resultant from increased competition inherent in global trade.

Globalization tends to be good for acquisition and is encouraged to the maximum extent allowed by U.S. law. Accordingly, the Air Force does not knowingly procure goods or services on U.S. munitions lists from Communist Chinese military companies. Furthermore, we remain ever vigilant to changes in world markets and the potential of foreign influence in our supply chain.

The Air Force continues to hone our processes to ensure changes in the industrial base do not lead to future U.S. reliance on China for critical materials or technologies. To that end, the Air Force is establishing a series of senior leadership councils to monitor the defense industrial base and identify those issues critical to procuring war fighting capabilities from the global marketplace.

Examples include an Air Force Industrial Base Council in the making with supporting working groups that constantly review our reliance on critical materials and components in our current practices for insight into first, second and even third-tier suppliers. Modeled after an existing DoD space initiative focused on quality, the Air Force is confident this forum will help better identify supply chain management issues facing the Air Force not only in space but in air and cyberspace as well.

This will provide actionable recommendations to both Air Force senior leadership and to the defense enterprise at large on emerging issues that could adversely affect other services or agencies.

Finally, we are also closely monitoring the second and third order effects that Chinese trade practices have on commodity markets. For example, projected increase in China's growing consumption of petroleum has already demonstrated upward pressures on the price of oil-based fuel.

As the department's leading consumer of petroleum, we are currently spearheading the evaluation of alternative fuels and engine technologies that will alleviate our dependence on foreign oil and break us away from the influences China is having on the price of oil worldwide.

The Air Force supports the development of domestically produced synthetic fuels to ensure a stable energy supply regardless of political uncertainties in oil-producing countries or the higher costs of oil caused by growing countries like China.

In conclusion, the Air Force continues to monitor the industrial base with an eye towards ensuring we have reliable, trusted manufacturing sources to ensure our nation's security. With this comes many challenges which we are meeting head on by implementing a variety of initiatives that will better posture the Air Force as we prosecute the Global War on Terror and prepare for future contingencies.

Our Air Force leadership is committed to providing sovereign options to our national leadership and will not allow the nation to be coerced by others through manipulation of the industrial base or the supply chain.

Ladies and gentlemen of the Commission, thank you again or the opportunity to make this opening statement, and I look forward to the questions posed by yourselves on this critically important subject. Thank you.

Panel V: Discussion, Questions and Answers

HEARING COCHAIR WESSEL: Thank you and thank you to all the panelists for your testimony. We'll begin with Mr. Reinsch, who has to unfortunately step out for a couple of moments after his question.

COMMISSIONER REINSCH: I apologize for having to leave. I'm going to be back, but it may not be before you're done, and Mike has kindly let me squeeze in one question and that's for Mr. Greenwalt.

MR. GREENWALT: Okay.

COMMISSIONER REINSCH: I'd like you, if you would, to elaborate a bit on the trusted integrated circuit strategy. To the extent I understand it, I think it's a smart way to deal with the problem, a smarter way to deal with the problem, than some of the other proposals that have come along in the past. Can you tell us a little bit more about it?

MR. GREENWALT: Sure.

COMMISSIONER REINSCH: And what it entails and how it's evolving?

MR. GREENWALT: Sure. There are a number of pieces to the strategy, and my office is trying to bring together the various pieces. First of all, there's a recognition that for the vast majority of microelectronic applications, we're going to rely on the commercial marketplace. That's something that we have to make that tradeoff and the amount of money we'd need to replicate that is extremely difficult.

So for the vast majority, we would rely on basically quality and anonymity and various ways of addressing a risk whether we needed to apply--what application needed a higher level of security. For those circuits that require a higher level of security, we'd be looking at what has just been established as a trusted foundry and right now--and trusted sources of production.

The higher applications, we have a plant up in New York, IBM runs, which is producing those particular circuits, and that's the trusted source segment of it.

The third piece is that there are a lot of commercial items and actually noncommercial items, microelectronics, in our systems today that are no longer being produced, and so we are looking to new sources, diminishing manufacturing sources, to replicate those. The commercial marketplace doesn't want to deal with the number--

COMMISSIONER REINSCH: You mean no longer produced anywhere?

MR. GREENWALT: No longer produced anywhere. Yes, they're in our systems. They were produced in the '70s, '80s, '90s, so we have a diminishing manufacturing segment of that as well. So there are kind of three portions of it:

The commercial marketplace and how we buy, primarily ensuring that through anonymous buying, we're getting what everyone else is getting in the marketplace.

Second, the trusted source, the actual real trusted sources here in the United States who are producing these high-end microcircuits.

And finally, our diminishing manufacturing part of it which is basically run out of Sacramento.

COMMISSIONER REINSCH: Thank you, and thank you, Commissioner Wessel.

HEARING COCHAIR WESSEL: Thank you. Commissioner Wortzel.

COMMISSIONER WORTZEL: Thank you very much for your testimony. It was direct, it was right on the point, and I take your statements on munitions list items to heart. I think that's a good thing.

I do have three questions, and I think they're going to address in one form or another every member of the panel. For Mr. Greenwalt and Admiral Dussault--is that the--

REAR ADMIRAL DUSSAULT: Yes, sir.

COMMISSIONER WORTZEL: Thank you. Three years ago in Akron, Ohio, the Commission had testimony from the sole manufacturer of United States sonobuoys, that the only available manufacturer of the printed circuit boards used in those sonobuoys is in China. That's not a munitions list item. Kind of a critical item though. Is that still the case?

Ms. Ballard, in 2006, in Detroit, the Commission heard from

witnesses with the Army Materiel Command that AMC couldn't repair equipment damaged in Iraq without critical components from the People's Republic of China.

Again, these are not items on the munitions list. But could we face the same kind of situation with respect to repairing and replacing our heavy equipment or armored equipment that we did with the Switzerland case if the Chinese somehow didn't quite like some of our policies? Has that situation changed?

And for Mr. Jaggers, are any aircraft fuselage or control components sourced in China specifically for transport or refueling aircraft used by the United States Air Force? Thank you.

And you may not have those answers today so I recognize that, but I think you could just let us know if you're able to.

MR. GREENWALT: Admiral, I think you can answer the sonobuoy one.

REAR ADMIRAL DUSSAULT: Yes. Regarding the sourcing of sonobuoys, the Navy had no direct contracts with any suppliers in mainland China. The question becomes where do they source their sub-tier suppliers? And I was reading some of the testimony ahead of this Commission, and there's anecdotal information that they feel pressurized to get the best possible price on the global market, and that some of those sources appear to be from China, but received no direct evidence that there were suppliers in PRC.

But I think that speaks to the generalized pressure on all producers and manufacturers to get the best possible price, and many of those commodities are available from China. So that's as much direct information I have on that at this time. Yes, sir.

MR. GREENWALT: You want to try the AMC?

MS. BALLARD: I don't have an answer on the AMC question, but I'll be happy to get one for you.

MR. JAGGERS: Your question is am I aware of any fuselage or control actuator systems in transport or refueling aircraft, so the two that that would entail is the existing fleet of 135s and the KCX. I'm not aware of anything in the existing legacy fleet of 135s and the KCX is going through a procurement right now. So it's premature to--I only can say certainly we're in compliance or aware of the law and going to comply with the law, but I'm not aware of any issues pending on KCX that would require attention in that area.

But I'll take it for the record, and I'll come back and get you a proper, more in-depth response.

MR. GREENWALT: I think to go back on the integrated printed circuit board question, that kind of gets back to Mr. Reinsch's discussion there, and as that supply chain does globalize, DoD as part of its trusted integrated circuit strategy needs to be looking at in each program what chips we have, what they're being used, assess the risk

of either intellectual property theft, tampering, the degree of product reliability, where we're getting these sources, you know, and so on.

And then make a determination whether that particular application needs to be produced or not, and the problem we have is it's very expensive to produce trusted sources, and when DoD is a tenth of a percent or whatever of the microcircuit market, we don't drive that market; therefore, we have to make the tradeoffs.

And if we want to have a trusted source, we're going to pay for it. Now, in certain cases, we absolutely should, and intelligence surveillance, and the question is when we should? And in this particular case, I don't know the particulars of it, but it's one of those areas where we should make the risk/benefit analysis.

HEARING COCHAIR WESSEL: Thank you. Commissioner Brookes and cochair.

HEARING COCHAIR BROOKES: Thank you. I just had one question. I think the microelectronics thing was covered. Mr. Greenwalt, in your oral testimony, I wasn't able to find it in your written testimony, but you used the phrase that caused me a bit of concern. You talked about--correct me if I'm wrong--you said that we are not getting any militarily significant goods--

MR. GREENWALT: Yes.

HEARING COCHAIR BROOKES: --from China. Now, military significant is a very strong qualifier, and I would hope that you could define that for the record.

MR. GREENWALT: Absolutely. Military significant, I would define as on the munitions list. So, in that particular case, that is what's prohibited by the Section 1211 of the NDAA. So the way I would parse this out, you have your munitions list items and military significant items there. Then obviously you have dual-use items which have military applications. Then you have commercial off-the-shelf applications which may be used by the military but aren't necessarily controlled under the Export Administration Act or under a typical dual-use export control license.

HEARING COCHAIR BROOKES: Can you give me any sort of percentage as to what percentage of dual-use commercial off-the-shelf items come from China that are used in military equipment?

MR. GREENWALT: The studies that we have conducted in 2001 and 2004, we were required by Congress to look at sub-tier foreign content in weapon systems, and we found no Chinese content in those weapon systems.

HEARING COCHAIR BROOKES: So it's zero now. Have you been required by Congress to do one since 2004?

MR. GREENWALT: We have not. The issue with each of those studies is that it's incredibly difficult to do. In other words, each

system, as you go dive down into the 12th tier, it's a process that IS something we probably don't want to repeat every year because it's just something we just--

HEARING COCHAIR BROOKES: But you haven't done one since 2004?

MR. GREENWALT: We haven't done one since 2004.

HEARING COCHAIR BROOKES: And there's been no legislation requiring you to do once since 2004?

MR. GREENWALT: There has not, no. No, there has not.

HEARING COCHAIR BROOKES: That's something the Commission may want to consider as a recommendation as to whether the Pentagon--

MR. GREENWALT: Oh, I'm sorry. I was corrected.

HEARING COCHAIR BROOKES: All right.

MR. GREENWALT: We did the 2004 on our own.

HEARING COCHAIR BROOKES: You did the 2004 on your own.

MR. GREENWALT: We were mandated in 2001 and we did the 2004 on our own.

HEARING COCHAIR BROOKES: Okay. Do you have another one planned?

MR. GREENWALT: At the present time, I do not, but--

HEARING COCHAIR BROOKES: Okay.

MR. GREENWALT: But it may be a time to do another one.

HEARING COCHAIR BROOKES: Okay. Thank you. I think the Commission should look at potentially in the recommendations at the end of the year whether Congress should require another one be done since one hasn't been done since 2004.

Thank you.

HEARING COCHAIR WESSEL: Thank you. If I could, Mr. Jaggers, I hope I'm pronouncing your name correctly.

MR. JAGGERS: Yes.

HEARING COCHAIR WESSEL: I'd like to have some understanding about leakage of technologies and what may happen, understanding your military significant definition. My understanding is we're looking, for example, at the development of the Boeing 787, is that there has been a question of leakage potentially of stealth technology.

As Boeing having done the B-2 over years, the question of, as that new system is being developed, as there are some co-production agreements, et cetera, that we may see enhancements of Chinese military capabilities from the co-production and migration, if you will, of our manufacturing, outsourcing, et cetera, over many years. This goes to other industries certainly as well of what we may do to enhance them.

What issues have you seen with the 787 and the potential stealth leakage and how are those being addressed?

MR. JAGGERS: I can't comment to any leakage of LO or stealth, low observable or stealth technologies.

HEARING COCHAIR WESSEL: Right.

MR. JAGGERS: I'm just not aware of--

HEARING COCHAIR WESSEL: My understanding is there was some questions early last year about certification of Boeing's activities as it relates to prior stealth technology and how that would be used in the future in the development of the 787 and what production would be done in China. Were you not involved in that?

MR. JAGGERS: No, I wasn't, but I'll take it for action and get you an answer.

HEARING COCHAIR WESSEL: If you could, that would be helpful.

MR. JAGGERS: You bet.

HEARING COCHAIR WESSEL: Second of all, and Commissioner Wortzel related some of the testimony we've had over the years on various anecdotal information, clearly not a comprehensive look, and I should point out we've just commissioned a study on three systems which we hope that we can work with you on to go down below the tier two, tier three suppliers to understand what's happening since your 2004 study, that we can update that just on a couple of systems, as well.

What concerns do you have about what capabilities there may be for surge capacity here in the United States? As our manufacturing base declines in size and in skills, if we have to go into some kind of surge, whether it's Humvees or some other MRAPs or other activities, what capabilities are you most interested in keeping? What are you doing about any of those issues at this point?

MR. GREENWALT: We have been able to, and I think Ms. Ballard can probably also address this, we have been able to surge in the capabilities that we have wanted in this particular conflict probably not as fast as some folks would like, but the issue becomes a requirement as far as when you--we have to decide what it is we want and then it's going to take the industrial base some time to respond.

We're currently surging MRAPs, as you're well aware, and MRAP is very interesting because it's not a unique defense surge we're doing here. In other words, we're leveraging the commercial base. These vehicles to a great degree are depending upon many commercial products, be it transmissions or axles or tires and so on, as a matter of fact, from a company that you're associated with as well.

It's been a great partnership of accessing that base, but that base is not just U.S., it's global. We have our allies are contributing very much to this particular surge.

The issue with surge is you can plan for surge and you can waste a lot of money keeping excess capacity around that you're never going to use, and we have to be very careful to take a look at what capabilities we want to have in the future, and it is very prudent to rely on commercial surge because then they can bop up their production and move down, and we don't have to continually pay for it. And that's essentially what we're doing with MRAP and what we've done in many other areas.

Where I'm concerned about right now on MRAP is in steel and in tires, and steel, even though we have--DoD buys about, I think, three-tenths of a percent of the U.S. steel production, so we are a minuscule buyer in steel. However, we have one plant in Pennsylvania that really provides the type of steel we need for armored steel. So we're moving around, looking at a plant in Oregon, looking at a plant in Canada.

We have some domestic source restrictions that preclude us from getting there, but we're getting around that to ensure that we can access, but when you only buy three-tenths of a percent of the steel industry, it's hard. It's hard, and to get the right machines and the right things that we want, so I think we have been successful in doing it.

There's been a policy in the last several decades of trying not to pay for or limit the amount of excess capacity we have because we want to take those dollars and move them into other parts of the department.

Tina, do you have anything?

MS. BALLARD: You've actually covered all of the key points. Our focus is, as you've said, on steel and on tires, and also in terms of when we go to surge one program, what the implications of that are on being able to provide for other systems and requirements in the department.

MR. GREENWALT: And so we have the Defense Production Act authorities, the Defense Priorities Allocation System; the use of the DX rating on the MRAP allows us to take current production and move it into those systems we consider the most important.

However, we have to manage, and as Ms. Ballard was saying, other priorities that may need that steel or may need those tires, and we have what's called the PAIR (Priority Allocation of Industrial Resources) process, which is allocating those particular materials right now in this area.

But it's one of those things that you have to manage and we have to have the requirement, the requirement, and once we get the requirement or have a pretty clear idea what the requirement is, then we can plan for surge, and once we get that, I think we do a pretty good job.

HEARING COCHAIR WESSEL: My time has expired.

Hopefully, we'll have another round. Commissioner Blumenthal.

VICE CHAIRMAN BLUMENTHAL: Thank you all very much. I'd like to go to this requirements issue that Secretary Greenwalt mentioned. It seems like that really is the issue when we're talking about - surging - when we're talking about not having the kind of up-armored Humvees or that sort of thing that we wanted in time, it was because we didn't expect the sorts of problems we faced in Iraq, and therefore we didn't have the budget for it, and we didn't have the acquisition capability. That's not really a question of where you're getting the supply. It's a question of anticipating having that requirement; is that correct?

MR. GREENWALT: That is correct. I don't think anyone would have thought that the areas that we had to surge for, counter IED equipment, whether MRAP or electronics to counter IEDS, you would have expected that in the late '90s.

VICE CHAIRMAN BLUMENTHAL: So then it's a question of the top line of our procurement budget requirements anticipating conflict, that sort of thing.

Former Secretary of the Navy, John Lehman, made a point about China's shipbuilding versus our own, how many ships they're turning out with military applications versus our own. But again, that seems to me a question of our top line defense budget, the fact that it may not be going up to where we need it to be.

Let me ask all of you this question. If we anticipate right now that we are going to need more vessels, anti-submarine warfare, bombers, because of contingencies in the future with China, would this country be able to respond to that requirement should we allocate and appropriate the money for those requirements?

MR. GREENWALT: The private sector is remarkably adaptive to our needs when we have the budget. Now that requires effective management and so on, but if we needed to surge in certain areas, I have no doubt that with the proper planning and nine to 12 month lead times for materials, for refurbishing installations, for getting welders, we could build up.

The issue is one of requirements and the issue is one of budget, and I think that as we manage the industrial base, as I was trying to point out in my opening statement, we have various industrial bases to manage.

The defense-unique one, of course, which is shipbuilding, that's a defense-unique, defense-dominant, and we maintain that base. We have other bases--we have the commercial base--if we decide to replicate the commercial base somewhere and make it defense-unique, we're putting more resources in there and that takes resources away from investing in the future, and those are the future technologies.

Those future industries are the ones that DoD really needs to invest in to stay ahead of any potential adversaries, and that's another industrial base that we're starting to develop. And the way the cycle works is once we develop those, if there's a commercial application, they will become part of the commercial marketplace.

So, as I look at where we put our money is where the industrial base is going to be, and we have to decide whether we're going to put more money in defense dominant, we want to leverage the commercial base, we want to put money into new technologies, and the reality is we want to do all three, but we have do portfolio management.

VICE CHAIRMAN BLUMENTHAL: The budget is not there for it or the procurement budget has not been growing because of current operations and because of other types of issues at operations and management? Is that a correct characterization?

MR. GREENWALT: I think if we were to have additional budget, there would be places to put it, yes.

VICE CHAIRMAN BLUMENTHAL: It is a fair characterization to say that the pressures in terms of going out into the global supply chain and finding foreign supplies, even at second and third tiers, the pressures are on the entire acquisition system because of budgetary restrictions and budgetary requirements versus let's say the nature of the economy?

I guess the other way to ask this question is if DoD changed its acquisition and budgetary strategy based on higher level procurement and acquisition budgets, would you find the same pressures to go out and find the best values on a global supply chain?

MR. GREENWALT: There are two ways to do this. We could unnecessarily raise the defense budget and invest in and replicate industries that are already providing commercial products, and I think that would be not a wise use of taxpayer dollars, but if we were given more dollars, we may choose to invest in newer technologies.

I think, and if we invested in more platforms, you would see the industrial base adjust to that increased number as it adjusts to a decreased number.

I do think, though, we would still want to, as far as to save the taxpayer dollars, we would continue to leverage commercial base because there is just no reason for us to replicate that unless there's a real national security risk.

VICE CHAIRMAN BLUMENTHAL: Thank you.

HEARING COCHAIR WESSEL: Chairwoman Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you. Thank you to all of our witnesses today, both for appearing before us and also for all of the service that you do. We know that you are under an enormous amount of stress these days with a lot of demands on your time, and I think we probably should have been clear that our interest is not so

much in making sure that you're complying with the laws, but making sure that the laws that we have on the books are sufficient to address all of the challenges that you all face in making sure that our warfighters have what they need.

I'd like to ask a little bit about the non-munitions list issue, sort of getting right to the heart of our manufacturing base because it really does strike me, Mr. Greenwalt, in particular, that the ability of a DX rating to work is that there are people out there who can produce the product or are producing the product which you need for DX ratings.

Last year when we were in Dearborn, a lot of concerns were raised about our tool and die industry, and I believe somebody even mentioned that we no longer have the domestic capability to manufacture triggers for Howitzers, basic things like that.

And we learned that industry analysts in the auto industry predicted that of the 800 parts manufacturers in business in 2000, only 100 will remain by 2010. That's a pretty significant decline, and what do we do to make sure that the military can get the products that it needs from a reliable source as the people who are doing the manufacturing are going out of business or moving overseas?

MR. GREENWALT: I think there are a couple of ways to go about this. Let me try to respond in this way. The issue becomes can the department in its budget actually make a difference in those markets? I think there is a perception that DoD has enough market power to make a difference.

For example, in Iraq today, we have I don't know how many trucks in Iraq, but a lot of trucks. Actually Ms. Ballard's organization buys a lot of trucks. And in those trucks, we have Caterpillar engines, and so we buy I think predominantly or almost all Caterpillar engines.

Despite all the trucks we have and everything in Army's budget buying trucks, we purchase about one percent of Caterpillar's overarching sales. One percent, to us it's everything, but to Caterpillar, it's one percent, and so the whole supply chain, our demand is one percent of those engines, and going down all the way down into the machine tool machine and so on.

So we could do one of two things. We could go to an Army depot and try to produce our own engines and figure out all the different ways of doing that or we buy Caterpillar. So we are dependent to a great degree on the manufacturing output of the entire U.S. industry and decisions made by Caterpillar or made by the auto industry, and then so on, and where they fail or where they can't meet our needs, then we have to try to figure out a way to do our own sources. But we don't drive that market, and that's what--

CHAIRMAN BARTHOLOMEW: But isn't there a risk to our defense equipment if of that one percent of Caterpillar's production that you buy--

MR. GREENWALT: Yes.

CHAIRMAN BARTHOLOMEW: --Caterpillar is no longer manufacturing in the United States and ends up doing all of its manufacturing in China? Isn't there a risk that the Chinese government could decide that they would shut down Caterpillar's plants or just not allow the production to take place or disrupt the production or something?

MR. GREENWALT: If we go down that path, then we'll never buy Caterpillar because these are private sector decisions, and Caterpillar itself has made a decision to globalize the supply chain. The profit levels in Caterpillar right now are great because of they have done.

CHAIRMAN BARTHOLOMEW: Right. We're just using it as an example.

MR. GREENWALT: I know, but it's the same thing. These firms are going to make decisions, and the Defense Department is not going to be able to influence those decisions to a great degree.

If we had 50, 60, 70 percent of the market share, yes, we could basically say we'd like you to do "x," but when we rely on firms that only provide us a half a percent or one percent--even Boeing commercial aircraft, we only buy three percent of the commercial aircraft that Boeing produces. We're a significant customer but we're not the largest customer.

CHAIRMAN BARTHOLOMEW: So as companies see themselves increasingly as multinational and not as American companies, their sense of obligation to the Department of Defense might not be as strong.

MR. GREENWALT: We are another customer. And so, and now we can--I'll leave it there.

CHAIRMAN BARTHOLOMEW: Okay. Thank you.

MR. JAGGERS: Ma'am, may I take a stab?

MR. GREENWALT: Yes.

CHAIRMAN BARTHOLOMEW: Yes.

MR. JAGGERS: I'm making some notes as we've been listening to this a little bit. I think the key to this is time. If you can remember to be vigilant and be in tune with the industrial base issues or your suppliers that you're relying on like Caterpillar, and you can see that on the horizon, and that's the challenge is getting that insight, there are a number of things we can do.

First of all, we can look at in some cases nonmaterial solutions. In other words, what can you do without relying on that particular technology or component and do a different operation or tactic or procedure. If you're going to stay with that current generation of technology, look at alternative suppliers, not only in the U.S. but worldwide.

We have investments that our laboratories are making in science and technology, as well as small business innovative research, as well as partnerships with other U.S. manufacturers through independent research and development, IRAD.

There are other authorities, Title III and some other authorities, if it gets down to that, and you have to bring on--or get yourself in a position of producing an on-shore supplier before that Caterpillar event takes place, and then of course, probably the last option is produce it ourselves. It's not a good option.

But I looked through all these different options and I think the key to that all is time because S&T is not--science and technology and things like that, it's not going to be an immediate solution, but given time, we can look for alternative ways to not try to coerce Caterpillar to meet our needs because we're a minority share of that market, but we have tools in the toolkit, I think.

CHAIRMAN BARTHOLOMEW: Yes. I also think that we have an obligation to make sure that the young people that we send off to fight on our behalf have jobs that they can come home to.

MR. JAGGERS: Absolutely, ma'am.

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR WESSEL: Commissioner Videnieks.

COMMISSIONER VIDENIEKS: A couple questions. What does the Buy America Act require now and how is it applied differently to China?

MR. GREENWALT: Do you want me to do that one or do you want--

COMMISSIONER VIDENIEKS: Ms. Ballard, please.

MR. GREENWALT: Would you like to do Buy America? No, you'd like me to do Buy America.

MS. BALLARD: I'd like you to do it.

MR. GREENWALT: Buy America is a source requirement and a content percentage requirement. And if we have to buy in America, and there are some exemptions.

COMMISSIONER VIDENIEKS: And there's a sliding threshold which is coming down; right?

MR. GREENWALT: Yes. I'll go through the exemption there. If from a U.S. source, if another country wants to sell to the United States, there's a 50 percent preference given to the U.S. firm. And therefore--

COMMISSIONER VIDENIEKS: In other words, a 50 percent add-on is added to the competing price.

MR. GREENWALT: That's right.

COMMISSIONER VIDENIEKS: For evaluation purposes?

MR. GREENWALT: That's right. So now what has happened--Buy America Act does not apply. Let's put it this way. As we have

the Trade Agreements Act has amended the Buy America Act in the sense that countries who we have that have joined the WTO and who have signed the GPA, the Government Procurement Agreement, are exempt from the Buy America Act. So, therefore, those countries that are part of the--and then we have other trade agreements that we've signed.

COMMISSIONER VIDENIEKS: The evaluation favor of 50 percent is not used?

MR. GREENWALT: It is not used. So they are allowed to sell to the U.S. government commercial items. Now, Buy America Act doesn't apply or Trade Agreements Act doesn't apply to munitions items and therefore munitions items always have that 50 percent premium except to 21 countries who we have memorandums of understanding with, and therefore that trade in munitions items is a free trade for those 21 countries.

COMMISSIONER VIDENIEKS: How is China treated differently now?

MR. GREENWALT: China has not signed the GPA so therefore the Buy America Act does apply.

COMMISSIONER VIDENIEKS: So any goods, even not end-use military goods, but component goods, if there were such things coming from China, would have the 50 percent add-on factored in there?

MR. GREENWALT: If you purchased them directly.

COMMISSIONER VIDENIEKS: Right.

MR. GREENWALT: The distinction is directly.

COMMISSIONER VIDENIEKS: Only. Right.

MR. GREENWALT: So a U.S. firm could import up to 49 percent Chinese content and still be called a U.S. product under the Buy America Act. And Chinese components could go through Trade Agreements Act countries and come to the United States in that regard.

COMMISSIONER VIDENIEKS: Transshipped, you're saying; right?

MR. GREENWALT: Yes. So as long as they're substantially transformed the way the law reads, substantially transformed in the Trade Agreements Act country, then those Chinese components could come to the U.S. that way.

COMMISSIONER VIDENIEKS: I have another question that deals with acquisition lead time. I think you mentioned eight or nine months. Does that mean that we have some contracts in place which we can utilize? Because I don't think that one could award a competitive contract of fairly significant value and have the goods delivered in eight or nine months.

MR. GREENWALT: No,

COMMISSIONER VIDENIEKS: And then the question of inventory comes in also. Should we not maintain certain inventories

for critical items even though they're expensive? Even though inventories are expensive? So it's kind of a dual question here.

Does the acquisition lead time include placement of the contract or only issuance and order against the contract and the manufacture and delivery of the critical item?

MR. GREENWALT: It takes time to figure out what we want. It takes time to prepare the proposal. It takes time to have the competition, and then it takes time to actually let the contract, and hopefully after the bid protests that maybe occur, and adjudicate that, we actually let a contract. Then the vendor who wins the contract needs to go through--

COMMISSIONER VIDENIEKS: So my understanding is you're saying that this all inclusive, eight or nine months includes the entire acquisition cycle?

MR. GREENWALT: I think I threw out eight or nine months, and in many cases, I'm kind of thinking--

MS. BALLARD: Lead time.

MR. GREENWALT: --in lead time to start getting parts and materials together and then you got to manufacture it. So there are various lots of eight and nine month periods in this process.

COMMISSIONER VIDENIEKS: It seems short to me.

MS. BALLARD: I think that you're touching on a critical point, as did Mr. Jaggers, that we speak in terms of industrial base often in terms of money. We need to think also in terms of time and it's not just procurement time. It's lead time to get the items that will go into the end product.

So when we think in terms of how we get what we need, I think we need to think in terms of the materials, in terms of the money, and in terms of the time it takes to get the material and produce the end item.

And a lot of times, as Mr. Greenwalt said, the industry is very responsive and frankly patriotic and committed to getting what we need, but time cannot be ignored as a critical aspect of getting those end products.

MR. GREENWALT: And we have to factor the time to get the money.

COMMISSIONER VIDENIEKS: Right. But I think we're talking at cross-purposes.

MR. GREENWALT: Yes, no.

COMMISSIONER VIDENIEKS: I'm saying the estimate to me sounds unreasonably short. You were saying it encompasses the entire cycle, and I cannot believe that.

MR. GREENWALT: No, no, no. Eight or nine months is not the entire cycle. Eight or nine months was the time of getting lead time to get materials in one particular case.

COMMISSIONER VIDENIEKS: I'm just thinking about Humvees in Iraq right now. They have problems getting critical armor. They did have problems. I think it took longer than eight or nine months to go on trucks, jeeps.

MR. GREENWALT: And then you've got to go the lead time with what's the requirement, the lead time for putting the acquisition together, lead time for getting materials, the lead time for manufacturing, and the lead time for delivering and distributing, and that's the type of things we're facing with MRAP today.

COMMISSIONER VIDENIEKS: Thank you.

HEARING COCHAIR WESSEL: Thank you. Hopefully, you have time. We have one commissioner left on the first round, Commissioner Houston.

COMMISSIONER HOUSTON: Thanks so much to all of you for being here. I have a quick, getting back specifically to China, real quick, very specific question. Last year, we had a hearing and Senator Levin came with some lovely fake auto parts in real boxes. They couldn't spell Dearborn right, but other than that, it looked like a legitimate part, and these parts are coming through legitimate procurement streams, these counterfeit parts.

I wondered if in any of your experiences, you've come across this as a problem, and what mechanisms the DoD has in place to make sure that that which seems like a legitimate part really is a legitimate part and not a counterfeit?

Senator Levin mentioned that they were getting into counterfeiting airplane parts as well as auto parts.

REAR ADMIRAL DUSSAULT: I would talk to this problem in terms of the capability that we have for quality control throughout our acquisition process, and we rely on both our own Navy personnel but also more so on the Defense Contract Management Agency who has highly qualified quality inspectors and assessment personnel, and they're aware of this vulnerability, and this is one of the things that they look for throughout the course of the quality inspection process.

So it is a reported problem throughout the global supply chain, and we're well aware that our sub-tier suppliers do source some of their materials throughout Asia and specifically China, and this is one thing to look out for. So it is a concern.

COMMISSIONER HOUSTON: The same for all of you, then.

MR. GREENWALT: I remember back when I first came to the Hill and I worked for Senator Cohen and we did an investigation on bogus spare parts in aircraft parts, and I worked with Senator Levin's staff on a number of how to expand and enhance the quality assurance and management that the Admiral is talking about in the Department of Defense.

So it's one of those areas where you have to remain vigilant.

You have to have the quality control process go all the way down through the cycle. I'm sure there are instances where we can improve that process, and I'm sure Senator Levin is going to focus more and more attention on that, as the department should as well.

COMMISSIONER HOUSTON: Thank you so much.

HEARING COCHAIR WESSEL: For a quick comment, our chairperson.

CHAIRMAN BARTHOLOMEW: Just, I notice when you were talking with Commissioner Videnieks about sort of the procurement process that you mentioned time and you mentioned materials, but I think it's really important that we remember skill set in all of that, too. That we can get all the materials in the world. If we don't have people who are trained and able to manufacture them into what we need, we're going to be in trouble.

MR. GREENWALT: No. Absolutely. The engineering challenge and on MRAP, the welders and getting them trained, and the people part of this is vitally important, critical. Thank you.

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR WESSEL: Thank you for all your time. We did have some follow-up questions that many of the commissioners had. We'd like to be able to work with you and your staff potentially to get some answers to those in the coming days, and thank you for your time, and we will break for about five minutes as the next panel gets seated.

Thank you.

[Whereupon, a short recess was taken.]

PANEL VI: THE STATUS AND ACCOMPLISHMENTS OF CHINA'S THREE-PRONGED "GRAND STRATEGY" FOR DEFENSE INDUSTRIAL BASE MODERNIZATION

HEARING COCHAIR BROOKES: Let's go ahead and get started. Good morning. Today's third panel, will address the Chinese defense industrial base. The Commission is not only interested in the warfighting capabilities of the People's Liberation Army, but also in the manufacturing capacities and organizational makeup of the Chinese defense industry that is being tasked with supplying it.

Joining us today to discuss this issue is Mr. Michael Danis, who is a Senior Intelligence Officer at the Defense Intelligence Agency. He specializes in the Chinese defense industrial base.

Dr. James Mulvenon is the Deputy Director of Advanced Analysis of Defense Group Incorporated, Center for Intelligence Research and Analysis. He specializes in Chinese defense research, development acquisition, as well as weapons of the PLA.

Dr. Tai Ming Cheung is a Research Fellow and Research

Coordinator at the Institute on Global Conflict and Cooperation at the University of California, San Diego. He also teaches a course on Asian security and Chinese foreign policy, and will soon be releasing a book that examines the development of the Chinese defense industrial complex.

Let us remind all of our witnesses that opening remarks should be limited to about seven minutes, if you can, so that we may have maximum time for questions, but that your entire prepared remarks will be made part of the official record and posted on the Commission's Web site which is www.uscc.gov.

The timing lights are there to help you monitor your remaining time. When the green light turns yellow, two minutes remain, and when the light turns red, please conclude your remarks as soon as you are able. One other thing I would ask on housekeeping, it appears that if you could pull the microphone closer to yourselves when you speak and make sure that the red light is on, it will facilitate some in the audience who have had a hard time hearing some of the testimony this morning.

So, Mr. Danis, if we could begin with you. Thank you very much.

STATEMENT OF MR. MICHAEL DANIS, SENIOR INTELLIGENCE OFFICER, DEFENSE INTELLIGENCE AGENCY WASHINGTON, D.C.

MR. DANIS: Good morning, Madam Chairwoman. It's a pleasure to be here today, and I thank you for inviting me to testify today on China's military-industrial complex in its current state. The phrase "the more things change, the more they stay the same" may best describe the state of China's military-industrial complex.

By that, I mean that while there have been numerous changes in China's military-industrial complex since the late 1970s, the bulk of the institutes and factories that designed or built weapons and enabling systems continue to be in business today as state-owned enterprises that are in turn subordinate to large state-owned enterprises or government entities.

There is a chart, a graphic, that we provided to you because the next couple of paragraphs are going to be a little--

CHAIRMAN BARTHOLOMEW: Confusing?

MR. DANIS: --a lot of content to it, but what you really want to focus on is the bottom center of the chart. In the late 1970s, these large state-owned enterprises, or government entities, were known as the Second through Seventh Ministries of Machine Building Industry, later becoming named ministries of industry, i.e., nuclear, aviation, electronics, ordnance, shipbuilding and space, respectively.

With the exception of the Ministry of Electronics, the other five ministries later became large SOE corporations, and in 1998, these five state-owned enterprises were split into two entities.

These entities are listed in the lower center of the graphic here, and the acronyms for these organizations are as follows: China National Nuclear Corporation; China Nuclear Engineering and Construction Corporation; Aviation Industries of China I and II; China Ordinance Industry; China Ordnance Equipment Industry; China Shipbuilding Industry; China State Shipbuilding Corporation; China Aerospace Science and Technology; and China Aerospace Science and Industry Corporation.

The Ministry of Electronics Industry eventually merged with the Ministry of Posts and Telecommunications to become the Ministry of Information Industry, MII, a standards and policy government organization. In the process, China Electronics Corporation was established in 1989 as a subsidiary to MII to manage and provide guidance to the various factories of the former electronics industry.

Since 1998, with reorganization of the military-industrial complex, the electronics industry has been excluded by the Chinese from what they call their military industries, which is not to say that these entities no longer produce military systems. Most of them continue to do so or the commodities they produce are considered dual-use technologies.

Separately, in 2002, the China Electronics Technology Corporation was established to manage the research institutes that were formally subordinate to the old Ministry of Electronics Industry. Again, most of these entities have ties to military programs.

Deng Xiaoping once said "Whether a cat is black or white makes no difference. As long as it catches mice, it is a good cat."

During and since Deng's reign, the institutes and factories of China's military-industrial complex, as well as other organizations such as the institutes of the Chinese Academy of Sciences, have slowly embraced Western industrial management, practices and financing, but with Chinese characteristics.

The above corporations remain state-owned enterprises, but they presumably operate more efficiently. Put another way, the Chinese have a good cat and at times it can be a great mouser.

In May of this year, Li Ronggong, Minister of the State-Owned Assets Supervision and Administration Commission, SASAC, announced that China would decentralize the 159 major state-owned enterprises to attract investors with the exception of those who have operations involving national security or for which foreign investment is forbidden.

On the fifth of July, a week ago Thursday, SASAC, COSTIND and the National Reform and Development Commission issued a joint

statement saying that weapons manufacturers should restructure their finances to introduce more private investment in hopes of embracing competitiveness and profitability of these companies, of these state-owned enterprises.

This does not mean that the Chinese government is abrogating control of these corporations. China uses a split-share structure which consists of tradable and non-tradable stock. The state owns majority shares of the non-tradable stock of these former SOEs. Putting these state-owned enterprises on the stock market does allow these entities to obtain capitalization to fund research and manufacturing.

Rather than having the state solely fund these enterprises, it allows private and/or foreign speculation to cover some of the capitalization costs. So these entities may no longer be called state-owned enterprises, but they remain state-controlled enterprises.

China recently announced that it would allow private Chinese firms to compete on weapons programs. This is a new step in Chinese weapons development, but it is not unexpected. Depending on the degree to which China allows these firms to truly compete in weapons development and production, the institutes and factories of China's military-industrial complex will have to become much more competitive if they are to remain the weapons manufacturers of choice for the State Commission of Science, Technology and Industry for National Defense which picks these firms for production for the People's Liberation Army.

Finally, I'd like to briefly comment on China's macro level research and development efforts. These efforts include China's 863 and 973 Programs, the Natural Science Fund, State Key Lab Programs, State Key Engineering Research Center Programs, China's 16 Character Policy, and the National S&T Development Program for 2006 through 2020, among others.

First, these individual efforts represent China's equivalent of Apollo-like programs. Developing a strong S&T capability has been a long-term goal of China's leadership. Not surprisingly, all State Council members are trained engineers.

Second, China's goal in the past, especially with regard to the 863 program, was to catch up with the West. Now, the Chinese are emphasizing the need to leapfrog and overtake the West in S&T development rather than catching up, at least in those areas where they have strengths in those fields.

To do so, China is demanding innovation from its people rather than reverse engineering on the part of its S&T talent. While the Chinese continue to lag the West in many areas of science and technology, this is a statement that we should expect to hear more often and we should be paying attention to this.

Third, China looks at the long term. The five-year plans that are

established are used to measure progress in meeting much longer-term goals and they adjust the five-year plans accordingly to meet the longer-term plans.

Fourth, all the programs that these research institutes are working on are intended, directly or indirectly, to advance Chinese weapons development and production within China.

And finally, these programs are worked in conjunction with other programs that are coordinated at the state level.

Last, I want to make note that the Chinese have suffered a series of scientific failures that have turned out to be fraudulent over the past year. Nevertheless, China's leadership continues to emphasize science and technological progress as a basis for China's future.

It's not that this information is a state secret. The Chinese have been very up-front and steadfast on these points for well over 20 years. China intends to be a world leader. We shouldn't be surprised at their progress in getting there.

Thank you for your time this morning. I welcome any questions you may have for me.

HEARING COCHAIR BROOKES: Thank you very much. Let's move right next door to Dr. Cheung.

STATEMENT OF DR. TAI MING CHEUNG
RESEARCH FELLOW, INSTITUTE ON GLOBAL CONFLICT AND COOPERATION, UNIVERSITY OF CALIFORNIA
SAN DIEGO, CALIFORNIA

DR. CHEUNG: I'd like to thank the Commission for allowing me to come and testify about the modernization of the Chinese defense industrial base. It's a little lonely in San Diego, but it's good to have an audience here.

VICE CHAIRMAN BLUMENTHAL: We don't feel bad for you.

CHAIRMAN BARTHOLOMEW: Yes, we're not going to feel bad for you being in San Diego.

DR. CHEUNG: So my oral presentation focuses more on a broad macro level overview of the structural changes of the defense industrial base, the changing place of the Chinese defense industry within the national economy. A lot of the details Mike Danis has focused upon, and I will just take a slightly higher-level view.

Overall, a two-pronged approach is being pursued in the modernization of the Chinese defense industry. First is the internal reengineering of the defense industry that focuses on breaking down bureaucratic barriers, paring back the role of the state in conjunction with cultivating a more competitively minded and entrepreneurial institutional culture that encourages the nurturing, diffusion and absorption of technology and knowledge. This has been taking place,

especially since the late 1990s, and is laying the foundations of a significantly more capable defense industry.

The second plank of this strategy is to realign the defense industry and integrate it into the civilian economy to form what we can call a dual-use economy. The Chinese authorities view a strategy of embedding the defense industry within the broader civilian economy as playing a central role in supporting the long-term modernization of the country's military capabilities.

Now, I'll turn and look at the defense industrial reforms since the late 1990s, and particularly focusing on three aspects that I find particularly interesting. Since the late 1990s, defense industry mandarins in China have pressed to establish a more streamlined, competitive and open structure without the barriers that have led to this rigid compartmentalization of the activities and restricted knowledge flows within the system that defined it, especially during the Maoist era.

This has required a substantial curtailing of the role and reach of the state within the defense S&T and production systems, the adoption on a gradual basis of market-based mechanisms, and efforts to promote competition, evaluation and initiative, as well as corporate, financial and structural reforms.

These measures in specific have seen greater funding for research institutions, the improvement of how funds are being managed, introducing a more competitive mechanism for defense research, adoption of more sophisticated contract management assistance for research projects, and speeding up the application of research findings for production, and also the integration of civilian and military technologies, as well as far-reaching organizational changes.

I will talk about three key issues that I see that are particularly interesting. One is the reform of the state-owned defense industrial enterprise groups. These are the ten or 11 that we heard from Mr. Danis. A central cause of the plight of the defense industry during the 1990s was the faltering performance of its industrial conglomerates that bled huge amounts of red ink during most of the reform period.

But since the late 1990s, we've seen a major transformation in their performances. We've seen far-reaching cost-cutting measures, debt restructuring, access to new sources of capital, combined with a significantly stronger pickup in defense orders as well as civilian orders, and we've seen an impressive turnaround in business operations. The defense industry finally broke even in 2002, and in 2006, it reached a record-breaking US$2.6 billion.

If we put this from a comparative perspective, half of the defense conglomerates in China today are listed amongst the top 100 best performing enterprises in China, and we have various indicators

to show that they are beginning to compare very favorably with the best Chinese civilian companies such as in patents and other types of measures.

With my time running out, I'll focus in particular on the rise of the dual-use economy in China. Since the late 1990s, there has been an intensive debate amongst Chinese defense and economy policymakers to chart the long-term course of China's economic and military industrial development.

As a result of these deliberations, in the last few years, we have seen a clear definition of what they see as the long-term future for the Chinese defense industry and the dual-use economic base, and they have laid out in a new 16 character list of principles that replaces Deng Xiaoping's original 16 list of characters that he announced in 1978, that in 2003 we have seen that this new 16 character list has helped to define a new dual-use economy.

These 16 characters in translation into English is combining civil and military needs; locating military potential in civil capabilities; vigorously promoting coordination and cooperation; and conducting independent innovation.

The key concept within that is locating military potential in civilian capabilities, which in Chinese is what we call the "Yujun Yumin." And this is what we can define as a dual-use economy.

The Third Plenum of the 16th Party Congress in 2003 gave the formal go-ahead to the construction of this new civilian and military technological and industrial base.

This emerging dual-use economy will essentially consist of two distinct but connected parts. One is a new high technology focused base that is embedded within the civilian economy. The bulk of the entities that will be linked to this new apparatus will be non-governmental civilian companies engaged in industries such as information and communications technology, nanotechnology, electronics, companies such as Huawei, Zhongxing and Datang. They will include R&D intensive enterprises that are leaders in product innovation as well as component subcontractors.

The other half of the dual-use economy will be largely made of legacy state-owned defense industrial entities that are seeking to transform themselves into more nimble new technology outfits.

To conclude, China's success in this grand endeavor to form a dual-use economy is by no means guaranteed, especially as there are numerous structural, bureaucratic, technological and cultural barriers to overcome. Their track record so far has been less than stellar, as we've seen, especially during the 1990s, but the formulation of a more sophisticated and integrated approach under this Yujun Yumin banner coupled with sustained high-level political backing will lead to significantly improving the chances for success over the next couple of

decades.

[The statement follows:][6]

HEARING COCHAIR BROOKES: Thank you very much. Dr. Mulvenon.

STATEMENT OF JAMES MULVENON, PH.D.
DIRECTOR, CENTER FOR INTELLIGENCE RESEARCH AND ANALYSIS, DEFENSE GROUP, INC., WASHINGTON, D.C.

DR. MULVENON: Thank you, Commissioner Brookes. Good morning. Thank you for inviting me to participate this morning in this hearing on Chinese defense industries, a subject I've looked at for many years. I will offer simply seven key findings that I think are illustrative of what is probably the most dynamic and most interesting phase in Chinese defense industrial development that we've seen in a long time.

With some notable exceptions--obviously missile and space is a long-time pocket of excellence--it was accurate to say through most of the 1980s and '90s that the Chinese defense industrial base uniformly suffered from chronic shortages of capital, technology, advanced production know-how. This is the third-line story. These are the industries that because of Mao's paranoia were located in the middle of nowhere and had no prospects really for engaging in China's economic reform.

If you look at the vast majority of the literature, some of which Tai and I wrote, which was accurate then, it was a literature that basically spent most of its time bemoaning the failures of the system. And when we did a study at RAND three or four years ago, we really consciously said that we have a new paradigm. There is a new phenomena going on here.

In that vein, I would argue that the purchases of Russian equipment in the early to mid-'90s, such as the FLANKERS and the Kilo-class submarines and Sovremenny-class destroyers, were meant to fill mission critical gaps in a high tempo Taiwan scenario, but also should be seen, in my view, as a scathing indictment of the failure of the Chinese defense industrial base to that point to provide them with the systems that they had promised.

The military had very near-term needs, but ever since then, there has been a constant refrain in Chinese internal literature to reduce that dependence on the Russians because obviously the Russians have previously betrayed them once before.

I would argue and agree with my colleagues that since the

[6] Click here to read the prepared statement of Dr. Tai Ming Cheung

reforms of 1998, the Chinese defense industries have undergone a dramatic and largely successful transformation, I would argue surpassing the expectations of even the most forward-leaning analyst as to where we would be right now in terms of Chinese defense industrial production.

And, whereas, before we could argue there was a uniform problem, there is not tremendous variation across the defense industrial sectors. If we want to explain that variation, which is now the interesting thing, frankly, analytically in Chinese defense industrial analysis, I would argue that that variation is best explained by the relative integration of a sector into the globalized production and R&D chain, which provides access to the most modern know-how and production techniques, and while missiles and space have always been set aside as a pocket of excellence, I would argue that the greatest progress we see on the ground has been made in the shipbuilding and defense electronics sectors, both of which have benefited greatly from China's economic emergence.

China's currently the largest commercial shipbuilder and is the world's IT workshop. And the spin-off benefits of those two commercial industries, which are heavily integrated with the military production, if you go to any of China's shipyards, what you find is that in many cases, it's collocated with naval production, and in one case I can give you, the commercial production side needed to upgrade the single chemical bath at the naval shipyard.

Of course, the military production side of that shipyard benefited from the upgrade of that chemical bath for commercial reasons, and that's the kind of dynamic you see. Frankly, there's been an explosion in naval production. China has introduced ten new classes of ships in the last ten years. Our own Navy can only dream of the kind of production rates that we see.

Defense electronics is a more complicated story. The global revolution in military affairs I think clearly points towards a revolution in commercial off-the-shelf systems, and there China's role as the IT workshop for the world has greatly benefited what I would term a revolution in Chinese command and control and communication systems, but there's also a component of that revolution that does involve military specified rad-hardened defense electronics, and there has been less progress.

Frankly, in that arena, I would point to the continuing problem of economic espionage in the United States. One need only connect the dots of the various cases that have been prosecuted in the last five or six years to see the very gaps in the non-commercial, non-dual use defense electronics that the Chinese continue to try to acquire illicitly.

Those sectors that have lagged in relative terms, and I would highlight aviation and ordnance, in my view have been hurt by a lack

of spin-off opportunities from the commercial sector. China has tried for many years to build regional commercial jets. The Chinese economy is littered with the skeletons of those projects.

Ordnance, by the same measure, has very little outside pressure to draw from because frankly of the glut in the international arms market. There's not much of a market for Chinese ordnance products. And their efforts at defense conversion have been difficult to reverse. Once you become a refrigerator factory and make money, it's very difficult to go back to making armored personnel carriers, which is always a loss-leader.

Let me close with a number of conclusions and implications that I would draw from some of these very interesting trends. It's precisely this integration in China's economic emergence in the global production and R&D chain that, in my view, has not only facilitated dramatic improvements in Chinese defense industrial production, but clearly is one of the main drivers of the really impressive successes we've seen in Chinese military modernization since the late 1990s.

I've argued that China's emergence as the world's IT workshop has played an important role in the Chinese C4I revolution, particularly the elements of that revolution that rely on commercial off-the-shelf systems. This C4I revolution at one level has greatly improved the communications and operational security of Chinese military forces.

But the real question remains, if we want to draw this defense industrial story to what it actually means for military capability on the ground, there's still an open question as to whether this relatively advanced C4I infrastructure can bootstrap up a comparatively primitive force, although impressive and fielding new impressive systems everyday, but that if you look at this, this is really the heart of this very confusing and somewhat ambiguous concept the Chinese have called "informatization," xinxihua.

That informatization fundamentally--and I'll offer you an analogy that was offered by a Chinese military analyst at their National People's Congress a number of years ago that finally explicated this concept for me in a way that I finally understood. He said, consider the A-10
Warthog, a proud old airframe, 40 years old, but if you put new modern line replaceable unit avionics packages in, then all of a sudden it's a modern aircraft.

It's a way for using information technologies to network together a hybrid of advanced systems and less advanced systems in a way that is a force multiplier for all of those systems to have the kind of sensor-to-shooter relationship with one another that makes them more capable on the battlefield, and that that's what they mean by informatization. It does not mean digitized forces. It does not mean

starship troopers. It means using information technology as the connective tissue to allow this military to operate in a more effective way.

Thank you very much.

[The statement follows:]

Prepared Statement of James Mulvenon, Ph.D.
Director, Center for Intelligence Research and Analysis, Defense Group, Inc., Washington, D.C.

Thank you, Mr. Chairman and the other members of the U.S.-China Economic and Security Review Commission for the opportunity to take part in the hearings you are holding today on the topic of China's defense industries. My prepared remarks contain general analytical judgments about the current state of China's defense-industrial system, and offers a case study of the successes in the defense electronics sector.

Key Findings

- Through the 1980s and most of the 1990s, the Chinese defense-industrial base uniformly suffered from chronic shortages of capital, technology, and production know-how;
- The purchases of Russian military technology in the early to mid 1990s, such as Su-27 FLANKERs, Kilo-class submarines, and *Sovremenny*-class destroyers; were meant to fill critical mission-related gaps in Chinese military modernization, and should therefore be seen as a scathing indictment of the failures of the PRC defense-industrial base to fulfill its long-standing promises to the People's Liberation Army (PLA);
- Since the reforms of 1998, the Chinese defense industries have undergone a dramatic and successful transformation, surpassing the expectations of even the most forward-leaning analyst;
- There is now significant variation across the various sectors (aviation, aerospace, ordnance, shipbuilding, defense electronics) of the Chinese defense-industrial base;
- The relative progress of an individual defense-industrial sector appears to be best explained by its relative integration into the globalized production and R&D chain, which provides access to the latest production and manufacturing technologies and know-how;
- While missiles and aerospace have always been a "pocket of excellence," the greatest progress appears to have been made in the shipbuilding and defense electronics sectors, both of which have benefited greatly from China's current position as the leading producer of commercial shipping and information technologies;
- Those sectors that have lagged in relative terms (aviation and ordnance) have been hurt by a lack of similar spin-on benefits from partnerships between multinational corporations and domestic industry, though the defense-industrial reforms of 1998 and diffusion of innovation in the system have improved their performance;

Chinese C4I Modernization and the "Digital Triangle'

The Chinese military is in the midst of a C4I revolution, characterized by the wholesale shift to digital, secure communications via fiber optic cable, satellite, microwave, and encrypted high-frequency radio. The pace and depth of these advances cannot be explained by traditional Chinese defense-industrial dynamics, but instead spring from a paradigm shift known as the "digital triangle," which resembles a classic techno-nationalist strategy, with high-level bureaucratic coordination and significant state funding. The three vertices of the "digital triangle" are (1) China's booming commercial information technology companies, (2) the state R&D institute and funding infrastructure, and (3) the military. The linkages between these three vertices are longstanding, as telecommunications and information technology in China were

originally under military auspices and the commercial relationships with state and military research institutes remain important.

Vertice One: Chinese state IT companies. Most of the major Chinese IT and electronics companies grew directly out of the state sector, spinning off from telecommunications R&D and production units run by the military or the electronics and information technology ministries. These state capitalist companies, such as Huawei and Datang and Zhongxing (ZTE), are designated "national champions," benefiting from a wide range of state subsidies and advantages. On the one hand, these companies are also genuinely commercial in orientation, seeking to capture domestic and eventually international market share. On the other hand, they still maintain clear ties to the Chinese military, which has now become both a research partner and valued customer for their IT products. If we compare these firms with traditional defense industries, the new IT companies carry none of the oft-cited structural burdens, enjoying (1) new facilities in dynamic locales, (2) a lean, high-tech work force motivated by market-based incentives and stock options, and (3) infusions of near state-of-the-art foreign technology, thanks to the irresistible siren song of China's huge IT market, which encourages foreign companies to transfer cutting-edge technology for market access. However, the Chinese IT sector, backed by state R&D funding and national labs, has moved beyond the mere importation of Western technology to co-development with foreign firms and even indigenous development of near state-of-the-art technology. The result is significant levels of military access to cutting edge COTS information technology, fueling a C4I revolution in the armed forces. Moreover, these IT "national champions" are now aggressively pursuing markets abroad, particularly in the third world regions such as Africa that have been conspicuously avoided by Western firms.

Vertice Two: The strong foundation under this industry, however, is the state research institute and R&D funding system. For defense-related work, these units include numbered research institutes under the China Electronic Technology Group Corporation (CETGC), the PLA General Staff Department, and other defense-industrial entities, funded with money from the Ministry of Science and Technology's 863 Program and other national S&T funding programs. While there is nothing unique about this technonationalist approach, which looks similar to programs in Japan and elsewhere, the state R&D funding acts as a subsidy to the commercial companies mentioned in Vertice One.

Vertice Three: the People's Liberation Army. Through this "digital triangle" system, the military supports the civilianization of military technical research, becoming an R&D partner and privileged consumer of products.

The "digital triangle" dynamic is further facilitated by two critical technology trends: (1) the growing use of COTS (commercial-off-the-shelf) technology, such as computer network switches and routers, for military communications, which allows the PLA to directly benefit from the globally competitive output of China's commercial IT companies; and (2) the rise of China as a locus for global fabless integrated circuit production, which potentially permits the PLA access to the advanced microelectronics that lay at the heart of modern military sensors and weapons systems. Of these two trends, COTS, particularly in telecommunications equipment, has provided the greatest early dividends to the PLA, as evidenced by the expansion of its fiber optic computer networks. Defense microelectronics, particularly military-specific components with no natural counterpart in the civilian economy, have advanced more slowly. At the same time, however, the increasing sophistication of China's commercial semiconductor fabrication facilities ("fabs") provide the base production capacity necessary for the military to implement design ideas in a secure, domestic environment.

Conclusions and Implications

- Integration with the global production and R&D chain has facilitated dramatic improvements in Chinese defense-industrial production and PLA modernization since the late 1990s;

- China's emergence as the world's IT workshop has played an important role in the PLA's C4I revolution, particularly the elements of the C4I system that rely on COTS;
- The C4I revolution has significant improved the Chinese military's operational and communications security;
- The integration of advanced IT into the PLA's hybrid inventory of near-state-of-the-art and older systems is the heart of what the PLA calls "informatization," which is a primary dynamic driving the central warfighting scenario of "local, high-tech wars under informationized conditions." The most important possible "local, high-tech war under informationized conditions" is a military contingency involving Taiwan and U.S. military intervention.

Panel VI: Discussion, Questions and Answers

HEARING COCHAIR BROOKES: Thank you. We'll move on to questions. Cochair Wessel.

HEARING COCHAIR WESSEL: Thank you to all of you for being here today. We appreciate it. Some of you we've seen before and we are appreciative of your return presence.

I have a couple of questions, and one that struck me, Mr. Danis, as I was looking at your chart here and remembering SASAC's activities in late fall with December, I believe it was, in the discussion of heavyweight industries, a number of activities to ensure prominence of China in a number of developments, and also the recent spate of articles on the rise of private equity here in the U.S. SASAC, I guess, made a $3 billion investment I believe it was in Blackstone just prior to the IPO.

I know that DoD participates in the CFIUS process and the overall analysis of leakage of U.S. technologies, et cetera, into China. Has the department or others in the process looked at private equity and how we might be going outside of the CFIUS scope, which is a controlling situation, where there's a controlling stake, and whether China is now making strategic investments to fill the gaps where gaps exist in military modernization? Has that been looked at?

MR. DANIS: It has been a topic that--this is not the first time the Chinese have done something like this. Over the past 30 something years, they have looked and have purchased U.S. companies and some of these have been more contentious than others, and it's not just companies in the United States.

The Chinese purchased in Belarus a truck assembly facility for their ballistic missile programs. But your question is more along the lines of the funding, capital funding, as a means of going around this process, and I would say that this is an issue that is on the minds of individuals within the U.S. government on working this, and there are some meetings that are going to occur over the next several weeks dealing with how we are working this process.

So it's a relatively new development, but clearly this is another way of doing things, and there's a lot of weight behind these equity

firms, so yes.

HEARING COCHAIR WESSEL: I appreciate that. As those meetings take place and some understanding of how best to proceed is put in place, we would love to be able to get back to you and others in the process to understand how we address this new rise and China's capitalization and how they are both spreading the wealth and investing in their capabilities.

It brings me to a question that, Dr. Mulvenon, you were raising, that their industrial capabilities and their military modernization have really grown in tandem over the last six, eight years with the dramatic rise of globalization.

What role has the dramatic sourcing in China had, do you think, in enhancing China's military capabilities? What either direct relationship in terms of R&D development or leakage of technologies, platform integration, industrial capacity, what are the implications of that? Are we so far down the road that we've trained them to be ISO-9000 that they are able to apply that to 9001 and later iterations? Have we created our own problems here?

DR. MULVENON: I would just make two distinctions that I think are important. One is, as I said before, there are aspects of the global revolution of military affairs that lean towards commercial off-the-shelf, and when you look at those areas, those are the ones in which China's economic emergence and the dual-use technology that involves have most clearly benefited on the military side from the kinds of dynamics we've seen.

There is still, however, and these are often the sectors that lag, the pure military, the military spec kind of production, that does not have the easy spin-off from the commercial side, where they have continued to lag, and that's an area where we look at in the context of economic espionage and other things.

At the same time, we confront a very difficult policy problem. From an export control perspective, the China case is obviously significantly different than any we had ever dealt with before. The extent of Chinese globalization has meant that it's been very difficult for us to put regimes in place that it can actually facilitate the control of the important dual-use exports to China.

I think that BIS' recent decision about the catch-all strikes a nice balance between throwing the baby out with the bath water where frankly the Europeans and the Japanese and others are always going to be able to provide a lot of the technologies on a faster scale, but identifying the dual-use technologies that we know that our partners in Wassenaar are not willing to help us protect, and yet creating enough of a balance there where with the validated end-user system, that there's both carrot and stick if you want to engage in dual-use exports.

I would say that perhaps the most important dynamic, though, is

the fact that it's not the technology that's being transferred; it's the production know-how. And it's the fact that the coin of the realm now on the ground for multinational corporations is building R&D labs in exchange for market access. It gives them the tools. It's the old adage about catch a fish for a man or teach him how to fish. It's one of those situations.

So I'm less concerned about specific technologies than I am about the ability to, in fact, move on and innovate and develop and produce things at a higher volume.

HEARING COCHAIR WESSEL: A quick just follow-up, and if we have time for another round I'd like to ask, with the creation of an R&D facility over there, you don't have a deemed export problem; right?

DR. MULVENON: Right.

HEARING COCHAIR WESSEL: If it's an indigenous R&D, unless there's a flow-through immediately, meaning that's not subject to export control if we create a half billion dollar facility there; correct?

DR. MULVENON: I think, for instance, Rockwell Collins has an R&D facility in Xi'an. And I think that they are still covered by their--because it's Rockwell Collins, they are still covered by all the ITAR restrictions and everything else they would have in terms of sharing restricted technology with PRC nationals that would be working at that lab.

HEARING COCHAIR WESSEL: Right.

DR. MULVENON: And they have to be very careful about that.

HEARING COCHAIR WESSEL: But what they develop there is not covered by the export control?

DR. MULVENON: No, it's not.

HEARING COCHAIR WESSEL: Right.

DR. MULVENON: It's not because of the nature of the agreement. I would say one other thing about that which is that the former rep for Rockwell Collins said to me at one point, he said every year we have these graduates from R&D lab, and he says and Huawei gets the top ten graduates of our lab every year. So it's not that we're actually creating intellectual or scientific capital by having these R&D labs there. In fact, what we're finding is that they are a mill in many cases for improving the innovation of domestic Chinese national champion companies.

HEARING COCHAIR WESSEL: Thank you.

HEARING COCHAIR BROOKES: Commissioner Blumenthal.

VICE CHAIRMAN BLUMENTHAL: Thank you. Thank you all very much. Very interesting testimony. I have, if I can sneak in three questions. One is trying to understand the nature of this new dual-use defense industrial structure. If you're a PLA procurement or

acquisition officer nowadays, if you can sort of paint a portrait? Can you go and you have a requirement to go buy IT for the military, for a C4ISR program, do you have the option to go to one of the commercial companies, whether they be Chinese or United States and find the best value and the best product, and then go forward and make that purchase?

Is it looking more like our defense requirements and defense acquisition?

DR. MULVENON: There is the equivalent of FedBizOpps in China and you can actually look at it. It's plap.com on the Internet, and it's a fascinating Web site because it's a procurement portal for non-military related items that the General Logistics Department wants to procure, and you can look at that, and it's all, because they have really gotten themselves out of the uniform-producing business, the food-producing business, all of the things that we ourselves have outsourced for a variety of reasons.

But they have retained the purely military side, and I would say that there's a lot of barriers to entry also for foreign companies into that. Certainly I've been to the logistics exhibition shows in China and things like that. One gets the impression that it's an open market, but when you scratch a little bit, you find that a lot of these so-called commercial companies are staffed by, in fact, former general logistics officers. They have the same sort of perverse system that we have here in that sense.

VICE CHAIRMAN BLUMENTHAL: So you cannot just go to Xi'an Aircraft and say can you make me 20 fighter aircrafts and then compete it with another aircraft company?

DR. MULVENON: I think there would be a spicy Chinese retort to that request, yes.

DR. CHEUNG: I think the mind-set is in transition now with these efforts to develop this dual-use economy, and we're beginning to see these efforts, especially down at the second, third and lower tiers, to broaden the defense industrial base. Before, up until the late 1990s, the Chinese leadership said the defense-industrial complex remains essentially compartmentalized from the rest of the economy, but that doesn't work now because of globalization.

Both externally and domestically we need to outsource increasing parts of the lower tiers of the defense-industrial base. So they now see that it's a defense-industrial base. There's only a small core of the top defense industrial conglomerates, the top 11, but they are more systems integrators. Below that, it's more the lower tiers of the pyramid now are increasingly embedded, and they're developing the procurement systems, the requirements that will increasingly allow both private and semi-private enterprises to take place, but we're still in the very early stages.

VICE CHAIRMAN BLUMENTHAL: Private enterprises to provide services and goods to the PLA?

DR. CHEUNG: Right. Components and service and goods.

VICE CHAIRMAN BLUMENTHAL: I'd like very much, Dr. Mulvenon, your picture of the connective tissue of how you take an A-10 Warthog and make it into a modern platform. What we know about the PLA officer who needs to actually operate that new equipment and how able they are to keep up with some of these leapfrogging technologies?

DR. MULVENON: This is an absolutely essential problem that they have, and they recognize it explicitly, and it's directly linked to their attempts to develop a real non-commissioned officer corps because they realize that within that non-commissioned officer corps, you have to have the technical NCOs, you have to have the warrant officers, that know how to operate this modern gear.

And they have had, I think, some significant successes in retaining personnel. The conscription rates are way down because they don't need to cycle as many people through the system. They've done tremendous amounts in terms of increasing the salaries and the standards of living of these people to make it more attractive to make a career in the military.

Obviously, the siren song of the economy is very powerful; the one-child policy is a big deterrent for families to want to put their child in the military. But it's precisely those people, that non-commissioned officer class, that I think is really going to be the telling thing about whether they can actually maintain this equipment at the level to which it operates at maximum capacity.

VICE CHAIRMAN BLUMENTHAL: Thanks. If we have a second round, I'll have a question.

HEARING COCHAIR BROOKES: Chairman Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you very much. Thank you, gentlemen. Mr. Danis, it's always a pleasure to hear from you, and thank you to both of our other witnesses for appearing before us today.

Commissioner Fiedler really wanted to be here, but he has a serious illness in his family and wasn't able to attend. So I have three questions that he would like, and they're for Dr. Mulvenon and Dr. Cheung, and what I'd like to suggest is that if we can just give them to you and perhaps you could answer them in writing because they're quite technical.

The first one is what companies does Xinshidai, controlled by the General Staff Department of the PLA, own?

The second is what other companies does the PLA exercise substantial influence over if they do not own them?

And the third, it is my understanding that the PLA is not

completely out of business. What companies do they still own? And if you don't mind, if you can provide some information for us.

I'm going to take us to a more general place. It's just really kind of interesting listening to your descriptions of how the Chinese government is building up its defense industrial base, and obviously it's got a very strong manufacturing base, a commercial manufacturing base, that it can exploit or use or harness or however we want to call it. And meanwhile, as I look at the United States and see what's happening to our defense-industrial base, our manufacturing base, it's really quite a startling contrast.

Have you have given any thought to that kind of dynamic? What are your own observations about the United States and where we are in terms of being able to meet our military needs? And do you think that the Chinese are embarking on a path that's going to be disadvantaging us?

DR. MULVENON: I would begin by saying Jeff's questions don't surprise me. I wrote my dissertation on PLA, Incorporated as did Tai.

CHAIRMAN BARTHOLOMEW: Maybe just send him a copy of the dissertation.

DR. MULVENON: He has it, I'm sure. Somebody bought it. I don't know who, but--

DR. CHEUNG: Some PLA companies.

DR. MULVENON: Yes, back in the day when he was doing the "Kick the PLA Out of the USA" campaign, certainly we're partners in that. But clearly, we have two systems moving in opposite directions, and the people who make the Humvee may be in a secure position right now because of all the equipment we have to recapitalize.

But we're in a very difficult procurement situation for domestic defense-industrial base because there's just too many things we need to buy that are too expensive with finite resources.

But I would argue that the U.S. defense-industrial base could take a lesson from the Chinese in the following sense, that the Chinese have done a better job, in my view, of integrating into the non-military economy and not simply arguing that there needed to be continued defense-industrial procurement at a high level, and have found a way to adapt into the commercial economy, and I don't see the same sort of nimbleness on the U.S. side because the Chinese defense-industrial base went through a very long painful period where there wasn't significant procurement, but they were still expected on the other side of that to develop the next generation of systems, and so they engaged in some economic behavior for awhile that didn't seem to be consonant with defense-industrial production, but on the other side, they ended up pulling it out.

CHAIRMAN BARTHOLOMEW: Dr. Mulvenon, do you see that

as a fault on the part of the U.S. government?

DR. MULVENON: It's not a fault of the U.S. government. U.S. defense industrial companies have to operate in a market environment.

CHAIRMAN BARTHOLOMEW: Right.

DR. MULVENON: And when your customer doesn't have the money that they said they were going to have to buy what they said they were going to buy, you have to adapt. And you simply can't say that you're just going to wait until the customer has the money again. And some of the U.S. defense-industrial base has not done a very good job of adapting to that.

The only advantage in our system is that there can be market exit. The major problem in the Chinese case was it was politically unfeasible for there to be bankruptcy, for any market exit, for anybody to actually be just driven under by economic realities, and for a long time the subsidies that they to spent in order to maintain those industries were debilitating.

But now that their economy is booming at such a high rate, they can now afford to pick up that check again.

DR. CHEUNG: I would like to point out that I think for the Chinese, the best industrial and economic paradigm that they're looking at is not the U.S., but Japan. For Japan, Japan has very much of a very integrated civil-military economy, and they also have a very strong industrial manufacturing base, and what the Chinese want to do is have an economy that is as integrated on the dual-use side as Japan, but on a scale the size of the U.S., and I think that that is what they see as to be what they would want to aim for over the long term.

And, of course, the Japanese, the role of the state and the more restricted place of the market helps them to be able to keep a lot of their core manufacturing capabilities despite globalization.

DR. MULVENON: Right. The Chinese would rather look like Mitsubishi-heavy than General Dynamics or Northrop Grumman.

CHAIRMAN BARTHOLOMEW: Mr. Danis, anything you'd like to add? Anything you can add?

MR. DANIS: I think that the Chinese by having a redundancy in a number of entities are able to come up with an answer to their problems. They compete against each other, but they also work together on various problems to solve them.

I think one of the smartest things that the Chinese have done has been to focus on using dual-use technology as not the panacea for all their problems, but they don't focus on it necessarily having to be mil spec to meet their requirements, and, for example, if you have a cruise missile, you're going to fire it once, so whether it has to perform, a certain ship has to perform at mil spec specifications for a period of time, it's not a factor for them.

What I'm trying to get at is that I believe they are a lot more

flexible in adapting to the technology that's out there. It's not a question of how many manufacturers in the United States do we have for these things. It's more along the lines, at least in my opinion is, how flexible can we be to updating these systems because the technology revolution just continues to accelerate particularly in the information industry.

CHAIRMAN BARTHOLOMEW: Thanks. Mr. Danis, the questions that I asked of the two other witnesses, if there's any information that you can provide, again, we'll provide the written questions for the record.

MR. DANIS: Oh, absolutely.

CHAIRMAN BARTHOLOMEW: Great. Thank you.

MR. DANIS: Will do.

CHAIRMAN BARTHOLOMEW: Thank you, gentlemen.

HEARING COCHAIR BROOKES: Thank you. Commissioner Wortzel.

COMMISSIONER WORTZEL: Thank you very much for being here. You guys have always done a wonderful job over the years I've known you and you did a great job testifying today and addressed all the questions we had in a really relevant way.

Dr. Mulvenon, Dr. Cheung, would you agree with Mr. Danis' characterization that there exists a structure in the Chinese government to provide for central direction and coordination in industry to provide for this defense production, and if so, where is it most effective?

And then this is kind of a related question. Tai Ming, on page four and five of your written testimony, you list five means that the Chinese defense industries use to access and transfer or bring in foreign technologies.

Do you think it would be reasonable to increase that to seven because Dr. Mulvenon mentioned two that you didn't, and one, of course, is espionage and the other is just flat theft of technology and intellectual property, and can any of you comment on the degree to which this centrally controlled structure, if you agree there is one, can direct that espionage or theft of an intellectual property?

DR. MULVENON: As tempting as it is to view China as a monolith, as tempting as it is to view the Chinese as some faceless guy stroking a white Persian cat in his lap in his floating volcano island headquarters, you don't have to scratch very deep in China to find that the situation is much more complicated, and in my view much more difficult to deal with. The monolith is actually the easy scenario to deal with because it's just insidious and sort of relentless and everything else.

In fact, the defense-industrial policy side and the procurement side is replete with difficult compromises between organizations with overlapping span of control. There continues ten years later, in my

view, to be significant amount of ambiguity about the relative roles and missions of COSTIND versus the General Armaments Department.

When you talk to people in that system, they'll tell you that the only way that those things get sorted out is through personalities. That there are committees that are staffed by mixtures of both, and there are long-time people in the field who just sort of knit together interagency compromises. That there's really no clear institutional or formal org chart way of solving these problems, that it often becomes very informal, which is a story that we hear all the time in China, and it rings very true.

On the direction and procurement side, again, what I think the evidence suggests is, in fact, central direction in terms of high-level goals but decentralized implementation and execution in order to take advantage of multiple avenues. Certainly, in my experience, I've seen many, many institutes spending an awful lot of time tearing each other's throats out, competing over access to various things.

If it was a monolith, we would not see that because that's wasted effort, that's inefficient, but instead you have a system at the lower levels, where I argue that people are given a lot of open field running to be able to get this stuff, and part of what they describe as competition is pitting institutes and factories and other defense industrial entities against one another to try and come up with who can get it faster, cheaper, better.

So I think there is still, of course, state level direction, market tilting, it's not a pure market, but that what has changed is the breakdowns of some of the stovepipes and the ability to actually have more competition horizontally both in acquisition and production.

DR. CHEUNG: Mr. Wortzel, up until the late 1990s, one of the, perhaps the principal reason why the defense-industrial complex in China was stagnating was because it was a Soviet-style command system where COSTIND had a very negative role in terms of its overwhelming dominance of all the processes, and the Chinese recognized that, and they said we have to move away from that model, and so as James has pointed out, especially since the 1998 structural reforms, there's been this effort to move COSTIND back from being such an involved role in looking at every daily aspect of the management of the defense-industrial process and to make them just more of a coordinator.

The role of COSTIND now is fundamentally different. They're not involved in everyday decisions. In the past, for example, when an R&D institute did their R&D, and they decided, well, and they reached a stage where the plans had to be put into production, they couldn't select which of the production enterprises that they would produce. They would have to go up to COSTIND and COSTIND then would

select which organization.

So there was a lot of this compartmentalization, and the Chinese recognized that this doesn't work, and so now they've said COSTIND has to move back and their role is to make regulations and make slight guidelines and does long-term planning. But you allow the conglomerates and also the General Arms Department, allow the PLA to play a more customer-oriented role to define what the PLA wants, et cetera, and this is the system that they're trying to implement now. Still have a long way to go, but we're seeing that. It's like that this decentralization is very important.

One area where they are centralizing, which is very important, is in terms of defining these like the defense procurement system and defining standards, standardization, which was not there in the past, and this is where they are trying to focus on that because as weapon systems become increasingly more complicated, as you have all these different components, you need a very centralized regulatory and standardization policy to be able to maintain quality control, et cetera, and that's where they're focusing.

So this is where you see a lot of the major changes, especially now and in the pipeline. This is where the Chinese get it and so we are seeing this translated into some of the successes that are taking place in production now.

MR. DANIS: I was looking at your question, which was is there a structure to direct and coordinate their procurement, and my answer is yes. You have several different organizations within the Chinese government that are responsible for enacting certain components of this procurement process. I take the points that have been made by both my colleagues for whom I have great respect. I think they kind of incorporate. Those points are part of this process though. In terms of getting things done, it's who you know. But that's no different than how it is here in the United States as well in terms of making things happen.

You may have various structures that are set up in place, and these are the responsibilities, but when all is said and done, it's a question of who do you know and can you work with this individual in getting things accomplished?

As to the formal structure, the General Armaments Department is supposed to lay out here is our requirement for a weapon system. They have, and I don't know why this organization was put underneath the General Armaments Department, but the China Defense Science and Technology Information Center. They know who's got the technology around the world to get the components that may be required for various weapon systems.

I thought it worked relatively well when it was under COSTIND. COSTIND is the organization that is supposed to determine who do I

have within our industrial structure that can meet these requirements? And they are supposed to also take a look at what is the production flow that's going on there now. Are they overtasked? They don't direct it, but they're supposed to know who is responsible for, who has this capability of doing that.

You've got the National Reform and Development Commission, which has a much greater role in this process than most people think. There was a letter that was published last year. It's called Letter No. 30 from the State Council which was directing the General Armaments Department and the various other ministries and organizations within China's government structure to do certain tasks associated with the National S&T Long-Term Plan, which includes items regarding national defense.

It spells out in this effort here who is responsible for it. They list here's the lead department, here are the documents that we want you to ascribe to, or here are the participating departments in this program, here's the time frame we want to have this thing completed, and who is the individual that we can go to on this topic to make sure that it's been accomplished. And almost all of these in terms of the responsible individual are individuals from the National Reform and Development Commission.

And I only want to make one point on this, is that I was looking at one of the requirements that was given to an individual from the NRDC to follow through on, and there's video from approximately six months ago where the very item that she was tasked to be working on, she's briefing to the people.

So there is a structure for this system here. It's far from perfect, and it's far from being efficient, but there is a structure in place, and it works.

HEARING COCHAIR BROOKES: Commissioner Houston.

COMMISSIONER HOUSTON: I'd like to thank all of you for being here this morning also. You've really gotten into the weeds and the details of China's defense structure, and it's been very, very helpful for us, so I appreciate that very much.

Mr. Danis, you talked about the private investment, that they were starting to take the SOEs into a private investment scenario. And one of the things we always hear is the word "hybrid," and "dual" just keeps coming up in everything. It kind of seems to be sort of their new black is to make everything dual.

I have three questions based on that, just to get a better handle on exactly where they're going with this private investment. Is the investment, the private investment, including the foreign and domestic, into these hybrid companies, is it going into the civil side or is going into the military side? And would they be leveraging the capital they get from having investors on their civil side to buck up what they're

doing on the military side?

Two, I'm curious what the level of U.S. interest is in joint venturing in these SOEs and if there are any companies, any U.S. multinationals or domestic companies, that are involved in it already? And also, one of the things we've heard a lot about are the exclusions, that there are certain industries, especially in the military, where China is determined to keep it in their own court, and what exclusions, what particular exclusions there would be to this policy of investing in these companies?

MR. DANIS: I'll try to handle all three of these fairly quickly, just in the interest of time. With regard to foreign investment in these organizations, the Chinese have allowed foreign investment in state-owned enterprises for a number of years now.

With regard to the top ten, if you will, that is an issue that is still under debate. The top ten large state-owned enterprises are the military-industrial complex or 11 or 12 or whatever you want to call it. But when it comes to a number of the small and medium-sized state-owned enterprises, the money that is invested into these entities is capital that is supposed to be used for whatever. It's the money for the stock; this money is now available to the company to be used as they need to to meet their goals.

Virtually everything that needs to be done within China's military-industrial complex is going to be in the area of the industrial, the production base and the R&D base. That is all technology for the most part it's dual-use technology. There may be some items that are on the munitions list that are military commodities, but for the most part, it's dual-use technology and it's a question of applying for export licenses if it's export controlled or not in obtaining that.

But without a doubt, if there is a military application for that commodity and if the Chinese need to use it for that commodity, that's indeed where it goes. It is used for that purpose.

With regard to the level of U.S. interests in state-owned enterprises, over a number of years, the U.S. has indeed established a number of joint ventures with Chinese firms to produce certain items. For example, Motorola's large--actually Motorola is probably not a good example. There are a number of going concerns there where these companies are producing various things for U.S. manufacturers.

I don't see that this is really changing all that much in terms of them investing into these state-owned enterprises. I think it would allow them to have a better handle--foreign entities--a little bit better handle on the quality of the workmanship that comes out, but it's actually improved considerably in that area.

Finally, in the area of exclusions, it's really what the Chinese determined are areas that they wouldn't want us to be involved in. I would say that anything that's in the area of a sensitive technology,

and perhaps a new fighter program, laser weapons, radars, anything in the area where there's a direct military application of this commodity, would be areas where they would be loathe to want to have investment in that unless they absolutely had to.

COMMISSIONER HOUSTON: Do either of you have anything you wanted to contribute?

DR. CHEUNG: I'll make a comment about the role of the Chinese defense conglomerates and their efforts to raise private investment. When we look at Chinese defense-industrial conglomerates, when you're talking about the top ten, 11, we should know that the majority of their output is actually civilian. They went through this process of defense conversion, and up about 70 to 80 percent of their output is actually civilian.

What they're trying to do with those 70 to 80 percent of their civilian production is to reorganize them into essentially a civilian portion of this defense conglomerate and allow them to be listed on Chinese and also the Hong Kong stock markets, and that's what they've been doing for the last five years or so, and then to reorganize the critical military components into like a core internal corporation within the overall conglomerate and that is not allowed to be for foreign or private investment, and so that is what they are doing.

In terms also of the role that foreign investors play, Mr. Danis has pointed out, yes, that the Chinese have these key strategic industries which they don't allow foreign investment. One interesting area, though, is in terms of Sino-Russian cooperation, especially on the defense side, and I think over the long-term, in particular with the efforts to have joint development projects, that the Chinese are being wooed by the Russians to invest in a lot of their defense projects, their long-term defense projects, and the Russians in terms of their fifth generation fighter aircraft and some of their other areas, they would like to have Chinese defense investment.

And so that is one area that I think that we should pay a lot of attention to where the Chinese money is going. It's not as much going to the U.S. or to the West, but it's to Russia and these other countries that are much more eager to have this Chinese state or private money in that area.

COMMISSIONER HOUSTON: Thank you very much. Appreciate it.

HEARING COCHAIR BROOKES: Commissioner Wessel, do you have another additional question and then we'll wrap up this panel?

HEARING COCHAIR WESSEL: I have many, but I will ask only one at this point. Mr. Danis, we've now seen I guess Congress passed earlier this week revisions to the CFIUS statute. My recollection, and Commissioner Wortzel can correct me since I believe he's done some work on this in the past, as we've looked at export controls, the

resources available for end-use verification are somewhat limited.

What do we do on CFIUS on post-transaction reviews? Do we have the resources necessary to determine whether the SSAs, NSAs and other components of these agreements that are sometimes reached are being adequately handled over time?

MR. DANIS: Certain cases receive follow-up scrutiny to ensure that certain conditions are being carried out. Most of the cases that we look at, the threshold of concern to begin with is not high. So I would say that some of these, this is probably an area that we need to be spending more attention to at least for those that are medium or high risk but then get approved.

I'm not an individual to talk to about resources for that, but I would simply say that we are presently challenged in meeting the increased number of cases that have occurred as a result of these revisions in the past since Dubai Ports case.

HEARING COCHAIR WESSEL: Great. Okay. Thank you.

HEARING COCHAIR BROOKES: Thank you very much, gentlemen. Appreciate your time and sharing your thoughts with us today.

Do you want to take a short break, Mike? Let's take a five minute break and then we'll proceed with the final panel.

[Whereupon, a short recess was taken.]

PANEL VII: CHINA AND THE U.S. DEFENSE INDUSTRIAL BASE: U.S. NATIONAL SECURITY AND FORCE READINESS

HEARING COCHAIR WESSEL: Our final panel today will examine the well-being in the U.S. industrial base from an American industry perspective. We have two guest witnesses this morning who we appreciate being here.

Mr. Owen Herrnstadt is the Director of Trade and Globalization of the International Association of Machinists and Aerospace Workers. He researches and writes on labor law and the effects of trade policies and globalization on American businesses and workers.

Bill Hawkins is a Senior Fellow at the U.S. Business and Industry Council. He is currently contributing to a report on the well-being of the U.S. defense-industrial base, and that report is expected to be completed in the near future.

Let me remind our witnesses that opening remarks should be limited to about seven minutes or so, but that your entire prepared comments will be inserted into the record, and then we will proceed with questions from the commissioners.

I'd also like to thank in addition to your being here today the two staffers who spent a substantial amount of time and effort in putting

together these two days of hearings, Shannon Knight and Marta McLellan. It's been great so far and we look forward to your presentations. Mr. Herrnstadt, if you could begin.

STATEMENT OF MR. OWEN E. HERRNSTADT
DIRECTOR, TRADE & GLOBALIZATION
INTERNATIONAL ASSOCIATION OF MACHINISTS &
AEROSPACE WORKERS, UPPER MARLBORO, MARYLAND

MR. HERRNSTADT: Thank you. Thank you, Commissioner Wessel. The International Association of Machinists and Aerospace Workers (IAM) represents several hundred thousand workers in a variety of industries throughout North America, including industries like shipbuilding and repair, of course, aerospace, defense, transportation, woodworking, and many, many others.

IAM members work for both prime and sub-tier contractors producing, manufacturing, assembling, servicing and maintaining a wide variety of systems and products directly and indirectly related to the defense industry. In fact, our members have helped build and contributed to some of the most successful defense companies in the world.

In addition to basic concerns for our nation's security, the IAM has a vested interest in ensuring that the U.S. defense-industrial base is vibrant and robust now and well into the future. Given our members' unique position as an essential and indispensable part of the U.S. defense industry, our continued warnings of the demise of the U.S. manufacturing base, including the defense manufacturing base, and deep concerns over China's massive growth in manufacturing in general, we are honored to appear before you today.

In order to fully understand the potential threat that China's defense industry poses, it's necessary to--and I'll be very brief--elaborate on the crisis in U.S. manufacturing. I'll then talk a little bit about the rise of China's manufacturing something I think this Commission is very already well-versed in, and then will focus on three or four proposals for future activity.

The importance of the U.S. defense industry to our nation's economic and physical security cannot be questioned. The industry is responsible for designing, producing and maintaining many of the world's most sophisticated and important weapon systems, and as I mentioned before, U.S. defense industry workers are indispensable to this mission.

The industry itself is also a vital factor in our nation's economic security directly and indirectly employing hundreds of thousands of individuals. It's also responsible for creating and fostering new technologies which have assisted in the development of new industries

giving rise to further employment.

Sadly, many of these manufacturing jobs have been outsourced to other countries. In fact, what was once a drip maybe 50 years ago has turned into a tidal wave, as literally three million manufacturing jobs have disappeared from our shores in the last few years. In the aerospace industry alone, several hundred thousand workers have lost their jobs in the past 15 or 20 years.

And as these jobs disappear, more and more industry, particularly the manufacturing industry, are gaining strength in countries like China. The IAM, almost a year ago was so concerned about this that we held a specific seminar at our own building to discuss this very issue-- the draining of our manufacturing base, and how this would indeed affect our own defense industrial base.

Participants were asked two basic questions. First, will the U.S. have the unique tooling to manufacture the means of its own defense in seven to ten years, and, second, will the U.S. still have the workforce skills needed to operate tools and manufacture these weapons systems?

The IAM's President Tom Buffenbarger, who moderated the round table discussion, summarized the reality we face: "From ships to aircraft to land-based weapon systems, we have traded homegrown expertise and capability for low- cost foreign suppliers and a questionable supply chain that makes us vulnerable in a way we never were before."

In reaching this conclusion, he was mindful and noted what some participants said during this roundtable discussion, participants that were IAM members working in this industry.

One said, "To do a good job, the first thing you have to have is good tools and good tooling. Yet we are fast losing all our tooling skills in this industry."

Another said: "As our industrial base shrinks, machine tooling capacity diminishes and workforce skills vanish. We lose something uniquely American: the ingenuity and productivity of our people. Worse yet, we leave ourselves unprepared to deal with future contingencies. We will lack the capacity to meet the threats head on."

At the same time, this is continuing - we see month after month an extraordinary trade surplus coming from China - something that Commissioner Bartholomew just referred to, the last panel noted, this drain of our manufacturing workers, and which has been contained in past reports by this Commission.

Shipbuilding is certainly one that is at the forefront as are other industries along with, the technology and production that continues to be drained from this country, as well as other countries, into China assisting it with its burgeoning growth.

In the time remaining, let me just acknowledge three areas for future work. One: I think we need to acknowledge the growing threat

to the U.S. defense industrial base that is created in part by outsourcing. Policymakers can hardly grapple with such a huge issue unless they acknowledge that the issue does exist and how it exists in a very significant and serious fashion.

We need to develop and implement comprehensive solutions and do it in a timely fashion. Such solutions must give full consideration to a whole litany of issues: taxation, outsourcing, currency evaluation, transfers of technology and production in return for market access, as well as a host of other things.

We need to also look at building skills, through schools enabling us to replace the skills that are being lost, and lost on a daily basis, by our own U.S. defense workers as the aging workforce grows and new workers are unable to enter the market because new jobs aren't there.

We need to make sure that those jobs exist and continue well into the future. And lastly, we need to review industrial policies of other countries like China to determine exactly what their framework is, what their objectives are, and what role they will have on the future of our own manufacturing base as well as our U.S. defense-industrial base.

Thank you.

[The statement follows:]

Prepared Statement of Mr. Owen E. Herrnstadt
Director, Trade & Globalization, International Association of Machinists & Aerospace Workers, Upper Marlboro, Maryland

I. Introduction

The International Association of Machinists and Aerospace Workers (IAM) represents several hundred thousand workers in North America in a variety of industries, including ship building and ship repair, electronics, woodworking, transportation, and of course aerospace. IAM members work for both prime and sub-tier contractors, producing, manufacturing, assembling, servicing and maintaining a wide variety of systems and products directly and indirectly related to the defense industry. Our members have helped build some of the world's largest and most successful defense companies -- including Boeing, Lockheed Martin, Pratt & Whitney, and General Electric. In addition to basic concerns for our nation's security, the IAM has a vested interest in ensuring that the U.S. defense industrial base is vibrant and robust, now and well into the future.

Given our members' unique position as an essential and indispensable component of the U.S. defense industry, our continued warnings of the demise of the U.S. manufacturing base (including defense), and deep concerns over China's massive growth in manufacturing, we are honored to appear before you today.

In order to fully understand the potential threat that China poses, it is necessary to begin with a summary of the current state of manufacturing and its impact on our defense industrial base. This is followed by a brief review of the rapid development of manufacturing in China. The last section of this testimony includes a summary of proposals that we urge U.S. policy makers to consider in addressing these

matters.

II. U.S. Manufacturing is in Crisis

The importance of the U.S. defense industry to our nation's economic and physical security cannot be questioned. The industry is responsible for designing, producing, and maintaining many of the world's most sophisticated weapons systems. U.S. defense workers are indispensable to this industry. The loyalty, dedication, productivity, and skills that they display day after day has made this industry such a success. Their contributions have also helped to ensure our physical security.

The industry itself is also a vital factor in our nation's economic security, directly and indirectly employing hundreds of thousands of individuals. Many U.S. communities have prospered because of the industry and various regions of our country have grown economically dependent on it. The industry is also responsible for creating and fostering new technologies which have assisted in the development of new industries, giving rise to further employment.

In view of the importance of the defense industry to our nation, it is inconceivable that policy makers would not take every possible step to maintain and strengthen it. Sadly, as outsourcing, offsets, co-production, and other similar activities grow, U.S. employment is shrinking. Overall, we have lost roughly three million jobs in the manufacturing industry in the past few years. In the aerospace industry for example, several hundred thousand jobs have been lost over the past several years.

Many years ago as the U.S. manufacturing industry began to leave our shores, it was a steady drip. That drip has become a tidal wave. As these jobs disappear to countries like China, our nation's ability to manufacture basic goods and components, let alone develop new technologies critical for future industries, leaves us vulnerable to the uncertainties that await us.

Our shrinking industrial base raises fundamental questions about our future ability to meet our nation's defense needs. The IAM hosted a conference a year ago bringing together defense workers, defense industry representatives, and industry experts to discuss this very matter. Participants were asked two basic questions:

> "First, will the U.S. have the unique tooling to manufacture the means of its own defense in seven to ten years, and second, will the U.S. still have the workforce skills needed to operate those unique tools and manufacture those weapons by then?"

IAM President Tom Buffenbarger who moderated the roundtable discussion summarized the reality we now confront, "From ships to aircraft to land-based weapons systems, we have traded homegrown expertise and capability for low-cost foreign suppliers and a questionable supply chain that makes us vulnerable in a way we never were before."

In reaching this conclusion, Buffenbarger noted several of the comments made by defense workers who participated in the discussion. Many of these comments described the outsourcing of manufacturing work to other countries. They noted that at the same time that once vibrant U.S. industries like shipbuilding were shrinking, the same industries were growing in other countries, like China. Similar comparisons were made to aerospace.

Participants were keenly aware that with the disappearance of these basic commercial and defense industries the our basic skills that are needed for our defense industrial base were also disappearing. One participant noted, "To do a good job, the first thing you have to have is good tools and good tooling. Yet, we are fast losing all of our tooling skills in this industry…" As the average age of "machinists and other skilled production workers" approaches 55 years, these much-needed skills are disappearing and

disappearing fast. Buffenbarger summarized the discussion in the following fashion:

> "As our industrial base shrinks, machine tooling capacity diminishes, and workforce skills vanish, we lose something uniquely American: the ingenuity and productivity of our people…[W]orse yet, we leave ourselves unprepared to deal with future contingencies. We will lack the capacity to meet threats head on."

III. Manufacturing in China

While dramatic concerns over the health of the U.S. defense industrial base continue, it is well established that the general manufacturing industry in China is flourishing. Any question over China's emergence as a manufacturing center can easily be answered by yet another report of just one more month of a phenomenal and record-setting trade surplus. As China consumes the world's raw materials to fuel its manufacturing industry, many have raised concerns over basic shortages of those same materials which are necessary for industries here in the U.S. and for suppliers in other countries. Moreover, as China develops the capacity to enter such leading edge industries as aerospace, more concerns are raised with respect to future competition and the negative impact that it could have on what manufacturing may remain here at home.

The most bitter irony of course is that some of China's industries have been aided by the transfer of production from the U.S. The IAM has been raising this alarm for several years now. We are only too mindful of the offset deals and other forms of outsourcing that continue to result in the transfer of technology and production to China in the commercial manufacturing industry.

As we have also stated, and has been well-documented previously by this Commission and many, many others, workers in China do not enjoy fundamental human rights. As the AFL-CIO explained by filing a trade petition against China with the United States Trade Representative, China's failure to permit its workers to enjoy the right to form a union and to engage in collective bargaining is a market distorting mechanism which artificially holds down wages. As the petition also explains, this results in the loss of thousands of U.S. jobs.

IV. Developing Solutions

1. <u>Acknowledge the growing threat to the U.S. defense industrial base that is created, in part, by outsourcing.</u>

   Outsourcing of commercial and defense manufacturing production poses a major threat to the U.S. defense industrial base and U.S. defense workers. Policy makers cannot begin to grapple with this urgent matter if they do not fully grasp the full extent of this growing crisis.

2. <u>Develop and implement a comprehensive solution in a timely fashion.</u>

   The U.S. cannot wait any longer in devising solutions to the issues outlined in this testimony. Such solutions should be based on full consideration of a variety of matters both directly and indirectly related to our defense industrial base. These matters include currency valuation, non-enforcement of trade policies, outsourcing, and tax policies that reward corporations to produce outside of the U.S. Other policies are also needed to spur innovation and research and to make certain that the jobs that they create remain in the U.S.

   Major efforts must be made to provide workers with the special skills that are

required for work in this highly skilled industry. We must also provide incentives for workers to gain these skills. This means, among other things, that good and decent jobs must be waiting for them after they learn these skills. Workers must also be confidant that their jobs will continue well into the future.

One novel idea that has previously been mentioned involves the use of economic impact statements. The idea is relatively simple: Prior to any government award, contract, or assistance, a careful review must be made to determine (with as much precision as possible) what impact that activity will have on employment here at home. This review would include an analysis of the direct and indirect employment impact both in the short term and in the long term. The short and long term analysis would include consideration of transfers of technology and production.

3. Review the industrial policies of other nations, particularly China.

Much of what we know about China is that we don't know as much as we need to. Ignorance is surely not "bliss" when it comes to food safety or safety issues involving a multitude of other products. While questions over pet food, toys, toothpaste, and tires have been in the news recently, questions over quality have been raised for several years. The time to ask fundamental questions about the materials and products we are receiving from China is now—not after it is too late.

Likewise, the same is true when it comes to assessing the impact that disruptions of our supply chains can have on our economy and on our defense industrial base. We must also undertake a careful review of whether we will have the raw materials when we need them. Questions over the scarcity of these materials and China's role should be comprehensively and quickly explored. Of course, fundamental to all of these issues is the basic concern over transparency in China, especially with respect to manufacturing and its own defense industry (as well as human rights).

V. Conclusion

As mentioned at the outset, the IAM is grateful for the opportunity to appear before you today. We also extend our appreciation to the Commission for its tireless work on this highly critical matter. We hope our testimony has been helpful.

HEARING COCHAIR WESSEL: Thank you. Mr. Hawkins.

STATEMENT OF WILLIAM A. HAWKINS
SENIOR FELLOW, U.S. BUSINESS AND INDUSTRY COUNCIL
WASHINGTON, D.C.

MR. HAWKINS: I'm from the U.S. Business and Industry Council and we're small to medium-sized manufacturers. We are companies that are basically in the supply chain of larger companies. We make components and parts, and though we don't do a lot of defense work per se, we're concerned that what we've seen in our own commercial areas of the supply chain being moved overseas, particularly a lot of problems with the Chinese as competitors, that this may be happening in defense-related industries as well,

particularly as defense uses more commercial off-the-shelf components and parts and technologies, and that the defense industry spokesmen keep saying that they want to use the same commercial supply chain for their defense work. They don't want two different supply chains. They want the same supply chain.

So we think this is a problem, certainly a trend of a problem, but we really don't know because nobody has really looked at this and done the work. I was in, in the 1990s, I was on the staff of Congressman Duncan Hunter, the first witness today, and worked with the GAO in trying to find out what the Pentagon was doing about searching down into the lower tiers of production and found out they weren't doing anything.

And that's what led eventually to the Congress demanding that the Pentagon do studies and look, try and find out where things are coming in the supply chain. Unfortunately, they're not doing a very good job at it. In fact, I don't think they're doing a serious job at it even.

The latest report that they put out on this was last year, and there was some mention of this earlier today, but what they looked at, as their sources for their report, they looked at only three things.

One was a GAO report on the balance of trade in defense goods, which said it was fine; we run a surplus in defense goods. We all know that. But it didn't say anything about what the imports were and certainly nothing below the end use or the main product, no sub-tier information at all.

They also looked at their own direct purchases of anything over $25,000, direct DoD contract, but again that didn't look at anything below first or prime contractor, maybe the first tier, but no information further down, which is what we really need.

And then there was a 2004 report, which was also mentioned earlier, but that only looked at 12 product, 12 systems, weapons, selected out of hundreds, and again only looked down to about the second tier, and that's legacy equipment.

The real problem is what are we going to be doing in the future because all the services are now getting ready to rearm and reequip across the board, new platforms, new subsystems, after the long procurement holiday of the '90s, and will these new systems coming down the pike which will be in service for 25, 30 years, what are they going to be comprised of? Where are they going to be made? What are the components and subsystems going to come from?

And since a lot of these platforms are going to be designed to be upgraded as they go along, the subsystems and the subcontracting and the supply chain become really the future of the system because where the new upgrades are going to come from, the new weapon systems that are added on to these platforms, which are going to be in the inventory

for a very long time, we don't know and nobody is really looking.

When Commissioner Brookes said the Commission might want to suggest to Congress that they do take a stronger look at this, that's something we would certainly endorse and encourage the Commission to do.

In fact, the final one of the statements in that 2006 report, which is the most recent one, says that the Defense Department generally does not mandate supplier selections to its contractors. The department expects its contractors to select reliable capable suppliers consistent with obtaining best value and a host of other things there, but they're all commercial considerations. They're not geopolitical considerations. They're not national security considerations.

Now, like I say, the trends--the trends don't look good here because our prime defense contractors are finally becoming systems integrators. They outsource most everything to somebody else and they're looking more and more and putting more emphasis on overseas partners, particularly the European partners, and the European defense industry is in sad shape.

Their demand collapsed in the '90s like ours did, but ours has come back; theirs hasn't. So there are a lot of European companies who really want to get into the American market.

But if we do that, if we pick them up as substitutes for rebuilding our own industry which went downhill in the '90s because we weren't buying much of anything, then we haven't solved the problem. We get a ratchet effect. There's always a cycle in these things. The down cycle we lose capacity and if the up cycle we substitute foreign capacity for rebuilding domestic capacity, there's a downward trend.

So we have to watch out for that. Because this is really shocking. You mentioned the surge concern. Iraq has put a big pressure on our defense industry when in fact it's a very small war. It's much smaller than Vietnam or Korea, and much, orders of magnitude, smaller than World War II, and yet we're having trouble meeting the demands for this.

A lot of it is, as was mentioned earlier, poor planning from the start. There's a host of Defense Department documents that talk about, well, future wars are going to be short, and we're just going to fight them with what we've got and we don't need to worry about building anything during the war.

The home before the leaves fall notion is a great historical fallacy. It's been repeated time and time throughout history. Wars are always longer than people think they're going to be. They are always going to take more than people think they're going to take, and we have to plan for that.

The push for dealing with Europe sounds okay because the Europeans are our allies in NATO and all that. But we know that the real trend in supply chains is to Asia and China is getting a larger share of that everyday. An April IMF report in microelectronics, which was also an earlier topic here, says that China is taking a larger and larger market share globally of that industry. So if we're going to go down that route of off-the-shelf technology and foreign purchasing, then China is going to be in the mix if we don't keep a sharp eye out for it.

A real quick summary here—I think it was reported that the Pentagon argues that obviously it's not cost effective to maintain essentially an arsenal system again where the Defense Department runs its own industry, and we find out that the Chinese are getting away from that, too, which means that you have to have a robust commercially supported industrial system which Defense can draw on and also expand into during mobilization, which means that we have to get our general trade policy in order so that industry is not just supported by the small demand from defense, but it's supported by the entire demand of the economy, and that's the only way you maintain a large enough and diverse enough industrial technological system to meet the surge requirements or mobilization requirements of war time.

Thank you.

[The statement follows:][7]

Panel VII: Discussion, Questions and Answers

HEARING COCHAIR WESSEL: Thank you. I appreciate it, both your testimony. Commissioner Reinsch.

COMMISSIONER REINSCH: This is an old topic, and it's always a dilemma for me. I think Mr. Herrnstadt is right about what's been going on in the manufacturing base in the economy. I've given that speech in the past. In fact, I gave it 20 years ago, and that's the source of the dilemma. We've been losing those jobs for 40 years. We haven't been losing them to China for 40 years. We've been losing them to lots of places for 40 years.

I think you can ascribe a good bit of that right now to China, but I don't think you can ascribe a trend of that length to China exclusively which suggests there are other things going on here besides simply the rise of another economy. And I think you, at least, alluded to that implicitly, Mr. Herrnstadt, in your concluding comments running over a range of things that we ought to do, and I'd like to get you to elaborate on some of those a little bit more if you would.

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[7] Click here to read the prepared statement of Mr. William Hawkins

Talk to us about remedies or solutions to reverse the erosion of the manufacturing base that you've identified. What specifically have the machinists, for example, recommended in that area?

MR. HERRNSTADT: Sure. Glad to. When I say it's a comprehensive solution, I mean just that. We can no longer attack the loss of jobs merely looking at the specific issue of how do we replace specific jobs that are lost. We need to look at it in a comprehensive term which means we need to look at tax policies and we need to look at corporate tax policies which some argue encourage corporations to move jobs offshore.

We need to figure out ways to give those companies incentives to keep those jobs here on-shore.

COMMISSIONER REINSCH: Have you figured out a way to do that?

MR. HERRNSTADT: Here's one proposal that's contained in my written testimony. I also list trade issues as well. We need to seriously look at implementing some sort of economic impact statement, a real one. Whenever a private entity is given a contract, an award, assistance, whatever, a program, they should be required to give some good faith estimate as to what jobs will be created and maintained if they receive that contract award or assistance here at home, where those jobs will be located, to the best of their ability, and what kinds of jobs those will be.

The analysis has to figure in both the impact in a short term and a long term, the long term meaning, will there be transfers of technology in production anywhere in that award or assistance to another country and will that come back to negatively impact on our own workforce either directly by losing those jobs or indirectly by fostering competition abroad? That's a specific question that we could be asking to gain more vital information, to figure out exactly how we are not just putting a band-aid on this, but actually looking at it with more specificity. That's one proposal.

COMMISSIONER REINSCH: That's an interesting one. I need to think about it because it hadn't occurred to me before. One of the statements that my day job organization has made is to discuss in general terms incentives for companies to stay here as opposed to going somewhere else, and we've used the word "incentives" deliberately because we believe that carrots work better than sticks in this context, and that with sticks all you're going to do is encourage them to incorporate overseas which is probably going to be counterproductive.

Have you all given any thought to the incentive side of the coin in tax policy, things you can do to encourage more investment here in a positive way rather than with penalties?

MR. HERRNSTADT: I think it's an intriguing issue. I think it's one that is incredibly complicated and one that requires, I think, a further look. One also has got to look at tax issues. One has to look at budget issues and all of those things.

That's one reason why we have also advocated a permanent commission to actually look at how do we revitalize our own manufacturing base, by looking at all of these comprehensive issues. We've advocated a commission reviewing outsourcing and offsets. That's what we've spoken about before.

COMMISSIONER REINSCH: Right.

MR. HERRNSTADT: But it can only be figured out if we bring together representatives from industry, government, academics, and of course, labor, to sit down and actually have a frank discussion to figure out how we put all of the pieces together. We can't just fine-tune things by one piece here and one piece there. We need a comprehensive look at it, just as some other countries have been doing.

COMMISSIONER REINSCH: Thank you.

HEARING COCHAIR WESSEL: Thank you. Let me just on that note, one thing that I would urge both my co-commissioners as well as the panelists to look at is the incentives built into our system as we look at capital formation, accounting, and those issues, something that I've begun to spend more time with lately, because we find that certain, what are currently termed intangibles, don't show up on the balance sheet, so that investments in skills, investments in the worker training and all the various other issues don't show up as a depreciable asset that has value on the balance sheet but rather than just an expense, whereas many other investments show up as something that will give you a higher profit/loss benefit, and therefore maybe we need to be looking at how we account for some items within our system to determine what we should be, in fact, valuing differently than we do now. So long term that's something that I think certainly would be worth looking at.

Mr. Hawkins, if I remember, Doug Bartlett is with your organization. Is he now president?

MR. HAWKINS: Chairman of the board.

HEARING COCHAIR WESSEL: Chairman of the board. And he's the gentleman that Commissioner Wortzel referred to earlier who does the sonobuoy work and that work.

MR. HAWKINS: Yes, testified.

HEARING COCHAIR WESSEL: There seemed to be less concern on the service panel we had this morning on the change in the supply base over time, and I wanted to get your comments since I believe you were here for that panel.

MR. HAWKINS: Yes.

HEARING COCHAIR WESSEL: On whether you agree with their interpretation representing the small and medium-sized businesses who are part of the supply chain? Whether you and your members see things the same way in terms of the commercial off-the-shelf, the migration to that procurement system?

MR. HAWKINS: There are obviously benefits from doing the commercial off-the-shelf purchasing, but it should still be done--that supply base still needs to be here-- in the United States.

One of the things they were talking about is that it's hard to necessarily find American companies still that are here, and that's one of the things that propels our organization to be concerned about this issue because that's what's happening to our membership and our members is that they're being pushed, either being out-competed and pushed into shrinking here or a lot of pressure to relocate overseas.

We've had larger companies tell some of our members that, okay, you get, we'll renew your contract for another couple of years, but in that time frame, you need to train the Chinese to do your job because they're going to get it after that or you can move to China yourself and do that. In fact, I was at a conference in Ohio about a year and a half ago, which was possibly sponsored by IBM, that was to encourage American companies, smaller American companies, to find niches in the American system so they could survive.

And, of course, IBM wanted to sell them software and IT stuff to help them do that, but at the end of the day, the last speaker----he flew in from Shanghai to say, okay, this is all well and good, and this I guess goes to the incentive issue too here, it's all well and good, but at the end of the day, you're going to be asked to meet the China price, and you can't do that unless you're in China.

So when that happens, call me. I'm in Shanghai. I'll help you relocate. It was a real downer at the end of the conference. But that's the problem.

I think you have to essentially take the profit out of moving your supply chain overseas, and you have to do that simply by what we've been advocating. It's controversial, a lot of people haven't been willing to go this route, but it's the way historically countries always solve their balance of payments and trade deficit problems. They put in tariffs and they stop the imports.

You can't produce overseas for the American market. You have to produce here if you're going to sell here. We have the largest market in the world. It's the market everybody wants, everybody needs to survive, so you got to be here to meet that, meet that market.

HEARING COCHAIR WESSEL: Thank you. Any comments, Mr. Herrnstadt?

MR. HERRNSTADT: Yes. Unfortunately, I did miss that panel discussion, but there has been an ample amount of, I think, studies

noting the drastic decline in the supplier base in this country, and I believe the old Bureau of Export Administration from years ago did some anecdotal research on the effects that some suppliers had had specifically with relationship to offsets. So it continues to be a very critical issue.

HEARING COCHAIR WESSEL: Thank you. Commissioner Wortzel.

COMMISSIONER WORTZEL: Gentlemen, thank you very much for your time and your testimony here. On the last panel, two of the panelists expressed the view that the real model for China in integrated civil/military/industrial bases is Japan, and not the United States. They cited companies like Mitsubishi Heavy Industries as an example.

In your written testimony, Mr. Hawkins, you say that the corporate model for the United State is of one supply chain both for civil or corporate and government work. That seems similar to Japan. So I'd ask both of you, if you know, what are the differences in models there that they're talking to? Has all manufacturing shifted to this dual line in market economies or in advanced economies because the military won't support a separate production system?

Now, the second question that I have, again, I'd be happy to have both of you or either of you comment, is whether you know if, as a business risk mitigation effort, American industries are ensuring that they're not overly dependent on a single source in their own supply chains such as China?

It seems to me that international conglomerates or American multinationals know that should China ever carry out its threats against Taiwan, that single source for integrated manufacturing is going to be disrupted or end, at least for awhile. So what do you see in industry as a self-defense mechanism that protects us from these concerns that we have?

MR. HAWKINS: Let's see. The notion of having one supply chain is not, that per se is not a problem. To some extent that's inevitable and it's always been an element of business.

The dichotomy has occurred because the commercial side of that is going overseas, and we don't want the military side of that to go overseas. So that makes the split. Otherwise, if you didn't have this commercial migration overseas, then it wouldn't be the problem. But that's happening, and that's what has to be pulled back into these together because it is too expensive likely to go back to an arsenal system where you maintain two separate systems.

In some ways we've already done that with the shipbuilding industry because we don't have any commercial shipbuilding to speak of. It's all essentially military, but there is a downside to that because there has been some criticism of the shipbuilding industry, that it's

falling behind in some construction techniques because it doesn't have the input from the commercial side.

So it's a good thing to have the two together, but they need to actually be together within the United States. That's the problem. The other about disruption--two things. One, a lot of what is going to the Chinese has been fairly recently and it's moved fairly fast. It could presumably move fairly fast somewhere else. In fact, even if we want to maintain the Wal-Mart effect and have cheap imports from somewhere, there are a lot of other places we could get that besides China and it would be better to, in a sense, tweak our trade policy to favor imports from somewhere else--India, Malaysia, or my favorite is the Philippines. I think we have a long history and an obligation to help the Philippines, and I would love to see some of this capital and investment go to the Philippines rather than to China.

But the other point is the Chinese know this, too, and to some extent are using that as leverage. There's writings in Chinese works saying that there really can't be a confrontation with the United States or at least not one that would last very long because business in America would not allow it. They still have this Marxist view that business interests run a capitalist economy, and they would prevent American policy from taking a confrontational course to China.

So the question is where the leverage there is? I think we could do without the Chinese goods better than they could do without the American market. But we have to use that.

COMMISSIONER WORTZEL: Mr. Herrnstadt.

MR. HERRNSTADT: Yes. I just have a very brief comment. I'm not a business person, but it seems to me it's only common sense that the questions you are asking are absolutely critical, and they are questions that need answers and answers in an exceedingly timely fashion.

So there needs to be a broad look, an inquiry into that. What happens when vital supply chains are disrupted with China, with any other country for that matter, in the commercial sector as well as in the defense sector, and what the overlap is? Those are incredibly, incredibly sensitive and important topics.

HEARING COCHAIR WESSEL: Commissioner Bartholomew. Chair Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you very much. Thank you to both of our witnesses for appearing here today and for the work that you've done. Over a number of years, Mr. Herrnstadt, I think back on the publication that the machinists did--I think 1993--now, "Jobs on the Wing."

MR. HERRNSTADT: 1995.

CHAIRMAN BARTHOLOMEW: Was it 1995? I remember my former boss citing it regularly. It was one of the first studies out there

to start focusing on what some of these issues were. Really I have more a couple of comments than questions, and I also just wanted to let people know that Commissioner Esper is not here today because he in his day job works on defense industry issues and out of concern about the ethics of the situation he decided that it made more sense for him not to be able to participate.

Commissioner Reinsch, I actually wanted to address a comment to you, which is when I hear this, this has been going on for 40 years argument, I always think what's different now is the magnitude, the extent and the speed at which it's happening. Any chance that there might have been 40 years ago to do some sort of trade adjustment assistance that worked in the context of over time seems really so much more difficult given the speed at which everything is happening and the extent at which it's happening. So just an observation on that.

Also, that when we were in Akron, Ohio, one of our witnesses testified that Ohio's biggest export is its young people because there are no jobs for them; there is no future for them there. And I guess that's really what my question comes out of. Both Mr. Herrnstadt and Mr. Hawkins, skill sets are one of the issues that are really important. I think that a lot of people have this concept that, well, anybody can do these machine tool jobs, anybody can do this sort of thing, and what can we do to ensure that this country has the trained labor force that we need for these jobs and how do we get young people to believe that there's a reason to go into those jobs if they don't see a future for themselves?

MR. HERRNSTADT: That's a very profound question, and it's really a very serious question, but it's also a really traumatic question because that's what we've been asking for many years. There are two surveys--one, the machinists did. I believe it was in 1996. It focused on a couple of plants. One included a defense facility where there was a cyclical downturn in the defense industry and a study that was commissioned I believe by the Aerospace Commission from a few years ago. I'm not quite certain of that.

And they come up with both the identical findings. They asked questions about would you want your children to follow you in this industry? Not exactly, but sort of. And the answers were basically no, why would I want to do that, I've just been laid off? Or if I get rehired, I'll get laid off again. There's no certainty in this.

So we need, we need skills, skill training. These are apprenticeship and training programs. These are not easy jobs that someone can walk in off the street and do. These are incredibly technical, high skill set jobs. We need apprenticeship programs. We need high skilled technology centers to train young people, but that doesn't mean anything if there are no jobs at the end of the day for young people or for middle-aged or senior citizens to go into on this.

If there are no jobs, it's meaningless. The incentive for people to actually go through a four-year program to obtain the certification that's needed is not there if they're going to be handed a pink slip right after they get their certificate program, which is why we need to look at sort of a really comprehensive look--I go back at that--to figure out systematically where the structural flaws in what we currently have now exist and how to actually fix them, not only now quickly but also well into the future.

MR. HAWKINS: I have to agree with everything Mr. Herrnstadt has said, but add a couple anecdotal things. My son is studying computer science, wants to go into security networking systems, but I worry will he have a job? I think maybe because that's a defensive thing; you got to protect the computers here. That's something that you can't outsource as easily.

But most of his friends aren't going into technical fields, and when I was teaching economics, there weren't very many economics majors. All my students were business majors, that's where everyone wanted to go, and it was business, finance and marketing because that's where the money is. I had a friend in graduate school who was a brilliant engineer. He held several patents, electrical engineer, worked up in Oak Ridge on high tech stuff, but he didn't really start getting recognized or paid well or really making a career until he moved into marketing.

So here's a brilliant engineer who moves over to marketing because that's where the money is. We also have to worry about the incentivizing of what we reward. Do we reward technical expertise or do we reward something else?

CHAIRMAN BARTHOLOMEW: Thank you.

HEARING COCHAIR WESSEL: I have one or two quick questions unless there are any other panelists? Did you have additional ones as well, Mr. Reinsch?

COMMISSIONER REINSCH: Maybe. You go ahead.

HEARING COCHAIR WESSEL: You raised just a moment ago, Mr. Hawkins, an issue that's currently being considered by Congress, and I am no expert on patent law, but I was wondering whether you had any thoughts on some of the changes that are being considered and what they might do to the manufacturing base in terms of long-term patent law reform? Have you spent any time on that issue?

MR. HAWKINS: Only a little bit. We're concerned. As an organization we're concerned about it. It's not one of the topics I've looked into a lot, but we are concerned because patent is about intellectual property, and intellectual property is still one of the areas that we lead the world in and we need to preserve, and it seems to me from what I understand of the reforms that are being made and have been pushed for quite awhile tends to weaken the protection of

intellectual property.

There are always more people who want to use somebody's ideas than there are people capable of coming up with the ideas, and a system that is pushed by the people who want easier, cheaper, if possible free, access to other people's ideas, that's put a lot more people on one side of the scale than on the creative people who are trying to protect their rights and again gets back to incentives. Do we want incentives for those people who are able to do high tech, innovative things? And we don't want to weaken that.

HEARING COCHAIR WESSEL: If you have any other people in your organization who have done any work on that issue or, Mr. Herrnstadt, I don't know if you have comments on the patent law reform, I would be interested in what impact you think the changes might have on our manufacturing base and opportunities there.

I also wanted to just ask a question whether either of you had a view on the issue I raised with the previous panel with Mr. Danis because I was somewhat surprised and also pleased by the comment he made on the private equity question and the changing nature of private equity here, and also China's involvement, increasing involvement, in private equity here, and that the government is now going to take a look at what the security implications of that are.

Have either of you spent any time on the private equity issue and its role in manufacturing here or associated issues?

MR. HAWKINS: Not really except for the aspect that you mentioned earlier about CFIUS, about watching for foreign takeovers of equity, and particularly we've got the Chinese now turning their huge cash hoard, hard currency reserves that they've built up through their trade surpluses, are now starting to look for more profitable ways to invest that money by going into buying up private equity instead of bonds, and that's such an enormous amount of money, and it is being run by the state. It's government money run by a government agency. That you have to think that they're going to use that money to further national objectives, not just pick up a couple of extra points of yield.

So we're going to have to strengthen our surveillance of this. According to the Bureau of Economic Analysis of the Commerce Department, last year we had a very large influx of foreign direct investment, but that 91.5 percent of that was to simply buy up existing facilities. It wasn't greenfield investments that expanded American capacity in any way. It just changed ownership from American hands to foreign hands and that has potential negative impact.

HEARING COCHAIR WESSEL: Mr. Reinsch?

COMMISSIONER REINSCH: May I? Do we have another minute?

HEARING COCHAIR WESSEL: Please, yes.

COMMISSIONER REINSCH: I do this with some trepidation.

I'm sure I'll pay for it down the line, but the point of the 40 year thing was not to say that now is not worse than then. Now is worse than then. The point was to say there are other forces at work in the economy besides trade and besides a single country, which I think we've agreed on.

I was struck by some of Mr. Herrnstadt's comments, and I was reminded of the Akron hearing by something that Commissioner Bartholomew said. I'm probably not the right person to talk about this, as the father of a divinity school student and a hip-hop performer. I've not exactly had a lot of parental experience in the job market in quite the same way as other people.

But what struck me about the Akron hearing was a machinist who was testified and talked among other things--this was not the main thrust of his testimony--about a high school kid that he had had as a summer equivalent of an intern--I'm not sure what word he used--who they thought was just wonderful, and had hoped desperately that he would go into machining when he graduated.

And the kid didn't. He looked at the job opportunities and came exactly to the conclusion that Mr. Herrnstadt described, about the marketplace. And so what did he decide to do instead? He decided to go to college and the witness said it like that was a bad thing. And I'm sorry, I don't think it's a bad thing. I think the kid made an appropriate choice for him, and I hope it was a wise one, but I don't think that the signal that we--and I'm sure it's not the signal you want to send to the current generation is that we don't want them to go to college; we want them to do something else.

I guess where that leaves me in part is back to where I began which is there are larger forces going on in the economy than we've been discussing. I think Mr. Herrnstadt's idea that we ought to spend some time studying that is a good idea and an important one.

Obviously, people are making career choices and professional choices based on their views about the future of those jobs, and if they foresee layoffs or a thin job market, they're not going to be attracted.

I suspect they're also making lifestyle choices that we haven't addressed. These are hard jobs. The jobs that your workers have not only require a lot of training, but some of them require a good bit of physical dexterity and strength, and they're not easy. When I spent all my time on the Hill working for a senator that represented a lot of steelworkers, it was the same thing. I have great admiration for the people that do those jobs.

I can also understand why there are a lot of kids today who might not want to do them and might prefer a different lifestyle, and we haven't dealt with that at all.

It seems to me that there is something to be said for spending more time collectively, workers, management, government, trying to

look at what's going on in the economy today and what kind of choices our children are making and also the extent, as you alluded to, extent to which our education system is preparing for new economic realities rather than the economic reality of 20 years ago.

So in that respect, I'm with you. I'm not sure I'm with you on everything. Do you want to comment on that, Mr. Herrnstadt, or should we just end the rant and conclude the hearing?

MR. HERRNSTADT: Thanks. If I could just briefly respond. I want to make it clear, I do think trade plays a large role in it. I think there are many other factors as well, and we need to take them all into account, but I think trade is a particularly serious factor that plays in it, and if you look at and hear as many plant closings as I have heard and others have heard and jobs moving to Mexico or China or service centers moving to the Philippines or Singapore, it makes you want to weep, and it makes you angry, and it also makes you want to do something to fix it, to hang on to what we have currently in this country.

I think also that when we talk about studying this issue, we need to do much more than that. The last thing we need is another two-year or three-year study to come out with some 300 page book. And we really need it, and this is when I say timely, I can't really understate it, urgently. We are hemorrhaging these jobs. We are hemorrhaging these communities, almost on a daily basis, and it's sick and it's also shameful.

And then the last point. Of course, these are hard jobs, but these are also great jobs. When you look at the pride that these workers have in the weapon systems that they produce, in the commercial products they produce, it is amazing. And the loyalty and dedication that they have in their work, these are folks that are enthusiastic. These are folks that love what they do. These are folks that impart this love and enthusiasm to their kids, and they hope their kids, some of them, will go into this field on it, and some of these kids want to.

But if the job security isn't there, it isn't there. This is not to say that this has some sort of, oh, mutually exclusive thing with folks getting higher education in terms of college. It's kind of a completely different discussion and for another day. Thanks.

MR. HAWKINS: I believe it's on Discovery Channel--there's a great series called "GI Factory," where they go around and they look through American factories that are building weapon systems, and they interview the people who work there, and they show how it's done. And as Mr. Herrnstadt said, the enthusiasm of the people who work there, a lot of them are veterans themselves, or they have a family member who's in the service now. They put care and concern into the work that I'm not sure you're going to find if you outsource it to some guy overseas somewhere. They're not going to be similarly directly

bonded into what they're doing as the people are in the American factories who are doing this work.

HEARING COCHAIR WESSEL: With that, thank you. I hope if you have further comments and information, that you'll provide it to us as we work on this year's our end-of-year report, and that concludes today's hearing. Thank you.

[Whereupon, at 11:55 a.m., the hearing was adjourned.]