# INVESTIGATING THE CHINESE THREAT, PART I: MILITARY AND ECONOMIC AGGRESSION

### **HEARING**

BEFORE THE

# COMMITTEE ON FOREIGN AFFAIRS HOUSE OF REPRESENTATIVES

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#### INVESTIGATING THE CHINESE THREAT, PART I: MILITARY AND ECONOMIC AGGRESSION

#### WEDNESDAY, MARCH 28, 2012

House of Representatives, COMMITTEE ON FOREIGN AFFAIRS, Washington, DC.

The committee met, pursuant to notice, at 10 o'clock a.m., in room 2172 Rayburn House Office Building, Hon. Ileana Ros-Lehtinen (chairman of the committee) presiding.

Chairman Ros-Lehtinen. The committee will come to order.

Welcome to my fellow members on the committee and to our distinguished panel of witnesses who are joining us today.

If they could take their spots, thank you so much.

After recognizing myself and my friend, Mr. Berman, the ranking member, for 7 minutes each for our opening statements, I will recognize the chairman and the ranking member of the Subcommittee on Asia and the Pacific for 3 minutes each for their opening statements, followed by 1-minute opening statements for all other members wishing to speak.

We will then hear from our witnesses. I would ask that you summarize your prepared statements to 5 minutes each before we move to the questions and answers with members under the 5-minute

As Mr. Wilson, Mr. Bilirakis, and Mr. Duncan were unable to ask questions during the hearing with the Secretary of State, I had said publicly toward the end that I will be recognizing them, when they come, first by seniority for questions before returning to the regular order of questioning for the majority side.

So, without objection, the witnesses' prepared statements will be

made a part of the record.

Members may have 5 days to insert statements and questions for the record, subject to the length limitation and the rules.

The Chair now recognizes herself for 7 minutes.

Napoleon once famously remarked that "China is a sleeping dragon. Let her sleep, for when she awakes, she will shake the

The 21st century is the era of China's awakening. The decades

to come will test whether China will truly shake the world.

This hearing is a first in a series to examine the range of threats to U.S. national security, our interests, and allies, posed by a rising China and, also, to receive recommendations on how to counter such threats. Today we will examine recent military and economic actions taken by the People's Republic of China and evaluate what they mean for United States interests and those of our allies.

In advance of his transition to the presidency of China, China's Vice President visited the United States last month. The White House went to great lengths to ensure that the visit went smoothly, reiterating a commitment to a peaceful and stable relationship. The actions taken may have included a turning-away of a high-level asylum-seeker at a consulate in China and included Vice President Biden's dismissal of a meeting request from the spouse of one of China's most prominent dissidents.

With respect to Mr. Wang, the reported defector, China's dissent news service posted an audio broadcast of a Chinese official who read the report from the Chinese Party of China, CPC, Central Committee on Mr. Wang. Allegedly, the report stated that Wang entered the U.S. Consulate in Chengdu on February 6th, spoke to U.S. officials about "relevant exchange and cooperation projects,

then asked for asylum."

The report allegedly goes on to say that, at the request of U.S. personnel, Wang filled out an application for political asylum, but late the next day, on February 7th, after "a face-to-face talk with a comrade directly dispatched from the CPC Central Committee," Wang agreed to leave the U.S. Consulate.

The possibility that the administration turned away an asylumseeker, and possibly a high-value intelligence source, raises a number of serious questions that require immediate answers. I have a pending request with the Department of State for specific informa-

tion on this matter.

Generally, the administration's overtures have failed to alter Beijing's behavior or its policies. China continues the artificial depreciation of its currency, which steals American jobs away. China continues to undermine the U.S. technological edge through all available means, including circumvention of U.S. export controls and by hacking into private and governmental computer systems. China's ongoing participation in industrial espionage is evidenced by a recent criminal indictment of individuals charged with stealing trade secrets from the DuPont Corporation.

Also, piracy of intellectual property rights remains a significant problem for U.S. companies doing business in China, such as the Illinois-based paper shredder manufacturer Fellowes, Incorporated.

Through such illegitimate means, China has made tremendous advances in the modernization of its military with a budget that some experts expect by the year 2015 will surpass the totality of all 12 of its Asia-Pacific neighbors. Along with increased maritime capacity, Chinese aggression has manifested itself in its broad territorial claims throughout the South China Sea, the East China Sea, and the Yellow Sea.

Last November, the White House finally acknowledged Beijing's bullying of its neighbors and President Obama announced a pivot to emphasis the U.S. strategic and economic interests in the Asia-Pacific region. In reaction to President Obama's pivot, one People's Liberation Army general wrote a commentary which quickly spread across Chinese Web sites. The general said, "This is aimed at China, to contain China. The United States has committed a fatal strategic error. It has misjudged its foes."

Among the expert panel of witnesses today is Dr. Larry Wortzel, Commissioner of the U.S.-China Economic and Security Review Commission, who will testify that China has prepared for cyber warfare. According to the Commission's latest report, the PLA has the cyber attack capacity to cripple computer networks in the U.S. Pacific Command.

China also remains a significant benefactor of other authoritarian regimes, providing missile defense, missile-related technology to Iran, investing heavily in Iran's energy sector, blocking strong action in Syria, expanding its relations with and seeking energy resources from Sudan, Venezuela, and Cuba. And Beijing has supplied Castro with a massive \$750-million oil rig designed to extract offshore oil from sites near the United States. Any future accident would risk a nasty oil spill into Florida's coastline.

China's refusal to cooperate with sanctions contributed to North Korea's acquisition of nuclear weapons. Although North Korea's new leader recently announced that he would suspend nuclear tests and allow inspections in exchange for food, North Korea shortly followed up by announcing that it would launch a satellite in April. This would be in violation of U.N. Security Council resolu-

tions.

China is North Korea's major supplier of food, energy, and weaponry, but Beijing does nothing in the face of North Korea's threatened missile launch. The Nuclear Security Summit, which President Obama recently attended in South Korea, does not seem to have affected the North Korean decision. In fact, Pyongyang responded to the President's warnings by moving the missile to the launch pad. When push comes to shove, Beijing always sides with its authoritarian allies, be they in Damascus, Havana, Tehran, or Pyongyang.

The Obama administration spent its first 2 years seeking accommodation with Beijing with little in return. Having failed with charm, the administration has come belatedly to seeking a more realistic approach to the China issue. Hopefully, it is not too little too

late.

Now I am pleased to turn to the distinguished ranking member for his opening statement. Mr. Berman is recognized.

Mr. Berman. Thank you very much, Madam Chairman, for call-

ing this hearing.

It was 40 years ago last month that President Nixon undertook his historic trip to China, a visit that changed the course of world events and continues to reverberate today. That trip and the establishment of diplomatic relations with China were rooted in a Cold War strategic context in which the ultimate goal was to prevent So-

viet expansionism.

In the early years of the U.S.-China relationship, the interactions between our two nations were narrowly-focused and took place almost exclusively at the government-to-government level. Today, four decades later, the bilateral U.S.-China relationship has its own strategic rationale that is global in scope. In addition to the ties between our two governments, the two countries have formed deep and wide economic, educational, and cultural connections that resonate not only in Washington and Beijing, but in the farmlands of Iowa and rural China.

At the time of the Nixon visit, China was a poor and isolated nation. Today, after decades of astonishing economic growth, hun-

dreds of millions of Chinese citizens have been lifted out of poverty;

a large middle class is forming.

China has become the world's second-largest economy and plays an integral role in the international system. With China's rise as a global power, Chinese influence can be seen and felt all over the world, from the boardrooms in the world's major financial centers to the back roads of Africa.

There are some in this country, and some on this committee, who argue that a rising China poses a significant threat to the United States, that China is looking to supplant America's leadership role in the world. And in China, some believe that the United States is in decline and determined to contain China and curb its rise.

However, many others, including on this committee, believe that U.S. cooperation with a rising China is both possible and desirable, and that a bitter and acrimonious rivalry between our two countries would have detrimental impact on global stability. As Henry Kissinger recently wrote in Foreign Affairs, "The U.S.-China relationship should not be considered a zero-sum game, nor can the emergence of a prosperous and powerful China be assumed in itself to be an American strategic defeat."

Even if the U.S. and China are able to work together on a positive basis to address regional and global issues—and I hope that we are—there will inevitably be disagreements and points of friction in our bilateral relationship. When those arise, the United States must never hesitate to speak out and take action, particularly when American interests and those of our allies and partners are at stake.

This means calling on China to end its discrimination against U.S. companies, stop the theft of U.S. intellectual property, cease its unfair currency practices. It means shining the spotlight on Beijing's appalling lack of respect for human rights, democracy, and rule of law. It means calling on China to renounce the military option in resolving its ongoing political dispute with Taiwan. And it means demanding that China explain its rapid military buildup, abide by international maritime laws and norms, cooperate with the international community to end violence in places like Syria and Sudan, and work with the United States and others to solve the North Korean and Iranian nuclear problems.

It remains to be seen how China will ultimately address these issues, what kind of role Beijing wants to play on the world stage, as it continues its economic growth and geopolitical rise. At times, China seems to want to be treated like a great power. Yet, it often ducks the responsibility that comes from being a leading player or, even worse, as we saw in the Chinese veto of the U.N. Security Council resolution on Syria, blocks the rest of the world from doing the right thing

China has benefitted greatly and achieved prosperity for its citizens from an open international economic system. Yet, China has engaged in mercantilist behavior, sometimes ignored rules of the global economy, and constructed a playing field for non-Chinese companies in China that is unfair, opaque, and corrupt.

All of this boils down to a choice for China. Will it use its growing power and newfound standing in the world solely for its own

benefit or will it pursue a constructive path that strengthens the global order for the benefit of all nations?

I thank the panel of witnesses for being here today and look forward to hearing their views on the future of the U.S.-China relationship, and yield back the balance of my time.

Chairman Ros-Lehtinen. Thank you, Mr. Berman. Thank you

for your opening statement.

And the Chair wishes to send greetings to that heckler in the back, Harry Wu, a wonderful friend of our committee, and who understands a thing or two about China's brutality.

Mr. Smith is recognized for 1-minute opening statements, and we

will recognize everyone to speak for 1 minute.

Mr. SMITH. I thank you very much, Madam Chair, and I would ask unanimous consent to have my full statement made a part of the record.

Chairman Ros-Lehtinen. Without objection.

Mr. SMITH. China's declared defense budget, already the second-highest in the world, will increase by 11.2 percent this year to \$106.4 billion. This follows a nearly unbroken string of double-digit increases over the last two decades.

As Beijing has escalated its military buildup, China has also expanded its geopolitical ambitions and increased its claim within the South China Sea. China's Asian neighbors have started to strengthen their own defenses and sought new security ties with the U.S. and other partners.

The challenges of China that it presents are not limited to any corner of the globe. China continues to advance its capabilities to initiate cyber attacks and exploit U.S. cyber security vulnerabilities, which present grave threats to U.S. national security and economic interests.

Finally, China's economic investments into Africa and other parts of the world also pose significant threats, such as locking up the supply of strategic minerals or rare earth elements used in high-tech products, including smart bombs, and offering a poor policy example of the respect for human rights to its partners.

Tomorrow I will chair my fourth hearing on China's growing influence in Africa and the bad governance model that it is exporting

to African countries like Sudan and elsewhere.

Chairman Ros-Lehtinen. Thank you. Thank you so much, Mr. Smith.

Mr. Sherman is recognized.

Mr. Sherman. If we had balanced trade with China, our unemployment rate would be under 5 percent and the cost of containing China's aggressiveness in its region would be far less. But there are high, enormous profits available by maintaining the present trade system.

And so, a huge propaganda effort is deployed to convince the American people that our current trading system is both fair and beneficial. We have a choice between two roads. One is to renounce the current MFN treatment of China and demand the negotiation of a balanced trade agreement, with a voucher system perhaps, that you need a voucher to import anything from China.

But the road more traveled is to keep repeating empty criticisms of China, in order to lull the American people to sleep, as if such repetitions for decades are going to cause a change in Beijing's policy, and to leave us with an aggressive China, unemployed Americans, and a highly-contempted foreign policy and economic establishment.

I vield back.

Chairman Ros-Lehtinen. Thank you, Mr. Sherman.

Ms. Schmidt is recognized.

Ms. Schmidt. Thank you, and I want to thank you for this hear-

ing.

I am increasingly concerned about this administration's approach with China, be it its relationship with Taiwan, the issue with the Dalai Lama, and, most importantly, the issue currently about AsiaSat, which is an issue whether the administration is agreeing to transfer communications satellite to munition controls for China. And that concerns me greatly. So, I hope we touch on those issues in this hearing.

Chairman Ros-Lehtinen. Thank you very much, Ms. Schmidt.

Mr. Sires is recognized.

Mr. SIRES. Thank you, Madam Chairlady, and thank you for

being here today.

You know, I have many concerns with China: Their abysmal human rights record, their increase in defense budget, their disregard for total international norms. So, I just want to hear what you have to say about some of those concerns that I have about China.

Thank you very much for being here.

Chairman Ros-Lehtinen. Thank you very much.

Mr. Chabot is recognized.

Mr. CHABOT. Thank you, Madam Chair, for pulling together such

a distinguished panel here as you have this morning.

Having been one of the founding chairs of the Congressional Taiwan Caucus, and having served as co-chair of that for about a decade, I do hope that our witnesses will take at least some time today to focus on China's military threat to our long-time friend and ally, Taiwan.

I remember when I first came to Congress back in 1995, I learned at that time that China had approximately 100 missiles, and every year it would go up. There would be a few hundred more and a few hundred more and a few hundred more. Now they are up to approximately 1,600 missiles, both medium-range and short-range ballistic missiles aimed at Taiwan. So, I hope during the hearing that we can focus some time on that.

I know Mr. Tkacik and I have discussed the threat to Taiwan many times. So, I particularly look forward to hearing his testiment and the other many and the other man

mony and the other members as well.

And I yield back.

Chairman Ros-Lehtinen. Thank you, Mr. Chabot.

Ms. Bass is recognized.

Ms. BASS. Thank you, Madam Chair and Ranking Member Berman.

I do look forward, as the chair of the Subcommittee on Africa mentioned a few minutes ago, tomorrow we are going to have a committee hearing on China's role in Africa, and I look forward to that. Also, perhaps some of the panelists might comment on that

relationship as well. Specifically, I am interested in the labor issue, so when the Chinese go into African nations, bringing Chinese

labor with them as opposed to hiring the local population.

As China continues down a path of growth, there are important questions that must be answered regarding China's military power, its foreign exchange policies, human rights, cyber espionage, China/Taiwan relations. While China's ascent can neither be stopped nor ignored, we must continue to focus attention on ensuring responsible Chinese policies and practices that promote peace, growth, and opportunity.

Thank you.

Chairman Ros-Lehtinen. Thank you very much, ma'am.

Mr. Connolly is recognized.

Mr. CONNOLLY. Thank you, Madam Chairman, and thank you for

holding this hearing.

The U.S.-China relationship is absolutely one of the most important, obviously, in the world, and it is a relationship that must be worked out. But the United States has to insist on its interests in

this relationship; otherwise, it is one of unequal partners.

And we need to focus, obviously, on our human rights values, as we interact with the Chinese, and we also have to insist economically on the increasing pressure of intellectual property rights. Intellectual theft is epidemic in China, and it must be addressed as we move forward in this relationship on behalf of not only our interests and our business interests, but, frankly, for the future maturation of China itself as an interest of the family of nations.

I thank the chair.

Chairman ROS-LEHTINEN. Thank you. I thank all the members for their opening statements.

And now, the Chair is pleased to welcome our witnesses.

First, Dean Cheng, who is currently the research fellow for Chinese Political and Military Affairs at the Heritage Foundation. Prior to joining the Heritage Foundation, he was the Senior Analyst with the China Studies Commission and also served with the Science Applications International Corporation.

Welcome.

Next, I would like to welcome John Tkacik, a senior fellow and director of the Future Asia Project at the International Assessment and Strategy Center. Mr. Tkacik is a retired Foreign Service officer who has devoted over 20 years of government service to Chinese/Taiwanese affairs. From the years 2001 to 2009, Mr. Tkacik was also a research fellow on China at the Heritage Foundation.

We welcome you, sir.

And we are also pleased to welcome Larry Wortzel, the Commissioner of the United States-China Economic and Security Review Commission. Dr. Wortzel was reappointed by Speaker Boehner for a 2-year term, expiring on December 31, 2012. He has a distinguished career in the U.S. Armed Forces, which included two tours of duty as a military attaché at the American Embassy in China. And he likes to go bass fishing in my home state of Florida.

And finally, I would like to welcome Taylor Fravel. He is associate professor of political science and member of the Security Studies Program at MIT. Dr. Fravel studies international relations with a focus on international security, China, and East Asia, and

is currently completing a study of China's military doctrine since

A wonderful set of panelists. I welcome you all. I ask that you, again, keep your presentation to no more than 5 minutes. And without objection, your prepared statements will be made a part of the record.

So, Mr. Cheng, please proceed.

#### STATEMENT OF MR. DEAN CHENG, RESEARCH FELLOW, ASIAN STUDIES CENTER, THE HERITAGE FOUNDATION

Mr. Cheng. Thank you, Chairman Ros-Lehtinen, Ranking Member Berman, and distinguished members of the committee, for the opportunity to be here this morning.

The views I express in this testimony are my own and should not be construed as representing any official position of the Heritage

Foundation.

My comments today will focus on the military aspect of the threat from the People's Republic of China, but I would like to emphasize that the Chinese concept of national security is a holistic one, rooted in the idea of comprehensive national power, which includes not only military capabilities, but economic capacity, level of science and technology, diplomatic respect, and even culture.

The Chinese People's Liberation Army is the most visible aspect

of China's comprehensive national power. China fields the world's largest military and has enjoyed double-digit increases in its defense budget for the last two decades. China's official defense expenditure, generally seen as understating actual defense spending,

has now passed the \$100 billion mark.

These expenditures have funded what Jiang Zemin termed "the two transformations" involving a shift from quantity to quality and emphasizing the ability to fight high-tech wars, what the Chinese now call informationized wars. In short, this is not your father's or

your grandfather's PLA.

Chinese military writings regularly note that future warfare will require networks of sensors and communications in order to win the contest between systems of systems. So, China is building, for example, a constellation of high-resolution, multi-spectral earth observation satellites to support its new fighters, tankers, submarines, and missiles. At the same time, Chinese tests of anti-satellite capabilities in 2007 and again in 2010 underscore the growing ability of the PLA to deny opponents C4ISR capabilities.

To be fair, it is important to recognize that China, as the world's most populous country and second-largest economy, is bound to have a very large military, given its expanding economic interest and substantial manpower pool. And it is wishful thinking to expect that China will follow the Soviet path and bankrupt itself on defense spending. And indeed, the Chinese leadership regularly emphasizes that national economic construction is higher priority

than army-building.

But while weapon systems are important, how the Chinese think about employing them is vital. And one of the great concerns that should worry us is that the Chinese do not necessarily think the way we do, especially in terms of deterrence and crisis management.

The American outlook has been heavily shaped by the Cuban missile crisis, itself affected by President Kennedy's lessons drawn from World War I. This has focused American attention on avoid-

ing inadvertent escalation and accidental war.

By contrast, the PRC chose to precipitate a conflict with the USSR in 1969, when both nations were nuclear-armed. And this different attitude is also reflected in the Chinese refusal to talk about creating maritime rules of the road. In the Chinese view, such rules allow both sides to feel safe when operating in close proximity, but the Chinese have very little interest in making the United States feel safe in the western Pacific in disputed waters, when they are engaging in what Beijing sees as illegitimate activities. The solution to avoiding accidents or crises, in their view, is for the United States to pull back.

This fundamentally different perspective on deterrence and crisis management is symptomatic of the reality that China is different from Iraq, Serbia, or Afghanistan. China has a substantial indigenous military industrial base. It possesses space and cyber capabilities on a rough par with the United States, as well as its substantial nuclear arsenal. The Chinese pose a fundamentally different scale of threat than have other states in the past or even North

Korea or Iran would in any calculation in the future.

These differences are exacerbated by what U.S. analysts have termed China's anti-access/area denial strategy. As the PRC takes a holistic view toward assessments of national power, so Chinese efforts to prevent the United States from readily deploying to the western Pacific involve strategic and operational as well as tactical elements.

At the strategic level, the Chinese pursue a range of political warfare measures, including the so-called warfares of legal warfare, public opinion warfare, and psychological warfare, all of which seek to influence domestic, adversary, and third-party audience perceptions and attitudes by undermining legitimacy, strengthening friendly will, and arousing sympathy.

At the operational level, Chinese military writing suggests an emphasis on establishing information superiority or dominance over an opponent, which, in turn, involves securing space and cyber dominance, thereby preventing an opponent from coordinating their

forces or targeting their weapons.

When coupled with tactical systems, such as anti-ship ballistic missiles, we then see a unified approach that links tactical to operational to strategic, the objective being to allow the Chinese leadership to dissuade local states from supporting the United States for allowing it to operate in its area.

The Chinese have a consistent approach with persistent actions. The challenge from Beijing seems clear. It is up to us to respond.

[The prepared statement of Mr. Cheng follows:]



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#### **CONGRESSIONAL TESTIMONY**

# The Security Challenges Posed by the People's Republic of China

Testimony before House Foreign Affairs Committee United States House of Representatives

March 28, 2012

Dean Cheng Research Fellow The Heritage Foundation My name is Dean Cheng. I am the Research Fellow for Chinese Political and Security Affairs at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

Thank you Chairman Ros-Lehtinen, Ranking Member Berman and distinguished members of the Committee for the opportunity to be here this morning.

My comments today discuss the issue of the threats posed by the People's Republic of China (PRC) to the United States. They will focus on the security aspect of the threat, but I would like to emphasize that the Chinese concept of national security is a holistic one, rooted in the idea of "comprehensive national power." Comprehensive national power assumes that a nation's standing, and its relative power, is rooted not solely in its military, but must also take into account its economic capabilities, its scientific and technical capacity, the diplomatic respect it receives, and its political unity. There is even a cultural component, as Chinese President Hu Jintao noted in a speech last year.<sup>1</sup>

This is not to equate "comprehensive national power" with "threat." Indeed, Chinese economic growth and prosperity cannot be properly called a threat in any direct sense; China's economic development does not, in and of itself, jeopardize American security. But it is a part of the security calculus because it enables China's military modernization as currently conceived, and because it represents, as the Chinese phrase it, part of the overall military *potential* of a nation.

In terms of the military-security aspect, there are many visible elements. That being said, the military-security aspect is, in many ways, the most visible element of the China threat. The People's Liberation Army (PLA) is the world's largest military, numbering

<sup>&</sup>lt;sup>1</sup> Edward Wong, "China's President Lashes Out at Western Culture," *New York Times* (January 3, 2012). http://www.nytimes.com/2012/01/04/world/asia/chinas-president-pushes-back-against-western-culture.html?\_r=1

approximately 2.3 million troops.<sup>2</sup> By contrast, the United States active duty military is approximately 1.5 million.<sup>3</sup> The recently concluded National People's Congress (NPC) declared that the PLA budget would increase by 11.2% in 2012, continuing a two-decade long pattern of double-digit increases, which has seen the official spending figures more than double. These figures, widely acknowledged to be substantially understating China's actual defense spending, have now passed the \$100 billion mark.<sup>4</sup>

The PLA military has been steadily modernizing across a range of capabilities, including land, sea, air, and space forces. This effort gained impetus in the wake of the first Gulf War, when the Coalition performance took the Chinese by surprise. The direction of that effort was codified in the "Military Strategic Guidelines for the New Period." These guidelines, issued in 1993, introduced the concept of "local wars under modern, high-tech conditions." These guidelines constitute "the highest level of national guidance and direction" to the Chinese armed forces.<sup>5</sup>

In a December 1995 speech by then Party General Secretary and Chinese President Jiang Zemin to the Central Military Commission further clarified the direction of Chinese military modernization. In that speech, Jiang emphasized the importance of the new guidelines, and charged the PLA with undertaking the "Two Transformations (*liangge zhuanbian*, 两个转变)." These entailed a shift from a military focused on quantity to one focused on quality, and from a military preparing for "local wars under modern

<sup>&</sup>lt;sup>2</sup> International Institute for Strategic Studies, *The Military Balance 2010* (London, UK: Routledge Press, 2010), p. 399.

<sup>&</sup>lt;sup>3</sup> International Institute for Strategic Studies, *The Military Balance 2010* (London, UK: Routledge Press, 2010), p. 31.

<sup>&</sup>lt;sup>4</sup> Keith Richburg, "China's Military Spending to Top \$100 Billion in 2012, Alarming Neighbors," Washington Post (March 4, 2012)

<sup>&</sup>lt;sup>5</sup> David Finkelstein, "China's National Military Strategy: An Overview of the 'Military Strategic Guidelines,'" in *Right-Sizing the People's Liberation Army: Exploring the Contours of China's Military* ed. by Roy Kamphausen and Andrew Scobell (Carlisle, PA: Strategic Studies Institute, 2007), p. 82.

conditions," to one that was preparing for "local wars under modern, high-tech conditions."

This modernization is reflected in the steady acquisition of a range of new systems by the PLA Air Force, PLA Navy, and Second Artillery, which are growing in importance relative to the ground forces, the traditional senior service in the PLA, due to their greater reliance on technology.

For the PLA Air Force, the modernization effort has seen the steady introduction of new fighters, including Su-27s and Su-30s acquired from Russia, as well as the indigenously developed J-10. The new J-20 stealthy combat aircraft was tested on the eve of Secretary of Defense Gates' visit in 2010. Other PLA acquisitions include tanker, transport, and electronic warfare aircraft, reflecting the broad modernization of PLAAF capabilities extending to the combat support functions. The PLA XV Airborne Corps, under the control of the PLAAF, has also seen its equipment modernized, including new airborne combat vehicles.

For the PLA Navy, the modernization effort has seen the introduction of at least two new submarine classes, including the domestically designed *Yuan*-class diesel-electric boat, and continued work on a new nuclear-powered attack submarine.

China's missile forces, meanwhile, are believed to be steadily acquiring both ballistic and cruise missiles. They are also believed to have reached initial operational capability with the DF-21D anti-ship ballistic missile system.<sup>7</sup>

More important than individual weapons is the steady Chinese effort to improve their command, control, communications, computers, intelligence, surveillance, and

<sup>&</sup>lt;sup>6</sup> Zhang Qinsheng and Li Bingyan, "Complete New Historical Transformations—Understanding Gained from Studying CMC Strategic Thinking on "Two Transformations," "People's Liberation Army Daily (January 14, 1997), in FBIS-CHI.

<sup>&</sup>lt;sup>7</sup> Ronald O'Rourke, China's Naval Modernization: Implications for US Navy Capabilities: Background and Issues for Congress, RL33153 (Washington, DC: Congressional Research Service, April 22, 2011), p. 10.

reconnaissance, or C4ISR, capabilities. This is a reflection of the shift in focus from "local wars under modern, high-technology conditions" to "local wars under informationized conditions." In essence, the PLA has made clear that it consider the most important high technology areas were those associated with information, i.e., communications, computers, advance sensors, space systems. Moreover, Chinese military writings regularly note that future warfare will not be platform against platform, or even system (xitong) against system, but a contest between systems-of-systems (tixi). Thus, the creation of networks of sensors and communications is at least as important as the acquisition of particular weapons.

In this regard, the recent Chinese space white paper highlighted the plan to field, in the next five years or so, a constellation of high-resolution, multispectral earth observation satellites—in short, China is entering the "spy satellite" business, to provide the PLA with global surveillance and tracking capabilities. At the same time, Chinese tests of anti-satellite capabilities, not only in 2007, but in 2010, underscore the growing ability of the PLA to deny opponents the same C4ISR capabilities that the PLA is acquiring.

#### Additional Threat Considerations

While much of the discussion of the potential threat from China tends to focus on hardware, this "bean count" type of analysis can be somewhat misleading. It is important to recognize that China, as the world's most populous country, and also the second largest economy, is bound to have a very large military. It has more people to draw upon, and an increasing portfolio of interests that require defending. And, as has been noted, there is nothing more expensive, and more useless, than a second-best military.

Chinese defense spending, too, needs to be seen in the context of Chinese strategy. China's defense spending is generally accepted to be significantly higher than its official figures, but that is not to say that China is necessarily spending for defense on the scale of

<sup>&</sup>lt;sup>8</sup> PRC State Council Information Office, China's Space Activities in 2011 (Beijing, PRC: State Council Information Office, 2012). http://www.chinadaily.com.cn/cndy/2011-12/30/content\_14354558.htm

the former Soviet Union. Indeed, as close students of the collapse of the USSR, it is mistaken to expect that China will follow the Soviet path and bankrupt itself on defense spending while neglecting the other components of comprehensive national power.

Instead, the Chinese leadership regularly emphasizes that national economic construction continues to hold higher priority than army-building. This emphasis on building up national economic power, and keeping military spending on a relatively lower priority, was reiterated in Hu Jintao's December 2004 speech, when he laid out the "historic missions of the PLA in the new phase of the new century," often referred to as the "New Historic Missions" of the PLA.

What should worry us about the PRC, and in particular about its military build-up, are the underlying context within which we should be examining China's military modernization effort. The first issue is that the Chinese do not think the way we do. By this, I am referring to the issues of deterrence and also of crisis management. The American outlook on both has been shaped in no small part by the Cuban Missile Crisis, itself affected by President Kennedy's lessons drawn from World War I. The great fear has been that war would result from inadvertent escalation; thus, Kennedy worried about pushing the Russians too far, paralleling the path to World War L<sup>9</sup> The President's ambassador-at-large, Chester Bowles, meanwhile recommended Barbara Tuchman's *The Guns of August* to Ambassador Dobrynin in the midst of the crisis, in order to avoid a repetition of the "pattern of politico-military action and counter-action." Consequently, there is a common belief on the part of many American analysts that "nuclear armed nations do not go to war with each other." This conclusion implies that the main danger is accidental conflict, rather than deliberate action.

<sup>9</sup> Robert Kennedy, Thirteen Days: A Memoir of the Cuban Missile Crisis (NY: WW Norton, 1969), p. 127.

<sup>&</sup>lt;sup>10</sup> Chester Bowles, "Memorandum from the Ambassador at Large (Bowles) to President Kennedy, 13 October 1962," from Foreign Relations of the United States 1961-1963, Vol. XI Cuban Missile Crisis and Aftermath (Washington, DC: US Government Printing Office, 1996). http://www.mtholyoke.edu/acad/intrel/bowles.htm

It is not at all clear, however, that the PRC necessarily subscribes to a comparable view. In this regard, it is important to recognize that, whereas the western focus of deterrence has tended to be on dissuasion, the Chinese term *weishe*, which is commonly translated into "deterrence" in fact embodies not only dissuasion, but also coercion. This is not simply a terminological difference or issue of translation; rather, it indicates that, at a fundamental, conceptual level, American and Chinese policy-makers approach the concept of deterrence, and therefore international relations, from wholly different starting points.

This is reflected in Chinese historical behavior. It is useful to recall that the PRC chose to precipitate a conflict with the USSR in 1969, when both were nuclear-armed, over the disputed border. That conflict not only suggests that the Chinese view of what successfully deters is different from our own, but also betrays a very different sense of crisis management. The Chinese seem to believe that crises are fundamentally controllable. Thus, in recent discussions to limit the potential for aerial or maritime incidents, the Chinese stance has been to reject "the possibility of accidents, blaming continued US operations for any risks." 12

This stance is especially disturbing, as recent crises suggest a reluctance to engage in communications during a crisis. Thus, during the EP-3 incident in 2001, Chinese officials could not be contacted for some time. The commander of the US Seventh Fleet has also indicated that Chinese naval forces currently tend to ignore ship-to-ship communications in the Asian region. Indeed, Chinese crisis response often seems to be sluggish, with officials reacting at telex-speeds in an increasingly Twitter-based world.

<sup>&</sup>lt;sup>11</sup> American policy-makers at the time had concluded that it was the Soviets that were the probable aggressors. Henry Kissinger, On China (NY: Penguin Press, 2011), p. 217.

<sup>&</sup>lt;sup>12</sup> Shirley Kan, US-China Military Contacts: Issues for Congress, RL 32496 (Washington, DC: Congressional Research Service, 2012), p. 25.

<sup>&</sup>lt;sup>13</sup> Shirley Kan, US-China Military Contacts: Issues for Congress, RL32496 (Washington, DC: Congressional Research Service, 2012), pp. 25-26.

This fundamentally different approach to deterrence and crisis management would not be so worrisome, but for the reality that China is such a major player on the world stage. Indeed, by dint of its population, economy, and technological base, as well as its military, China is different from all other post-Cold War antagonists of the United States. Unlike Iraq, Serbia, or Afghanistan, China has a substantial indigenous military industrial base, and possesses space and cyber capabilities on a rough par with the United States, as well as a substantial nuclear arsenal. In any threat assessment of the PRC, then, one must consider not only China's substantial actual capabilities, but its approach to crises which is potentially destabilizing. Thus, in assessing the potential risks of conflict, the PLA poses a fundamentally different scale of threat than have other states in the past, or even than North Korea or Iran would in any calculation of the future.

This is further exacerbated by the choices the PRC has made in terms of what programs to pursue, which would not suggest benignant intentions. US analysts have characterized China's military approach as one of anti-access/area denial. In essence, the PLA's efforts appear aimed at preventing the United States from deploying to the western Pacific, and therefore jeopardize the ability of the United States to support its allies, assist its friends, or otherwise fulfill its security obligations. Some of the programs that recent DOD reports on Chinese military capabilities have highlighted in this regard include anti-ship ballistic missiles, anti-ship cruise missiles, and modernization of various Chinese strike aircraft.

But Chinese efforts opposing American access extend beyond simply the acquisition of systems, and involve strategic and operational activities, which are equally problematic in their effect on US abilities to operate in the western Pacific.

At the strategic level, the Chinese write regularly about the importance of political warfare, which is aimed at fundamentally altering the framework of regional activity, raising doubts about the very legitimacy of the American presence. This includes the pursuit of the so-called three warfares, i.e., public opinion warfare, psychological warfare, and legal warfare.

Public opinion/media warfare is the venue for implementing psychological and legal warfare. It refers to the use of various mass information channels, including the Internet, television, radio, newspapers, movies, and other forms of media, in accordance with an overall plan and with set objectives in mind, to transmit selected news and other materials to the intended audience. The goal is to generate public support both at home and abroad for one's own position and create opposition to one's enemy. It seeks to guide public perceptions and opinion so as to effect shifts in the overall balance of strength between oneself and one's opponent.<sup>14</sup>

Public opinion warfare is seen as a stand-alone form of warfare or conflict, as it may occur independent of whether there is an actual outbreak of hostilities. Indeed, it is perhaps best seen as a constant, ongoing activity, aimed at long-term influence of perceptions and attitudes. One of the main tools of public opinion/media warfare is the news media, including both domestic and foreign entities. The focus of public opinion/media warfare is not limited to the press, however, but involves all the instruments that inform and influence public opinion (e.g., movies, television programs, books).

Psychological warfare is the most basic of the "three warfares." It is defined as conflict in the spiritual and psychological area; its purpose is to influence, constrain, and/or alter an opponent's thoughts, emotions, and habits, while at the same time strengthening friendly psychology. <sup>15</sup> Although much of the focus is on commanders and key decision-makers, psychological warfare is also aimed at the broader civilian and military populations. It encompasses the range of actions that will affect an opponent's

<sup>&</sup>lt;sup>14</sup> Academy of Military Sciences Operations Theory and Regulations Research Department and Informationalized Operations Theory Research Office, *Informationalized Operations Theory Study Guide* (Beijing, PRC: AMS Press, November, 2005), p. 405 and Liu Gaoping, *Study Volume on Public Opinion Warfare* (Beijing, PRC: NDU Press, 2005), pp. 16-17.

<sup>&</sup>lt;sup>15</sup> Academy of Military Sciences Operations Theory and Regulations Research Department and Informationalized Operations Theory Research Office, *Informationalized Operations Theory Study Guide* (Beijing, PRC: AMS Press, November, 2005), p. 404.

population, social groups, military, government, and/or leadership, in terms of their beliefs and attitudes, including their will to resist. Thus, psychological warfare is seen as more than simply military propaganda, but is a reflection of comprehensive national power and overall national strength, in psychological terms.<sup>16</sup>

Legal warfare, as one Chinese article defines it, involves "arguing that one's own side is obeying the law, criticizing the other side for violating the law, and making arguments for one's own side in cases where there are also violations of the law." <sup>17</sup> It is one of the key instruments of psychological and public opinion/media warfare, by raising doubts among adversary and neutral military and civilian authorities, as well as the broader population, about the legality of adversary actions, thereby sapping political will and support, and potentially retarding military activity. It also provides material for public opinion/media warfare.

What makes the Chinese conception of legal warfare unique is that it is an offensive, rather than defensive, orientation towards the use of the law in times of crisis or conflict. American JAGs are focused on advising American officers on when their actions may violate the law; the case where a JAG advised against firing a missile against Mullah Omar because of the presence of civilians in his convoy is perhaps the best example.

By contrast, the Chinese conception is to use the law to attack and constrain opponents by seizing the initiative on the legal battlefield and thereby disrupt enemy operations. This includes efforts at legal deterrence or coercion, which would warn an opponent that their every action will be scrutinized for possible violations of international law or the laws of armed conflict, in order to impose self-constraint; legal strikes, which would officially charge the enemy with operational activities that violated the law; and legal counter-

<sup>&</sup>lt;sup>16</sup> National Defense University Research Section, New Concepts of the Military Transformation (Beijing, PRC: PLA Press, 2004), pp. 196-197.

<sup>&</sup>lt;sup>17</sup> Han Yanrong, "Legal Warfare: Military Legal Work's High Ground: an Interview with Chinese Politics and Law University Military Legal Research Center Special Researcher Xun Dandong," *Legal Daily* (PRC), (February 12, 2006)

attacks, which would highlight enemy efforts at slanting or misrepresenting international law in their favor.

At the operational level, Chinese military writings suggest that they are intent upon establishing information superiority or dominance over an opponent, that is, the ability to exploit information more rapidly and effectively, while preventing an adversary from doing so. As one Chinese military textbook observes, the focus of the "campaign basic guiding concept" is to establish superiority, or dominance, over the information realm. Seizing information superiority or dominance (*zhi xinxi quan*) is seen as vital. <sup>18</sup> An essential means of attaining information dominance, in turn, would be through military space operations. "Establishing space dominance, establishing information dominance, and establishing air dominance in a conflict will have influential effects."

By attacking opposing space forces, the PLA would deny an opponent the elements crucial for coordinating forces, targeting advanced weapons, and determining the effectiveness of operations countering China's anti-access/area denial capabilities. By engaging in computer network attacks, the PLA potentially threatens the entire information infrastructure upon which national militaries and national economies depend. In combination, it would nullify much of the advantage that American forces have enjoyed in previous conflicts.

Again, this suggests that the overall Chinese military development effort is focused on countering the American ability to uphold its alliance commitments and support friends and allies in the region. In a situation where the "three warfares" were already raising doubts about the legitimacy of an American role, the Chinese ability to demonstrate information dominance through the establishment of space and cyber superiority would raise real questions about whether the United States could respond at an acceptable cost.

<sup>&</sup>lt;sup>18</sup> Zhang Yuliang, Chief Editor, The Science of Campaigns (Beijing, PRC: National Defense University Publishing House, 2006), p. 81.

<sup>&</sup>lt;sup>19</sup> Zhang Yuliang, Chief Editor, *The Science of Campaigns* (Beijing, PRC: National Defense University Publishing House, 2006), p. 83.

By raising the cost of American intervention, such efforts also serve to influence other Asian states, by raising doubts about whether the United States can and will fulfill its commitments. Chinese demonstrations of their capabilities, whether the anti-satellite tests of 2007 and 2010, or persistent Chinese cyber intrusions into various nations' networks, serve as a warning to all states, conforming with the old Chinese saying, "Kill the chicken to scare the monkey." By showing that the PLA has the ability to challenge the United States in the most advanced technology domains, space and cyber, the Chinese leadership is making clear that any American intervention will be potentially costly. That Beijing is doing this while simultaneously pushing assertively against its neighbors is likely intended to raise doubts in Tokyo, Seoul, Manila, and Taipei about how effective an American response would be—and therefore whether those states should seek it in the first place. The more longstanding the doubts, the greater the hesitancy to call upon the US in the midst of a crisis.

In this light, the Chinese acquisition of tactical capabilities, such as the anti-ship ballistic missile, reinforces the strategic objectives. The more capable the PLA appears to be in effecting an anti-access/area denial capability, the more likely Chinese strategic political warfare moves are to raise questions about the desirability as well as viability of opposing Beijing. Persuading China's neighbors that it is better to concede to Chinese wishes than to call upon an America that cannot effectively do anything would allow Chinese leaders to obtain victory without fighting. At the same time, if America finds its allies reluctant to provide or request support and assistance, then Washington is less likely to intervene, especially when that intervention is more likely to be costly.

#### Conclusions

It cannot be emphasized enough that China's approach to its security is not solely focused on military measures, but instead incorporates all the instruments of national power. The PRC conceives of its foreign and security policy in a holistic manner, and is employing all of its available resources, military, science and technology, economic and diplomatic

resources, in order to influence its neighbors, many of which are American allies and friends.

China, for example, has used its space program, not only to create anti-satellite capabilities, but also to demonstrate its technological prowess. As important, it has also employed it as a diplomatic tool, creating the Asia-Pacific Space Cooperation Organization (APSCO) which is headquartered in Beijing.

China has also established a global, 24-hour English language news service as part of Xinhua, the Chinese state news agency, and is opening news bureaus around the world. Meanwhile CCTV has now opened an office here in Washington, DC.

In response, the United States needs to establish a consistent policy, comprising persistent actions across the spectrum of capabilities to make clear that the United States will remain a steadfast partner.

Yet, the Chinese challenge does not appear to be evoking a sufficient American response. Despite NASA's excellent "branding" globally, it is not clear that the United States has been nearly as diligent in utilizing its space assets for terrestrial, political gains. And while China has been expanding its global media presence, the US has tried to cut Chinese language services on Voice of America, and AP, as well as AFP, Reuters and other western news agencies are limiting their news bureaus to a handful of capitals. Thus, around the world, the first and sometimes only view of the news is through Beijing's eyes. In terms of strategic communications, it would seem China has a far better understanding of the myriad ways to influence global opinion than does the nation of Madison Avenue.

Even the much-discussed "pivot to Asia" contained in the recent Defense Strategic Guidance falls short. For all the publicity accorded the phrase, there is a remarkable lack of concrete commitments of resources to match the rhetoric. Both Secretary Panetta and Secretary Clinton have emphasized that the United States still looks to Europe.

"Europe remains America's partner of first resort," Mrs. Clinton said, and Mr. Panetta described Europe as the United States' "security partner of choice for military operations and diplomacy around the world." <sup>20</sup>

This raises questions about just how much of a pivot is actually involved, especially as budgetary resources are cut.

The United States remains the predominant power. In Asia, it is far more welcome and far less distrusted than the PRC. The 21<sup>st</sup> Century can be "America's Pacific Century" as Secretary of State Clinton has called it, , but it requires a willingness to demonstrate leadership and resolve, to make clear to the region that we are, as Robert Kennedy phrased it, "just friends and brave enemies."

<sup>&</sup>lt;sup>20</sup> Elisabeth Bumiller and Steve Erlanger, "Panetta and Clinton Seek to Reassure Europe on Defense," New York Times (February 4, 2012). http://www.nytimes.com/2012/02/05/world/europe/panetta-clinton-troops-europe.html

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Chairman Ros-Lehtinen. Thank you very much. Mr. Tkacik, did I get your name, more or less? Nailed it? You are recognized, sir. Thank you.

#### STATEMENT OF MR. JOHN J. TKACIK, JR., SENIOR FELLOW AND DIRECTOR OF THE FUTURE ASIA PROJECT, INTER-NATIONAL ASSESSMENT AND STRATEGY CENTER

Mr. TKACIK. Madam Chairman, Ranking Member Berman, distinguished members, thank you for giving me the opportunity to appear here today.

I have submitted extensive written remarks, and I appreciate the

chairman's offer to put them in the record.

Let me say at the outset, China, since 1989, and, indeed, since the collapse of the Soviet Union in 1992, has assumed an adversarial posture toward the United States, Europe, and Japan, and

others, in a variety of foreign policy and war-fighting areas.

As one Chinese strategist puts it, "In the world today, virtually every one of America's adversaries are China's friends." This is not a coincidence. China's leadership sees the United States as a challenge to the legitimacy of the regime. And indeed, across the board, from nuclear and missile proliferation to human rights, to global climate change, and fisheries, China adopts a diametrically-opposite policy to the United States.

And even during the Iran and Iraq wars—or excuse me—the Iraq and Afghanistan wars, China has gone out of its way to provide weapons and explosives, and I would argue computer network assistance, to hostile states and insurgents in direct combat with U.S.

coalition and NATO forces.

My job is to look out into the future of Asia 20 years or so and calculate what we are likely to see. Basically, I am following straight-line trends over the past 20 years, and I will project them

into the next 20 years. What we have is not reassuring.

When you try to integrate multiple trend lines and aggregate the results, the margins for error grow and the conclusions are necessarily speculative. But if 20 years ago one had done a straightline projection of China's previous decade of economic and population growth, or for military spending, or even foreign exchange reserves growth, your projections 20 years later in 2012 would be low. They would be sort of on the mark, but they would have been low. China is now the largest industrial power on earth. China's industrial sector has overtaken America's.

Now, many of the international threats that the United States faces around the world are discrete military, transnational terrorism, et cetera, but, as such, analyzing them is more or less straightforward. Not so with China. China poses a direct, multidimensional matrix of threats and approaches it with a strategy which I believe the Beijing leadership has thought through in great detail over the past two decades. China is now clearly following a broad national strategy of state mercantilism which has scant regard for international norms, intellectual property. It has an immense industrial spying apparatus. And in fact, any tools that expand China's wealth are utilized without regard to legality, proprietary, or convention.

The threats are economic. They are industrial. They are commercial and financial. They are technological, scientific, territorial, and political. They involve transnational crime and environmental challenges. There are also colossal demographic challenges that, too, can turn into threats on very short order. The military threats posed by China are intensely more complicated by the non-military dimensions. And all these threats can blow up in America's face in a moment's notice.

My written remarks are quite extensive, but they only touch upon a few areas where America's national security is already in jeopardy. Let me start with the economic threats from China.

They include trade, financial, industrial, and technological factors and the Chinese strategies that underpin them. There's no question but that the cyber threat is the single greatest threat to the United States, and to be a bit dramatic, to the entire rules-based international system that China now has approached.

Chinese intelligence and the entire Chinese state have access to everything in everyone's computers. I wish I were exaggerating, but, alas, I am not. Imagine what you could do with complete, unfettered access to the emails of your political rivals, your economic rivals, your banks, your news organizations, the personal emails of anybody you wanted, all of the Fortune 500 companies of America, the Fortune 1,000 across the world. That is precisely the threat.

In my written submission, I will also touch upon China's territorial sea claims, but not its threats to its continental neighbors because those are penumbral to America's core interest and to those of our treaty allies. Suffice it to say that China's territorial sea claims in the South China Sea, the Taiwan Strait, the East China Sea are absolute. They brook no challenge.

China's own legislation, its supreme national law, permits only the intrusion on these waters of foreigners who "abide by Chinese law." And I must say, recent Chinese statements that no country claims the entire South China Sea are true, except that China claims 1.5 million square kilometers of it. The rest of it is negotiable

I will leave that as my oral presentation. I would like to get into the issues of Taiwan and others in the questions and answers.

Thank you.

[The prepared statement of Mr. Tkacik follows:]

# TESTIMONY FOR THE HOUSE COMMITTEE ON FOREIGN AFFAIRS

## Investigating the Chinese Threat, Part One: Military and Economic Aggression

### March 28, 2012

## John J. Tkacik, Jr. Senior Fellow, Director Future Asia Project International Assessment and Strategy Center

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Madame Chairman, and distinguished members, I thank you for giving me the opportunity to appear before you today.

I submitted some written remarks, Madame Chairman, and I wonder if they could be submitted for the record.

Future Asia

My job is to look out into the future, twenty years or so, and calculate what we're likely to see in Asia. The lazy way to do this is to follow straight-line trends over the past twenty years, project them into the next twenty and see what you get.

For populations, this is fairly reasonable, for other trends it is unsafe beyond five years or so. Still, if one can project economic growth trends, together with populations and migration trends for five years, you can lay a baseline for longer-term trajectories.

When you try to integrate multiple trend lines and aggregate the results, the margins for error grow and conclusions are necessarily speculative. But if, twenty years ago, one had done a straight-line projection of China's previous decade of economic and population growth, or for military spending growth, or even foreign exchange reserves growth, your figures for 2012 would be a bit low, but not really off the mark.

Many of the international threats that the United States faces are discrete and as such, analyzing them is more or less straightforward. Not so with China. China poses a multidimensional matrix of threats and approaches it with a strategy which I believe the Beijing leadership has thought through in great detail over the past two decades.

The threats are economic, industrial, commercial, financial. They are technological, scientific, territorial, political, diplomatic. They involve transnational crime and environmental challenges. There are colossal demographic challenges that, too, can turn into threats in very short order.

The military threats posed by China are intensely more complicated by the non-military dimensions. And all these threats can blow up in America's face at a moment's notice.

My written remarks are quite extensive, but they still only touch upon a few areas where America's national security is already in jeopardy. Let me start with the economic threats from China. They include trade, financial, industrial and technological factors and the Chinese strategies that underpin them. I will also touch upon China's territorial seas claims, but not its threats to its continental neighbors because they are penumbral to America's core interests and those of our treaty allies.

Then there non-economic threats to the U.S. and its allies, including China's diplomatic support around the world for countries of proliferation concern – "rogue states" with avowed goals of harming the United States. China's support for rogue states seems at once a cynical but highly effective tactic to keep the United States off balance. I have recently done extensive research on China-North Korea relations and that is a focus of today's testimony. I appeared last summer before the HFAC Oversight Subcommittee to discuss on China-Pakistan, another nuclear state whose nuclear weapons program China has abetted. I have not written on the details of China's diplomatic and technical support for Iran's nuclear program, but I am familiar with the broad outlines.

China also poses a very new challenges in Africa, the Middle East, the Pacific Islands, and of course in the Western Hemisphere. Only in Latin America, however, does China have a prepackaged ideological network – the so-called "Bolivarian Alliance" – for Beijing's regional diplomacy to build upon. China is already the leading trade partner with South America, importing petroleum, minerals, metals and raw materials and exporting manufactured goods, construction services, and providing increasingly vast amounts of credit. For most of the last decade the dominant analysis of China's "rise" in Latin America has been that China is focused on advancing its substantial commercial interests (Chinese imports from Latin America grew from \$2 billion in 2000, to \$91

billion in 2010), securing energy and other vital natural resources, and opening markets to sustain its own political-economic stability. For the most part, this line of analysis has led to the assumption that any Chinese "threat" in Latin America is at most a distant prospect for the United States. But the intensity of China's new economic interests in the Hemisphere suggests China is interested in more than profits. The Chinese have shown a puzzling eagerness for a strategic presence in the Caribbean which does not seem related to their resource needs. I have not prepared any further remarks on Latin America, but I can address some broader strategic factors if you wish.

First, let me explain the economic threats.

State Mercantilism with Chinese Characteristics

On the evening of September 21, 2005, Deputy Secretary of State Robert Zoellick proffered to a large audience of dinner guests at the National Council on US-China Relations a short but important policy speech which centered on the question "Whither China?"

In it, he six times used the term "mercantilism" to describe China's economic strategy as if to say that China's mercantilist policies were certainly doomed to failure, and that for China's own sake, it could not sustain them. But one of Mr. Zoellick's remarks caught my attention. Mr. Zoellick, informed no doubt by the mountains of secret intelligence data that flooded his in-box each day, observed that, and I quote:

"China's economic growth is driving its thirst for energy. In response, China is acting as if it can somehow 'lock up' energy supplies around the world. This is not a sensible path to achieving energy security. Moreover, a mercantilist strategy leads to partnerships with regimes that hurt China's reputation and lead others to question its intentions."

It was a supremely astute observation. Here we are, six years later, and China not only has continued on this text-book path of mercantilism, but has widened it to six lanes. And it is not just energy supplies that China is "locking up" but mineral and agricultural resources as well. Six years ago, Mr. Zoellick simply could not believe that China intended to embark on this course, but all evidence is that they have.

The instruments of state mercantilism

The most unsettling aspect of China's relentlessly high economic growth rates, is the aggressiveness with which the state uses all means, licit and illicit, to achieve them, from foreign exchange manipulation, commodities monopolies, predatory business practices, cyber intrusions to gain market-moving information (and there is evidence suggesting that some cyber penetrations in financial institution computer networks have the potential to crash entire sectors), wholesale theft of intellectual property and proprietary business information, intimidation of trade partners, arrests of foreign businessmen, even scamming international carbon trading markets designed to reduce global climate change.

China also is expanding rapidly its demographic footprint around the globe with intensive out-migration to developing countries in Africa<sup>2</sup>, Latin America and the Caribbean<sup>3</sup>, Central and North Asia<sup>4</sup>, the Russian Far East<sup>5</sup> and the Pacific<sup>6</sup>, notably in the form of large labor cohorts engaged in construction and infrastructure projects which then remain in their host countries which enter host country retail sectors and after the projects are completed. These new communities of overseas Chinese are now have significant impacts on host country economies and politics.

Complementing this economic aggressiveness is China's apparent intention to assert its territorial claims to dominate civilian maritime and aviation transportation in East Asia, particularly in the sea and airspace of the South China Sea, the Taiwan Strait, and the East China Sea. These territorial sea and airspace claims also impact subsea oil, gas and mineral resource exploration and development as well as important fisheries of China's neighbors in Southeast Asia, Taiwan, Japan and South Korea. It should also be noted that China's territorial sea claims are in direct conflict with international law, specifically the 1982 "United Nations Convention on the Law of the Sea" (UNCLOS) to which China is a party. China justifies its disregard for the UNCLOS by averring that its territorial claims predate the UNCLOS and therefore are not covered by it."

There is no question that China's state-directed mercantilism engages in all these practices, although some suggest that it is not a conscious or monolithic state policy. The numbers are quite persuasive that, whatever China is doing, it has the effect of expanding China's economic power at the expense of the rest of the world.<sup>8</sup>

#### China's Industrial heft

This factoid should startle you. At the outset of the Second World War, America's GDP was about *double the combined output* of Japan's and Germany's in the Second World War, and remained *more than double* the USSR's throughout the entire Cold War.<sup>9</sup>

Already, China is the world's largest steel producer; in the words of one very senior and very alarmed U.S. trade official, "China now has more *excess* steel capacity than the entire steel production capacity of Japan. In addition, China produces more steel than the United States, European Union, and Japan combined," an observation he capped with the conclusion that, "China is not investing in steel on a market basis." The immensity of China's other primary industries – aluminum, copper, cement, petroleum, – is staggering. More important – in 2008, China eclipsed the United States in output of information technology products and is now the world's biggest producer.

Today, China's industrial sector has already surpassed America's. <sup>12</sup> So, too, will China's military industrial infrastructure soon overtake America's if current trends continue. 2012 is a landmark year for the Chinese People's Liberation Army because it is the first year that the Chinese government has announced a military spending budget in excess of \$100 billion. <sup>13</sup> The Defense Intelligence Agency pegs China's 2011 military spending at \$183 billion at current foreign exchange rates, while the Central Intelligence

Agency places Chinese military spending at about 4.3% of China's \$7 trillion gross domestic product, or about \$301 billion, or about \$485 billion in purchasing power parity terms.  $^{14}$  At the outset of World War II, America's victory was assured by the numbers. Today, it would not be.

But why has China embarked on such an aggressive and predatory strategy of mercantilist economic expansion?

After all, there are good reasons not to. Clearly, none of East Asia's major powers is interested in disrupting China's trade or lines of civil aviation or maritime transportation. Just the opposite. They are all far too dependent on China's manufacturing and merchant marine supply chains to risk such a thing. However, given the tremendous growth of China's domestic industrial and manufacturing sectors (now much bigger than the United States' 15); given China's industrial policies of sourcing the vast majority of manufacturing components domestically; given China's neurotic hoarding of commodities and raw materials well beyond the demand of its industries; and of course, given the significant expansion of China's naval forces, particularly advanced submarines, the opposite is not necessarily true. In the year 2012, China looks like it is making contingency plans for a major breakdown in global commodities supplies, either through a collapse of the U.S. dollar or a significant military conflict.

#### Beijing's Influence in Global Commodities

Indeed, China's vast demand for global commodities has given Beijing virtual control to set global commodity prices – and literally every Bloomberg update of commodity price movements includes some explanation or another about how prices are impacted by Chinese demand. No other country wields such influence, not even the United States, because frankly, no other country's demand for any given commodity is set by the central government. They are all set by market forces.

Some analysts see in China's boundless appetite for physical commodities, particularly copper, a way Chinese non-state lenders back their assets. <sup>16</sup> They extend domestic yuan denominated financing backed with vast warehoused stockpiles of copper bullion, and there no doubt is some truth to this. Nevertheless, China's imports of copper, iron ore, aluminum, gold, nickel, and other nonferrous metals, are completely state-directed, and there is no question that central government considers them to be strategic stockpiles; they are stockpiles that are well in excess of anything China's industrial sectors require.

But the Chinese government is also engaged in speculative frontrunning in commodities . Indeed, in early 2009, China's State Reserves Bureau (SRB) suddenly ordered the purchase of about 300,000 tons of copper – about 2% of global annual production – at rock bottom prices, and sold off at the height of the market in October 2010 for a profit, in that one transaction set, of about \$1.5 billion. <sup>17</sup>

But China does not limit its exertions to control global commodity markets simply to its state-directed aggregate national demand for commodities. One of the most striking

features of China's strategy is the obsessive effort to control the sources of those commodities. Again, this is particularly visible in China's vast global investments in copper mines, from Afghanistan to Zambia, from Peru to Mongolia.

If you once asked what China is doing with all the U.S. dollars it gets for its exports to the United States – because it certainly isn't spending them on U.S. manufactured goods – the answer is: China is using them to buy up as many international commodities sources as it can, mines, oil fields, pipelines, plantations, ranches and farms. One might almost think that China is spending its dollars as fast as it can before the dollar collapses.

But this would be misleading. Because China still seems intent on amassing as many U.S. dollars as it possibly can, by any means necessary.

#### Gaming Global Financial Markets

Which raises questions about China's manipulation of global financial markets. Here it seems that Chinese financial wizards have exploited just about every trick in the book to milk vast amounts of cash from international markets. One minor but characteristic way Chinese entities raise cash is from so-called "reverse listings" of China-play companies within defunct or shell companies that are already listed as penny stocks on US stock markets, and sad to say, many (if not most) of these Chinese firms are, themselves, shell companies. <sup>18</sup> Compounding the problem is China's steadfast refusal to permit auditors to release any accounting data to U.S. investigators or regulators citing, what else? – state secret laws.

The real money-making success of China's financial sector is not, however, in these small-scale scams, well, small-scale if less than a billion is small scale. And it doesn't seem to come from normal interest from China's vast foreign exchange holdings.

Indeed, the stewards of China's \$3.2 trillion in foreign exchange reserves have two advantages that others do not: 1) they are market-makers adept at front-running international markets on a galactic scale, and 2) they have the ultimate in inside information – they are deep inside the computer networks of every major bank, brokerage house and commodities trader in the world. And the evidence is clear that Chinese intelligence agencies have penetrated literally all major global central banks – including the Federal Reserve. In January, the FBI arrested a Chinese citizen computer programmer contracted by the Federal Reserve Bank in New York that in New York who had stolen software that accesses all US government agency account balances, appropriation and non-expenditure activity, payments, deposits and intra-governmental transactions within the US Treasury. <sup>19</sup>

#### Internationalized Yuan - Threat to the Dollar?

Perhaps a more existential threat to the American economy is China's effort to compete with or supplant the U.S. dollar as the medium for international trade and finance without actually having to make its own currency, the *renminbi* (RMB) yuan convertible. While

Beijing began to encourage Chinese companies to use the RMB in overseas transactions early in 2011<sup>20</sup>, it has only been in the last several months that China has begun to encourage its trading partners to open yuan trading accounts, financing, and remittances to avoid having to denominate transactions in U.S. dollars or other hard currencies.<sup>2</sup> China has amassed an unprecedented foreign exchange warchest of \$3.2 trillion, but rather than use its U.S. dollars to buy U.S. products, it either spends them on commodities or directly invests them in buying up mining and exploration assets across the globe. 22 It seems that whenever China's monthly foreign exchange accounts fail to show massive increases (about \$400 billion a year for 2008, 2009, 2010, and 2011), it's because the state is importing unusually large tranches of commodities.<sup>23</sup> The problem is, no one outside of China's State Administration for Foreign Exchange (SAFE) really understands what China is doing with its forex. China is not getting much of a return on its \$1.2 trillion in U.S. Treasurys, but it is accumulating large amounts of forex over and above its trade surpluses and direct foreign investment. If it's "hot money" – U.S. dollars that Chinese companies are repatriating to China and exchanging for RMB - then at some point SAFE must reinvest it in accounts that yield more than RMB accounts do.<sup>2</sup>

Increasingly, China wants to convert trade and finance transactions away from dollars and ultimately into RMB. In April 2011, China revealed that seven percent of its foreign trade in the first quarter of 2011 had been conducted in RMB yuan, up from less than a half-percent a year earlier. <sup>25</sup> Last September, China suggested that it might consider some future convertibility arrangement for the RMB if it were allowed to join the International Monetary Fund's special drawing rights (SDR) mechanism. <sup>26</sup> Chinese negotiators apparently pressured France into supporting a broader international role for the RMB without first achieving RMB convertability by hinting that China would use its foreign exchange reserves to purchase Eurobonds. <sup>27</sup> But Beijing's actions reflect a continued policy adamance that the state control China's currency, not some unpredictable international marketplace. <sup>28</sup>

The sudden emergence of China's non-convertible RMB yuan as a staple currency in global trade is unsettling and raises the prospect that, should the U.S. dollar's acceptance as the international trade medium begin to weaken, China would have a worrisome potential to undermine the dollar unexpectedly. Indeed, China is already the world's second largest trading nation and its biggest exporter (outstripping the United States by 25 percent), its biggest manufacturer, its biggest consumer of raw materials and natural resources. Theoretically, there is no reason that the RMB could not supplant the dollar, and, theoretically, the dollar is already vulnerable to collapse under an aggressive Chinese monetary attack if Beijing really wanted to push things to a global crisis. <sup>29</sup>

Which raises the question of "how did we get into this mess?"

The Advanced Persistent Cyber Threat

The answer in large part is found in China's predatory and kleptomaniacal trade practices, and the single most versatile tool in China's kit of unfair practices is cyber espionage. In fact, these practices are so pervasive that most European and North

American government counterintelligence agencies have issued formal warnings to their parliaments, congresses and to business communities that Chinese industrial espionage is the single greatest threat to their businesses.

In January of this year, three of the most cyber-spy savvy men in America delivered a powerful warning on China's cyber threat. Former Director of National Intelligence Mike McConnell, former Secretary of Homeland Security Michael Chertoff and former Deputy Secretary of Defense William Lynn spelled it out as clearly as they could: China's economic and industrial espionage and cyber warfare capacities are able "to cripple our critical infrastructure, including financial networks and the power grid. Now ... the threat of economic cyber espionage looms even more ominously." 30

While the United States has only in the last six months officially – on the record – named China as the primary adversary in global economic warfare, other countries have been less reticent. In late 2007, the Director General of Britain's domestic security service, MI-5, Jonathan Evans, sent a confidential letter to 300 chief executives and security chiefs at banks, accountants and legal firms which, according to the London *Times*, underscored the "damage to UK business resulting from electronic attack sponsored by Chinese state organisations, and the fact that the attacks are designed to defeat best-practice IT security systems." The letter was remarkable because it warned "Chinese state organizations" were the perpetrators. At about the same time, a top German intelligence official told the press that computer hacking by China against German companies and its government "was occurring on an almost daily basis." German intelligence officers briefed reporters that computer hackers linked to the Chinese military had hacked into German ministries — including the office of Chancellor Angela Merkel — and infected them with spying programs. French and Canadian counterintelligence agencies have expressed similar anxieties. 33

But it was not just European politicians that the Chinese targeted. In November, 2008, the FBI notified both the McCain and Obama presidential campaigns that both their computer networks had been penetrated, and that "China was the place of origin." This should have surprised nobody: By June 2008, Congressman Frank Wolf had been aware that his congressional computer database had been attacked repeatedly by Chinese hackers for two years, and despite his demands, congressional networks were not secured. Wolf charged that "despite everything we read in the press, our intelligence, law enforcement, national security and diplomatic corps remain hesitant to speak out about this problem. Perhaps they are afraid that talking about this problem will reveal our vulnerability. In fact, I have been urged not to speak out about this threat." It still took the U.S government another three years to admit that China was the main cyberthreat to the country.

In August, 2011, white-hat hackers in U.S. software security firm McAfee managed to access a server in China which had been a jump-off for cyber attacks and discovered a cyber-espionage operation that had lasted many years, had penetrated 72 governments and other organizations, most of them in the U.S., and had downloaded vast amounts of data from military secrets to industrial designs. Dmitri Alperovich, McAfee vice-

president said, "I am convinced that every company in every conceivable industry with significant size and valuable intellectual property and trade secrets may have been compromised, with the great majority of the victims rarely discovering the intrusion or its impact." <sup>36</sup>

One Washington official "with a clearance" said in an email, "the story is understated...it's actually much worse than reported!" <sup>37</sup>

### The Scale of the Cyber Problem

That "giant sucking sound" you often hear from your PC? It's China's indiscriminate cosmic-scale cyber-vacuum cleaner. It suggests that China's intelligence services have established Google-like server farms all across China into which downloaded data can be stored, organized, prioritized, cached and – of course – searched. It also suggests that China doesn't care whether anyone knows about the ubiquity of their cyberpenetrations – perhaps because they cannot be stopped.

In October 2011, the United States Office of the National Counterintelligence Executive (NCIX) issued a startling report "Foreign Spies Stealing US Economic Secrets In Cyberspace: Report to Congress on Foreign Economic Collection and Industrial Espionage, 2009-2011" warning that Foreign economic intelligence collection and industrial espionage are "significant and growing threats to the nation's prosperity and security" and cautioned that "Chinese actors are the world's most active and persistent perpetrators of economic espionage. US private sector firms and cybersecurity specialists have reported an onslaught of computer network intrusions that have originated in China." The report went on: "the governments of China and Russia will remain aggressive and capable collectors of sensitive US economic information and technologies, particularly in cyberspace." On the first page of the report, the NCIX indicated that, by far, the major sources of industrial espionage and theft of trade secrets was China.

The megaindustrial-scale theft of intellectual property and proprietary business information both by Chinese employees of foreign firms and by professional state cyberpenetrations of foreign commercial, academic, financial government computer networks is standard operating procedure for all Chinese companies and state entities. Most recently, the top information security officer of Northern Telecom (Nortel) revealed that his company's networks had been under the control of Chinese hackers for over a decade, the precise decade when Nortel found itself unable to compete with Chinese telecoms firms in international bidding. During that decade, the man said, "they had access to everything . . .They had plenty of time. All they had to do was figure out what they wanted." 40

Even America's most advanced IT firms have admitted breaches. Intel said in November 2011 that hackers had penetrated Intel's networks and warned that "the theft or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an incident could adversely affect our competitive position

and reduce marketplace acceptance of our products." Sikorsky, Lockheed, Mantech, CACI International, Northrop-Grumman, Juniper Networks, VeriSign, are among the top U.S. companies whose computer networks have been penetrated by Chinese hackers.<sup>41</sup>

It is no longer a secret that Chinese cyber penetrations of the most sensitive U.S. databases and information systems – including U.S. space databases – are statesponsored. On February 29, 2012, NASA admitted in a formal submission to Congress that it had virtually no defense against cyber attacks. The NASA report is the most self-damning report I have ever seen from an agency of the US Government. One quote: "... Our ongoing investigation of another such attack at JPL involving Chinese-based Internet protocol (IP) addresses has confirmed that the intruders gained full access to key JPL systems and sensitive user accounts. With full system access the intruders could: (1) modify, copy, or delete sensitive files; (2) add, modify, or delete user accounts for mission-critical JPL systems; (3) upload hacking tools to steal user credentials and compromise other NASA systems; and (4) modify system logs to conceal their actions. In other words, the attackers had full functional control over these networks! Verily, it takes the breath away.

These penetrations demonstrate that NASA in particular (but civilian space contractors, and other defense agencies as well) are virtually defenseless against them. Most alarming are the almost total vulnerability of U.S. space assets to hostile information operations (IOs) from China and the inability of U.S. agencies to construct effective patches when they actually discover the penetrations. Increasingly, U.S. government sources are confirming the details of these vulnerabilities to the press, and the scale of the danger must draw Congressional action.

All evidence available to both the U.S. government as well as to cyber security experts across the world leaves no doubt about the attribution of the espionage and aggressive computer network operations: it is the Chinese state.

It has been only in the last several months, however, that the United States government has begun openly to warn that the Chinese government itself condones, if not directs, the wholesale cyberpenetration of global government, business, academic, nongovernmental organization and personal computer networks. On September 23, 2011, Treasury Secretary Timothy Geithner said "they [China] have made possible systematic stealing of intellectual property of American companies and have not been very aggressive to put in place the basic protections for property rights that every serious economy needs over time." Geithner added, "We're seeing China continue to be very, very aggressive in a strategy they started several decades ago, which goes like this: you want to sell to our country, we want you to come produce here ... if you want to come produce here, you need to transfer your technology to us." 43

Geithner was right, of course. China has never been cooperative in reining in IPR violations, and one is left with the inescapable impression that the Chinese government

itself directs, condones and even sponsors the practice of driving foreign rivals into bankruptcy – non-payment of bills is a favorite tool in this regard.

#### American Superconductor

An emblematic case is the attack on American Superconductor, which supplied U.S.made proprietary wind turbine electrical systems and control software to China's Sinovel, the world's second largest wind turbine manufacturer. American Superconductor (AMSC) had over \$700 million worth of undelivered components on existing contracts with Sinovel when, without notice, Sinovel refused to accept the goods, claiming they were defective. The Massachusetts-based AMSC had invested heavily in the expansion of its manufacturing facilities on the Sinovel orders which by last summer had accounted for over 70 percent of AMSC's revenues. AMSC discovered, quite by accident, that Sinovel had somehow managed to get AMSCs source codes and blueprints and had cancelled its orders with AMSC, not because the products were defective, but because Sinovel had begun to pirate and manufacture exact replicas of AMSC's products in China. With a bit more investigation, AMSC discovered Sinovel had promised \$1.5 million to an AMSC employee who had stolen the software source codes and blueprints. AMSC successfully prosecuted the employee who admitted his role. But Sinovel still refuses to pay for the \$700 million in undelivered AMSC goods despite a contractual obligation to do so. AMSC is now in a catastrophic financial crisis.

Sinovel, however, has the backing of the Chinese government and has continued to profit vastly from its behavior. It seems to have no intention of paying its debts.

# The Threat from Counterfeits

Another vulnerability to American companies from pirating and counterfeiting U.S.-made goods and intellectual property is the prospect that the counterfeits will severely damage the reputations of the American companies. This is a problem in basic industrial commodities as well as brand name consumer goods and pharmaceuticals. It is a threat China has no intention to mitigate. On October 24, 2007, Jon W. Dudas, Under Secretary of Commerce for Intellectual Property Rights, commented that the Chinese government was resistant to bilateral discussions China's rampant counterfeiting of trademarks and outright theft of intellectual property. "Since April, when the United States sought dispute settlement at the WTO (World Trade Organization) over IPR issues," Dudas observed, "bilateral relationships with our counterpart offices have suffered." Dudas bemoaned China's failure to enforce IPR protections, and noted that China openly permitted the widespread counterfeiting and theft of intellectual property. <sup>45</sup>

But the substitution of shoddy, or deliberately-defective components has already had an impact the U.S. defense supply chain.<sup>46</sup>

Chinese-manufactured IT components are ubiquitous throughout U.S. government computer systems making it difficult to tease-out the source of hardware- and firmware-

based "Trojan horses, "backdoors" and "kill switches". <sup>47</sup> In October, 2008, *Business Week* reported that counterfeit microchips – never shipped by their purported manufacturer – were installed in U.S. defense systems, including an F-15 fighter, a breach of industrial security that highlights the vulnerability of U.S. aerospace systems. <sup>48</sup>

In 2007, Chinese-manufactured microchips were assembled into Seagate hard-drives and shipped to customers – with password viruses pre-loaded. <sup>49</sup> And in December, 2008, the Pentagon banned the use of all external IT storage and other devices (e.g. flash drives, hard drives) on DoD computers because viruses embedded in their Chinese-made components and software had uploaded back-doors "worms" into classified computer systems — enabling hackers to penetrate even classified systems. <sup>50</sup>

A 2010 survey of defense industry suppliers conducted by the Commerce Department showed that "detected incidents of counterfeit party in the supply chain" had jumped almost 250 percent from 2005 to 2008 (3,868 incidents to 9.356). The survey identified fake Chinese parts on aircraft brakes and substandard titanium in fighter jet engine mounts, as well as other problems affecting Boeing, Raytheon and L-3.<sup>51</sup> A classified 2005 Pentagon report warned that components supplied by BAE Systems "experienced field failures" – equipment failures during operational use – which were traced to counterfeit Chinese-made microchips that were infiltrated clandestinely into the manufacturing process.

Melissa E. Hathaway, then-head of cyber security in the Office of the Director of National Intelligence, was quoted as saying: "Counterfeit products have been linked to the crash of mission-critical networks, and may also contain hidden 'back doors' enabling network security to be bypassed and sensitive data accessed [by hackers, criminals, and spies]." <sup>52</sup> In a 2008 report, *Business Week* magazine cited Robert P. Ernst of the Naval Air Systems Command's Aging Aircraft Program as estimating "that as many as 15% of all the spare and replacement microchips the Pentagon buys are counterfeit. As a result, he says, 'we are having field failures regularly within our weapon systems—and in almost every weapon system.' He declines to provide details but says that, in his opinion, fake parts almost certainly have contributed to serious accidents." <sup>53</sup>

Of course, devices most susceptible to Chinese counterfeiting are computer networking systems. In one case, US Homeland Security officials seized \$143 million worth of counterfeit Cisco Systems trademarked network computer equipment manufactured in China which was intended for sale to the US Marine Corps in use for combat communications. <sup>54</sup>

## Cyber Threat could Crash Financial Markets

There is also clear evidence that Chinese state-directed cyberwarriors already have the capacity to cripple if not destroy U.S. financial markets. Secretary of Defense, Leon Panetta worries that a cyber attack on financial markets and power grids could be "the next Pearl Harbor." He was not just talking about organized crime. According to December 31, 2011 issue of *The Economist* magazine, Panetta is anxious that "some

attackers are aiming to cause more serious damage." Says *The Economist*, "a report on the risks of economic warfare ... written in 2009 for the Pentagon's Irregular Warfare Support Programme (IWSP) ... cites a paper prepared for law-enforcement officials by a group of anonymous moneymen who were alarmed by trading patterns around the time that Lehman Brothers failed." The paper suggests that computer-generated financial crashes like the May 6, 2010 "Flash Crash" and the collapse of the stock market in 2008, could have been the result of deliberate manipulation. "Rumours persist," said *The Economist*, "of involvement by those with non-economic motives." <sup>55</sup>

Because China's demand is centrally-controlled in Beijing, global consumers of virtually any commodity – even soybeans – are at the mercy of Beijing directed commodity traders and those traders have full access even to soybean computers. <sup>56</sup> The impact of wholesale Chinese penetration of databases, theft of financial and commercial secrets, intellectual property and the counterfeiting of goods, therefore, poses a broad and potentially mortal threat to U.S. defense readiness in a very direct sense.

## Technology Transfer

Theft and cyberpick-pocketing are not the only illicit ways Chinese state and commercial entities, gain U.S. business secrets. For decades, China has had a broad industrial policy requiring foreign companies making direct investments or trading with China to share sensitive technology. And most foreign firms acquiesce hoping, almost always in vain, that they can keep one-step ahead in technology as Chinese state entities ensure that shared technology is disseminated to their Chinese competition and/or they can make enough profits in Chinese markets to compensate for losses of intellectual property. <sup>57</sup>

Many advanced technology firms in the U.S. also find that they must finance "research labs" in China as a condition of market access. Intel, IBM, Applied Materials, Microsoft, Google and General Electric are only a few of the scores of American firms engaged in wholesale transfer of technology to China via vast US-funded research centers. Yet, Microsoft's Chief executive said in May 2010 that "Intellectual property protection in China is not just lower than other places, it's very low, very, very low," adding "We see better opportunities in countries like India and Indonesia than China because the intellectual property protection is quite a bit better." Just two years earlier, Microsoft spent \$280 million to open its biggest research center outside the U.S. where it employs 3,000 Chinese. And Microsoft shouldn't have been surprised that its intellectual property had been pillaged by its Chinese partners because it turned over its source codes to China in 2003 as a condition for entry into the Chinese market.

Virtually all foreign businesses in China recruit their work forces directly through Chinese state agencies or their Chinese joint venture partners, which is the same thing. Accordingly, the loyalty of their employees is first and foremost to the Chinese side which manages their employee files, their security and police dossiers, supervises their household registrations (hukou) and oversees their careers. 61

Chinese police and security organs also intimidate foreign businessmen, especially foreign citizens of Chinese ancestry. A number of prominent cases over the past few years include a senior Chinese-born Australian mining executive and a Chinese-born American geologist whose primary transgressions appear to have been their loyalty to their parent companies rather than the Chinese state. 62

China certainly uses more conventional means to swamp non-Chinese competitors in international markets: heavy state subsidies to Chinese telecommunications and construction firms enable them to undercut foreign rivals, while cyber-acquired business information permits Chinese companies to under-bid their foreign competition by just enough to ensure success. 63

In 2010, U.S. intelligence agencies reported to the Congress that *Chinese* telecommunications firm Huawei had an unsecured \$40 billion line of credit with Chinese state banks to facilitate its domination of global telecommunications markets. 64 The same is true in wind and solar power sectors, automotives, microelectronics, construction, the list is endless. 65

Lesser severe commercial but still significant threats from China's behavior in global markets would include lack of health and safety standards or enforcement in agricultural goods, processed juices and foods, medical supplies and pharmaceuticals, even construction materials such as steel cranes and gypsum wallboard.

#### China's Maritime Claims

China is not content with a culture of strong-arm commercial and financial aggressiveness. As a unitary state actor in the international arena, China has a coherent multidimensional approach to global competition which also includes the domination of sealanes and civil airspace in East Asia. This is one of Beijing's top strategic goals, not just for economic and military advantage, but also for domestic political legitimacy and regional diplomatic propaganda. In this context, the most visible geostrategic flashpoint between China and the rest Asia – and the United States as well – is China's growing belligerence in the seas it shares with its Asian neighbors.

China's increasingly adamantine territorial sea claims in the South China Sea, the Taiwan Strait and the East China Sea are certain to be resolved only one of two ways: either China gets what it wants or it will use armed conflict to enforce its so-called "core interests"

Let me review the bidding on China's maritime claims:

### South China Sea

Combined, the South China Sea, the Taiwan Strait and the East China Sea are the globe's single busiest maritime route through which roughly half of the world's seaborne traffic transits each year.<sup>66</sup> China claims them all, and Chinese law, on its face, restricts

"freedom of navigation and overflight" in China's EEZ and continental shelf only to states that observe "the laws and regulations of the People's Republic of China." As recently as two weeks ago, U.S. experts noted that China's so-called "Nine-Dash Line" (which encompasses the bulk of the South China Sea) now demarcates absolute right over all the fishing resources of the entire sea. While in public Chinese diplomats play down territorial sea claims to foreign audiences, 69 China's absolute sovereignty is nowhere demurred.

China views its claims to the South China Sea are not covered by the 1982 United Nations Convention on the Law of the Sea (UNCLOS) because China's claims antecede the Convention and because the Convention "does not deny historical claims." <sup>70</sup>

In June 2010, at his headquarters in Pearl Harbor Naval Base, Hawaii, Admiral Patrick Walsh gave an interview to a reporter from Japan's major newspaper, *Asahi Shimbun*. Walsh was stressed by a new intensity in Chinese naval harassment in the South China Sea, especially its unseemly reef-grabbing and physical force against non-Chinese fishermen from the Sea's other littoral states. Mimicking the "core interest" terminology of the Chinese themselves, Walsh told the Japanese correspondent, "This is an issue that has us very, very concerned because, on principle, the interference with freedom of navigation in international water is a *core interest* for those who use the global commons." Walsh referred to "this economic 'carotid artery' that runs through the South China Sea ... they [the Chinese] are willing to put at risk over rocks, reefs and disputed claims." "71

Beijing persists in its broad "Nine Dash Line" territorial sea claim around the full periphery of the South China Sea – a claim which *The Economist* magazine calls "a great lolling tongue of Chinese sovereignty" encompassing about 1.5 million square kilometers of water. There are promising seabed oil and gas structures within whatever EEZs are carved from the Sea's continental shelf and the islets occupied by China, Taiwan, Vietnam and the Philippines. Since 1992, China has warned its south sea neighbors against exploring the Sea's oil and gas resources.

Since 1974, China has inexorably tightened its claims to the Sea and it islets, claims that were first articulated in 1947 by the Chinese Nationalist Government under Chiang Kaishek in Nanking, and which the regime in Taipei had staked in the maritime vacuum as Japan gave up claim to the islands at the end of World War II. Taipei's nationalists occupied some of the largest of the islands, Itu Aba in the Sea's southern Spratly chain and Pratas in the Sea's far northern edge amidst Taiwan, Hong Kong and Luzon. As early as 1974, Taipei reportedly opened up the Taiwan Strait to the transit of People's Liberation Army Naval (PLAN) warships in support a Chinese attack on South Vietnamese forces in the Paracel islands from France at independence in 1954 – France had reclaimed them from Japan in 1945, and Japan had claimed them from the teettering French government as it collapsed before the Nazis in 1940.

In March 1988, Chinese troops destroyed Vietnamese forces then occupying Johnson South Reef in the Spratlys.

And since then, Chinese naval, civilian maritime administration and fisheries forces have occupied a succession of minor reefs to enforce their claims. In recent years, China's military has systematically garrisoned several chains of submerged coral shoals in the Spratlys west of the southern Philippine island of Palawan, secretly emplacing huge caissons of concrete in their shallow water and constructing massive platforms and anchorages. The Chinese forcefully ejected Philippines troops from Mischief Reef in 1995, and the Philippines has been complaining about it ever since. In 2002, ASEAN induced China to accept the 2002 ASEAN Declaration on the Conduct of Parties in the South China Sea which includes a commitment by all parties to "resolve their territorial and jurisdictional disputes by peaceful means, without resorting to the threat or use of force." China's subsequent behavior, however, reflects that Beijing saw the move as pure propaganda and never intended to abide by the code of conduct in the first place.

In May 2011, the Philippines air force spotted several new structures in the Spratly island group, all complete with satellite communications, air defense cannons, and 300 meterlong cargo docks. The discovery coincided with the visit to Manila of China's defense minister, General Liang Guanglie who, without a hint of irony, proceeded to sign a communiqué with his Philippines counterpart which urged that "unilateral actions which could cause alarm should be avoided." <sup>74</sup>

China gradually is tightening its strategic presence in the South China Sea. By 2008, the deputy commander of the Chinese navy's East Fleet, Admiral Zhang Huachen, explained that "with the expansion of the country's economic interests, the navy wants to better protect the country's transportation routes and the safety of our major sea lanes." A retired PLA general was a bit more candid: "We kept silent about territory disputes with our neighbors in the past because our navy was incapable of defending our economic zones, but now the navy is able to carry out its task." 75

Indeed, incidents at sea between U.S. Navy and Chinese forces have always been a fact of life (the most violent was an incident in April 2001 when a Chinese jet fighter collided with an American EP-3 reconnaissance aircraft 60 miles off Hainan Island). They have intensified since March 2009 when the U.S. naval ocean surveillance ship *USNS Impeccable* engaged in submarine detection operations in international waters about 75 miles south of Hainan Island was surrounded by several Chinese fishing boats which closed to within 25 feet of the American ship. The confrontation was preceded by a close approach incident when a Chinese naval frigate crossed the *Impeccable* is bow at a range of 100 yards. When the U.S. lodged an official complaint about the Chinese behavior, China's foreign ministry countered that the U.S. vessel had broken "international and Chinese law" and besides, the U.S. complaint was "totally inaccurate and confuses right and wrong and is unacceptable to China."

A senior Chinese strategic analyst at People's University in Beijing, Professor Shi Yinhong, observed that "the United States is present everywhere on the world's seas, but these kinds of incidents may grow as China's naval activities expand."<sup>77</sup>

China now picks fights in the South China Sea with alarming frequency. On June 11, 2009, a Chinese submarine deliberately cut the cable of a sonar array being towed by the *USS John McCain* in international waters about 140 miles northwest of Subic Bay, Philippines. Shortly after the contretemps with the *Impeccable*, China's fisheries department announced it would increase its fisheries patrols in South China Sea<sup>78</sup> and by June had deployed eight new patrol vessels which had seized several Vietnamese fishing boats. In 2009 alone, Chinese had seized 433 Vietnamese fishermen in the South China Sea.<sup>79</sup>

In August 2011, Chinese naval vessels confronted an Indian Navy ship that was transiting between two Vietnamese ports, and India promptly asserted freedom of navigation on the high seas. In October 2011, India announced its intentions to explore for subseabed oil in Vietnamese waters, drawing Chinese protests, with the Chinese government officially declaring "challenging the *core interests* of a large, rising country for unknown oil at the bottom of the sea will not only lead to a crushing defeat for the Indian oil company, but will most likely seriously harm India's whole energy security and interrupt its economic development." In February 2012, armed Chinese vessels prevented Vietnamese fishing boats from seeking storm refuge in the Chinese-occupied Paracels – and reportedly tried to rob the Viet crewmembers.

At the southern end of the South China Sea where China's maritime claims abut Indonesia's, Indonesian authorities detained eight Chinese fishing boats and arrested 75 illegal Chinese fishermen. A year later, in the summer of 2010, Indonesian patrol vessels again confronted a fleet of ten Chinese fishing boats, but this time, a Chinese "fishery management vessel" (described as a "repurposed heavy gunboat") threatened to fire on the Indonesian coast guard ships. Moreover, the Chinese boats were not even in waters claimed by China, but in Indonesia's EEZ near Natuna Island. <sup>82</sup> One analyst believes that massive overfishing in Chinese waters have left coastal fisheries in "a state of near collapse," and this has prompted the Beijing government to encourage its fleet of 300,000 fishing boats to go farther asea – a migration that now brings regular clashes in neighboring fishing grounds that China now claims as its own. <sup>83</sup>

As if to rationalize its new belligerence, China also set about declaiming that it had "core interests" in the South China Sea. In March, 2010, according to *The Washington Post*, Chinese assistant foreign minister Cui Tiankai explained to two senior U.S. officials that his country viewed its claims to the South China Sea on par with its claims to Tibet and Taiwan. <sup>84</sup> This was reportedly the first time China had defined the South China Sea to be as central to China's security as Taiwan. Thereafter, Chinese diplomats proclaimed a "core interest" in the South China Sea to progressively more senior Americans – and Southeast Asians as well. In tandem, Chinese security scholars declared in the official media that "by adding the South China Sea to its core interests, China has shown its determination to secure its maritime resources and strategic waters." <sup>85</sup>

By June 2010, China's proprietary posture in the South China Sea had become unbearable not just to the major South China Sea littoral states, but to the United States as well. Addressing the annual Asian Security Summit in Singapore (also known as the "Shangri-La Dialogue") on June 5, U.S. Defense Secretary Robert Gates countered China's "core interest" rhetoric with his own declaration of "the longstanding belief of

the U.S. government that a peaceful and non-coerced resolution to the Taiwan issue is an abiding national interest – and vital for the overall security of Asia."  $^{86}$ 

In response, senior American officials began explicating America's "national interests" in the South China Sea. Speaking at the Asian Regional Forum (ARF) in Hanoi on July 23, 2010, Secretary of State Hillary Clinton called for a binding international code of conduct for the states claiming disputed islands in the South China Sea, including China, as well as a formal international process for resolving those claims. "The United States has a national interest in freedom of navigation, open access to Asia's maritime commons and respect for international law in the South China Sea," Clinton asserted. China's foreign minister immediately characterized the U.S. stance as an "attack" on China, adding ingenuously that "nobody believes there's anything that is threatening the region's peace and stability." <sup>87</sup>

There ensued several months of Chinese complaints about American interference in the Sea, beginning with the banner headline on the front page of the July 26, 2010, *Huanqiu Shibao* (the international news mouthpiece of the Chinese Communist Party) which charged "Hillary's ignorant rhetoric is cause of South Sea furor, Yang Jiechi refutes U.S. distortions, China Slams American interference in South Sea." An English commentary in *Global Times* (the English language edition of *Huanqiu*) warned darkly of the "American Shadow over South China Sea" and cautioned that "Southeast Asian countries need to understand any attempt to maximize gains by playing a balancing game between China and the US is risky." The commentary continued. "China's tolerance was sometimes taken advantage of by neighboring countries to seize unoccupied islands and grab natural resources under China's sovereignty. . . China will never waive its right to protect its core interest with military means." "89

China kept up the pressure until it became clear that it was simply making things worse for its Southeast Asian diplomacy. By the spring of 2011, the "core interest" formula had faded for a time from China's official South China Sea rhetoric. But it resurfaces regularly in pseudo-unofficial commentaries in English on Chinese media websites. Chinese media still indulgently post commentaries calling for "economic punishment" of Southeast Asian neighbor which have the temerity to challenge new Chinese assertions of territorial sovereignty in South China Sea waters. <sup>90</sup> The U.S. Navy's Pacific Commander, Admiral Patrick Walsh fretted on the record to the Associated Press on January 17, 2012 that South China Sea disputes "have all the ingredients of an escalatory situation,"

2012 has seen a recrudescence of China's belligerence at Sea. Earlier this month, People's Liberation Army Major General Luo Yuan, executive director of the China Military Science Society, proposed that China establish a new "administrative zone" encompassing much of the South China Sea, and the enforcement of territorial claims in the Sea by stationing troops on more disputed islands and encouraging its fishermen and oil companies to start commercial operations around them. <sup>91</sup>

Is China's expanding security footprint in the South China Sea a problem for the U.S. as well as Southeast Asia? As former Asia policy aide to President George W. Bush,

Michael Green, put it: "The Chinese are elbowing, seeing how far they can go before the referee blows the whistle on them and they get a yellow card . . . This is also a [Chinese] signal to Vietnam, the Philippines, and the smaller countries in the region, that 'look, if we can do this to the Americans, what chance do you think you have?" "92

### The Taiwan Strait

Perhaps a more momentous question for this Committee to address is whether eventual unification of Taiwan with China means that the Taiwan Strait becomes a Chinese "inland waterway." The Taiwan Strait links Japan and South Korea to their markets in Europe and their energy suppliers in Southeast Asia, the Middle East and Africa. Whichever power controls the Taiwan Strait also controls Japan's, South Korea's, Taiwan's as well as China's sea lines of communication (SLOCs).

Taiwan's current president, Ma Ying-jeou, a scholar of international maritime delimitations, in his 1981 law school dissertation a explains "The Taiwan Strait requires no *international* delimitation since the ROC and the PRC are not foreign states *inter se*. There is presumably no room for applying international law." For its part, the Chinese military sees the Strait as sovereign Chinese waters.

China only began to get touchy about foreign naval transits of the Taiwan Strait in the past decade or so as it unilaterally determined that foreign naval vessels must have advance permission for the Chinese government to transit territorial waters. At its narrowest, (between *Haitan* island and Taiwan's coast) the Strait is about 76 miles wide – and international law recognizes a 12-mile (20 kilometer) territorial waters jurisdiction and an additional 12-mile "contiguous zone" of enforcement 94 thus narrowing the international channel to just a few dozen miles. Even then, China considers the entire Taiwan Strait as its continental shelf. Chinese law on its face restricts "freedom of navigation and overflight" in China's EEZ and continental shelf only to states that observe "the laws and regulations of the People's Republic of China."

China started to put up "no trespassing" signs in the Strait on April 17, 2001. That day, two Australian Navy frigates and a supply ship were intercepted by PLA Navy vessels and ordered by radio to leave the Taiwan Strait by the Chinese commander who insisted that the Australians had entered China's 12-nautical mile territorial waters. The Australian flotilla, steaming from Pusan in South Korea to Hong Kong, refused to change direction and continued on their way. The Australian Sun-Herald described the incident as a "tense stand off" in which the Australian commander "stared down" the Chinese. 96

Unlike previous fulminations by the PLA, this affair was not a matter of the People's Liberation Army's overzealousness in defending the country's territorial waters in contravention of customary international law that it did not fully understand. China's foreign ministry subsequently filed a diplomatic protest with Australia about the incident to which the Australian Foreign Ministry responded that "our position is our ships were exercising their rights under the international law of the sea which provides that foreign vessels can pass through another country's territorial waters, under the right of innocent passage, as it's described." Australian Prime Minister John Howard later said "China's

always had a different view about what international law allows the vessels of one country to do in the territorial waters of another." 97

China, therefore, can be expected to persist in its "different view about what international law allows" as its navy grows more muscular and as Taiwan recedes from the picture as an autonomous international actor.

Another episode in November 2007 seems also to have heightened suspicions among U.S. Navy commanders that China's posture toward the freedom of navigation in the Taiwan Strait was illegitimately possessive. When the U.S. aircraft carrier USS Kitty Hawk and its accompanying battle group transited north from Hong Kong through the Taiwan Strait, the Foreign Ministry declared itself "gravely concerned" about the battle group's passage. <sup>98</sup> Taiwan's press claimed that a Chinese naval task force which included the Sovremennyy-class guided missile destroyer Shenzhen and at least one Type-039 Song class submarine shadowed the Americans for 28 hours during the transit – the submarine seemed to be lurking near Orchid Island off Taiwan's southeastern tip in what were clearly Taiwanese, not Chinese waters. <sup>99</sup> Although a U.S. Navy spokesman later denied any incidents had taken place, newspaper reports from Taipei said Taiwan navy antisubmarine aircraft had monitored the movements of a Chinese submarine and the destroyer Shenzhen during the Kitty Hawk's transit and Taiwan's defense ministry declined to deny stories that the Chinese navy had shadowed the Americans. <sup>100</sup>

The significance of the putative encounter is not whether it occurred, but what the United States Pacific Command commander, Admiral Timothy Keating, thought the Chinese might have been signaling at the time. At a press conference in Beijing a few weeks later, Keating noted "Chinese submarines have impressive capabilities and their numbers are increasing." He cautioned that "in submarine operations in particular, because of the medium in which they're conducted, underwater, there is greater potential, in my opinion, for inadvertent activity that could be misconstrued or misunderstood." And when asked why the *Kitty Hawk* battle group had chosen to return to its homeport in Japan via the Taiwan Strait rather than up Taiwan's eastern coast, Keating seemed to bristle:

We don't need China's permission to go through the Taiwan Straits. It's international water. We will exercise our free right of passage whenever and wherever we choose as we have done repeatedly in the past and we'll do in the future. As it happens, the weather was pretty crummy on the leeward side of Taiwan, and so the commander made an appropriate decision, requested permission, was given permission to transit the Taiwan Strait, and we'll do that whenever we need to. 101

Nevertheless, the United States Navy has not made a practice of transiting the Taiwan Strait – and when such transits are undertaken, they seem always to be part of a broader political message. For example, the November 2007 sortie was in response to China's sudden withdrawal of permission for the *Kitty Hawk* to portcall at Hong Kong. U.S. fleet elements were deployed to the Taiwan Strait in March 2004 to deter Chinese interference in Taiwan's presidential elections, similar movements of U.S. ships took place in

February and March 2000. And during Taiwan's first free presidential elections in March 1996, China launched four short-range DF-15 ballistic missiles into Taiwanese waters and closed the Taiwan Strait to commercial shipping in a transparent attempt to intimidate Taiwan's electorate. The U.S. sent two separate aircraft carrier battle groups to positions near the Taiwan Strait. <sup>102</sup> It was China's ability and willingness to seal off the Taiwan Strait to international shipping that riled Washington in 1996.

With China now at the center of all East Asian export manufacturing supply chains, neither Japan nor South Korea (and certainly not Taiwan) is interested in interrupting or severing China's SLOCs. For example, over half of South Korea's component exports go to China – up from one-third at the beginning of the decade. <sup>103</sup> China became Japan's top trading partner in August 2007, something that a Japanese finance ministry official said reflects "the gradual shift of production by Japanese firms to China. I think the trend of growing trade with China will continue." <sup>104</sup> By April 2010, over half – 50.69% - of Taiwan's manufacturing production was produced by Taiwan-owned corporation factories overseas (well over 60% of which were in China in 2006). That figure was only 12.39% in January 2000. And over 60% of all exports booked by Taiwan firms are shipped from Taiwan-owned factories in China. <sup>105</sup>

So, clearly, none of East Asia's major powers is interested in disrupting China's maritime trade.

The East China Sea – the Senkaku Islands

China's territorial claims on Japan's Senkaku Islands just east of the northern approaches to the Taiwan Strait significantly impact Japan's strategic depth as well as the perception among Asia's democracies that Japan remains a great power. They are also significant because the Senkaku Islands are covered by the US-Japan Mutual Defense Treaty. <sup>106</sup>

Japan has administered the Senkaku islands since the 1870s when the Ryukyuan (Okinawa) kingdom formally joined the Japanese empire. Japan erected light beacons and navigation aids on the islands and from 1904 through 1941, a Japanese fishing community of over 200 thrived on the main Senkaku island. But Japan is now under intense geopolitical pressure from China to abandon the islands.

For a nation with a 5,000-year history of border conflicts and territorial disputes, China's claim to the Senkakus is far and away the newest – newer even than China's 1940s claims to the South China Sea islets. Indeed, up to 1969, both the Taipei and Beijing governments consistently catalogued the Senkaku islands as Japanese territory. <sup>107</sup> Indeed, there is no record anywhere of a Chinese (Taipei or Beijing) claim to the Senkaku islands prior to 1969. <sup>108</sup>

Prior to 1969, no one knew of any particular benefit to owning the Senkaku Islands, except the Japanese who viewed it more as a navigation hazard surrounded by a rich fishing ground. In 1968, however, a report issued by the United Nations Economic Commission for Asia and the Far East (ECAFE), noted that "The best prospect for large

new petroleum discoveries are [sic] believed to be the mature and youthful continental margins off eastern Asia and off northern Asia." While this news was greeted with some gratification in Japan, Taipei's Republic of China government – then representing the Chinese mainland in the United Nations – was spurred into proffering Chinese claims to the Senkaku Islands and to the seabed oilfields within its orbit. It was a difficult propaganda "sell" because not a single Taipei publication could be found that had ever catalogued the Senkakus as Taiwan's. <sup>110</sup>

The Senkakus then became a matter of "face" in Beijing. In Henry Kissinger's early meetings with Chinese premier Zhou Enlai in October 1971, Zhou made a point of claiming the Ryukyu islands: "Taiwan is cursing us about the Ryukyus; not just about Okinawa. . . . I will not go into the historical facts of that, but I am certain those islands sent gifts to the Chinese Emperor and were looked upon as tributary states." As late as 1973, however, Premier Zhou still had not raised the Senkakus issue with the Japanese despite the fact that he had already done so with President Nixon and Henry Kissinger and even with the Canadian foreign minister. <sup>112</sup>

The subsequent history of China's claims to the Senkakus revolved around expedience. On October 2, 1974, Chinese vice premier Deng Xiaoping told an overseas Chinese group in Beijing that "we will never give up this Chinese territory but Japan also will not surrender it," and mused that "the movement to guard Tiaoyutai (Senkakus) has to be continued." Nonetheless, Deng conceded to a visiting Japanese group that the China would be willing to shelve the Senkaku issue during negotiations with Japan on a peace treaty. 113 From then until the early 2000s, as the Chinese navy acquired increasing power-projection capabilities, China was content to leave the Senkakus on the backburner.

In January 2003, *China Youth News* quoted a Chinese Maritime Patrol Service's deputy commander as saying that the Service had responded effectively to violations of Chinese jurisdiction in the East China Sea with patrol vessels and aircraft to meet incursions by American and Japanese ships and aircraft. Chinese Maritime Patrol ships "had warned Japanese ships which were leaking oil pollution into the territorial seas." 114

More ominously, over the past decade, several provocative transits of Chinese naval flotillas (including submarines) past the Senkakus and into Ryukuan waters have heightened Japan's sense of the Senkakus' strategic vulnerability. In April 2010, the PLA Navy conducted an exercise east of the Senkakus in Japanese narrow territorial waters between Okinawa and Miyako islands. The Chinese fleet (at least ten warships) included destroyers, missile frigates and submarines. In 2008, a smaller Chinese fleet of four ships made a similar sortie. In fact, Chinese naval vessels have been probing Japanese waters east of the Senkakus since 2005. In September 2005, on the eve of Japan's Diet Elections, five Chinese warships including one of China's latest Russian-made *Sovremennyy* class destroyers menaced Japanese coast guard vessels north of the Senkaku islands thereby ensuring a landslide reelection victory for Prime Minister Junichiro Koizumi's pro-defense Liberal Democratic Party. A few weeks later, on October 2, the fire-control radar aboard the Chinese *Sovremennyy* near the Senkaku

islands "locked-on" a Japanese P-3 patrol aircraft and another Chinese vessel's artillery radar targeted a Japanese coast guard vessel nearby. 115 China's navy was baring its teeth.

This foray was a repeat of a similar one that took place the previous January, at the start of government-sponsored anti-Japanese demonstrations across China, when two Chinese *Sovremennyys* loitered near a Japanese-leased oil exploration vessel in Japanese EEZ waters. <sup>116</sup>

Pointedly, throughout 2005, China's new naval cheekiness in Japanese territorial waters coincided with sometimes violent, state-directed anti-Japanese demonstrations in several Chinese cities in March and April – protesting (of all things) Japan's application to become a permanent member of the United Nations Security Council. The Chinese leadership's entire anti-Japan campaign seemed animated at least partly by an urge to test the limits of the U.S.-Japan mutual Security Treaty. <sup>117</sup>

By October 2006, Chinese submarine activity in the Senkakus-Okinawa area began to alarm U.S. Naval planners. On October 27, a PLA Navy Song-class submarine surfaced in waters off Okinawa within torpedo range of the U.S. carrier *Kitty Hawk* where it was seen in the *Kitty Hawk* 's wake by an F-18 pilot as he vectored to land on the carrier. <sup>118</sup> The Chinese submarine was undetected by the carrier battle group's anti-submarine systems apparently because it had lain in wait, submerged and stock-still, for at least one day as the task force approached the area. Beijing's state-controlled media later reported that China's top submarine officer and vice chief of staff of the PLA Navy, Rear Admiral Ding Yiping, had "personally commanded" the entire operation (he may even have skippered the submarine himself) and predicted the success of his mission would lead to a promotion. <sup>119</sup>

The operation suggested that Chinese submarines already are quite at home in Japanese waters. Chinese hydrographic survey ships assiduously mapped the seas around the Senkakus and by June 2008 Japanese media reported that Chinese submarines had entered territorial waters of the Japanese home islands and had shown themselves "very comfortable" with marine characteristics of the Japanese coastline. <sup>120</sup> From then on, China's naval presence in Japanese waters has become increasingly intense, reinforcing a sense in both Tokyo and Washington of the tactical importance of the Senkaku islands almost equidistant between Okinawa and the China Coast in the East China Sea.

#### September 2010 - Senkaku Climax

The China-Japan face-off over the Senkakus reached a political climax on September 7, 2010 when the skipper of a Chinese "fishing boat" deliberately rammed a Japanese coast guard cutter within Japan's territorial waters near Kuba island in the Senkaku chain. When the Japanese coast guard arrested the Chinese skipper, China's foreign ministry protested that Japan had no right to take any maritime enforcement action in Chinese sovereign territory. <sup>121</sup> This was followed by three weeks of steadily escalating diplomatic demarches, protests and threats culminating in a *de facto* Chinese embargo on exports of Chinese rare-earths oxides (essential in the manufacture of advanced electronic

devices) to Japan. 122 Chinese customs officials also slowed processing for Japanese-owned factories in China.

The entire episode sent chills throughout the global trading structure, but the crisis finally prodded the United States to weigh-in publicly on Japan's side. On September 24, the White House reiterated that the United States considers the Senkakus to be under Japanese "administration" and hence is covered by the U.S.-Japan Mutual Security Treaty. <sup>123</sup> At a Pentagon press conference the same day, Chairman of the Joint Chiefs of Staff Admiral Mike Mullen confirmed that the U.S. "security umbrella" extended to the Senkakus, and that the United States was very supportive "of our ally in that region, Japan." Defense Secretary Robert Gates, standing next to Mullen, seemed to think the Admiral's statement wasn't clear enough. He interrupted the admiral to add "and we would fulfill our alliance responsibilities." <sup>124</sup>

Even before the September 2010, confrontations, Japan's concerns about the Senkakus were heightened by the ever-increasing and aggressive surface, submarine and naval air operations of the Chinese Navy. On May 25, 2010, the commander of U.S. forces in the Pacific, Admiral Robert Willard, warned "there has been an assertiveness that has been growing over time, particularly in the South China Sea and in the East China Sea" and characterized his command's interaction with Chinese naval counterparts as a "very immature military-to-military relationship." 125

China's naval harassment of Japanese vessels persists well into 2012. Japan's 2011 National Defense Policy Guidelines – in a major strategic about face – has ordered the navy to increase the submarine fleet from the current 16 to 22: no longer will Japan's submarine force be arrayed against a northern Russian threat, but against the southern Chinese one. Tokyo now faces the financial responsibilities of building up its island defenses in the Ryukyu's far west Nansei Shoto – including the Senkakus. And Japanese troops are now exercising with American allies in scenarios to counter Chinese aggression against the islands. As recently as March 16, 2012, Chinese coast guard vessels entered Japanese territorial waters within 20 kilometers of the Senkaku Islands, an incursion which the Chinese government broadcast on its coast guard website because "This patrol reflects the Chinese government's consistent position on the sovereignty of the Diaoyu [Senkaku] Islands" and which the Japanese government termed "extremely serious." 127

The Committee should be aware that Tokyo and Washington both agree explicitly that the Senkaku Islands, as Japanese-administered territory, are within the ambit of the US-Japan Mutual Security Treaty. Any heightened confrontation between Japan and China over the Senkaku Islands could quite easily involve U.S. Naval, Air and/or Marine forces.

Beijing's Proliferation Behavior – Its relationship with Pyongyang

Almost as threatening as China's muscular strategy of rigid state mercantilism and its relentless intimidation of its maritime neighbors is Beijing's predictable support for virtually every rogue state on the planet, and North Korea is emblematic of this behavior.

Without China's active cooperation and diplomatic cover, North Korea could not sustain its nuclear weapons or its ballistic missile programs. There is ample enough evidence in the public record that China facilitated the transfer of Pakistani nuclear weapons technology to North Korean in return for North Korean ballistic missile assistance to Pakistan as early as 1993. <sup>128</sup>

Let me stress that today, China's military alliance with North Korea remains its strongest, and there has been no instance in the past twenty years that reflects any willingness in Beijing to pressure Pyongyang in its relations with the United States of Japan. <sup>129</sup> Since 2002, The United States has sanctioned Chinese companies for providing North Korea with tributyl phosphate, an acid solvent used in the extraction of uranium and plutonium salts from nuclear reactor effluents <sup>130</sup> – once in April 2004, ironically just one month before the U.S. State Department recommended that China be admitted to the Nuclear Suppliers' Group, an informal international nonproliferation organization. In 2003, at U.S. insistence, China interdicted one such shipment <sup>131</sup> but there is no indication that China has made any other effort to enforce its export controls on North Korea. It is the opinion of at least the arms control experts at the U.S. State Department that China enforces its rules "only under the imminent threat, or in response to the actual imposition, of sanctions" and that China's failure to respond is not so much an "inability" to enforce its export regulations as an "unwillingness" to do so. <sup>132</sup>

In fact, China quite frequently has facilitated the transit of Pakistani military aircraft at Chinese airbases *en route* to North Korea – with cargos that U.S. intelligence has linked to the nuclear/missile transactions. <sup>133</sup>

From 2003 and the beginnings of the Six Party Talks process it is clear that Beijing's and Pyongyang's military consulted closely on nuclear diplomacy – top ranking Chinese and North Korean delegations met before the April and August talks with the Americans in Beijing, and China's foreign ministry appeared to be excluded from any decision-making. <sup>134</sup> For the next three years, the Six Party Talks passed through a roller-coaster sequence of manic-depressive sessions, yielding breakthrough agreements (September 2005, February 2007 and June 2008) and utter catastrophes (the October 2006 nuclear detonation and the July 2008 missile ICBM launch). All the while, the only consequence was buying time for Pyongyang's weapons development and strengthening Beijing's leverage over Washington.

### Chronology 2008- Year of Hope

In June 2008, China's heir-apparent, Vice President Xi Jinping, made a three-day visit to Pyongyang just prior to North Korea's confused and largely irrelevant nuclear fuels declaration – and "proposed to strengthen bilateral coordination and cooperation in the six-party talks on the Korean Peninsula nuclear issue." The Chinese people were reminded, on the front page of the *People's Daily* no less, that "the friendship between the Chinese and Korean peoples . . . has been sealed in blood. The peoples of China and Korea have always understood each other, sympathized with each other, supported each

other, aided each other, and the story of China-Korean friendship is impregnable against all forces." 136

Although a week later, North Korea turned over an 18,882-page "declaration" of nuclear programs to China (as the chair of the "Six Party Talks"), the declaration seemed designed more to obfuscate than inform -- and also had the humorous quality of being irradiated with, of all things, highly enriched uranium(!). <sup>137</sup> Unsurprisingly, the declaration did not include "all nuclear programs" (specifically any mention of highly enriched uranium, nuclear proliferation to Syria, or an accounting of nuclear weapons) as was required by the accords of February 13, 2007 and September 19, 2005.

Given Xi Jinping's fairly lengthy sojourn in Pyongyang, the certainty that he consulted in depth on tactics surrounding the "Six Party Talks" process, together with the fulsome "impregnable" and "sealed in blood" oratory about the China-North Korea relationship, it seems likely that the Chinese leader departed North Korea quite satisfied with the level of Pyongyang's compliance.

The question is, by the time North Korea made its declaration on June 26, 2008 (having harvested – who knows – several dozen kilograms of plutonium <sup>138</sup> from its spent fuel rods), was the United States closer to its goal of a denuclearized North Korea? Not really. Indeed, the last four years, several missile launches, and yet another nuclear detonation prove it was farther away than ever. And China is largely responsible.

2009 "Sino-Korean Friendship Year"

2009, hailed in Beijing and Pyongyang as "Sino-Korean Friendship Year, was a banner year for North Korean brazenness, with an ICBM launch and a subsequent withdrawal from nuclear safeguards in April and a second nuclear detonation on May 25. <sup>139</sup> That was followed up by a Chinese tour guide who lured two American journalists across the Yalu River where they were captured by North Korean border Guards. The Americans were eventually retrieved by former president Bill Clinton in a glitzily publicized rescue mission (which quite fortuitously coincided with Chinese intelligence and propaganda department delegations). <sup>140</sup>

Throughout 2008 and 2009, the United States Embassy in Beijing alerted the Chinese foreign ministry that Chinese state-owned firms, "working through North Korean intermediaries, were acting as a key source of raw materials and technology for a North Korean ballistic missile development project in Syria" among others. (The embassy cited several Chinese companies which supplied proliferation-related material to Pakistan, Iran, <sup>141</sup> One of the revelations in Wikileaks is how often Chinese companies use the North Koreans as intermediaries in transferring nuclear weapons and nuclear delivery system technology to sanctioned states like Iran and Syria, and of course, to Pakistan. A former colleague of mine who has worked this issue calls North Korea "China's proliferation proxy."

2010 - Succession and Living Dangerously

North Korea's bizarre dynastic succession was at the center of a very strange year, 2010. It was a year of even more remarkably brazen North Korean behavior than 2009, with the North's unprovoked sinking March 26 of a South Korean naval vessel (with a Chinesemade torpedo <sup>142</sup>) and the artillery bombardment of a South Korean fishing village which killed two civilians in November. In neither case did China permit any international sanctions against North Korea. Instead, Kim Jong II had two "successful" visits to China in May, apparently to seek China's blessing for the eventual succession of Kim's 28-year old son, Kim Jong-eun as North Korea's new "dear" leader, and again in August to formalize China's anointment of his heir.

Following Kim's May 2010 visit to China, foreign journalists were persuaded that China would criticize Pyongyang's torpedo attack, but surprisingly, China's support for the North firmed-up instead. <sup>143</sup> Within a week, Kim Jong II had fired his premier, replaced him with a Kim family confidant, and named his brother in law, Jang Song Thaek, as his deputy as commander of North Korea's army. Jang had been an avid promoter of Kim's son, Jong-eun, as the country's new leader. 144 By early August, the stage had been set for Jong-eun's succession, and a Korean Workers Party Congress – the first in 30 years was set for the end of the month. In the meantime, U.S. intelligence had determined that Jong-eun was the driving force behind North Korea's new belligerence. It was time, then, for Jong-eun to make a formal visit to Beijing to receive the Chinese Communist Party's recognition of his new status. At last, Kim Jong-il proclaimed in public to Chinese President Hu Jintao, "In the complex international situation, it is our historic mission to ensure that the baton of friendship between Korea and China is smoothly handed over to the next generation." China responded, "Maintaining and stabilizing the current relationship between China and North Korea is of maximum benefit to China,' reported the Party-controlled Huangiu Shibao. Simultaneously, PLA Shenyang Military Region commander Zhang Youxia visited North Korea where he received assurances that "in the future, North Korea will consolidate and develop exchanges and cooperation with China in every sphere, and make increasing efforts to strengthen friendly cooperation between our two militaries." 145

Secure in the knowledge that the succession had China's blessing, arrangements for North Korea's leadership succession could move forward. On September 28, unexpectedly, Kim Jong-eun was given new titles, ahead of the KWP Congress that supposedly would have legitimated the promotions. On October 11, China's internal security czar, Politburo Standing Committee member Zhou Yongkang, met with Kim Jong II in Pyongyang to extend yet another invitation for the younger Jong-eun to visit China. Elder Kim Kim told Zhou that he wanted to educate the "younger generation about the traditional friendship between the two countries ... and sincerely learn about China's experience." According to the official Korean News Agency, Zhou Yongkang, a member of the Standing Committee of the Political Bureau of the Communist Party of China, presented Kim Jong-un with a plate engraved with a photo showing former Chinese leader Mao Zedong and North Korean founder Kim II-sung smiling during a meeting. All this came on the 60<sup>th</sup> anniversary of China's entry into the Korean War to

fight against the United States, a date that was noted in both China and North Korea with reaffirmations of blood-friendship. 146

In just a few days, on November 12, 2010, North Korea had invited an American nuclear weapons specialist, Dr. Siegfried Hecker, to observe its ultramodern and ultra-secret, uranium enrichment complex near Yongbyon. Hecker said he was "stunned" by the facility's complexity – "hundreds and hundreds" – more than 2000, in fact, of newly installed uranium centrifuges, control rooms, computers, that had been assembled no earlier than April 2009. <sup>147</sup>

Nuclear proliferation experts across the globe, too, were stunned by Hecker's report. Shannon Kile of the Stockholm International Peace Research Institute (SIPRI), assessed it unlikely that North Korea had the indigenous expertise needed to assemble such a centrifuge plant, "I just can't imagine they would have been able to do this on their own. This is pretty esoteric technology." Mark Fitzpatrick, proliferation expert at the International Institute for Strategic Studies in London, said he "Chinese middlemen, undoubtedly, are a major part of North Korea's procurement network." Beijing, of course, did not comment. The centrifuges, 'finely calibrated cylindrical devices that spin at supersonic speed', are highly sophisticated machines which, in my firm opinion, China would not release for sale to just anyone and is certainly capable of restricting access to if it so desired.

Then, on November 23, as if to say "we've shown you our uranium centrifuges, we can do as we like," North Korean coastal artillery randomly began to barrage a South Korean fishing village on the island of Yeonpyeong, killing two civilians and two soldiers. Again, Beijing's reaction was to blame everyone, including the United States, for North Korea's "overreactions", while on December 10 China's top diplomat, Dai Bingguo, flew to Pyongyang where he was photographed holding Kim Jong II's hand among a gaggle of smiling Chinese and North Korean officials. When the Chinese foreign ministry spokeswoman was asked why Beijing seemed to back Pyongyang's viciousness, she responded "I want to ask those people who bring accusations against China what they have done to contribute to the regional peace . . . Military threats won't solve the problem, but to increase tension." <sup>148</sup>

## 2011and 2012 - Sudden Succession and Continuity

2011 was a relatively uneventful year, possibly because Kim Jong II was dying, and the succession was settled. He postponed a scheduled trip to Russia in June, but made the journey to Siberia in late August. On November 19, Kim Jong II met with a top level Chinese military delegation led by General Li Jinai, who assured Kim that "in the new historical era, China will be at one with North Korea and, in line with the consensus reached by the leaders of both sides, will ceaselessly increase understanding and mutual confidence."

Within a month, Kim Jong II was dead. Beijing betrayed no anxiety at the transition, likely because China had been aware of Kim's fragile health all along, his death was not unexpected, and Beijing had been fully involved in the succession. Young Jong-eun's ascension to the status of "Dear Young General" and "Great Successor" has thus far been managed uneventfully and, with China's backing, North Korea seems even to have the Americans under control.

That is to say, yet again the drama returns. On February 29, 2012, Pyongyang negotiators in Beijing happily agreed to a nuclear and missile moratorium with American counterparts in return for massive food aid and an American acknowledgment that North Korea had a right to nuclear power development. But again, true to form, Pyongyang turned around and on March 16 announced a "space launch" using an ICBM to take place in mid-April, in commemoration of Kim Il Sung's 100<sup>th</sup> birthday, in apparent disregard for their so-called "Leap Day Agreement" missile halt. The Chinese state newspaper, *People's Daily*, reported the announcement deadpan on page 3, and noted that a Chinese vice foreign minister had "made an appointment to see" (*yuejian*) the North Korean ambassador to "express concern and worry" (*guanqie he youlii*). Two days later, *People's Daily* published North Korea's assertion that a space launch was its legitimate right and that the United States was attempting to deny North Korea its rights. <sup>140</sup>

Chinese diplomats informed their American counterparts that North Korea is going ahead with the launch, and there is no chance they will change their minds. Washington shouldn't think there's anything it can do, so basically, "get over it." Then, as South Korea proposed a nuclear summit to discuss the North's behavior, Pyongyang unleashed a storm of propaganda which termed Seoul's "thrice-cursed act of hurting the dignity of the supreme leadership of the DPRK," and, of course, threatened war.

And so it goes. The result has been a demonstration by Pyongyang's new leadership that it, not the U.S., calls the game in and that Pyongyang retains Beijing's full backing.

#### Conclusion

China has assumed an adversarial posture toward the United States, Europe, Japan and others in a variety of foreign policy and warfighting areas. As one Chinese strategist puts it: *In the world today, virtually all of America's adversaries are China's friends*."<sup>150</sup>

Indeed, across the board, from nuclear and missile proliferation to human rights, to global climate change and fisheries, China adopts postures diametrically opposite to the United States. And even during the Iraq and Afghanistan wars, China has gone out of its way to provide weapons and explosives, and I would argue, even computer network assistance, to hostile states and insurgents in direct combat with U.S., coalition and NATO forces.

Can Americans feel reassured the "new multipolar world order" that China's leaders demand will be hospitable to American leadership or values in the coming decades? Or is there a grave potential for collision as the international system enters a power transition

phase? University of Chicago's John Mearshiemer pointed out in 2008, "as history shows, powerful states on the rise often fight wars with other major powers." 15

China is now too big to confront, and managing China's rise now requires a quiet, coherent, multi-dimensional and disciplined strategy that must be coordinated with allies and friendly democracies. Crucial to achieving America's strategic policy goals is consensus among the world's democracies to "balance" China's rise in every sector of the multidimensional rivalry. The key obstacle to this consensus is China's sheer economic weight and Beijing's willingness to use it to punish its competitors. Unless the United States takes the lead, the world's democracies must perforce acquiesce in China's ascent and ultimately will acquiesce to Beijing's world view.

China is now an economic superpower, and it is simply too big for the United States to inflict trade, financial or economic sanctions on it - even if it wanted to. To do so would be "mutual assured economic destruction." But there is no need for the world's democracies to avert their eyes and pretend that China is, somehow, a "responsible stakeholder" in the international system.

But I have not been asked here to tell you what to do about it . . . just to tell you what the problem is.

#### Endnotes

<sup>&</sup>lt;sup>1</sup> (emphasis added) "Whither China - From Membership to Responsibility?" Robert B. Zoellick, Deputy Secretary of State Remarks to National Committee on U.S.-China Relations, New York City, September 21, 2005 at http://www.state.gov/s/d/rem/53682.htm, accessed September 22, 2005.

<sup>&</sup>lt;sup>2</sup> For a comprehensive look at these trends see inter alia Deborah Brautigam, *The Dragon's Gift, The Real* Story of China in Africa, Oxford University Press, 2009 and Robert I. Rotberg, ed. China Into Africa, Trade, Aid and Influence, The Brookings Institution, Washington, D.C. 2008.

An upcoming study is Alex E. Fernandez Jilberto and Barbera Hogenboom, eds., Latin America Facing China: South-South Relations Beyond the Washington Consensus, Cedla Latin America Studies, March 2012. See also Kevin P. Gallagher, Amos Irwin, Katherine Koleski, The New Banks in Town: Chinese Finance in Latin America, InterAmerican Dialogue, February 2012, at http://ase.tufts.edu/gdae/Pubs/rp/GallagherChineseFinanceLatinAmerica.pdf. A short case study is "A Cinese Beachhead? New Investors on America's Doorstep," *The Economist*, March 10, 2012, at

http://www.economist.com/node/21549971. See Paul B. Stares, et al, Managing Instability on China's Periphery, Council on Foreign Relations, September 2011. China's impact on Mongolia is striking. See U.S. Embassy Ulaanbaatar telegram 09 Ulaanbaatar 20, "Subject: Mongolia on a Rising China: Hedging Preferred but Engagement Required," at

http://wikilcaks.org/cable/2009/01/09ULAANBAATAR20.html. See also Alan M. Wachman, Suffering What It Must? Mongolia and the Power of the 'Weak', Foreign Policy Research Institute, Philadelphia,

An interesting essay is Michael Auslin, "Russia Fears China, Not Japan; The decades-long dispute over the Kuril Islands may well be Russia's way of focusing on its real long-term adversary: China," The Wall Street Journal, March 3, 2011, at

http://online.wsj.com/article/SB10001424052748703559604576175660916870214.html. See also M.D. Nalapat. "China's silent dominance in Russia," UPI Asia, October 20, 2008 http://www.upi.com/Top\_News/Special/2008/10/21/Chinas-silent-dominance-in-Russia/UPI-

<sup>6</sup> See John J. Tkacik, "Removing the Taiwan Stone from Asia's Great Go Game: Thoughts on Taiwan's Geographic and Demographic Role in Asia-Pacific Security," in Peter C. Y. Chow, ed. National Identity and Economic Interest: Taiwan's Competing Options and Its Implication for Regional Stability, Palgrave MacMillan, New York, 2012, pp.

<sup>7</sup> See U.S. Embassy Beijing telegram 08 Beijing 3499 of September 9, 2008, "Subject: MFA: PRC Historical Claims to South China Sea not Subject to UNCLOS" at <a href="http://wikileaks.org/cable/2008/09/08BEIJING3499.html">http://wikileaks.org/cable/2008/09/08BEIJING3499.html</a>.

Bob Davis, "Does China's Forex Policy Beggar Its Neighbors?" The Wall Street Journal, March 8, 2012
 at <a href="http://blogs.wsj.com/chinarealtime/2012/03/08/does-china's-forex-policy-beggar-its-neighbors/">http://blogs.wsj.com/chinarealtime/2012/03/08/does-china's-forex-policy-beggar-its-neighbors/</a>;
 Harrison, Mark, ed., The Economics of World War II: Six Great Powers in International Comparison, Cambridge University Press (1998), p. 11.

Cambridge University Press (1998), p. 11.

The official was Timothy Stratford, Assistant U.S. Trade Representative for China. See "Effect of China on U.S. Economy Too Scrious To Not File Cases in WTO, USTR Official Says," *Regulation & Law*, No. 26. Friday February 8, 2008, p. A-2.

26, Friday February 8, 2008, p. A-2.

11 David Lague, "China corners market in a high-tech necessity," *International Herald Tribune*, January 22, 2006, at <a href="http://www.iht.com/articles/2006/01/22/bnsiness/rare.php">http://www.iht.com/articles/2006/01/22/bnsiness/rare.php</a>.

12 For an excellent but perhaps overly sanguine survey of China's economic growth, see Albert Keidel,

12 For an excellent but perhaps overly sanguine survey of China's economic growth, see Albert Keidel, "China's Economic Rise – Fact and Fiction," Carnegie Endowment for International Peace, *Policy Brief*, No. 61 July 2008, at <a href="http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=20279">http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=20279</a>. Jane Perlez, "Continuing Buildup, China Boosts Military Spending More Than 11 Percent," *The New York Times*, March 4, 2011 at http://www.nytimes.com/2012/03/05/world/asia/china-boosts-military-spending-more-than-11-percent.html.

<sup>14</sup> China's announced military budget has grown faster than China's announced economic growth every year since 1990. Defense Intelligence Agency Director Ronald L. Burgess reported to Congress February 16, 2012 that "China spent as much as \$183 billion on military-related goods and services in 2011." See, "Annual Threat Assessment, Statement before the Senate Armed Services Committee, February 16, 2012, p. 18, at <a href="https://www.dia.mil/public-affairs/testimonies/2012-02-16.html">https://www.dia.mil/public-affairs/testimonies/2012-02-16.html</a>. The CIA World Factbook calculates China's military spending as 4.3% of GDP (\$301 billion) – page updated March 20, 2012, at <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html">https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html</a>. The CIA also calculates China's 2011 GDP in purchasing power parity (ppp) terms at \$11.29 trillion, putting military spending at around the \$485 billion level. For a Chinese perspective on relative geopolitical weights of China and the United States see Yan Xuetong, "The Rise of China and its Power Status," *The Chinese Journal of International Politics* (in English), Vol 1, Issue 1, Summer 2006, pp. 5-33, at <a href="http://ciip.oxfordjournals.org/content/1/1/5.full">http://ciip.oxfordjournals.org/content/1/1/5.full</a>.

<sup>15</sup> The Central Intelligence Agency's *World Factbook* recalculates China's 2011 GDP (of \$7 trillion) to be nearly \$11.3 trillion in "purchasing power parity" (ppp) terms. That is, the total goods and services produced by China's economy are worth about \$11.3 trillion dollars on the U.S. market. Industry accounts for 46.8 percent of China's economy or about \$5.3 trillion in ppp terms, while industry is only 22.1 percent of the \$15.04 trillion U.S. economy, or about \$3.32 trillion. Even at current exchange rates, China's industrial sector is virtually equal (\$3.28 trillion) to America's.

16 Some of China's most bizarre hoarding behavior is in tradable commodities such as copper, iron ore, rare earths oxides, cotton and maize. For an interesting discussion of how these vast stores of physical commodity stocks in China are being used for creative "inventory financing" see Izabella Kaminska, "On the scale of hidden copper stocks," the Vinancial Times online, April 27, 2011, at <a href="http://tlaiphaville.fl.com/blog/2011/04/27/554391/on-the-scale-of-hidden-copper-stocks/">http://tlaiphaville.fl.com/blog/2011/04/27/554391/on-the-scale-of-hidden-copper-stocks/</a>. For cotton see Leslie Hook and Gregory Meyer, "China to build cotton reserve to encourage output," Financial Times, March 30, 2011, at <a href="http://twww.fl.com/cms/s/0/2919b04e-5af5-11c0-a290-00144fcab49a.html">http://twww.fl.com/cms/s/0/2919b04e-5af5-11c0-a290-00144fcab49a.html</a>. For corn see Chuin-Wei Yap, "A 546-Million-Ton Elephant in China's Grain Silo." China RealTime, December 10, 2010, at <a href="http://blogs.wsj.com/chinarealtime/2010/12/10/a-546-million-ton-elephant-in-chinas-grain-silo/">http://blogs.wsj.com/chinarealtime/2010/12/10/a-546-million-ton-elephant-in-chinas-grain-silo/</a>. In 2008, senior US Trade Representative official Timothy Stratford worried that China now has more excess steel capacity than the entire steel production capacity of Japan. In addition, China produces more steel than the United States, European Union, and Japan combined, Stratford said. "China is not investing in steel on a market basis." Regulation & Law, No. 26, February 8, 2008, p. A-2. China's very bizarre behavior in iron ore markets, including obsessive compulsive purchasing of overseas iron mines from Mongolia to Africa suggests that the country is stockpiling strategic amounts either in event of a dollar

crash or major military conflict. It seems that China's iron ore imports vastly outstrip its steel production. Chuin-Wei Yap, "China's Metals Imports Rise Article," *The Wall Street Journal*. April 10, 2009, at

```
http://online.wsj.com/article/SB123935915059108367.html.

Takier Blas, "China sits on up to $1.5bn in copper profits," Financial Times, October 10, 2010,
http://www.ft.com/cms/s/0/30bb156a-d4b1-11df-b230-00144feabdc0.html.
   While these "fraudcap" scams have largely been exposed, they offer insight into the business culture of
China's financial sector. A number of illustrative cases are: Chad Bray, "FBI Search Offices of 'Reverse
Merger' Player," The Wall Street Journal, January 27, 2012, at
http://online.wsj.com/article/SB10001424052970203363504577186970699110542.html; Joseph Sternberg,
"Uncovering Chinese Companies' Secrets and Lies; State secrecy laws make less of a difference in stock scandals than you think. Geography matters more," The Wall Street Journal, September 29, 2011 at
http://online.wsj.com/article/SB10001424053111903791504576584173365927858.html; Adam Jones
China and US in standoff over auditors," Financial Times, November 6, 2011, at
http://www.ft.com/cms/s/0/7a6a0836-06da-11c1-90dc-00144fcabdc0.html; Nathalic Tadena, "Four
Charged Over Trading; Chinese Citizens Are Targets of Speedy Insider Case After November Deal," The
Wall Street Journal, December 7, 2011. at
http://online.wsj.com/article/SB10001424052970204770404577082773976087462.html; David Stevenson,
 "A cautionary tale of investing in China," Financial Times, January 28, 2011, at
http://www.ft.com/cms/s/2/751cdc7c-2b0d-11e0-a65f-00144feab49a.html.
   Patricia Hurtado, "U.S. Charges Programmer With Federal Reserve Software Theft," Bloomberg,
January 18, 2012. The defendant, Bo Zhang, dismissed his first attorney and retained one of New York's
top criminal lawyers to represent him. He was released on $200,000 bond, a move, his attorney suggested,
reflected that Zhang's was not an espionage case. (no author) "Chinese Man In Ny Fed Cyber Theft Hires
Veteran Crime Lawyer," March 14, 2012 at http://www.60news.com/news-chinese-man-in-ny-fed-cyber-
thest-hires-veteran-57106/.
   Shen Hong, "China Loosens Yuan's Overseas Limits," The Wall Street Journal, January 13, 2011, at
http://online.wsj.com/article/SB10001424052748703583404576079521834538168.html.
    Tom Orlik and Bob Davis, "Beijing Diversifies Away From U.S. Dollar," The Wall Street Journal,
March 2, 2012 http://online.wsj.com/article/SB10001424052970203753704577254794068655760.html;
Fabiana Frayssinet 8
Latin America, "Testing Ground for Chinese Yuan," IPS News,
http://www.ipsnews.net/news.asp?idnews=106916; Patrick McGroarty, "Nigeria Adds Yuan to Its
Exchange Reserves," The Wall Street Journal, March 2, 2012, at
http://online.wsj.com/article/SB10001424052970203986604577257190163679120.html; Henny Sender and Joe Leahy. "China offers other Bries remninbi loans," Financial Times. March 7, 2012
\underline{http://www.ft.com/cms/s/0/3e46ac04-67fd-11e1-978e-00144feabdc0.html}; \ "Japan Gives China's Yuan \$10 to the first of 
Billion Stamp of Approval," Reuters, March 13, 2012; Christian Oliver, "South Korea doubles currency
swap deal with China," Financial Times, October 26, 2011 http://www.ft.com/cms/s/0/35911e14-ffd4-
11e0-89ce-00144[eabdc0.html].

22 Charles Wolf, "China's Next Buying Spree: Foreign Companies; Beijing wants to diversify out of U.S.
debt and it will have plenty of cash to make acquisitions," The Wall Street Journal, January 24, 2011, at
http://online.wsj.com/article/SB10001424052748704754304576095880533686442.html.
    Tom Orlik, "Fortuitous Trade Data Give China Ammunition on Yuan," The Wall Street Journal,
February 11, 2012, at
http://online.wsj.com/article/SB10001424052970203646004577214143341727700.html.

<sup>24</sup> For a look at the "hot money" problem see Aaron Blac, "China Reports $75.5 Billion in 'Hot Money'
Inflows," The Wall Street Journal, February 17, 2011, at
http://online.wsj.com/article/SB10001424052748704657704576149701694249960.html.
   Peter Stein and Shai Oster, "China Speeds Yuan Push; Change Would Make Currency More Attractive to
Global Firms," The Wall Street Journal, April 20, 2011, at
http://online.wsj.com/article/SB10001424052748704740204576272802457892870.html
    Gerrit Wiesmann, "IMF urged to ease way for renminbi," Financial Times, September 1, 2011, at
http://www.fl.com/cms/s/0/a8f3f40c-d4a6-11e0-a42b-00144feab49a.html. Recent reports include Lingling
Wei, "China Is Easing Yuan-Pay System," The Wall Street Journal, January 5, 2012, at
```

http://online.wsj.com/article/SB10001424052970203513604577139981921915046.html; "China to Make Shanghai Global Yuan Hub by 2015," Reuters, January 30, 2012

- <sup>27</sup> Cary Huang, "China, France agree to work on yuan flexibility; Task force plans to make a formal proposal to Group of 20 leaders' meeting on how the yuan can become part of the IMF's quasi-currency," South China Morning Post, August 27, 2011.
- <sup>28</sup> Josh Noble, "Renminbi: Chinese currency could become next safe haven," *Financial Times*, September 26, 2011. <a href="http://www.ft.com/cms/s/0/ccb95524-c2ac-11c0-897a-00144fcabdc0.html">http://www.ft.com/cms/s/0/ccb95524-c2ac-11c0-897a-00144fcabdc0.html</a>. Also see "Lex: China's Currency," *Financial Times*, September 27, 2011 at <a href="http://www.ft.com/cms/s/3/cd8a1458-c8c3-11c0-ac9c-00144fcab49a.html">http://www.ft.com/cms/s/3/cd8a1458-c8c3-11c0-ac9c-00144fcab49a.html</a>.
- <sup>25</sup> For an unsettling analysis of the relative strengths of the US dollar and the Chinese yuan see Arvind Subramanian, "Guest Contribution: How to Value a Currency," *The Wall Street Journal*, October 4, 2011 at <a href="http://blogs.wsj.com/chinarealtime/2011/10/04/guest-contribution-how-to-yalue-a-currency/">http://blogs.wsj.com/chinarealtime/2011/10/04/guest-contribution-how-to-yalue-a-currency/</a>.
- <sup>30</sup> Mike McConnell, Michael Chertoff and William Lynn, "China's Cyber Thievery Is National Policy-And Must Be Challenged; It is more efficient for the Chinese to steal innovations and intellectual property than to incur the cost and time of creating their own," *The Wall Street Journal*, January 27, 2012, at <a href="http://online.wsi.com/article/SB10001424052970203718504577178832338032176.html">http://online.wsi.com/article/SB10001424052970203718504577178832338032176.html</a>.
- <sup>31</sup> "MI5 alert on China's cyberspace spy threat; Exclusive: director-general of MI5 sends letter to British companies warning systems are under attack from China," *The Times*, December 1, 2007.
- <sup>32</sup> "WIRTSCHAFTSSPIONAGE: Fast tägliche Cyber-Attacken aus China," *Der Spiegel*, October 22, 2007, at <a href="http://www.spiegel.de/netzwelt/web/0.1518.512914.00.html">http://www.spiegel.de/netzwelt/web/0.1518.512914.00.html</a>. See also "China rejects German cyber spying allegations." Reuters, October 23, 2007.
- spying allegations," Reuters, October 23, 2007.

  33 Peggy Hollinger Bernard Simon, "Fears rise of growth in industrial espionage," *Financial Times*, January 7 2011, at <a href="http://www.fi.com/cms/s/0/e807cc24-1a91-11e0-b100-00144feab49a.html">http://www.fi.com/cms/s/0/e807cc24-1a91-11e0-b100-00144feab49a.html</a>
- <sup>34</sup> "Cyber Attacks On McCain and Obama Teams Originated In China," The Money Times, November 12, 2008, at
- http://www.themoneytimes.com/news/20081109/cyber\_attacks\_on\_mccain\_and\_obama\_teams\_originated\_in\_china-id-1040806.html
  35 "Wolf Reveals House Computers Compromised by Outside Source," Press Release, June 11, 2008
- 35 Wolf Reveals House Computers Compromised by Outside Source, Press Release, June 11, 2008 <a href="http://wolf.house.gov/index.cfm?sectionid=34&parentid=6&sectiontree=6.34&itemid=1174">http://wolf.house.gov/index.cfm?sectionid=34&parentid=6&sectiontree=6.34&itemid=1174</a>.
- <sup>36</sup> Joseph Menn, Cyberattacks penetrate military secrets and designs," *Financial Times*, August 3, 2011, at <a href="http://www.fl.com/intl/cms/s/0/d4f09016-bda3-11e0-babe-00144feabde0.html">http://www.fl.com/intl/cms/s/0/d4f09016-bda3-11e0-babe-00144feabde0.html</a>.
- <sup>37</sup> The Nelson Report, August 3, 2011.
- http://www.ncix.gov/publications/reports/fecie\_all/Foreign\_Economic\_Collection\_2011.pdf.
- <sup>39</sup> The most celebrated case is Google (Loretta Chao and Aaron Black, "Google Threat Jolts Chinese Internet Industry," *The Wall Street Journal*, January 13, 2010, at
- http://online.wsj.com/article/SB10001424052748704362004575000440265987982.html); see also Jordan Robertson, "Intel faced hacker attack same time as Google," Associated Press, February 23, 2010. Examples in just the past few years include several charges of Chinese industrial spying against Dow Chemical (Ben Fox Rubin, "Former Dow Chemical Scientist Gets Five Years in Prison," *The Wall Street Journal*, January 13, 2012, at
- http://online.wsj.com/article/SB10001424052970204409004577158713934267648.html and Christopher Drew, "Ex-Dow Scientist Is Convicted of Selling Secrets in China," *The New York Times*, February 7, 2011 at http://www.nytimes.com/2011/02/08/business/global/08bribe.html), DuPont Chemical (Justin Check, "Ex-DuPont Employee Guilty in China Case." *The Wall Street Journal*, March 1, 2012, at
- http://online.wsj.com/article/SB10001424052970203986604577256003717724564.html), Northern Telecom NORTEL (Siobhan Gorman, "Chinese Hackers Suspected In Long-Term Nortel Breach." *The Wall Street Journal*, February 14, 2012, at
- http://online.wsj.com/article/SB10001424052970203363504577187502201577054.html). Dow Agro and Cargill ("Scientist pleads guilty to sending trade secrets from Dow Agro, Cargill to China, Germany," Associated Press, October 18, 2011), Motorola (Motorola ("Corporate-espionage trial of Chinese-born American begins in Chicago," Associated Press, November 7, 2011, and David Barboza, "Motorola Solutions and Huawei Settle Claims Over Intellectual Property." The New York Times, April 13, 2011, at <a href="http://www.nytimes.com/2011/04/14/technology/14/huawei.html">http://www.nytimes.com/2011/04/14/technology/14/huawei.html</a>), American Semiconductor (Leslie Hook,

```
"AMSC to sue Sinovel in Beijing court," Financial Times, November 4, 2011, at
http://www.ft.com/cms/s/0/b5e190c8-05db-11e1-a079-00144feabdc0.html.), Verizon (Loretta Chao, et al.
'China Telecom Employees Hack Verizon iPhone?" The Wall Street Journal, February 16, 2011, at
http://blogs.wsj.com/chinarealtime/2011/02/16/china-telecom-employees-hack-verizon-iphone/), Ford
Motors (ED WHITEChina-bound ex-Ford engineer charged with stealing, The Associated Press, October
15, 2009), and Boeing ("First U.S. Economic Espionage Trial Winds Down," Associated Press, June 24,
2009.)
```

Siobhan Gorman, "Chinese Hackers Suspected In Long-Term Nortel Breach," The Wall Street Journal, February 14, 2012, at

http://online.wsj.com/article/SB10001424052970203363504577187502201577054.html.

Exclusive: Hacked Companies Still Not Telling Investors," Reuters, February 2, 2012.

42 NASA Cybersecurity: An Examination of the Agency's Information Security, testimony by Inspector General Paul K. Martin before the Subcommittee on Investigations and Oversight, House Committee on Science, Space and Technology, February 29, 2012, p. 6.

43 "Geithner slams China's intellectual property policies," Reuters, September 23, 2011, at

http://www.foxbusiness.com/industries/2011/09/23/geithner-slams-chinas-intellectual-property-policies/

A gripping account of the actual investigation is at Michael Riley and Ashlee Vance, "Inside the Chinese Boom in Corporate Espionage," Business Week, March 15, 2012, at

http://www.businessweek.com/printer/articles/13858-inside-the-chinese-boom-in-corporate-espionage.

The diplomatic mishandling of the case is at Jonathan Weisman, "U.S. to Share Cautionary Tale of Trade Secret Theft With Chinese Official," The New York Times, February 14, 2012. http://www.nytimes.com/2012/02/15/world/asia/chinese-official-to-hear-trade-theft-tale.html.

William Hawkins "Wake Up Call: Cheating China," U.S. Industry Today, Vol. 11 Issue 28, November

29, 2007.

46 For an early analysis of the threat of Counterfeit Chinese Electronics and Computer components see

The IEEE Spectrum – May, 2006 Issue, at Michael Pecht and Sanjay Tiku, "Bogus!", The IEEE Spectrum – May, 2006 Issue, at http://www.spectrum.ieee.org/may06/3401 and http://www.spectrum.ieee.org/may06/3423

For a concise account of the threat of micro-chip-embedded "backdoors" and "kill switches" see The Sally Adee, "Hunt for the Kill Switch," IEEE Spectrum, May 2008 at http://www.spectrum.ieee.org/may08/6171. The vulnerability of the U.S. defense microchip supply is amply and alarmingly documented in the Defense Science Board's February 2007 report "HIGH PERFORMANCE MICROCHIP SUPPLY," at http://www.acq.osd.mil/dsb/reports/2005-02-HPMS Report Final pdf.

Brian Grow et al, "Dangerous Fakes," Business Week, October 13, 2008

<sup>49</sup> See the author's 2008 essay, John J. Tkacik, Trojan Dragon, China's Cyber Threat, The Heritage Foundation, Februar 8, 2008, at http://www.heritage.org/research/reports/2008/02/trojan-dragon-

chinas-cyber-threat.

50 Jennifer Griffin, "Cyber Attack Linked to Company of Former Russian Spies," FOXNews.com, December 10, 2008 at http://www.foxnews.com/politics/2008/12/10/cyber-attack-linked-company-russianspics/. Washington Times reporter Bill Gertz attributed the attack to Chinese government agencies that had apparently hired "former Russian spies" to penetrate the U.S. military systems. See "U.S. base in Afghanistan hit by suspected China cyber strike," East-Asia-Intel.com, December 12, 2008, at http://www.east-asia-intel.com/eai/2008/12\_10/10.asp.

Jeremy Lemer, "US military duped into using counterfeit parts," Financial Times, November 8, 2011, at http://www.ft.com/cms/s/0/adab0c50-0a3a-11c1-85ca-00144feabdc0.html. Tony Capaccio, "China Counterfeit Parts in U.S. Military Boeing, L3 Aircraft," Business Week, November 9, 2011, at http://www.businessweek.com/news/2011-11-08/china-counterfeit-parts-in-u-s-military-boeing-13aircraft.html.

Brian Grow, et al., "Dangerous Fakes; How counterfeit, defective computer components from China are getting into U.S. warplanes and ships," Business Week, October 2, 2008, at http://www.businessweek.com/magazine/content/08\_41/b4103034193886.htm.

Ibid. See also Kate Brannen, "U.S. Senate Panel Targets Counterfeit Electronic Parts," Defense News, November 7, 2011, at <a href="http://www.defensenews.com/story.php?i=8163295&c=ASI&s=AIR.">http://www.defensenews.com/story.php?i=8163295&c=ASI&s=AIR.</a>

"Crackdown targets counterfeiting network equipment," Associated Press, Thursday, May 6, 2010.

```
^{55} "The war on terabytes - Policymakers worry about attacks on America's financial system," The
Economist, December 31, 2011, at <a href="http://www.economist.com/node/21542186">http://www.economist.com/node/21542186</a>.

See Even the American Soybean Association has been informed by the FBI that its networks had been
breached in 2010. Joseph Menn, "Cyber-espionage hits defence companies," Financial Times. September
18, 2011, at <a href="http://www.ft.com/cms/s/0/e5f78da4-e1d6-11e0-9915-00144feabdc0.html">http://www.ft.com/cms/s/0/e5f78da4-e1d6-11e0-9915-00144feabdc0.html</a>.
  A number of journal articles discuss this phenomenon, for example, James Simms, "Tricky China Foray
for Asian LCD Makers," The Wall Street Journal, October 21, 2009, at
http://online.wsj.com/article/SB125611101384698545.html. Peter Marsh, "China urged to protect foreign
technical secrets," Financial Times, October 4, 2005, at http://news.ft.com/cms/s/47717350-3473-11da-
adae-00000e2511e8.html. Alan Murray, "Protecting Ideas Is Crucial for U.S. Business," The Wall Street
Journal, November 9, 2005, p. A2, at http://online.wsj.com/article/SB113149228287891613.html. Sumner
Lemon, "Chinese chip-equipment maker faces U.S. lawsuit; Chinese startup AMEC has been sued by
Applied Materials for allegedly misappropriating trade secrets," IDG News Service, December 31, 2007, at
http://www.infoworld.com/article/07/12/31/Chinese-chip-equipment-maker-faces-US-lawsuit_1.html. 58 Keith Bradsher, "China Drawing High-Tech Research From U.S.," The New York Times, March 18,
2010, at http://www.nytimes.com/2010/03/18/business/global/18research.html. Joe McDonald, "GM to Set
Up Research Center in Shanghai," Associated Press, October 29, 2007
; Dawn C. Chmielewski and Don Lee, "What's good for GM may be developed in China
The U.S. carmaker announces plans to build a facility there to study alternative fuels." The Los Angeles
Times, October 30, 2007, at
http://www.latimes.com/business/la-fi-gm30oct30,1,1210547.story
   Alex Kennedy, "Microsoft looks beyond China amid piracy problem, Associated Press, May 26, 2010.
<sup>60</sup> David Kirkpatrick, "How Microsoft conquered China... Or is it the other way around?," Fortune, July
12, 2007, at http://money.cnn.com/magazines/fortune/fortune_archive/2007/07/23/100134488/. See also
James T. Areddy, "China graduates 500,000 engineers - IBM Expands Research Efforts in China;
Computer Maker Looks to Tap Country's Engineering Talent by Opening a New Facility in Shanghai," The
Wall Street Journal, October 14, 2008, at <a href="http://online.wsj.com/article/SB122392275568829407.html">http://online.wsj.com/article/SB122392275568829407.html</a>
Lian Junwei, "Weiruan chengnuo yu Zhonggong xiang yuanshima" [Microsoft commits to giving source
codes to PRCI, Gongshang Shibao (Taipei), July 18, 2002.

61 The author presented a case study of an American computer network security firm 3Com and its
personnel management relationship with its joint venture partner Huawei Telecommunications in a 2008
paper entitled "Trojan Dragon: China's Cyber Threat", Heritage Foundation, February 2008. That paper referenced Qiu Huihui, "Zheng Shusheng: Huawei 3Com zuizhong yao zili menhu" [Zheng Shusheng:
H3C will ultimately become an independent firm], 21 Shiji Jingji Baodao [21st Century Economic Herald],
Guangzhou, November 14, 2005. at <a href="http://www.nanfangdaily.com.cn/ij/20051114/iu/200511140074.asp">http://www.nanfangdaily.com.cn/ij/20051114/iu/200511140074.asp</a>. See also a very illuminating article published in 2005: Yong Zhongwei, "Huawei 3Com Gu Dan Shang Lu"
[Huawei and 3Com Walk the Road Alone], Zhongguo Shiji Wang [China Computer World], December 11,
2006, at http://www.ccw.com.cn/netprod/dp/htm2006/20061211_228831.shtml. China Computer World is
registered with the Beijing Administration for Industry and Commerce, permit number #010182
 <sup>2</sup> A summary of the Stern Hu arrest is at Sky Canaves, "Murky State Secrets Laws At Issue in Rio Tinto
Case," The Wall Street Journal, July 9, 2009, http://blogs.wsj.com/chinajournal/2009/07/09/murky-state-
secrets-laws-at-issue-in-rio-tinto-case/. Naturalized American citizen Xue Feng is reported at Charles
Hutzler, "China court rejects appeal by jailed US geologist," Associated Press, February 18, 2011
63 Cassell Bryan-Low, "China Calling," The Wall Street Journal, February 14, 2005
http://online.wsj.com/article/0, SB110834672417153711,00.html; Matthew Dalton, "Ericsson Loves the
U.S. (for Now), Does the future of Ericsson, the Swedish telecommunications equipment giant, depend on
the persuasive powers of a former U.S. congressional leader, a former president of the World Bank and a
former secretary of the U.S. Navy?," The Wall Street Journal October 25, 2010, at
http://blogs.wsj.com/brussels/2010/10/25/ericsson-loves-the-us-for-now/; Steven Yang and Iris Cai, "China Ministry Finds EU Subsidies for Telecom Equipment Makers," The Wall Street Journal, February
23, 2011, at http://online.wsj.com/article/SB10001424052748703775704576161702354280310.html; "No
Strings Attached: China's Huawei offers free network to London, Agence France Press, February 21, 2011
at http://www.taipeitimes.com/News/biz/archives/2011/02/21/2003496395.
```

<sup>64</sup> Shayndi Raice, "Lawmakers Urge Scrutiny Of Chinese Gear Suppliers," The Wall Street Journal, October 20, 2010, at

http://online.wsj.com/article/SB10001424052702304598704575562812069572900.html

See, for example, Sewell Chan And Keith Bradsher, "U.S. to Investigate China's Clean Energy Aid," The New York Times, October 15, 2010, at http://www.nytimes.com/2010/10/16/business/16wind.html, and a commentary by the CEO of Cyprus Semiconductors, T. J. Rodgers, "Subsidizing Wall Street to Buy Chinese Solar Panels," The Wall Street Journal, December 8, 2011, at  $\underline{http://online.wsj.com/article/SB10001424052970204903804577082631863392956.html.\ Patti\ Waldmeir,$ 

Beijing presses carmakers to share technology," Financial Times, February 18, 2011, at http://www.ft.com/cms/s/0/59a1a0a8-3b80-11e0-9970-00144feabdc0.html

The Taiwan Strait is the most travelled strait. In the year ending August 15, 2002, a total of 259,086 civilian aircraft transited the Taiwan Air Defense Identification Zone (ADIZ) while 246,015 international commercial ships transited the Taiwan Strait and the East Taiwan maritime route, for a daily average of about 675 ship transits - compared to the Dover Strait which sees a daily average of 400-500 ships over 300 tons in daily transit. About 90,000 ships pass through the Strait of Gibraltar annually; about 50,000 ships a year pass through the Straits of Malacca. The Suez Canal processes about 55-60 transits a day while the more constricted Panama Canal manages just 40-44.

<sup>67</sup> Article 11, Exclusive Economic Zone and Continental Shelf Act, Adopted at the third session of the

Standing Committee of the Ninth National People's Congress, 26 June 1998.

68 Wallace ("Chip") Gregson, LTG USMC ret., former assistant secretary of defense commented at a CSIS panel on March 15 that unlike the apparent clarification on the 9-dash-line over sovereignty, China is "now claiming all of the fishing resources in the entire S. China Sea." See The Nelson Report. March 15, 2012. On February 29, 2012, PRC Foreign Ministry was in passive-aggressive mode, complaining that "What should be pointed out is that neither China nor any other country lays claim to the entire South China Sea. We are not sure whether it is because of their unawareness of facts or it is out of their ulterior motives that some people keep making irresponsible remarks on this issue. We believe it needs to be clarified." Yet, the MFA has made no effort whatever to "clarify" it. The Nine-Dash-Line encompasses virtually the entire Sea, and in case there might be any misunderstanding, the PRC Foreign Ministry asserted in the same paragraph that "China's position on the South China Sea issue is consistent and clear. China has indisputable sovereignty over islands in the South China Sea as well as their adjacent waters. There is no such thing as being more or less confrontational." See Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on February 29, 2012, at http://www.fmprc.gov.cn/eng/xwfw/s2510/2511/t910855.htm. On March 16, 2012, the PRC/MFA reasserted "China has indisputable sovereignty over the islands in the South China Sea and their adjacent waters. China will not accept certain country's groundless accusation. We urge relevant countries to respect China's sovereignty, sovereign rights and jurisdiction in real earnest." Foreign Ministry Spokesperson Liu Weimin's Regular Press Conference on March 16, 2012, at http://www.fmprc.gov.cn/eng/xwfw/s2510/2511/t915492.htm.

See footnote 7 supra. In August 30, 2008, officers of the U.S. Embassy in Beijing queried MFA Department of Treaty and Law Oceans and Law of the Sea Division Deputy Director Yin Wenqiang about China's Sea claims. "Yin stated that China's jurisdictional claims in the region -- defined by the so-called 'Nine Dashes' or 'Cow's Tongue,' a mine-segment dotted line on PRC maps of the SCS first published by the Kuomintang Government in 1947 - 'do not contradict' the 1982 UN Convention on the Law of the Sea (UNCLOS)." Yin further explained that "China's sovereignty over the islands and 'rights to utilize economically and exercise jurisdiction' over China's claim came much earlier than UNCLOS.' Stating the area contained by the 'Nine Dashes' is a 'reflection of history,' Yin said that 'UNCLOS does not deny historical claims.' Yin pointed to the various territorial disputes extant in the SCS, saying 'UNCLOS cannot clarify everything.' Hence, China continues to promote the 'shelve differences, mutual development' approach to addressing economic development activities in the SCS and other disputed areas. China will not refer its SCS claim to dispute settlement procedures established in UNCLOS, because, Yin said, 'it is not in China's tradition' to submit to such compulsory or binding decision mechanisms. When queried as to why China acceded to UNCLOS, Yin commented that China became a signatory nation because neighboring countries in the SCS joined, and China believes its SCS claim is not threatened by

<sup>&</sup>lt;sup>71</sup> Yoichi Kato, "U.S. Commander blasts Chinese Navy Behavior," *Asahi Shimbun*, June 16, 2010.

<sup>72</sup> "Banyan: They have returned; China should worry less about America's 'containment' strategy and more about why the neighbours welcome it," *The Economist*, Aug 12th 2010, at <a href="http://www.economist.com/node/16791842?story\_id=16791842">http://www.economist.com/node/16791842?story\_id=16791842</a>.

<sup>73</sup> "Dalu Meiti zha Tai tiaozhan gongshou nanhai chenji, Taiwan fangmian zhunbei zai Taiping Dao jian jichang" (大陸媒體轟台 挑戰共守南海默契, 台灣方面準備在太平島建機場) [PRC Media blasts Taiwan – Challenge to Tacit Understanding re Spratty Islands, Taiwan plans Airstrip on Itu Aba]. Shijie Ribao, January 7, 2006, citing a report in Xinhua's International Herald Leader <a href="http://www.xinhuanet.com/herald">http://www.xinhuanet.com/herald</a>).
<sup>74</sup> David Jude "DJ" Sta. Ana, "China builds more Spratty outposts," The Philippine Star, May 24, 2011 at

<sup>74</sup> David Jude "DJ" Sta. Ana, "China builds more Spratly outposts," *The Philippine Star*, May 24, 2011 at <a href="http://www.philstar.com/ArticlePrinterFriendly.aspx,"articleId=689184;">http://www.philstar.com/ArticlePrinterFriendly.aspx,"articleId=689184;</a> "China, Philippine Defense Chiefs Discuss Spratlys," The Associated Press, May 23, 2011.

<sup>75</sup> Peh Shing Huei, "The rise of the sea dragon; China builds up its maritime might," *Straits Times*, May 22, 2010.

Anne Gearan, "Officials: US ship in China spat was hunting subs," The Associated Press, March 11, 2009. For a description of the *Impeccable*'s operations, see Hans M. Kristensen, "US-Chinese Anti-Submarine Cat and Mouse Game in South China Sea," Federation of American Scientists, March 10, 2009, at <a href="http://www.fas.org/blog/ssp/2009/03/incident.php">http://www.fas.org/blog/ssp/2009/03/incident.php</a>. Ann Scott Tyson, "U.S. Protests 'Harassment' of Navy Ship by Chinese Vessels," *The Washington Post*, March 9, 2009 at <a href="http://www.washingtompost.com/wp-dyu/content/article/2009/03/09/AR2009030900956">http://www.washingtompost.com/wp-dyu/content/article/2009/03/09/AR2009030900956</a> html. Christopher Bodeen, "China: Activity by confronted US ship was illegal," The Associated Press, March 10, 2009.

<sup>77</sup> Chris Buckley, "China says U.S. naval ship broke the law," Reuters, March 10, 2009, Shi Yinhong's sentiments are echoed by Mark J. Valencia in *Foreign Military Activities in Asian EEZS: Conflict Ahead?* National Bureau of Asian Research, May 17, 2011, at <a href="http://www.nbr.org/publications/element.aspx?id=496">http://www.nbr.org/publications/element.aspx?id=496</a>.

<sup>78</sup> Christopher Bodeen, "China may up patrols amid South China Sea disputes," The Associated Press, March 19, 2009; "More navy patrols sent to South China Sea," Agence France-Presse, April 16, 2009.
<sup>79</sup> Yoichi Kato, "U.S. Commander blasts Chinese Navy Behavior," Asahi Shimbun, June 16, 2010.

80 Ben Bland and Jamil Anderlini, "Tensions flare over oil in South China Sea," *Financial Times*, October 16, 2011, at <a href="http://www.ft.com/cms/s/0/8316f698-f801-11e0-8e7e-00144feab+9a.html">http://www.ft.com/cms/s/0/8316f698-f801-11e0-8e7e-00144feab+9a.html</a>.

81 A report is at Jeremy Page, "China in Sea Row With Vietnam," *The Wall Street Journal*, March 1, 2012,

A report is at Jeremy Page, "China in Sea Row With Vietnam," The Wall Street Journal, March 1, 2012,
 at <a href="http://onlinc.wsj.com/article/SB10001424052970203753704577255091639276020.html">http://onlinc.wsj.com/article/SB10001424052970203753704577255091639276020.html</a>.
 Kelley Curric, "Why is China Picking Fights with Indonesia?," The Weekly Standard, August 6, 2010, at

Kency Curric, why is China Picking Fights with indonesia?, The weekly Standard, August 6, 2010, a <a href="http://www.weeklystandard.com/blogs/why-china-picking-fights-indonesia">http://www.weeklystandard.com/blogs/why-china-picking-fights-indonesia</a>.

Style Goldstein, "Strategic Implications of Chinese Fisheries Development," Jamestown Foundation

<sup>84</sup> John Pomfret, "U.S. takes a tougher tone with China," The Washington Post, July 30, 2010; p. A01.

\*\* See commentary in English "Modernizing navy for self-defense," Xinhua, July 13, 2010, at <a href="http://news.xinhuanet.com/english2010/indepth/2010-07/13/c\_13397060.htm">http://news.xinhuanet.com/english2010/indepth/2010-07/13/c\_13397060.htm</a>. Chinese use the term "core interest" (hexin liyi 核心利益) as a diplomatic euphemism for an interest over which China will go to war. In the November 17, 2009, US-China "Joint Statement" issued by presidents Barack Obama and Hu Jintao, China insisted on including the statement that "The two sides agreed that respecting each other's core interests is extremely important to ensure steady progress in U.S.-China relations." By early 2010, The New York Times reported that Chinase State Councillor Dai Bingguo had repeatedly insisted to Secretary Clinton that the South China Sea was China's "core interest." See Edward Wong. "China Hedges Over Whether South China Sea Is a 'Core Interest' Worth War," The New York Times, March 30, 2011, at <a href="http://www.nytimes.com/2011/03/31/world/asia/31beijing.html">http://www.nytimes.com/2011/03/31/world/asia/31beijing.html</a>.

For the full text, see Remarks as Delivered by Secretary of Defense Robert M. Gates to the International Institute For Strategic Studies (Shangri-La-Asia Security), Shangri-La Hotel, Singapore, Saturday, June 05, 2010, at <a href="http://www.defense.gov/speeches/speech.aspx?speechid=1483">http://www.defense.gov/speeches/speech.aspx?speechid=1483</a>.

Fomfret.

\*\*\* "Xilaili Wangtan Nanhai zhengduan; Yang Jiechi bochi Meiguo waili, Zhongguo pingji Meiguo xicshou Nanhai," (希拉利忘談南海 爭端: 楊潔篪駁斥美國歪 理, 中國評擊美國插手南海), Huanqiu Shibao,

July 26, 2010, p. 1. An image of the front page can be found at

- http://www.huanqiu.com/newspaper/default.html?type=hqsb&date=2010-07-26.

  89-4 China will never give up right to use military in SChina Sea' American shadow over South China Sea," Global Times, July 26 2010, at http://opinion.globaltimes.cn/editorial/2010-07/555723.html.
- 90 For example, "China newspaper calls for punishing Philippines over proposed closer military links with US," Associated Press, January 29, 2012.
- 91 Jeremy Page, "General Calls for New Coast Guard to Patrol South China Sea," The Wall Street Journal, March 7, 2012, at http://blogs.wsj.com/scarcaltime/2012/03/07/general-calls-for-new-coast-guard-to-patrolsouth-china-sea
- Demetri Sevastopulo et al, "Beijing's naval harassment arouses US," Financial Times, March 25, 2009,
- at <a href="http://www.ft.com/cms/s/0/38043386-196b-11de-9d34-0000779fd2ac.html">http://www.ft.com/cms/s/0/38043386-196b-11de-9d34-0000779fd2ac.html</a>.

  Sylvan Jegul Problems of Seabed Boundary Delimitation in the East China Sea, Occasional Papers/Reprint Series in Contemporary Asian Studies, Number 3 - 1984 (62), School of Law, University of Maryland. P. 42, at http://digitalcommons.law.umaryland.cdu/mscas/vol1984/iss3/1/
- United Nations Convention on the Law of the Sea (UNCLOS), Article 33 95 Article 11, Exclusive Economic Zone and Continental Shelf Act, Adopted at the third session of the Standing Committee of the Ninth National People's Congress, 26 June 1998.
- <sup>6</sup> Fia Cumming, "The day our boys stared down China," Sun Herald, April 29, 2001, p. 7.

<sup>97</sup> Cumming

- 98 Mure Dickie, "Kitty Hawk's Taiwan passage angers Beijing," Financial Times, December 5 2007 http://www.ft.com/cms/s/0/b1ed3ec2-a2d4-11dc-81e4-0000779fd2ac.html.
- Wu Jieming et al, "Meiguo Xiaoying hao Zhonggong qianjian, Tai Hai duiqi 28 xiaoshi" [USS Kitty Hawk and PRC submarine face-off in Taiwan Strait for 28 hours], Taipei China Times, January 15, 2008. "Report: Chinese ships confronted Kitty Hawk," Kyodo News Service, January 16, 2008, at ht
- tp://www.navytimes.com/news/2008/01/kvo\_china\_080115/.

  100 Wu Jieming et al, "Xiaoying VS. Songji yuanjia you pengtou," [Kitty Hawk vs. Song Class Submarine; Rivals again bump heads ], Taipei China Times, January 15, 2008. "Zhongmei junjianTaihai duiqi, Guofangbu: neng chongfen zhangwo" (美中軍艦台海對峙 國防部: 能充分掌握) |Taiwan MND says they have sufficient grasp of situation], Taipei Central Broadcast News, January 15, 2008.
- Commander's Transcript from January 15, 2008, Admiral Timothy Keating, Commander, Pacific Command Press Roundtable Beijing, at http://www.pacom.mil/web/site\_pages/commander/080115keating-china.shtml.
- On March 11, 1996, the aircraft carrier USS Independence, the guided-missile cruiser USS Bunker Hill were close enough to observe the missiles with the Aegis radar banks capable of tracking missile flight paths. The carrier USS Independence was operating about 200 miles northeast of Taiwan, the Bunker Hill just south of the island with the guided missile destroyer USS O'Brien. That day, State Department spokesman Nick Burns acknowledged that "most of the Taiwan Straits now is off limits to shipping due to this live-fire exercise." The carrier group Nimitz joined the flotilla on March 20.
- <sup>103</sup> China's centrality to East Asia's export trade is summarized in Valentina Romei, "Chart of the week; China replacing Japan in east Asian supply chains," Financial Times, April 20, 2011 at http://blogs.ft.com/beyond-brics/2011/04/20/chart-of-the-week-china-replacing-japan-at-the-centre-of-eastasian-supply-chains/
- 'China becomes Japan's top trade partner," Agence France Presse, April 25, 2007.
- 105 Lin Yizhang, "Taiwan jie dan, Zhongguo Shengchan bizhong kong yue liucheng" (台灣接單中國生產 比重恐逾六成) [Ratio of Taiwan export orders filled in China feared over 60], Liberty Times, Taipei, April 23, 2010, at <a href="http://www.libertytimes.com.tw/2010/new/apr/23/today-fo3.htm">http://www.libertytimes.com.tw/2010/new/apr/23/today-fo3.htm</a>. An article in English is at "Taiwan's Overseas Production Triples In Ten Years: Liberty Times," eTaiwan News, April 23, 2010. <sup>106</sup> See Department of State Daily Press Briefing, Adam Ereli, Deputy Spokesman, for March 24, 2004, p. 14, at http://www.state.gov/r/pa/prs/dpb/2004/30743.htm. Ereli said "The Senkaku Islands have been under the administrative control of the Government of Japan since having been returned as part of the reversion of Okinawa in 1972. Article 5 of the 1960 U.S.-Japan Treaty of Mutual Cooperation and Security states that the treaty applies to the territories under the administration of Japan; thus, Article 5 of the Mutual Security Treaty applies to the Senkaku Islands.

In January 1953, for example, the Chinese Communist Party's (CCP) flagship newspaper, *People's Daily (Renmin Ribao*人民口報), called on the people of the Ryukyus to rise up against the American imperialists occupying their homelands and (just to be clear about to whom they were referring) the newspaper enumerated the "Senkaku" (失樹) archipelago as part of the Ryukyu chain, using the Japanese name for the islands rather than the current Chinese name "Diaoyu" (對魚), clear evidence that the Beijing government considered the islands part of then American-occupied Okinawa even in the heat of the Korean War. See "Ziliao: Liuqiu Qundao Renmin Fandui Meiguo Zhanlingde Douzheng" (資料:

琉球群島人民反對美國佔領的鬥爭) [Reference: The Struggle of the Ryukyu Islands People Against the American Occupation], Renmin Rihao, January 8, 1953, p. 4. The unsigned article apparently assumed that the Senkakus were still inhabited because the first sentence reads: "The Ryukyu Islands are located in the sea between the northeast of our country's Taiwan and the southwest of Japan's Kyushu island, and they include the Senkaku Islands ..." The Senkakus are the first islands listed.

<sup>108</sup> John J. Tkacik, "The EEZ around Japan's Senkaku Islands," U.S. Asia Law Institute, New York University School of Law, December 14, 2010, at <a href="http://www.usasialaw.org/?p=4644">http://www.usasialaw.org/?p=4644</a>.

<sup>109</sup> K.O. Emery and Hiroshi Niino, "Stratigraphy and Petroleum Prospects in the Korean Strait and the East China Sea," UNECAFE/CCOP *Technical Bulletin*, Vol. 1, 1968, p. 13, cited in Ma Ying-jeou, "Seabed Delineations", p. 19 (footnote 38).

110 And every Taiwan geography text book indicated the islands were Japanese. For example, the Republic of China Yearbook (中華民國年鑑-Zhonghua Minguo Nianjian) published in October 1968 states "Taiwan's northernmost [island] is Pengija Yu."

Ill Memorandum of Conversation, October 21, 1971, 10:30 a.m. -1:45 p.m., Foreign Relations of the United States (FRUS), 1969-1976, Volume E-13, Documents on China, 1969-1972.

112 See telegram from Embassy Tokyo to the Secretary of State dated June 15, 1973, 73 Tokyo 7545, cntitled "Japan's attitude on jurisdictional issues concerning oil resources off China's coast" at <a href="http://aad.archives.gov/aad/createpdf/rid=34558&dt=2472&dt=1345">http://aad.archives.gov/aad/createpdf/rid=34558&dt=2472&dt=1345</a>

<sup>113</sup> Telegram from Ameonsul Hong Kong to the Secretary of State dated December 6, 1974, 74 Hong Kong 13174, entitled "Teng Hsiao-ping's October meeting with overseas Chinese" at <a href="http://aad.archives.gov/aad/createpdf?rid=190250&dt=2474&dl=1345">http://aad.archives.gov/aad/createpdf?rid=190250&dt=2474&dl=1345</a>.

<sup>114</sup> Xu Xiangli, "Zhonggong qianghua haishang jiankongquan," (中共強化海上監控權) [PRC beefs up Maritime Surveillance Capabilities], Taipei China Times, February 13, 2003.

115 "Zhong-Ri zheng youtian, zhanjian dapao dui feiji, Jiefangjun paokou xiangxiang, Ri dachen pi tiaoqi, jianyi buzhangje huitan jiejue" (中日爭油田 戰艦人砲對飛機 解放軍砲口相向 日人臣批挑釁 建議部長級會談解決) [PRC-Japan squabble over oilfield, Chinese warships aim cannon at Japanese aircraft and ships, Japan PM slams Chinese provocation, suggests ministerial level summit to discuss resolving issue], New York World Journal (In Chinese), October 3, 2005, p. A-8.

116 (No author cited), "Resources and energy -- More open China a threat to Japan, China Gorging and Japan-China Resource and Energy Conflicts," *Yomiuri Shimbun*, April 13, 2005, reprinted in *Japan Focus*, at <a href="http://japanfocus.org/article.asp?id=318">http://japanfocus.org/article.asp?id=318</a>. Yang Peiling, "Xiandaiji Quzhujian xunxing youtian haiyu" (現代級驅逐艦 巡行油田海域) [Sovremennyy-class destroyers patrol oilfield waters], Taipei *China Times*, January 26, 2005.

After North Korea's highly provocative July 2006 missile tests, recalls the U.S. ambassador to the United Nations, China's foreign minister "repeatedly blamed the entire crisis on Japan's aspiration for a permanent seat on the Security Council!" (exclamation mark in original). John Bolton, Surrender is Not an Option, Threshold Editions (New York), 2008, p. 297

118 Bill Gertz, "China sub secretly stalked U.S. fleet," The Washington Times, November 13, 2006, at

http://www.washingtontimes.com/national/20061113-121539-3317r.htm; Audra Ang, "Admiral Downplays China Sub Incident," The Associated Press, November 17, 2006, at http://www.washingtontomes.com/wp-dyn/content/article/2006/11/17/AR2006111701469.html. Private conversations with U.S. analysts indicate the submarine was spatial assistantally by an E.18.

conversations with U.S. analysts indicate the submarine was spotted accidentally by an F-18.

119 "Gencong Xiaoying, Ding Yiping zuozhen zhihui; Haijun zhongda xingdong zhihuiguan zhiyi 2003 nian yin qianting shigu bei jiangzhi; jinnian 8 yue beige jinsheng fusilingyuan; yuji sannian hou geng shangceng lou" (跟蹤小鷹 丁一平坐鎮指揮海軍重大行動指揮它之一 2003年因潛艇事故被降職

今年8月破格普升副司令員 預計三年後更上層樓) | Shadowing the Kitty Hawk, Ding Yiping in personal

command; One of commanders of the major naval operation was demoted because of a 2003 submarine accident; promoted to deputy commander of the navy this August; predicted for another step up within three years], Shijie Ribao, November 16, 2006, p. A-O1 at <a href="http://www.worldjournal.com/wj-ch-news.php?nt\_seq\_id=1445428">http://www.worldjournal.com/wj-ch-news.php?nt\_seq\_id=1445428</a>. This story cites Beijing's Zhongguo Tongxun She as the source.

120 Chen Shichang, "Dalu Qianjian Gongran Fuhang Riben Hai, Dumai Xinwen Zhiyi zai Shiwei, Xianshi Suxi Haiyu Dixing, 'Haimianxia de Shili' Chaoyue Ri Ziweidui'' (大陸潛艦 公然浮航日本海讀賣新聞指意在示威顯示熟悉海域地形「海面下的實力」超越日自衛隊) [Mainland Submarine Cruises in Sea of Japan for first time, Asahi Shimbun says significance is in its demonstration, clearly it was familiar with the maritime characteristics, 'Subsurface force' surpasses the Japanese Self Defense Forces], World Journal New York June 9, 2004

<sup>121</sup> Yorec Koh, "Maritime Collision Fuels China-Japan Row," *The Wall Street Journal*, September 8, 2010, at <a href="http://online.wsj.com/article/SB10001424052748704362404575479163404472760.html">http://online.wsj.com/article/SB10001424052748704362404575479163404472760.html</a>; lan Johnson, "China and Japan Bristle Over Island Dispute", *The New York Times*, September 8, 2010 at <a href="http://www.nytimes.com/2010/09/09/world/asia/09beijing.html">http://www.nytimes.com/2010/09/09/world/asia/09beijing.html</a>; Shino Yuasa, "China calls in Japan envoy over boat collision," The Associated Press, September 8, 2010; Chris Buckley *et al*, "Beijing Protests as Japan Arrests China Boat Captain," Reuters, September 8, 2010.

122 Jamil Anderlini et al, "Wen turns up heat in row with Japanese," Financial Times, September 22, 2010 at <a href="http://www.ft.com/cms/s/0/d328082a-c5ce-11df-b53e-00144feab49a.html">http://www.ft.com/cms/s/0/d328082a-c5ce-11df-b53e-00144feab49a.html</a>; Keith Bradsher, "Amid Tension, China Blocks Vital Exports to Japan," The New York Times, September 22, 2010 at <a href="http://www.nytimes.com/2010/09/23/business/global/23 rare.html">http://www.nytimes.com/2010/09/23/business/global/23 rare.html</a>.

<sup>123</sup> Press Briefing by Press Secretary Robert Gibbs, September 23, 2010, at <a href="http://www.whitehouse.gov/the-press-office/2010/09/23/press-briefing-press-secretary-robert-gibbs-special-assistant-president-">http://www.whitehouse.gov/the-press-office/2010/09/23/press-briefing-press-secretary-robert-gibbs-special-assistant-president-</a>
<sup>124</sup> DOD News Briefing with Secretary Gates and Adm. Mullen from the Pentagon, September 23, 2010, at <a href="http://www.defense.gov/transcripts/transcript.aspx?transcriptd=4690.">http://www.defense.gov/transcripts/transcript.aspx?transcriptd=4690.</a>
<sup>125</sup>

123 Kathrin Hille, "US warns over Beijing's 'assertiveness'," *Financial Times*, May 25, 2010, at <a href="http://www.ft.com/cms/s/0/0a97c53a-681a-11df-a52f-00144feab49a.html">http://www.ft.com/cms/s/0/0a97c53a-681a-11df-a52f-00144feab49a.html</a>.

After South Korea-U.S. Drills, Now it's Japan's Turn," Wall Street Journal online, December 1, 2010, <a href="http://blogs.wsj.com/japanrealtime/2010/12/01/after-south-korea-us-drills-now-it%F22%80%99s-japan%E2%80%99s-turn/">http://blogs.wsj.com/japanrealtime/2010/12/01/after-south-korea-us-drills-now-it%F22%80%99s-japan%E2%80%99s-turn/</a>; Geoff Dyer, "Slighted Chinese hit at US-Japan drill," Financial Times, December 2, 2010, at <a href="http://www.fl.com/cms/s/0/4c4325c8-fe07-11df-853b-00144feab49a.html">http://www.fl.com/cms/s/0/4c4325c8-fe07-11df-853b-00144feab49a.html</a>. Martin Fackler, "Japan Announces Defense Policy to Counter China," The New York Times, December 16, 2010, at <a href="http://www.nvtimes.com/2010/12/17/world/asia/17japan.html">http://www.nvtimes.com/2010/12/17/world/asia/17japan.html</a>.

127 Mure Dickie and Kathrin Hille, "Japan protests China's island incursion," Financial Times, March 16, 2012, at <a href="http://www.ft.com/cms/s/aa82cf7a-6f68-11e1-b368-00144feab49a.html">http://www.ft.com/cms/s/aa82cf7a-6f68-11e1-b368-00144feab49a.html</a>.
 128 Pakistan's late prime minister Benazir Bhutto reportedly delivered "critical nuclear data" as part of a

barter deal for North Korean missile components and designs on her December 30, 1993, visit to Pyongyang. There can be little doubt that the North Korea visit was known to - and aided by - China. Bhutto's Pyongyang trip came a day after her "extremely fruitful and constructive" official visit to Beijing during which she found, after two and a half hours of intense meetings with Chinese Premier Li Peng, that "Pakistan and China have completely identical views on international and regional issues." The Bhutto visit to Pyongyang took place at a particularly sensitive time for Pakistan, China and North Korea. The United States threatened sanctions on China for transferring nuclear-capable missiles to Pakistan. North Korea was in delicate negotiations with the United States over its refusal to allow the International Atomic Energy Agency to inspect its nuclear facilities. The Pakistani prime minister believed she was obliged to maintain strict operational security in transferring CD-ROM's of sensitive nuclear data to Pakistan, and therefore needed "an overcoat with the 'deepest possible pockets' into which she transferred CDs containing the scientific data about uranium enrichment that the North Koreans wanted." See Glenn Kessler, "Bhutto Dealt Nuclear Secrets to N. Korea, Book Says," The Washington Post, June 1, 2008; A16, http://www.washingtonpost.com/wp-dyn/content/article/2008/05/31/AR2008053102122.html. Bhutto's visits to Beijing and Pyongyang, her first trip abroad after her October 1993 election as Prime Minister, were marked by gushing oratorical pacans to Pakistan-China and Pakistan-North Korea friendship. That nuclear issues were central is evidenced by Bhutto's own avowal that "nuclear nonproliferation should not

be made a pretext for preventing states from fully exercising their right to acquire and develop nuclear technology": See "Text' of Bhutto Banquet Speech," Pyongyang Korean Central Broadcasting Network in Korean, December 30, 1993, transcribed by the Foreign Broadcast Information Service, Daily Report at FBIS-EAS-93-249. In a perhaps telling moment, the North Korean media reported that Kim II Sung and Bhutto exchanged gifts, but added the odd note that each "saw the [other's] gift and expressed thanks for it." See "Kim II-song, Bhutto Exchange Gifts", FBIS Daily Report, December 30, 1993, at FBIS-EAS-93-249.

<sup>129</sup> China also has security clauses in its Treaties with the Russian Federation and with the Shanghai Cooperation Organization (SCO) partners. But the Treaty with North Korea is the only one with a formal mutual defense clause. See John J. Tkacik, Jr. "How the PLA sees North Korea," in Andrew Scobell and Larry M. Wortzell, Shaping China's Security Environment: The Role of the People's Liberation Army, Strategic Studies Institute, U.S. Army War College (Carlisle), 2006, pp139-172. A discussion of the PRC-DPRK Alliance Treaty is on pages 144-145.

130 Bill Gertz, "N. Korea seeks aid from China on nukes"; The Washington Times, December 9, 2002, page A-01 at <a href="http://findarticles.com/p/articles/mi\_lb5244/is\_200212/ai\_n19696552">http://findarticles.com/p/articles/mi\_lb5244/is\_200212/ai\_n19696552</a>.
 131 Private conversations with a Bush Administration official. In May 2004, Assistant Secretary of State

<sup>131</sup> Private conversations with a Bush Administration official. In May 2004, Assistant Secretary of State John Wolf told a congressional committee that the U.S. still supported China's membership in the NSG. He explained, "Let me be clear on the April cases. And when you talk about, I mean, the Iran Non-Proliferation Act covers all of the export control regimes, not just the Nuclear Suppliers Group list. And *most* of the sanctions that were imposed on Chinese entities related to things that were non-nuclear (emphasis added)." He then noted, "We haven't seen the kinds of activity that worried us several years ago. That doesn't mean that it's not taking place. It's only that we haven't seen it." See "U.S. Representative Henry J. Hyde (R-II) Holds Hearing On China And The Nuclear Suppliers Group - Committee Hearing," May 18, 2004, transcript by Federal News Service.

<sup>132</sup> See testimony of Assistant Secretary of State for Venification and Compliance, Paula A. DeSutter in Hearings conducted by the U.S.-China Economic and Security Review Commission entitled "China's Proliferation Practices and the North Korean Nuclear Crisis" on July 24, 2003, pp. 7-31 at <a href="http://www.uscc.gov/hearings/2003hearings/ln03-7-24.php">http://www.uscc.gov/hearings/2003hearings/ln03-7-24.php</a>. This comment appears on p. 26.

<sup>133</sup> Danny Gittings, "Battling the Bribers," *The Asian Wall Street Journal*, October 29, 2002, p. 18. See also David E. Sanger and James Dao, "A Nuclear North Korea: Intelligence: U.S. Says Pakistan Gave Technology to North Korea," *The New York Times*, October 18, 2002, p. A1. A compelling case that the Pakistani shipments transited Chinese military bases is made by Edward Timperlake and William C. Triplett II, "N. Korea, Pakistan, China," *The Washington Times*, December 8, 2002.

<sup>134</sup> John Tkacik, "Getting China to Support a Denuclearized North Korea," Heritage Foundation Backgrounder, August 25, 2003, at <a href="http://www.heritage.org/research/reports/2003/08/getting-china-to-support-a-denuclearized-north-korea">http://www.heritage.org/research/reports/2003/08/getting-china-to-support-a-denuclearized-north-korea</a>.

<sup>135</sup> "N. Korean Leader Hopes To Work With China In 6-Way Talks," Kyodo News Agency, June 18, 2008.
<sup>136</sup> "Chaoxian Laodongdang zongshuji Jin Zhengri huijian Xi Jinping," (Korean Workers Party General Secretary Kim Jong II meets Xi Jinping), Renmin Ribao, June 19, 2008, p. 1, at
<a href="http://paper.people.com.cn/rmrb/html/2008-06/19/content\_41928.htm">http://paper.people.com.cn/rmrb/html/2008-06/19/content\_41928.htm</a>

<sup>137</sup> Glenn Kessler, "New Data Found On North Korea's Nuclear Capacity, Intelligence on Enriched Uranium Revives Questions About Weapons, Secretary of State Condoleezza Rice said U.S. is 'troubled'," 

The Washington Post, June 21, 2008,p. A08 <a href="http://www.washingtonpost.com/wp-dyn/content/article/2008/06/20/AR2008062002499.html">http://www.washingtonpost.com/wp-dyn/content/article/2008/06/20/AR2008062002499.html</a>. Glenn Kessler, "Message to U.S. Preceded 

Nuclear Declaration by North Korea," The Washington Post, July 2, 2008, p. A07 at 

<a href="http://www.washingtonpost.com/wp-dyn/content/article/2008/07/01/AR2008070102847.html">http://www.washingtonpost.com/wp-dyn/content/article/2008/07/01/AR2008070102847.html</a>.

<sup>1.38</sup> The South Korean government counts 38 kilograms, Japan's government counts 44 kg, CNN reporters seem to think there were 40 kg, while The Washington Post reports nearly 60 kg. For an excellent summary of the discrepancies, see The Nelson Report, July 2, 2008.
<sup>139</sup> John J. Tkacik "Sea of Blood, Year of Friendship: China-North Korea Relations in 2009," Jamestown

John J. Tkacik "Sea of Blood, Year of Friendship: China-North Korea Relations in 2009," Jamestown China Brief, June 12, 2009 at <a href="http://china-business-intelligence.com/content/sea-blood-year-friendship-china-north-korean-relations-2009">http://china-business-intelligence.com/content/sea-blood-year-friendship-china-north-korean-relations-2009</a>.

<sup>140</sup> John J. Tkacik "Hu you gonna call? Pyongyang gets Chinese advice on Bill Clinton," China Business Intelligence, August 17, 2009, at <a href="http://clina-business-intelligence.com/content/hu-you-gonna-call-pyongyang-gets-chinese-advice-bill-clinton">http://clina-business-intelligence.com/content/hu-you-gonna-call-pyongyang-gets-chinese-advice-bill-clinton</a>.

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See Department of State telegram 76155 of July 21, 2009, "Subject: Following Up With China On
Cases Of Proliferation Concern," at <a href="http://wikileaks.ch/cable/2009/07/09STATE76155.html">http://wikileaks.ch/cable/2009/07/09STATE76155.html</a>. 142 "N. Korea Used Chinese-Made Torpedo in Attack on S. Korean Ship: Source," Yonhap News, May 19,
2010.

148 Jay Solomon and Andrew Browne, "Beijing Is Shifting on Korea, U.S. Says; Officials Expect China to
Move Toward Criticism of Longtime Ally North Korea, See a Rift in Attitudes Toward Pyongyang," The
Wall Street Journal, May 26, 2010, at
http://online.wsj.com/article/SB10001424052748704032704575268333052475278.html; Christian Oliver,
"China will not protect 'whoever sank S Korean ship'," Financial Times, May 28 2010, at http://www.fi.com/cms/s/0/65c162f0-6a30-11df-b268-00144feab49a.html; Choe Sang-hun, "China Balks at
Criticism of North Korea," The New York Times, May 30, 2010, at http://www.nytimes.com/2010/05/31/world/asia/31korea.html.
   Jaeyeon Woo, "North Korea Shifts Leaders," The Wall Street Journal, June 7, 2010, at
http://online.wsi.com/article/SB10001424052748703303904575292020878690654.html
    'N Korean leader's son to join party leadership: report," AFP, August 7, 2010, at
http://www.taipcitimes.com/News/world/archives/2010/08/07/2003479745; David E. Sanger and Thom
Shanker, "U.S. Sees North Korea as Rattling Sabers for Heir," The New York Times, August 13, 2010, at
http://www.nytimes.com/2010/08/14/world/asia/14policy.html; Kim Jong Un in China 100 percent true' -
China Seeks Fresh Nuclear Talks With North Korea, Reuters. August 28, 2010; Michael Wines, "North
Korea Confirms Leader's Trip to China," The New York Times, August 30, 2010, at
http://www.nytimes.com/2010/08/31/world/asia/31korea.html; Chinese paper defends relations with N
Korea Reuters, August 31, 2010, at
http://www.taipcitimes.com/News/world/archives/2010/08/31/2003481687; North Korea Seeks Stronger
Military Ties With China," Reuters, September 1, 2010.
146 "Top Chinese leader praises North Korea," Associated Press, October 11, 2010; "China Approves
N.Korean Leadership Succession," Yonhap, October 14, 2010 at
http://english.chosun.com/site/data/html_dir/2010/10/14/2010101400839.html; Chico Harlan, "North
Korean leader promotes son, sister in advance of party conference," The Washington Post, September 28,
2010 at
http://www.washingtonpost.com/wp-dyn/content/article/2010/09/28/AR2010092801744.html; "China goes
too far," Joongang Daily, October 30, 2010, http://joongangdaily.joins.com/article/view.asp?aid=2927
<sup>147</sup> David E. Sanger, "North Koreans Unveil Vast New Plant for Nuclear Use," The New York Times,
November 20, 2010, at http://www.nytimes.com/2010/11/21/world/asia/21intel.html. Fredrik Dahl,
"Analysis: North Korea likely needed outside help for centrifuge," Reuters, November 22, 2010.

148 David Barboza, "Senior Chinese Official Meets North Korean Leader," The New York Times,
December 10, 2010, at http://www.nytimes.com/2010/12/10/world/asia/10north.html.
    "Chaoxian xuanbu jiang fashe zizhu yanfa weixing yin guanzhu; Zhongguo zhen cheng xiwang youguan
gefang baochi lengjing kezhi bimian shitai shengji" [North Korea announcement of upcoming launch of
indigenously developed satellite draws attention, China sincerely hopes all sides will deal calmly and avoid aggravating situation], Renmin Ribao, March 17, 2012, p. 3, at <a href="http://paper.people.com.cn/rmrb/html/2012-10">http://paper.people.com.cn/rmrb/html/2012-10</a>
03/17/nw.D110000renmrb_20120317_1-03.htm?div=-1. Chaoxian Meiti Cheng fashe weixing shi qi hefa
quanli" [North Korean media state launch of satellite is its legitimate right], Renmin Ribao, March 19,
2012, p. 3, at http://paper.people.com.cn/rmrb/html/2012-03/19/nw.D110000renmrb_20120319_6-
03.htm?div=-1.
Other notable instances (of scores) include U.S. citizen. Hu Zhicheng at Andrew Jacobs, "Engineer's
Return to China Leads to Jail and Limbo," The New York Times, November 26, 2011, at
http://www.nytimes.com/2011/11/27/world/returning-to-china-engineer-finds-jail-and-then-limbo.html, and
Australian writer Yang Hengjun at Jeremy Page, "Chinese Spy Novelist's Disappearance A Mystery, The Wall Street Journal, March 30, 2011, at http://blogs.wsj.com/speakeasy/2011/03/30/chinese-spy-novelists-
disappearance-a-mystery/.
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<sup>130</sup> In Chinese, his phrase is "zai shijieshang, jihu suoyou Meiguode duishou dou shi Zhongguode pengyou." See Yuan Peng, "Yuan Peng: Meiguo san da shouduan yanyuan Zhongguo jueqi" (Yuan Peng: America's three major schemes to impede China's rise), *Guangzhou Ribao*, November 23, 2007, p. A20, at <a href="http://gzdaily.dayoo.com/html/2007-11/23/content\_86129.htm">http://gzdaily.dayoo.com/html/2007-11/23/content\_86129.htm</a> (June 27, 2008). Dr. Yuan Peng is now a

senior specialist in American affairs at the Chinese Institute for Contemporary International Relations seculor specialist in American affairs at the Chinese Institute for Contemporary International Relations (CICIR), the research arm of China's Ministry of State Security. For a discussion of CICIR's role in the Ministry of State Security see Michael Pillsbury, China Debates the Future Security Environment, National Defense University Press (Washington, D.C.) 2000, pp. 365-366.

151 Among others, Professor John Mearsheimer makes this point with reference to the United States and China. See John J. Mearsheimer, "Rivalry in the Offing," *China Security*, Vol. 4, No. 2 Spring 2008, pp. 9, 11 at <a href="http://www.chinasecurity.us/cs10.pdf">http://www.chinasecurity.us/cs10.pdf</a>.

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Chairman Ros-Lehtinen. Thank you very much, sir. Thank you. Dr. Wortzel?

## STATEMENT OF LARRY M. WORTZEL, PH.D., COMMISSIONER, UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

Mr. WORTZEL. Madam Chairman, Ranking Member Berman, committee members, thank you for the opportunity to appear

today.

On March 7th, the U.S.-China Economic and Security Review Commission released a report on Chinese capabilities for cyber espionage and cyber warfare. The report concluded that the People's Liberation Army has developed information warfare capabilities to defend military and civilian computer networks while seizing control of an adversary's information system. In peacetime, cyber espionage is a cornerstone of China's intelligence-collection operations.

Cyber attacks are appealing to China because they leave no clear fingerprints, and such attacks would be preemptive. The PLA calls its strategy for cyber attacks "Integrated Network Electronic War-

fare."

And I would like to depart from my role as a commissioner for a minute and give you my personal views on this war-fighting doctrine. During the Cold War, the Soviet military planned to start a war with radio electronic combat, a combination of electronic warfare with artillery, aircraft, and missile strikes. The Soviets expected to degrade an enemy's combat capability by 60 percent before a shot was fired.

The PLA's Integrated Network Electronic Warfare doctrine is Soviet doctrine on Chinese steroids. INEW added computer network

attacks and space attacks on satellites.

The commission's report also expresses concerns about some of China's largest telecommunications firms. These firms benefit from a network of state research institutes and government funding and programs that have the sponsorship of the military. Also, Chinese Government research organizations and universities are working on national programs for research on cyber technology.

The report notes that the U.S. military's NIPRNET, or Non-Secure Internet Protocol Routing Network, is particularly vulnerable to computer attack and exploitation, and any assistance to Taiwan

in a crisis could be disrupted.

Finally, the report documents vulnerabilities in the U.S. tele-communications supply chain where backdoors built into hardware or coded into software may give unauthorized access to systems. The U.S. Army ordered a large number of computers from a Chinese company for installation on our NIPRNET-based logistics system. Army officials believe that they can only exclude purchases from foreign firms for equipment controlled on the United States Munitions List, but not for the whole Army. It seems to me that the entire enterprise information architecture of the Department of Defense, if not the whole government, should be a national security concern.

If existing legislation cannot be interpreted differently, then new legislation may be required. Congress should consider directing the Executive Branch to maintain a classified list of countries, people, and companies that pose a serious cyber threat to our Government and industry. Such a list should be validated across the intelligence community and vetted by the Foreign Intelligence and Surveillance Court. During the procurement process, cleared government officials should be required to consult that list and to exclude people or companies on the list from introducing hardware or software

into government networks.

When our security officials can attribute an attack to a foreign person, in a closed Federal court, such as the Foreign Intelligence and Surveillance Court, they should be able to seek a warrant for arrest. And in the case of a foreign company, there should be a statutory prohibition on a company judged to be involved in cyber espionage from doing business in the United States. And we should encourage our allies to do the same. The Australian Government just barred Huawei, a Chinese company, from work on Australia's national infrastructure, cyber infrastructure.

The United States also should have a clear policy that it declares that attacks in cyber space are acts of war and a cyber attack may

generate a weapons strike and a state of war.

Thank you for the opportunity to testify today, and I welcome any questions you may have.

[The prepared statement of Mr. Wortzel follows:]

Testimony before the House Committee on Foreign Affairs

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Dr. Larry M. Wortzel

Commissioner, U.S.-China Economic and Security Review Commission

Hearing Entitled "Investigating the Chinese Threat: Military and Economic Aggression"

Wednesday, March 28, 2012

Rayburn House Office Building

Madam Chairman, Ranking Member Berman, members of the committee, thank you for the opportunity to appear today. On March 7, 2012, the U.S.-China Economic and Security Review Commission released a report prepared for it by Northrop Grumman Corporation on Chinese capabilities for cyber espionage and for computer network operations, or cyber warfare.

The report concluded, among other things, that the Chinese People's Liberation Army places a high priority on modernizing its command, control, communications, computers, intelligence surveillance and reconnaissance (C4ISR) systems and capabilities. This has been a catalyst for the development of an integrated information warfare capability that can defend military and civilian computer networks while seizing control of an adversary's information systems in a conflict. According to the Commission's report, "computer network operations have become fundamental to the PLA's strategic campaign goals for seizing information dominance early" in a military operation "and using it to enable and support other PLA operations throughout a conflict." At the same time, the report concludes, "during peacetime, computer

network exploitation has likely become a cornerstone of PLA and civilian intelligence collection operations supporting national military and civilian strategic goals."

The Commission report tells us that China's computer network exploitation activities to support espionage opened rich veins of information that was previously inaccessible or could only be mined in small amounts with controlled human intelligence operations. The Northrop Grumman Corporation report for the Commission is not the only evidence of how China is using computer espionage to support its military and civilian modernization goals. A November 11, 2011 report on the PLA intelligence and cyber reconnaissance infrastructure also supports the view that China is making a coordinated effort to combine civilian and military programs and both offensive and defensive capabilities. Researchers at the Project 2049 Institute, an independent think tank based in Arlington, Virginia, documented how the PLA General Staff Department's Third Department and Fourth Department are organized and structured to systematically penetrate communications and computer systems, extract information and exploit that information.<sup>1</sup>

Three former U.S. officials, Mike McConnell, former Director of National Intelligence; Michael Chertoff, former Secretary of Homeland Security; and William Lynn, former Deputy Secretary of Defense, said in a January 27, 2012 *Wall Street Journal* opinion piece that: "The Chinese government has a national policy of espionage in cyberspace. In fact, the Chinese are the world's most active and persistent practitioners of cyber espionage today." McConnell, Chertoff and Lynn point out that "it is more efficient for the Chinese to steal innovations and intellectual property that to incur the cost and time of creating their own."

This opinion piece followed a warning about Chinese espionage from the U.S. National Counterintelligence Executive, or NCIX. In an October 2011 report to Congress, the NCIX said

that "Chinese actors are the world most active and persistent perpetrators of economic espionage. US private sector firms and cyber security specialists have reported an onslaught of computer network intrusions that have originated in China," but the Intelligence Community cannot confirm who exactly was responsible. This NCIX report documents intrusions into the computer systems of global oil and energy companies, Google's networks, the networks of a US Fortune 500 manufacturing corporations, and the details on US mergers and acquisitions, and related pricing and financial data.<sup>2</sup>

The Commission's 2009 Annual Report to Congress, citing a *Wall Street Journal* article, discussed "intruders, probably operating from China, that exfiltrated 'several terabytes of data related to design and electronics systems' of the F-35 Lightning II," one of the most advanced fighter planes under development.<sup>3</sup> In addition, Lockheed Martin Corporation, Northrop Grumman Corporation, and British Aerospace and Engineering reportedly all have experience penetrations from hackers based in China in the past three years.<sup>4</sup>

This cyber espionage takes place in parallel to or in conjunction with other forms of espionage. According to the National Counterintelligence Executive, "of the seven cases that were adjudicated under the Economic Espionage Act (18 USC 1831 and 1832) in Fiscal Year 2010, six involved China." An article in a March 2012 manufacturing newsletter notes that "there have been at least 58 defendants charged in federal court related to Chinese espionage since 2008." Some of China's targets are stealth technology, naval propulsion systems, electronic warfare systems for our ships and aircraft, and nuclear weapons.

The Northrop Grumman report to the Commission has some dire warnings. The report tells us that China's government supplements university research and development on computer network operations. Further, in support of military operations, according to the report, cyberattacks are particularly appealing to China's military because cyber actions do not have clear attribution "fingerprints," unlike "ballistic missiles, airstrikes, or troop landings." And such attacks would likely be pre-emptive, occurring at the time of or just before the initiation of hostilities. Other researchers make the point that cyber-attacks are inexpensive and provide a lot of effect at a minimal cost.<sup>6</sup>

A PLA strategy for orchestrating cyber-attacks and other forms of combat is "Integrated Network Electronic Warfare," or INEW. This strategy employs electronic warfare, psychological operations, deception, computer network operations, and kinetic strike, or traditional firepower warfare.

For just a minute, I would like to depart from my role as a commissioner explaining the Commission's report and its implications and give you my personal views on this development in Chinese war fighting doctrine. In doing so, I will draw on over 40 years of military and academic experience following China and its armed forces. I was a U.S. Army strategist, intelligence officer and foreign area officer, during which time I served twice as a military attaché in China.

Those of us who served in the military during the Cold War remember a Soviet military doctrine called Radio-electronic Combat, or REC. This doctrine combined electronic warfare, communications intercept, radio-direction finding, and strikes by artillery, helicopters, aircraft, missiles and rockets. The Soviet doctrine called for the capacity to degrade an adversary's combat capability by sixty percent at the outset of any conflict, in other words, at "zero-hour." Thirty percent of the damage was expected from electronic warfare, disrupting or destroying enemy communications and command and control, and thirty percent from kinetic attack.

In my view the PLA Integrated Network Electronic Warfare doctrine is Soviet Radioelectronic Combat on Chinese steroids. Chinese doctrine has added in computer network operations that would disrupt not only command and control, but also logistics and resupply systems. This INEW doctrine is fully integrated with space warfare designed to degrade an adversary's space based sensor and communications systems. And it also includes provisions for precision strikes on U.S. bases, forces, and embarkation areas in the homeland. To be effective, the strategy must be executed at the very first phase of any conflict.

To return to the details of the Northrop Grumman report, it also expresses concerns about some of China's largest telecommunications firms such as Huawei Shenzhen Technology Company, Zhongxing Telecom (ZTE) and Datang Telecom Technology, Ltd. The report notes that these firms may not always be directly linked to the PLA or Chinese C4ISR modernization, but "they benefit from a background network of state research institutes and government funding in programs that have affiliation or sponsorship of the People's Liberation Army." Further, the report explains how a triumvirate of Chinese military institutions, government research organizations, and universities are working to fulfill national programs for basic research and scientific and technological modernization with military applications.

Computer network exploitation or cyber reconnaissance operations during peacetime also identify the nodes in an information system or in an adversary's critical infrastructure that would be attacked or taken over in a conflict. The Northrop Grumman report provides hypothetical scenarios based on PLA writings that show how "Chinese commanders may elect to use deep access to critical U.S. networks carrying logistics and command and control data to collect highly valuable real-time intelligence or to corrupt the data without destroying networks or hardware." Moreover, the report's authors have identified in PLA strategic writings ideas for

applying "paralysis warfare" in electronic and computer attacks against US command and control and logistics systems.<sup>9</sup>

The U.S. military's NIPRNET (Non-secure Internet Protocol Routing Network) is particularly vulnerable to computer network attack and exploitation. This network carries much of the time phasing and force lists for deployments, personnel data, and communications with civilian contractors. <sup>10</sup> An attack on the NIPRNET or the corruption of its data could affect the delivery of repair parts, ammunition, and aerial refueling. <sup>11</sup>

Finally, the Commission's report documents vulnerabilities in the U.S. telecommunications supply chain. <sup>12</sup> Foreign governments or intelligence services could leverage backdoors built into hardware or coded into firmware of software to gain unauthorized access to systems. The report tells us that "without strict control of the complex upstream manufacturing channel a manufacturer of routers, switches, or other telecommunications hardware is exposed to innumerable points of possible tampering and must rely on rigorous and often expensive testing to ensure that the semiconductors being delivered are trustworthy." Similarly, the lack of controls in equipment and component distribution channels creates opportunities for bad actors to funnel compromised goods to consumers, including industry and government.

There are ways to make penetrations of a U.S. system more difficult, such as by hiding the identification of ultimate end-users. But in one noteworthy instance, as pointed out by Representative Frank R. Wolf in 2006, a computer configuration clearly intended to be put on a classified computer network was ordered by the U.S. State Department from a Chinese company. As recently as last month, in response to an inquiry from Representative Wolf and his staff, another commissioner and I, working independently of the commission as a body, learned that the U.S. Army ordered a large number of computers from a Chinese company

destined for installation critical to our NIPRNET-based logistics system, our intelligence organizations, and installations that repair some of our most sensitive electronic sensors. One lesson from that incident is that although Department of Defense and Army procurement and acquisition officials believe they can exercise security cautions and exclude some purchases from foreign firms on purchases of information technology equipment destined to go into weapons systems that are controlled under the United States Munitions List (Part 121 of the International Traffic in Arms Regulation or ITAR), they think that the DOD cannot exclude foreign manufactured computer systems from going to a defense installation or on a system that is not ITAR controlled. These acquisition officials believe that concerns that a foreign manufacturer may not be reliable or a system may have trapdoors are not enough, in themselves, to allow procurement officials to exclude that manufacturer.

Speaking for myself, not for the Commission as a body, it seems to me that the enterprise information architecture of the Department of Defense, indeed perhaps the whole U.S. government, should be a national security concern.

The way that existing legislation is interpreted should be altered, allowing procurement and cyber security officials to exercise due caution if they cannot assure the security of a system. If existing legislation cannot be interpreted differently, and can only be applied to munitions list items, then new legislation may be required.

Further, in my personal view, Congress should consider directing the executive branch to maintain a classified list of countries, people and companies that pose a serious cyber threat to our government and industry. Such a listing could be validated across the intelligence community and vetted by the Foreign Intelligence and Surveillance Court. During the procurement process cleared government officials should be required to consult that list and then

exclude people or companies on such a list from introducing hardware or software into government networks.

Attribution is particularly difficult in the case of cyber penetrations or attacks. But in cases where our counterintelligence or security officials are able to attribute an attack to a foreign person, in a closed federal court such as the Foreign Intelligence and Surveillance Court, law enforcement authorities should be able to seek a warrant for arrest. And in the case of a foreign company, there should be a statutory prohibition on a company judged to be involved in cyber espionage from doing business in the United States. The Department of State should not be permitted to issue a visa to a person who is judged by the Foreign Intelligence and Surveillance Court to be involved in cyber espionage unless there is also a plan to bring that person to trial when he or she enters the United States.

Other researchers argue that attribution is imperfect. Their view is that the U.S. government should hold a foreign government responsible for controlling its citizens involved in cyber-attack or cyber-crime. That may work for cyber-criminals or hackers, but in the case of China, if the entire structure of the intelligence, military and national industry is involved in cyber espionage, it may not be adequate.

With respect to cyber warfare, it is clear that this activity is a legitimate domain of war. The United States and NATO already have incorporated cyber campaigns into military planning in a number of conflicts. Chinese military literature, as documented in the Commission's March 7, 2012 report, also includes provisions for cyber-attacks at the outset of any conflict; it is likely that other countries with cyber capabilities would do the same thing. My personal view is that this means that the United States should have a clear policy that declares that attacks in cyber

space are acts of war and that the U.S. may respond with force, not necessarily in the same domain of war. That is, a cyber-attack may generate a weapons strike and a state of war.

Thank you for the opportunity to testify today. I welcome any questions you may have.

http://www.uscc.gov/RFP/2012/USCC%20Report Chinese CapabilitiesforComputer NetworkOperationsandCyber Espionage.pdf, p. 55-62.

 $<sup>^1\</sup> http://project 2049.net/documents/pla\_third\_department\_sigint\_cyber\_stokes\_lin\_hsiao.pdf$ 

<sup>&</sup>lt;sup>2</sup> http://www.ncix.gov/publications/reports/fecie\_all/Foreign\_Economic\_Collection\_2011.pdf

<sup>&</sup>lt;sup>3</sup> U.S. China Economic and Security Review Commission, 2009 Report to Congress (Washington, DC: Government Printing Office, November 2009), p. 167-168.

<sup>4</sup> http://securityblog.verizonbusiness.com/2012/03/16/weekly-intelligence-summary-2012-03-16.)

<sup>5</sup> http://www.manufacturing.net/articles/2012/03/let-me-count-the-ways-china-is-stealing-our-secrets

<sup>&</sup>lt;sup>6</sup> See David C. Gompert and Phillip C. Saunders, *The Paradox of Power: Sino-American Strategic Restraint in an Age* of Vulnerability (Washington, DC: National Defense University Press, 2011).

lbid. p. 31.

<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> lbid. pp. 33-35. <sup>11</sup> lbid. pp. 37-38.

<sup>12</sup> lbid. pp. 82-93.

<sup>13</sup> http://www.nytimes.com/2006/05/23/washington/23lenovo.html?\_r=1&ref=frankrwolf

Chairman Ros-Lehtinen. Thank you, sir. Dr. Fravel is recognized.

# STATEMENT OF TAYLOR FRAVEL, PH.D., ASSOCIATE PROFESSOR OF POLITICAL SCIENCE, SECURITY STUDIES PROGRAM, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Mr. FRAVEL. Madam Chairman, Congressman Berman, and esteemed members of the committee, thank you for inviting me to participate in today's important discussion.

I would like to discuss one particular challenge that China poses, its behavior in the territorial and maritime disputes in the South

China Sea. Orally, I would like to make four points.

My first point, first, between 2007 and 2011, China adopted a much more assertive approach toward the disputes in the South China Sea. During this period, China challenged, and in some cases threatened, foreign oil companies, including American ones, investing in Vietnam's offshore oil and gas blocks, emphasized its own expansive claims in these waters, detained hundreds of Vietnamese fishermen near the Chinese-held Paracels Islands, and harassed Vietnamese and Philippine vessels conducting seismic surveys in waters that Beijing claims.

China adopted this more assertive approach for several reasons. First, China was often reacting to efforts by other claimants, especially Vietnam, to strengthen their own position in the South China Sea. As there are some conflicts, territorial disputes are prone to negative spirals of instability because one state's efforts to defend its claims will be viewed by others as a challenge that requires a

response.

Second, more generally, China's leaders were more willing to assert interest in the region after successfully hosting the Olympics and weathering the financial crisis in 2008.

Third, various Chinese maritime agencies competing with each other for greater authority and resources also played a role in China's behavior.

The second point: Since June 2011, China has adopted a less-assertive approach in the South China Sea disputes. China has stopped the most confrontational aspects of its assertive approach, especially the frequent detention of Vietnamese fishing vessels and the harassment of oil and gas exploration activities in waters that China claims.

In addition, China's new approach has several components, including reaffirming cooperation through joint development, holding summits with leaders from the Philippines and Vietnam, reaching agreements for managing tensions with the association of Southeast Asian nations and with Vietnam, and directly engaging other claimants, for example, by establishing a \$70 million Maritime Cooperation Fund.

China adopted a less-assertive approach because it realized that it had overreached and overreacted. By threatening other claimants, China tarnished the cooperative image that it had sought to cultivate since 2000, created a common interest among these states encountering China, and created strong incentives for states in the

region to improve their ties with the United States.

Central to the change in China's behavior was the firmness displayed by both states in the region and the United States, especially when Secretary of State Clinton declared a U.S. national interest in the South China Sea in July 2010. In sum, China's actions had undermined its broader grand strategy, which emphasizes maintaining good relations with both its immediate neighbors and with great powers like the United States.

My third point: China's recent behavior in the South China Sea has important implications for understanding China's foreign policy today. In the South China Sea, China's assertiveness has sought to deter other states from acting against Chinese interest and claims. China has not acted to compel states to accede to China's claims, however. The emphasis on deterrence in China's foreign policy is consistent with the emphasis on deterrence in China's military strategy today.

Although China is actively modernizing its armed forces, it remains reluctant to use them in many political and military issues. In the South China Sea, for example, China has relied primarily on civilian maritime law enforcement agencies to assert and defend

its claims, not the Chinese navy.

With 14 neighbors on land and eight at sea, China's foreign policy remains constrained by its external security environment. China has limited room for maneuver and must seek to maintain good relations with neighboring states, especially when faced with resistance to China's policies from its neighbors and from states like the United States.

My final point concerns several brief policy recommendations: First, the United States should maintain and consolidate its military and diplomatic presence in East Asia currently being undertaken as part of the rebalancing of American strategic priorities.

Second, the United States should continue to underscore its national interest in international norms that are threatened by China's more assertive policies, especially freedom of navigation and the peaceful resolution of disputes.

Third, the United States should maintain its longstanding principle of neutrality in territorial disputes of other countries to prevent transforming them into bilateral conflicts between the United States and China.

Fourth, the United States should ratify the Convention on the Law of the Sea to increase the effectiveness of U.S. efforts to pursue a rules-based approach to managing and resolving disputes over maritime jurisdiction.

Madam Chairman, thank you.

[The prepared statement of Mr. Fravel follows:]

#### Prepared Statement of

#### M. Taylor Fravel

Associate Professor of Political Science Member, Security Studies Program Massachusetts Institute of Technology

Hearing on "Investigating the China Threat, Part One: Military and Economic Aggression"

> House Committee on Foreign Affairs March 28, 2012

Madam Chairman, Congressman Berman, and esteemed Members of the Committee: Thank you for inviting me to participate in today's important discussion on China's foreign policy.

Whether measured militarily or economically, China is now the most powerful state in Asia and is a country with increasing potential as a global power. The U.S.-China relationship contains important elements of both cooperation and competition. Although it is important to maximize cooperation in the relationship, the competitive elements and challenges must also be identified and addressed.

Today, I would like to examine one of these challenges – China's recent behavior in the territorial and maritime disputes in the South China Sea. In particular, I will examine the sources of assertiveness and moderation in China's behavior in these disputes. Examination of the sources of China's behavior in the South China Sea is important for several reasons. First, it can illuminate the drivers of China's foreign policy as it becomes a more capable and powerful international actor. Second, it can shed light on how China will behave towards its neighbors and in conflict-prone issues such as territorial disputes, including China's willingness to rely on coercion or even armed force. <sup>1</sup>

#### Background: China's Claims in the South China Sea

China has two types of claims in the South China Sea. These are often lumped together, but need to be distinguished. First, China claims territorial sovereignty over two groups of islands, the Paracels and the Spratlys. China disputes the Paracels with Vietnam and some or all the Spratly Islands with Vietnam, the Philippines and Malaysia. The PRC issued its first formal claim to sovereignty over the islands in a note issued by Premier Zhou Enlai during U.S. and allied peace treaty negotiations with Japan in 1951.

<sup>&</sup>lt;sup>1</sup> This prepared statement draws on several previous publications, including: M. Taylor Fravel, "China's Strategy in the South China Sea," *Contemporary Southeast Asia*, Vol. 33, No. 3 (December 2011), pp. 292-319; M. Taylor Fravel, "Maritime Security in the South China Sea and the Competition over Maritime Rights," in Patrick Cronin and William Rogers, eds., *Cooperation from Strength: The United States, China and the South China Sea* (Center for New American Security: Washington, DC, 2012); M. Taylor Fravel and Michael D. Swaine, "China's Assertive Behavior – Part Two: The Maritime Periphery," *China Leadership Monitor*, No. 35 (Summer 2011), pp. 1-29; M. Taylor Fravel, *Strong Borders, Secure Nation: Cooperation and Conflict in China's Territorial Disputes* (Princeton: Princeton University Press, 2008).

Second, China claims maritime rights from these island groups under the 1982 UN Convention on the Law of the Sea (UNCLOS). In addition to the other claimants to the Spratlys, China contests maritime rights in the South China Sea with Brunei and Indonesia. China first claimed maritime rights from its land features in 1958, when it asserted a 3nm territorial sea in a diplomatic note published during the clash over Jinmen and Mazu islands. Following the signing and ratification of UNCLOS, China formally expanded the scope and type of maritime rights that it claimed in the 1990s. In a 1992 domestic law, China claimed 12nm territorial seas and contiguous zones and reaffirmed its sovereignty claims to various islands, including the Paracels and the Spratlys. In a 1998 law, China claimed a 200nm exclusive economic zone (EEZ) and continental shelf rights. Taken together, China in the South China Sea claims an EEZ or exclusive jurisdiction in these waters from the various land features that it occupies or claims

Nevertheless, ambiguity around China's claims persists for three reasons. First, official Chinese maps continue to show a "nine-dashed line" that encompasses much of the South China Sea. Although this map was first published by the Republic of China in the late 1940s, the PRC has not defined what the line means. Second, Article 14 of the 1998 EEZ law states that it "shall not affect the historic rights that the PRC enjoys" but does not specify what such historic rights might entail. Third, China has not yet drawn baselines around the land features on the South China Sea that would indicate the size of the EEZ that it claims in the region. Importantly, many of the land features in the South China Sea would not qualify as "islands" under article 121 of UNCLOS from which China could claim a 200nm EEZ.

Whether China labeled the South China Sea as "core interest" equivalent to Tibet, Xinjiang, or Taiwan attracted a great deal of attention in 2010. The *New York Times* reported in April 2010 that China had described the South China Sea as a core interest. Although it was discussed in a number of private meetings between U.S. and Chinese officials, no senior Chinese leader has ever publicly described the South China Sea as a core interest. The only exception appears to be an English-language article published by the Xinhua News Agency in August 2011. The article described China's sovereignty over the Spratly Islands as "part of China's core interests", but not the South China Sea itself

The territorial and maritime disputes in the South China Sea should be distinguished from a separate conflict between the United States and China over the legality of military activities in the EEZ. China claims under UNCLOS that coastal states have the right to regulate foreign military activities in the EEZ, a view held only by a minority of states. Incidents have occurred in March 2001, April 2001, March 2009, and May 2009 when Chinese vessels or aircraft harassed U.S. naval ships or aircraft operating in China's EEZ, including in the northern portion of the South China Sea off the coast of Hainan Island. The discussion below is limited to the territorial and maritime disputes outlined above.

#### Growing Assertiveness between 2009 and 2011

Starting in 2007, and especially between 2009 and 2011, China adopted a more assertive approach to its claims in the South China Sea. China's assertiveness revolved

around its claims to maritime rights and jurisdiction over the resources in these waters. The purpose of China's actions was to strengthen its own claims and to deter other claimants from further challenging China.

The first component of China's assertiveness emphasized diplomatic actions. Starting in 2007, China began to challenge the legality of hydrocarbon exploration projects in disputed waters, especially within Vietnam's EEZ. By 2008, China had issued 18 diplomatic protests to foreign oil companies investing in Vietnam's offshore blocks. China even threatened several companies, including American ones, with a loss of business in China if they continued with their investments with Vietnam. In mid-2009, China also challenged claims Vietnam and Malaysia had submitted to a UN commission for extended continental shelf rights in the South China Sea. China's notes to the UN included a map that prominently featured the "nine-dashed line." Because the Chinese notes did not define the line, it was viewed as an expansion of China's claim in a way that was inconsistent with the provisions of UNCLOS.

The second component of China's assertiveness was the use of civil maritime law enforcement agencies to demonstrate and, in some cases, exercise Chinese jurisdiction over the waters it claimed. Vessels from the Bureau of Fisheries Administration, empowered to regulate fishing in China, have been the most active. In 2009, China began to link a 10-year old seasonal fishing ban in the northern part of the South China Sea with its claims to jurisdiction over these waters. Between 2005 and 2010, Fisheries Administration vessels detained and held approximately 63 Vietnamese boats with 725 crew. In many of these cases, the boats and crews were not released until a fine was paid. Half of all such detentions occurred in 2009.

Patrol ships from the Marine Surveillance Force under the State Oceanographic Administration have also increased the scope and frequency of their patrols in these waters since 2005. In the first half of 2011, the vessels began to harass Vietnamese and Philippine ships conducting seismic surveys in EEZs off their coasts. In one instance, in late May 2011, a vessel from the State Oceanographic Administration cut the towed cable of a Vietnamese survey vessel. In early June 2011, a Chinese fishing boat became entangled in the towed cable of another vessel that was conducting a seismic survey for Vietnam.

Finally, military forces have only played a secondary and indirect role in China's assertiveness during this period. As part of a strategy of deterrence, China has displayed its modernizing naval capabilities in patrols and training exercises in disputed and undisputed areas of the South China Sea to dissuade other claimants from challenging China. Nevertheless, over the past decade, China has not used its armed forces to actively enforce its claims, much less expel other countries from the features that they occupy.

#### Sources of China's Assertive Behavior

China was more willing to defend and assert its claims during this period for several reasons:

First, territorial disputes by definition are unstable and prone to negative spirals of instability associated with the security dilemma. Because the conflicts in the South

China Sea involve sovereignty or exclusive rights, they are "zero sum" whereby one state's gain is another state's loss. As a result, states in such disputes are especially sensitive to perceived challenges to their claims by other states. Any action by one state to strengthen its own claim creates strong incentives for other states to respond. Such incentives are especially powerful because of the public nature of claims in territorial disputes and because international law requires states to actively assert and defend their claims.

In the South China Sea, many of China's actions were responses to what Beijing viewed as challenges to its claims by other states. China's demarches to foreign oil companies and commercial threats occurred after Vietnam embarked on a national plan to increase the share of the maritime economy in Vietnam's GDP from 48 percent in 2005 to 55 percent in 2020, with an emphasis on offshore oil and gas. China's increased diplomatic defense of its claims and publication of a map with the nine-dashed line at the UN occurred in response to the submission of claims by other states to a UN commission (to meet a May 2009 deadline that was set a decade earlier). China detained Vietnamese fishermen as their activity increased around the Paracel Islands, which China has controlled completely since 1974. China's harassment of hydrocarbon exploration projects in early 2011 occurred in response to new surveys that were launched in Vietnam and the Philippines. In sum, China was not the only state more willing to assert and defend its claims in the South China Sea during this period.

Second, in the aftermath of the financial crisis of 2008, China's leaders may have felt enhanced self-confidence in international affairs. Due in part to a massive stimulus program implemented in late 2008, China managed to weather the storm of the crisis with less difficulty than many advanced industrialized states, including the United States. China's relative success in this regard may have increased China's willingness to more energetically assert and defend its interests, including in the South China Sea. By itself, such self-confidence was probably not a decisive factor in the South China Sea, but it may have increased China's willingness to respond to what it viewed as challenges by other states.

Third, limitations in China's bureaucratic structure may have played a role in China's assertiveness during this period. In the last ten years, the number of actors with the ability to influence China's policy in maritime affairs has grown much faster than the ability of the state to regulate and coordinate them. For example, China has five civil maritime law enforcement agencies that are empowered to protect China's "maritime rights and interests" in the waters that China claims. These actors are part of ministries that are not directly supervised or coordinated by the Ministry of Foreign Affairs, the Ministry of Defense, or the PLA. What might appear externally to be a coordinated strategy may at times be a product of either bureaucratic autonomy or a competition among different departments for greater resources and authority.

#### A Shift to Moderation Since Mid-2011

Starting in mid-June 2011, China has adopted a more moderate approach to managing its claims in the South China Sea after it realized that its assertiveness had backfired. The purpose of this shift was to restore China's tarnished image in East Asia and reduce the rationale for a more active U.S. role in the region.

China's new approach has several components:

- China's top leaders, including President Hu Jintao and Premier Wen Jiabao, have re-affirmed the late Deng Xiaoping's guiding principle for dealing with China's maritime conflicts of "setting aside disputes and pursuing common development."
- China has reached agreements with other claimant states with the aim of
  managing tensions, promoting dialogue, and facilitating eventual dispute
  resolution. In addition to a July 2011 agreement with ASEAN, China reached a
  much more substantial agreement with Vietnam in October 2011 over basic
  principles for resolving maritime disputes that stress using international law.
- China's top leaders have held high-level meetings with their counterparts to improve broader bilateral relationships. Philippine President Benigno Acquino and Vietnamese communist party general secretary Nguyen Phu Trong visited Beijing in August and October 2011, respectively. Likewise, Vice President Xi Jinping traveled to Vietnam in December 2011 as part of a Southeast Asian tour.
- Authoritative Chinese-language media such as the People's Daily now underscore the importance of a cooperative approach in the South China Sea. Such articles are written largely to explain policy decisions to domestic readers, especially those working within party and state bureaucracies.
- China has engaged other claimants by establishing a 3B yuan (476 million US dollar) China-ASEAN Maritime Cooperation Fund (November 2011), hosting several workshops on oceanography and freedom of navigation in the South China Sea (December 2011), and hosting a meeting with senior ASEAN officials to discuss implementing the 2002 code of conduct declaration (January 2012).

Finally, China has halted the more assertive behavior that attracted so much adverse attention between 2009 and 2011. Vessels from the Bureau of Fisheries Administration have detained and held only two Vietnamese fishing vessels since late 2010 (in early March 2012). Patrol ships from the State Oceanographic Administration have not interfered in Vietnamese or Philippine hydrocarbon exploration activities since last May. More generally, China has not obstructed related exploration activities, such as Exxon's successful drilling of an exploratory well in Vietnamese waters claimed by China in October

#### Sources of Moderation in China's Behavior

Why did China adopt a more moderate approach? China realized that it overreached and overreacted: by threatening states in Southeast Asia, and increasing US involvement in the region, China undermined its broader grand strategy.

In early 2010, other parties to the disputes in the South China Sea began to express growing concern about China's actions. Moreover, they began to turn to other powers with interests in the South China Sea for help, especially the United States. In January 2010, Vietnam assumed the chairmanship of ASEAN and used this position to draw greater international attention to the dispute. In July 2010, the United States led an

effort by 12 states to express concern about China's behavior during a meeting of the ASEAN Regional Forum, an annual gathering of states in the region to discuss security issues. Secretary of State Hilary Clinton also offered the most detailed statement to date of U.S. interests in the South China Sea, including freedom of navigation, unimpeded commerce, respect for international law, and peaceful dispute resolution.

As a result, China began to realize that its actions were harming its broader foreign policy objectives. One core principle of China's current grand strategy is to maintain good ties with great powers, its immediate neighbors, and the developing world. Through its actions in the South China Sea, China had undermined this principle several ways: It 1) tarnished the cordial image in Southeast Asia that it had worked to cultivate in the preceding decade, 2) created a shared interest among countries in the region in countering China, 3) created strong incentives for states in the region to seek support from the United States, and 4) it added the dispute as an issue in the U.S.-China relationship. In sum, China's behavior worsened its relations with both its immediate neighbors and the United States – and created a shared interest among them in China.

China's more moderate approach seeks to ensure that the disputes in the South China Sea do not harm China's broader foreign policy objectives. Through this new approach, Beijing wants to project a more benign image in the region to prevent the formation of a group of East Asian states allied against China, reduce Southeast Asian states' desire to further improve ties with the United States, and weaken the rationale for a greater U.S. role in these disputes and in the region.

#### Implications for China's Foreign Policy in the Future

The assertiveness and moderation in China's recent behavior in the South China Sea carries several implications for the drivers of China's foreign policy.

- In many areas, including territorial and maritime disputes, China's foreign policies remain largely reactive to challenges from other states. The actions of other states in the South China Sea played a significant role in both China's assertiveness and moderation.
- In contentious disputes with its immediate neighbors, China's actions have
  mostly sought to deter other states from acting against China's interests and not
  to compel states through coercion or the use of force to change their positions
  and accede to China's demands. The emphasis on deterrence in China's foreign
  policies is consistent with the current orientation of China's military strategy.
- Although China is actively modernizing its armed forces, it remains reluctant to
  use them directly in many political-military issues. In the South China Sea, China
  has relied primarily on civil maritime law enforcement agencies, and not the PLA
  Navy, to assert and defend its claims. When incidents at sea occur, the use of
  such civilian agencies creates an additional rung on the ladder of escalation short
  of direct military involvement, and may indicate a desire to limit tensions.
- China's foreign policy remains constrained by its external security environment.
   China has fourteen neighbors on land and eight at sea, in addition to the forward deployed presence of the United States in East Asia. Several of these neighbors

have either large military forces or nuclear weapons. Some like India and Russia are also rising powers, while others like Japan and the Philippines are allies of the United States. China's own allies in the region, Pakistan and North Korea, are a source of tension with both China's neighbors and the United States. In such an environment, China has limited room for maneuver and must seek to maintain good relations with neighboring states.

- In any particular dispute, China remains constrained by the need to balance dispute-specific interests with its broader foreign policy goals. No evidence exists yet to suggest that China is willing to create a more hostile security environment that may threaten its continued economic growth to achieve specific interests in specific disputes.
- China's more moderate approach in the South China Sea provides further
  evidence that China will seek to avoid the type of confrontational policies that it
  had adopted toward the United States in 2010. It also indicates that China will
  respond to U.S. strategic rebalancing by relying on conventional diplomatic and
  economic tools of statecraft and not a direct military response.

#### Recommendations for the United States

Let me conclude with several recommendations for U.S. policy in East Asia:

- The United States should maintain and consolidate its military and diplomatic presence in East Asia currently being undertaken as part of the rebalancing of American strategic priorities, including American alliances and partnerships in the region. The involvement of the United States in the dispute, including Secretary of State Clinton's statement at the July 2010 meeting of the ASEAN Regional Forum, was one important factor in China's shift to a more moderate approach to managing its claims in the South China Sea. Successful American engagement in the South China Sea requires a sustained and active presence in the region.
- The United States should continue to underscore its national interest in the
  principles and norms that might be threatened by instability in the South China
  Sea and by China's more assertive policies, especially freedom of navigation as
  enshrined in UNCLOS and the peaceful resolution of disputes.
- The United States should support multilateral efforts to maintain maritime security in the region and continue active participation in the meetings of regional organizations such as the ASEAN Regional Forum and the East Asian Summit.
- The United States should maintain its longstanding principle of neutrality and of not taking sides in the territorial disputes of other countries. The maritime disputes in East Asia that involve China are complicated and multifaceted. To the extent that U.S. policy takes sides in these disputes or is perceived as taking sides it risks transforming these disputes into a bilateral conflict between the United States and China. In addition, if other claimant countries believe that the United States will defend their actions against China, they may take bolder and riskier actions that could increase instability in the South China Sea.

The United States should ratify UNCLOS, which embodies customary
international law in the maritime domain. Ratification would increase the
legitimacy of U.S. efforts to pursue a rules-based approach to managing and
resolving disputes over maritime jurisdiction and further enhance the image of
the United States among many states in East Asia.

Chairman Ros-Lehtinen. Thank you very much. Thank you to

all of our panelists for excellent testimony.

I would like to ask you gentlemen about China's relations with North Korea and with Iran. I know that we don't have much time. But China's enablement of North Korea's nuclear development program has allowed Pyongyang to become a de facto nuclear power. Does Beijing really desire a nuclear-free Korean peninsula or does China prefer a situation where an erratic and unpredictable North Korea ties down the United States and their East Asian allies while China pursues its own regional ambitions in the South China Sea and elsewhere?

And on Iran, news reports of Beijing supplying Tehran with surveillance equipment to spy on Iranian citizens is only the latest example of extensive Chinese/Iranian security links. There have been reports of Chinese military cooperation with Tehran in the upgrade of Iranian fighters, missile technology, and production of speed boats to patrol the Gulf and the Strait. Have the U.N. sanctions against Iran, including an arms embargo, diminished Beijing's supply of weapons and missile technology to Tehran?

A former Los Alamos nuclear engineering analyst said that Beijing's nuclear cooperation with Iran "created the foundation of the Iranian nuclear program today." Would you agree with that assess-

ment?

So, North Korea and Iran, we will start.

Mr. CHENG. It is obviously difficult to determine what China prefers, given the opacity of Chinese decision making. But I would suggest that China prefers neither a nuclear-free North Korean nor necessarily an erratic and unpredictable North Korea.

Instead, at the moment, given the leadership transition that is ongoing in China, it would seem most likely that the Chinese would prefer, frankly, that just somebody else deal with the North Korean situation, most likely the United States, while China deals

with its internal power shift.

Now, in the longer-term, China would most prefer a docile North Korea that it can control and manipulate, which it currently does not necessarily have. Given the unlikelihood of this situation, it would prefer a North Korea that does not precipitate a war on the peninsula, but which would not be reunified with the South, and which would focus American attention elsewhere away from Beijing.

Chairman Ros-Lehtinen. Thank you.

Mr. TKACIK. One has to remember that North Korea is China's oldest, and I think right now still the only, treaty ally in a military mutual defense treaty. I have watched China/North Korea for 20 years, and I have come to the conclusion that China seems, indeed, to want North Korea to behave the way it does. China has pretty much total control in North Korea, both by virtue of its economic and trade relationship and the military treaty. And it seems evident from the latest succession that China was absolutely critical in giving the benediction to the ascension of Kim Jong Un.

In late 2010, a senior American nuclear weapons specialist, Sigfried Hecker, went and visited North Korea and was taken to the uranium enrichment plant in Yongbyon that had just opened

up within the previous several months. Hecker said that this was the most modern thing that he had ever seen.

Chairman Ros-Lehtinen. Thank you.

Let me just give—I have got 1 minute left. Thank you.

Mr. WORTZEL. Madam Chairman, I see, and have seen, despite the rhetoric out of Beijing, I have seen nothing in Chinese nuclear doctrine writings other than the position that a weaker country threatened by a hegemonic state—and that means the United States—ought to be able to deter aggression with nuclear weapons. So, they have no problems with a nuclear-armed North Korea. They have no problems with nuclear-armed Pakistan. They pretty much encourage that. They left behind the infrastructure that helped Iran with its nuclear program.

And I will just conclude with that. Chairman Ros-Lehtinen. Thank you.

Mr. Fravel. Very quickly, I will just echo some of the comments that my colleagues have made. I think that China prefers above either a nuclear-free peninsula or erratic DPRK behavior, a divided peninsula in which the DPRK continues to exist as an independent state. I don't think that they are actively encouraging erratic behavior by the DPRK because, ultimately, it causes more problems for them than it solves.

Thank you.

Chairman Ros-Lehtinen. Thank you very much.

Mr. Berman?

Mr. Berman. Yes, I would like to get responses to three ques-

tions without using all my time to ask the questions.

First, to Dr. Fravel, the Director of the National Intelligence sort of confirmed your analysis or shared your analysis regarding China's less-assertive behavior over the last 10 months in the South China Sea. Do you think this was a deep change or a tactical change on the part of China? And how do we turn it into a longterm change in behavior rather than just a shift that shifts back into a reactionary cycle that could lead to open conflict?

Second, I would be curious if one of you could address the question of whether, in your opinion, the upgrade program for Taiwan's F-16s is sufficient for Taiwan's self-defense in the near-term as

well as the long-term.

And finally—and I think, Dr. Wortzel, you touched on this—regarding Iran, it seems to me the odds of our current policy achieving its goal may be very dependent on the extent to which China becomes a cooperating partner in the sanctions leading to a diplo-

matic resolution strategy that we are now pursuing.

What would the likely impact on U.S.-China relations be if Chinese energy companies involved in Iran were to be sanctioned by Washington? While China may not have any naturally-negative view of another country having nuclear weapons to deter a "hege-monic power," us, why wouldn't China's fear of a military con-frontation and its impact on its need for reliable and relativelycheap energy be enough of an incentive to get them to join that? Dr. Fravel, first, as quickly as possible in the  $2\frac{1}{2}$  minutes left.

Mr. Fravel. Thank you very much.

Very quickly, I would say that China's change in behavior in the South China Sea was initially a tactical shift, but I believe it has a strategic logic and has the potential to endure for a period of time, although it will certainly not resolve the underlying conflicts in the region. It has a strategic logic because, from Beijing's perspective, the goal is to limit sort of states in the region from pursuing deeper security ties with the United States. And the way to do that, from Beijing's perspective again, is to try to address some of the concerns that the states in the region have about China's behavior.

So, I think it has some likelihood of enduring for some period of time, but, ultimately, what would be needed is a much longer-term solution that would address the conflicting claims in the region.

Thank you.

Mr. BERMAN. Thank you. Taiwan, and then Iran.

Mr. CHENG. Sir, on the issue of the Taiwan upgrades, the upgrades are to a series of aircraft that are already 20 years old. Every aircraft that is being upgraded is pulled off the line for an extended period of time, which means the net number of aircraft that Taiwan can put in the air is reduced.

that Taiwan can put in the air is reduced.

The proposed sale of F-16C/Ds would replace aircraft that were designed in the 1950s. Not doing so, basically, means that Taiwan has an air force that, through sheer attrition and age, will be re-

duced over time without China having to do anything.

Mr. WORTZEL. Mr. Berman, first of all, I think the upgrade helps,

but it is insufficient for Taiwan.

On Iran, I think that if energy companies were sanctioned, it would certainly help if Chinese energy companies were sanctioned. They are still very dependent on Iran and very reluctant to do anything to sever that. Obviously, Russia is part of that equation.

Mr. Berman. But why wouldn't the fear of the exercise of a military option to set back Iran's nuclear program and the consequences of that on China's energy needs become a more dominant factor?

Mr. Wortzel. One would think it would, but, first of all, it hasn't—

Mr. Berman. So far.

Mr. Wortzel [continuing]. Obviously, so far. And second, if you are going to conduct surgical strikes on that nuclear program, you really haven't affected the pumping in the ports. It would have to be a completely different form of warfare. And so far, nobody is contemplating that, and they are probably aware of that.

Chairman Ros-Lehtinen. Thank you so much. Thank you, Mr.

Berman.

Mr. Smith is recognized.

Mr. SMITH. Thank you very much.

Dr. Wortzel, tomorrow Carolyn Bartholomew, your fellow commissioner, will testify at our hearing on the impact of China on Africa. But let me ask a question. China's population control has been employed as a weapon of mass destruction imposing a devastating impact on women and death to children, especially the girl children. Last September, in yet another hearing on these crimes against humanity, and a look at possible consequences, two consequences that are grossly, I think, under focused on were brought out during the hearing.

There is a book-many of you or all of you may have read it-Valerie Hudson's book called the "Bare Branches: The Security Implications of Asia's Surplus Male Population." In that book-and she testified at our hearing and updated her information—her argument is that the one-child-per-couple policy has not enhanced

China's security, but demonstrably weakened it.

She points out, as Nick Eberstadt famously phrased it, "What are the consequences for a society that has chosen to become simultaneously both more gray and more male?" She points out that, by 2030, the ratio for seniors-to-workers will be 2.5, and 1.6 workers for senior citizens in 2050; and also, that the number of boys, 118 boys for every 100 girl babies, and the ratio may be as high as 122.

She points out that these surplus males, as she calls them, and others have called them, the bare branches, a colloquial Chinese expression, will disproportionately be poor and less-educated Chinese young men, and the possibility for destabilizing China itself. Certainly the corresponding propensity or invitation to the Chinese Government to expand, to use international aggression as a safety valve, is laid out both historically in her book and her testimony as something that might happen.

And she says, and I will ask you the question then, "When we look at global aging, China is aging, and the likely economic effects of aging, and combine them with the analysis of the effects of abnormal sex ratios on society, the synergistic effects are likely to be quite dangerous for the Chinese Government." And again, she talks about the possibility of war with Japan and certainly Taiwan and

others in the crosshairs.

Your thoughts?

Mr. WORTZEL. Mr. Smith, I know Nick's work very well, Nick Eberstadt, and he has documented these problems very well. I don't subscribe to the theory that a surplus of males necessarily leads to a Spartan state. It leads to a lot of problems in getting people in the military, but, I mean, this is an authoritarian country; they will get who they need. And it does lead to potential instability, but not a Spartan state necessarily.

Mr. Smith. Well, I wasn't saying Spartan state. I was saying-Mr. WORTZEL. Well, I mean, it doesn't necessarily, when I say a Spartan state, I mean to aggression as a channel. The thing it certainly does lead to is an awful lot of prostitution. It leads to a lot of trade in persons, and women from Southeast Asia and Korea and Mongolia suffer because of that.

Mr. SMITH. Yes?

Mr. TKACIK. No, I agree with that. I think that the demographic challenge of a male population I think does mean that China's military will be, I think, more disciplined. And, No. 2, there will be a tremendous demographic aggression against Chinese neighbors where populations in the periphery are out looking for women to bring into China as wives. It will cause instability.

I don't think, if there is a war, China is going to lose it, though. Mr. Smith. I wasn't just saying it would lose it. It is that it would be a safety valve. That is what the thesis of her book, in part, was all about.

Mr. TKACIK. Yes.

Mr. SMITH. And I did ask her whether or not the Pentagon has shown any interest. It ought to be factored into at least their think-

ing. And she said——

Mr. TKACIK. I have not seen any interest. No, I think people think about this, but when you consider that the main concern of the Chinese Communist Party is economic growth and stability, that sort of aggression reverses that. So, I mean, one thinks they might think that through.

Mr. Smith. Yes?

Mr. CHENG. Sir, two other considerations. One is in a post-war environment, what happens to the parents and grandparents of the casualties? Since currently they are supported by the children, assuming that China is not able to fight an immaculate war with no casualties, you wind up with political consequences afterwards.

The flip side to that is that there is also an inherent public health issue with the growth in prostitution, issues like that. Things like AIDS, et cetera, can spread like wildfire through the

Chinese surplus male population.

Chairman Ros-Lehtinen. Thank you so much, Mr. Smith.

Mr. Connolly?

Mr. CONNOLLY. Thank you, Madam Chairman.

An observer listening to you all on this panel, and to our byplay with you, could, if you landed from Mars not knowing much about this relationship, conclude all is dark and the relationship is unrelentingly hostile; we are dealing with a growing and powerful adversary in the People's Republic of China from intellectual property issues to military posture, to actually countering U.S. foreign policy issues on nuclear proliferation, North Korea, Syria, their own hegemony in the Pacific Basin and military posture to one-child-per-family policies, to all kinds of things.

child-per-family policies, to all kinds of things.

I wanted to give panelists an opportunity to comment on that because surely there is more to the relationship, though these are very serious issues and cannot be swept under the carpet. But I haven't heard you talk much about how we move forward and what is at stake in trying to work out some kind of—forgive me again,

Madam Chairman—modus vivendi with this——

Chairman Ros-Lehtinen. You are going to start getting penalized for that.

Mr. Connolly. I'm sorry.

Dr. Wortzel, do you want to start?

Mr. WORTZEL. I would be happy to. Thank you for the question, Mr. Connolly.

First of all, as our 2011 report on the commission pointed out, things have gotten worse.

Mr. CONNOLLY. Worse? Worse?

Mr. WORTZEL. It may not be dark, but it is pretty cloudy. I think what we have to do is work with friends and allies to reinforce rule of law in China and to reinforce the observation of international common practice by China, because they don't. And we have to work with allies and friends to make sure they do and that they comply with their WTO obligations. They have really backed away from many of them.

Mr. CONNOLLY. Let me ask you, if I may, Dr. Wortzel, to expand. What is U.S. leverage and how well do you think we use it?

Mr. Wortzel. I think, first of all, our leverage is weakened slightly now by the economic relationship and the need for vest-

ment in Europe from China. So, it is less leverage.

But I think the big leverage we have is the fact that we have a strong economy and that the Chinese really do want to take advantage of that for their own exports in the near-term. There are a lot of problems to resolve with respect to that, but that is our primary leverage.

Our secondary leverage, well, perhaps as important is, frankly, our ability to prevent a state that sees itself culturally as the center of at least Asia, if not the world, from exercising the coercion against its neighbors that it traditionally has as a regional suze-

rain surrounded by vassal states.

Mr. Fravel. One perspective might be to look at the exchanges between our two countries. I believe the U.S. Embassy in Beijing is now the second-largest diplomatic post after the Embassy in Baghdad. That sort of reflects the fact that in all segments of society there are close relations between many Chinese and many Americans, especially at the person-to-person level, not necessarily the government-to-government level.

Just as a quick anecdote, when I started studying Chinese in the fall of 1989 at a small liberal arts college in Vermont, there were seven students in my class. Today at that same small liberal arts college in first-year Chinese there are now 55 or 60 students.

And so, I think, despite all the challenges that Larry has laid out and that other panelists have laid that, the fact that there are greater exchanges at the people-to-people level is arguably one source of optimism in the much longer-run. But, again, I certainly recognize and acknowledge the challenges.

Thank you.

Mr. TKACIK. I would point out that China is a rising power, and that the United States, Europe, Japan are status-quo powers. There is a grave potential for collision as the international systems

enter into a power transition phase.

I think the University of Chicago's John Mearsheimer pointed out in 2008 that, as history shows, powerful states on the rise often fight wars with other major powers. Now this is a replay of 100 years ago in Europe, 100 years ago in Japan, 50-60 years ago in Central Europe.

I have a feeling that what we are looking at is a historical prob-

lem, and we have not yet dealt with it.

Mr. CONNOLLY. Thank you, Madam Chairman.

Chairman Ros-Lehtinen. Thank you, Mr. Connolly.

Mr. CONNOLLY. I'm sorry, Mr. Cheng, my time is up.

Chairman Ros-Lehtinen. Thank you.

Ms. Schmidt?

Ms. SCHMIDT. Thank you.

I actually have two questions. I will deliver them both and allow

the experts to answer them.

The first deals with George Friedman's book, "The Next 100 Years," and his assessment of where we will be militarily in 2050. He believes that we will be engaging more through satellites and space more than with men on the ground.

Given that, and given the position of this administration to sell restricted satellite technology, the AsiaSat issue, what risks do you see for the U.S. in doing this, not just now, but in the future?

And the second deals with Taiwan. When President Mao was elected in Taiwan, he began a closer relationship and tie with China, especially with the Olympics and getting the ability of people to get in and out of China more easily. That, I believe, has put a seemingly larger presence of China into Taiwan's economy.

Given that, and the issue with the waterway issue between China and Taiwan, how real do you see the economic/maritime threat to Taiwan with China? And what resolution would you see

for it?

Mr. Cheng. On the issue of space warfare, I think it is very important to recognize that PLA writings make very clear that one of the essential aspects to successfully fighting what they term a local war under informationized conditions is the ability to secure space dominance. The Chinese ASAT test in 2007 was the single worst debris-generating event in all of history. People forget that afterwards China conducted another ASAT test in 2010.

I would suggest that the current administration's efforts to implement an international space code of conduct in the hope of getting the Chinese to then sign on, when China and other space faring countries have already said that they will not do so, is per-

haps the ultimate triumph of hope over experience.

And in this regard, I think that the announcement that we are thinking of selling space technology to China, when the administration has repeatedly said that export control reforms, which arguably are necessary, will not affect our controls on China, raises real questions about what direction the administration thinks it is heading in.

Mr. TKACIK. I would point out that, Congresswoman Schmidt, you are absolutely correct. The new Taiwan President has adopted a policy of accommodating China. Just in the last several months, we have seen an entire new change in the political posture of Taiwan, which basically agrees that Taiwan is part of China. I think once Taiwan has made that choice, then you are now looking at Taiwan moving out of the column of the Western democracies and the community of democracies in East Asia and moving into the column of the sphere of China's security interests.

The thing you have to remember is that Taiwan still has a sophisticated basing structure. It has phased-array radars mounted high up in Taiwan's mountains which used to be or which are designed to scan the Chinese mainland for ballistic missile launches, and now will be turned out into the western Pacific to scan for the

Taiwan's deepwater ports, submarine bases in eastern Taiwan, just a few dozen miles from Japanese territory, which had enabled friendly submarines to slip undetected into one of the deepest maritime trenches in the Pacific, they will likely give Chinese diesel/ electric submarines home in the future.

There is also a possibility of China and Taiwan cooperation against Japan and the United States in the East China Sea. The importance of the Senkakus for defining East Asia's and Japan's and the United States' maritime depth opposite the new Chinese superpower I think cannot be overstated.

And all this may result—I think this is what we are looking at, is that Ma Ying-jeou, the President of Taiwan, now has a very clear China policy. What is also clear is that he does not have an Amer-

ica policy.

Mr. WORTZEL. I would only say that I fundamentally disagree with Friedman, that until we get space-based weapons or rods from God—and that is not real likely—no part of a maritime domain was ever controlled from space. Space is fundamentally important to our military operations. We have a very powerful Navy, a powerful Air Force, and troops that can go in and put boots on the ground.

Chairman Ros-Lehtinen. Thank you, Ms. Schmidt.

Mr. Sherman is recognized, unless you would like to have a few minutes. Then, we can go to Mr. Chabot. Mr. Chabot is recognized.

Mr. CHABOT. Okay. Thank you, Madam Chair.

Could I hear the other members of the panel? We had a meeting in back and just got in, but I heard Mr. Tkacik discussing Taiwan. Well, let me go to you first, Mr. Tkacik, again, and then to the others

Is what I just heard you say about Taiwan and the shift under President Ma, the direction that he has gone, do you think that is

irreversible at this point? Or what is your opinion there?

Mr. TKACIK. Well, I don't think it is irreversible. I think what has happened is that, over the last, I have to admit, the last two administrations, the Bush administration and the Obama administration, basically, we have cut Taiwan loose. Taiwan is now in a phase where they basically feel they have no support in the United States, that the U.S. Government, the U.S. administrations are not supporting a Taiwan that is part of the network of Asian democracies that comprises island Asia as opposed to mainland Asia.

When you are faced with that kind of a situation, the Taiwanese voters basically say, "There's no sense in me voting for any kind of government that is going to challenge China because we are not going to get any support." I think that in 2000 they thought they were going to get support, and in 2004 I think the Taiwanese voters thought they were going to have the support of the United States, but no more.

Now, if that were to change, I think, yes, it would make a big difference in Taiwan's electoral process. But, right now, the policies that the government in Taipei are adopting are moving inexorably

toward the Chinese sphere of security responsibility.

Mr. CHABOT. Would the other members of the panel like to comment on that? Mr. Cheng or Dr. Wortzel?

Mr. WORTZEL. I certainly would, and I thank you for the oppor-

tunity to do so.

I think John, Mr. Tkacik, is right. But the operative word he used is the elections and the voters. So, it is not like Ma Ying-jeou has just come up with this policy that has no support. And the legislature hasn't helped either Taiwan or itself or the United States when they had a good armed sales package. So, part of that is partisan politics on Taiwan.

Mr. Chabot. And let me stop you there for a second, Doctor. By that, my recollection is that the United States was trying to get the needed weaponry into their hands. The legislature at that time, for political reasons or whatever, was so divided that they couldn't get their act together enough to approve much of—

Mr. WORTZEL. That's exactly right. The legislature was and still is divided. I think much of the populace was divided, and that is

reflected in the legislature.

And then, finally, in my personal view, Taiwan's military piecemealed a little bit of a whole bunch of good things, instead of going for a major defensive architecture that would have allowed them to engage in cooperative target engagement with all their ships and aircraft and ground systems. So, that was mismanaged, too.

Mr. Chabot. Okay. Mr. Cheng?

Mr. Cheng. Representative, I think that I am certainly not in any kind of position to give advice on Taiwan because they are a democracy and they make their own choices. All I can say is that, for the United States with regard to Taiwan, and throughout the region, what we need is a consistent strategy and persistent actions, a consistent strategy of defending our interest in standing up for our principles, persistent actions that are consistent with that strategy, whether it is the sale of needed arms under the legal terms of the Taiwan Relations Act, not simply upgrades, as has been inquired about, or whether it is the commitment of American forces on a persistent basis, unlike the vast relation we saw with the George Washington Battle Group back in 2009. Our failure to do so I do believe has political repercussions, including in democracies like Taiwan.

Mr. CHABOT. Thank you.

And I have limited time. So, let me make just a comment real

quickly here.

I think the fact that the Taiwanese Government has decided to move itself in the direction of the criminalization of politics is unfortunate as well. Their previous President, President Chen, still is behind bars. I think for an administration to come and essentially jail the previous administration is a tragedy, and I think that they ought to deal with that sooner rather than later.

I yield back.

Chairman Ros-Lehtinen. Thank you so much, Mr. Chabot.

Mr. Sherman is recognized. Mr. Sherman. Thank you.

I ask anyone on the panel to comment. Is there serious discussion in Taiwan of developing an independent nuclear weapons capacity? And would they have the capacity to do so within a few years?

Mr. TKACIK. I think the answer is absolutely no. Taiwan did have a fairly robust nuclear weapons research campaign in the 1970s and again right up until January 1988. Probably, if they had been successful, we wouldn't be discussing this now.

But both the major political parties in Taiwan I think are adamant against any such thing now. The ruling party is called the Chinese Nationalist Party, and it supports Taiwan's eventual re-

unification with China.

The opposition party, the Democratic Progressive Party, is adamantly anti-nuclear. So, there is just no-

Mr. Sherman. Thank you. I would like to go on to another ques-

Mr. WORTZEL. Well, I would like to add to that, if I may.

Mr. Sherman. But I am sorry, I-

Mr. WORTZEL. They don't have the strategic depth to confront China with nuclear weapons.

Mr. Sherman. I would like to move on to another question. We have a toxic trade relationship with China, a \$300-billion trade deficit. What that means is they send us \$300 billion of stuff every year and we send them \$300-billion worth of paper.

I can understand why Americans like this. It produces huge profits, helps consumers. With this ideology of free trade, we can simply ignore that the Chinese Government controls import decisions, not through tariffs but through other means. And so, it fits our theoretical model of the way the world should work. So, that provides us with an intellectual underpinning to support the huge profits and the wonderful stuff we get.

What I don't understand is China. Every year they ship us \$300billion worth of fine things, and they get bonds. Can anyone here

explain the bond fetish of the People's Republic of China?

Mr. WORTZEL. Well, I personally can't. I can say that our commission's reports over a series of about 4 years and a number of hearings that we have held make it pretty clear that the United States treasuries market and bond market remains still the most stable place to park that money and to get it back, and that the undervalued currency and the continued undervaluation of that

currency is based on the ownership of those treasuries.

Mr. Sherman. Yes, I can understand that, if you are going to save money, U.S. Treasury bonds are a wonderful place to put it. What I don't understand is why a developing country insists upon saving several hundred billion dollars a year rather than import-

Let me move on to another question. Germany has a balanced trade relationship with China. So, we could reach the conclusion that German workers and entrepreneurs are better than their counterparts in the United States or that the foreign policy establishment in Germany is doing a better job for the German people than the foreign policy establishment in our country.

How has Germany conditioned access to its market on fair access for its exporters to China? Dr. Wortzel or anyone else may answer.

Mr. WORTZEL. Well, I don't know the answer to that, but I can tell you, from having dealt with German defense and high-technology firms and their relationships with China, they take a very different approach to transferring technology. They recognize it will be stolen. They don't worry about sales and transfers. But what they do is take already outmoded technology for them and manufacturing and are quite willing to sell it and transfer it with the idea that their research and development is far ahead.

Mr. Sherman. Does anyone else have a view as to why Germany

is able to have a balanced trade relationship with China?

Mr. TKACIK. Well, the Germans have a robust industrial infrastructure. They produce very goodMr. SHERMAN. So do we.

Mr. TKACIK. Well, I don't know if we do any more. I think that in the last 10 years I think——

Mr. SHERMAN. So, you would blame the American worker and

manufacturing companies rather than the foreign policy-

Mr. TKACIK. I would blame a political decision in China not to buy American goods. I would point out that, while we have a \$300-billion trade deficit with China, China basically, all told, has a \$100-billion trade surplus. So, they are using American money to buy other people's goods and other people's resources and commodities. It seems to be a conscious economic decision on the part of China not to buy American.

Mr. SHERMAN. I agree.

Chairman Ros-Lehtinen. Thank you. Thank you very much.

Mr. Royce is recognized.

Mr. ROYCE. Thank you, Madam Chairman.

My subcommittee held a hearing on China's so-called indigenous innovation policy, and indigenous innovation is just basically the concept for the Chinese Government extortion of U.S. technology, in the view of many.

For years, American businesses were afraid to speak out on this issue. I think they feared they would be shut out of the Chinese market. But now we have a different attitude. Now, at long last, you see U.S. businesses speaking out long and hard about this indigenous innovation issue.

I would like your views on these policies, the forced transfer of U.S. technology over to the government in China. I would just like to underscore that this is some of the most valuable technology

that U.S. companies possess.

I should add that Mr. Connolly and I have legislation coming out of that hearing that we held that I introduced changing these practices. That is H.R. 2271.

But let me just get your thoughts on the record.

Mr. Cheng. Representative, I think that it is important to put all this in the context of the Chinese emphasis on comprehensive national policy, the idea that a nation's position is a reflection of

science and technology and industry.

In this regard, then, the emphasis is on technological development as a means of bringing China up the value chain to get it out of making the low-end items, becoming more of a manufacturing power and a post-industrial set of capabilities. This is consistent with what the Chinese have termed the two bombs/one satellite policies, which also emphasize domestic development, partly a fear that it would be cut off, as it was after the Sino-Soviet split, from foreign technology. But, also, partly the idea that you want to obtain foreign R&D which is, therefore, going to be lower cost, and the creation of state champions to create better.

The aspect of indigenous innovation should also be seen in the context of cyber warfare, in the sense of, if I can't get you to invest here, I may be willing to use cyber methods to try to, frankly, steal

it from you.

Mr. ROYCE. And some argue that they are not that great at innovation, and that is why they steal. That is why they steal it.

But go ahead.

Mr. WORTZEL. Well, I mean, there are cultural impediments to creating new ideas, and there are structural because of the Communist Party organization, and they recognize that.

But I have to say our commission looked at-I haven't seen your legislation, sir, but we looked last year at Mr. Webb's suggestion, Senator Webb's suggestion. We were not able to come to an agree-

ment on it.

But I will give you, if I might, the position that I suggested on this issue. That is, you take a look—somehow pharma for me is a decent model. I mean, you don't want to limit the transfer of technologies that may have been developed with government funding and research or taxpayer-funded research and development to China. But, after a while, it doesn't always pay to control it. You know, the M1911A1 pistol was 1911.

But pharma for me, because there is this sort of 5-year window, 7-year window, where the patents then go away, and other companies can use it, is a reasonable model to think about. The taxpayers deserve some return and not to lose what they funded certainly for a fixed period of time. But how far that should go, we couldn't

Mr. TKACIK. I mean, I would add that the Chinese have gone out of their way to steal America's most advanced technologies. They have done this to Applied Materials. They have done it Cisco Systems. They have done it to Google. They have done it to Microsoft.

And just in the last week, we saw a very interesting report from, I guess it was, Business Week, on how the Chinese stole the software and blueprints from American Superconductor, a Massachusetts company, basically, leaving American Superconductor with \$700 million in unpaid equipment bills. And the Chinese basically turned around and said, "That we don't need anymore. We can build this ourselves." It was breathtaking.

The problem I have, though, is that when the Chinese go and steal this technology from us, after a while they do begin to develop

an indigenous research and development capability that-

Mr. ROYCE. Let me make one last point. Last year, the DoD's annual report on the Chinese military reported an extensive tunnel network underneath China designed to hide its nuclear weapons. It could be 3,000 miles long, as I understand it. That would imply, they say, that the often-cited 300 to 400 weapons may, in fact, be many times that. Yes or no?

Mr. TKACIK. The answer is yes.

Mr. ROYCE. Thank you.

I yield back, Madam Chair.

Chairman Ros-Lehtinen. Thank you so much.

Mr. Manzullo is recognized.

Mr. MANZULLO. I am always intrigued by how Americans try to work with Chinese based upon an American model of thinking.

Mr. Cheng, I commend you in your paper for talking about something that most people don't even imagine, and that is the manner in which the Chinese approach something. If I could call your attention to page 5 of your testimony, you make the statement, paragraph 3, line 3, "The first issue is that the Chinese do not think the way we do." Then, you point that out by way of various examples. Also, the same pattern appears in Mr. Tkacik's testimony and, actually, across the board.

I was at a remarkable meeting of the U.S.-China Business Council on April 22, 2004. I wrote this down, keep it in my BlackBerry, as quoting Madam Wu Yi, at the time who I guess was the equivalent of the Secretary of Treasury perhaps.

lent of the Secretary of Treasury perhaps.

She said that China has a "market-based, managed, unitary floating exchange rate." I wrote that down, and I said this can't be. And then, my aide there said, well, this is in the official English

translation of what she said in Chinese.

What is particularly bothersome is the fact that we tend to deal with the Chinese based upon Western thinking. I just want to throw that out to Mr. Cheng and other members of the panel. I know you agree with me on that, but talk about it and the impact it has on American diplomacy with China.

Mr. Cheng. In brief, sir, I would submit the following: That in

Mr. CHENG. In brief, sir, I would submit the following: That in many ways we tend to think of China as a rising power. We think of ourselves as a status-quo power, which is hardly surprising given that we are happy with where we are after about 250 years

of history.

I would suggest that China actually thinks of itself as a statusquo power. The problem is how you define the status quo. For us, in our history, China has always been a weak power and only now has been rising over the last, say, 20 years. For China, with its 3-, 4-, 5,000 years of history, it has almost always been the dominant power in Asia and, therefore, the known world for them.

China, therefore, is seeking to re-establish itself. This is not Germany in 1900 newly-unified. This is a country that sees itself as returning to the world stage in its proper place. That is a very dif-

ferent perspective.

Mr. Manzullo. Anybody else want to comment on that? Dr. Fravel?

Mr. Fravel. Well, just a different example would be Chinese negotiating behavior. So, for example, many Chinese negotiations, the Chinese will want to first talk about principles and get agreement upon principles and, then, sort of establish a friendship or reach an agreement; whereas, I think the Americans approach it sort of the opposite. You reach the agreement first and, then, you sort of become friends afterwards.

And so, I think it creates a lot of challenges in negotiations with China. I think it is very important to understand what these differences are and how they will affect various aspects of U.S. foreign policy.

Mr. Manzullo. Dr. Wortzel?

Mr. WORTZEL. Well, I think that we want to stick to a Western viewpoint because essentially those are the legal norms and the international norms by which the world conducts itself, conducts warfare and trade. I think the mistake that we sometimes make is to think that Chinese perceptions and policy mirrors our way of looking at it.

So, I think it is very important to understand, as Dr. Cheng did, how the Chinese—or Mr. Cheng—how the Chinese think about things. But I don't think we should depart from a Western view-

point. The goal of our policy in the World Trade Organization is to get them to adopt that or at least live by it.

Mr. Manzullo. Mr. Tkacik?

Mr. TKACIK. Tkacik.

Mr. Manzullo. Tkacik.

Mr. TKACIK. I would just say that China is no longer a ruletaker. China is now a rule-maker in the international system. And imagine what the world is going to be like when China makes the

Chairman Ros-Lehtinen. Thank you very much. Thank you, Mr. Manzullo.

Mr. Rohrabacher is recognized.

Mr. ROHRABACHER. Thank you very much, Madam Chairman, and thank you for holding this hearing, providing this kind of leadership to focus our attention on some real threats to our prosperity

and to our security.

Let me just note for the record, Madam Chairman, that when we refer to China, we are not referring to the people of China. We are referring to the regime that controls the people of China and its entourage. But the people themselves are not responsible for the policies that we are talking about because China is the world's largest dictatorship and human rights abuser, to the degree that we are upset by the way the Chinese are setting up the rules on how they relate to us. One can only imagine the horror of having to live under a regime as arrogant and as oppressive as they do in China. So, let us reach out to the Chinese people.

What we have seen is the greatest transfer of wealth and power in the history of the world. In the last 30 years, we have seen a transfer of wealth from the United States and other Western countries, but especially the United States, to China, to a China that, as I say, is governed by the world's worst human rights abuser/dic-

tatorship.

This transfer of wealth, it should be no surprise. You know, are we really astonished that this has happened? No. We have seen it going on, and it is a result of specific policies that we have had in our Government, policies that we have not been able to change here in Congress because we have a business elite in the United States who are making profit for themselves, for the elite, off this policy, even though it may transfer wealth away from the rest of us, and, of course, a policy that has been also supported by people in the Executive Branch, for whatever their grandiose schemes of trying to make China a more peaceful country, a less dictatorship, because we are going to make them more prosperous.

That theory, of course, the what I call a "hug-a-Nazi/make-a-liberal theory," has not worked. And surprise, surprise, they are still the world's worst human rights abuser, but now they have all of our technology and they are building high-tech weapons based on what we have given them, the wealth as well as the technological

capabilities.

And, of course, they are the ones responsible, Madam Chairman, for the greatest and just most blatant theft of American technology and the investment that it took to create that technology of anything that any of us have witnessed in our lifetime.

And for the record, it has been reported that the head of the EU Space Agency recently met with the Chinese in order to see if it is possible we can permit them to be partners and dock their rockets onto the International Space Station.

I was a little late for today's hearing. I was at a meeting of the Science Committee. I will put on the record here as well: The United States should not in any way agree to having Chinese rockets and Chinese participation in the International Space Station.

Of course, the rockets are made up of technology that they have stolen from us. Thus, they have no R&D cost, which has drained our money and our resources. To permit them now to participate in the International Space Station would be adding much harm and much insult to already something where there is harm and insult.

I noticed that Ambassador Gary Locke, our Ambassador to China, in a recent speech indicated that the Obama administration expects to loosen export controls "that will enable more high-tech goods to be exported to China."

There has been a recent, for example, loosening of those export controls by a company called AsiaSat, which now has been given an export license. It is a Hong-Kong-based company. But it has got tremendous and very identifiable roots and contacts and controls by the Politing profine.

by the Beijing regime.

And Ambassador Locke disclosed that China has submitted a list of 141 high-tech items that they want from the United States. Madam Chairman, I would request that this committee ask for that list. And Ambassador Locke has indicated that 46 of those items are readily available and could almost go without any controls. I would ask that this committee request—

Chairman Ros-Lehtinen. I will be glad to make that request, and we will put it in writing and make sure that he receives it.

Thank you. The gentleman's time is up, if you want to conclude with some—

Mr. ROHRABACHER. Thank you, gentlemen. I am sorry, but I needed to put that on the record.

Chairman Ros-Lehtinen. Thank you. We will make that request, and thank you so much.

Mr. Kelly is recognized.

Mr. KELLY. Thank you, Madam Chairman, and I thank the panel

for being here.

Now China is the world's most active and persistent perpetrator of economic espionage. Every day U.S. businesses are targeted by China for cyber exploitation and theft, resulting in huge losses of valuable intellectual property and sensitive information.

So, China has stolen a wealth of IP from companies such as Google, which somebody talked about; Yahoo, Northrop Grumman, as well as a number of smaller companies that are afraid of speak-

ing up, lest they provoke even further attacks from China.

U.S. companies have reported an onslaught of Chinese cyber intrusions that steal sensitive information like client lists, merger and acquisition data, pricing information, and the results of research and developmental efforts. This information is used to give Chinese companies an unfair competitive advantage against our American companies from whom it was stolen.

Now while these hackers continue to steal intellectual property, they take new high-paying jobs from American workers right along with it. Estimates of this loss and economic espionage are hard to make, but they range anywhere from \$2 billion to \$400 billion a year. Just as important, many of these same vulnerabilities used to steal intellectual property can also be used to attack the critical infrastructures we depend on every day.

My question is, what is your assessment of this administration's actions in light of its solemn duty to protect U.S. businesses and infrastructure from cyber exploitation and theft? In fact, we even have a clearly-defined policy. Any of the folks on the panel?

Mr. Wortzel. I think the administration's approach has improved and is improving. I think having a U.S. Cyber Command and I think the great work by the Department of Justice and the Federal Bureau of Investigation in notifying U.S. industry—94 percent of the penetrations of American industry are discovered by agencies of the U.S. Government, not those industries. It is the government that tells them. Unfortunately, sometimes it takes 400 days or so for that to happen. So, they can use more assets. But I think they have a very good effort.

If you look at espionage convictions, if you look at convictions for violations of the Arms Export Control Act, the Export Administration Act, and the Industrial Espionage Act, Economic Espionage Act, I think Justice has done an excellent job over the past 6 or

8 years in bringing people to justice.

What we lack in the cyber arena are the things that I actually put into my testimony. We don't have a way to take a Chinese company to task or a Chinese actor and prohibit them from entering the U.S. market. I have suggested ways to do that. I think they are practical and reasonable.

Our commission held a hearing on this same subject on Monday. We had a couple of very good suggestions from cyber specialists who suggested companies adopt annual audits, in addition to defenses. And that with these annual audits, instead of waiting for the FBI or the Department of Homeland Security to tell them they have been penetrated, they will discover it.

General Cartwright, the former vice chairman of the Joint Chiefs of Staff, made an excellent suggestion, in fact, cited times of cooperation when the United States Government found penetrations by China. They went right to the Chinese Government.

Mr. Kelly. Well, let me ask, because time is of the essence in all of this. As you said, sometimes it takes 400 days.

Mr. WORTZEL. Yes.

Mr. Kelly. So, what kind of a price are U.S. businesses paying on this and the workers and the rest of the people that are involved in this theft? It just seems to me that, while we may have some policy, we don't have a clearly-defined policy. Where I am from in northwest Pennsylvania, we are losing jobs all the time and people are wondering, what are you going to do to stop this?

Mr. Wortzel. Network monitoring is extremely important.

Mr. KELLY. But in terms of losses, what do you think we have lost?

Mr. WORTZEL. Well, again, you have to document it. You have to have a legal mechanism to go after it and get it back. I mean, it

is a legal problem.

Mr. TKACIK. I would just add one thing, that it was very unsettling to me that the one agency in the entire U.S. Government that knows what it is doing in cyber penetration was not given the lead in America's cyber penetration strategy by the Obama administration. I think NSA has to be in the lead because they are the only ones that know what they are doing.

I had one other profound thought, and it slipped my mind. So,

I will just——

Chairman Ros-Lehtinen. I have had those senior moments so often. [Laughter.]

Mr. KELLY. Thank you, Madam Chair.

Chairman Ros-Lehtinen. Thank you very much.

Mr. Burton is recognized.

Mr. Burton. First of all, I want to apologize for my tardiness. I had another meeting I had to go to. So, I am sorry I missed a lot of your testimony. And if my questions sound redundant, please

forgive me.

The first thing I want to ask is, when I walked in, I heard you say there is 3,000 miles of tunnels in China that are used to conceal weaponry. First of all, why would they be doing that? I don't understand it. They are a nuclear power. We all know their nuclear capability. They have enough nuclear warheads and delivery systems to annihilate almost everybody on earth. Why in the world would they want to have 3,000 miles of tunnels to conceal more weaponry when they have already got enough? Anybody?

Mr. WORTZEL. First of all, there probably are about 3,000 miles of tunnels. They are not all storing nuclear weapons. There are underground national command centers, command-and-control equipment. There are military stores. There are civil defense stores in there. So, there are logistics and petroleum and ammunition in

there

But all of China's nuclear doctrine, so far as I understand it—and I think I do—is that if they are attacked, and it is unclear whether that would be a conventional or a nuclear attack, but if they suffer a very strong attack, they want their nuclear forces to be able to emerge even 2 to 4 days later and fire a very, very devastating second strike.

Mr. BURTON. Wow.

Mr. WORTZEL. So, part of this is denial and deception.

Mr. Burton. Maybe I should check and ask the question, what

do we have in response to that?

Mr. Fravel. One other element to add here is that the building of the tunnels in China began, actually, in the 1960s when China was very worried about whether or not it would have a secure strike capability because many of its missiles were quite vulnerable to first strike. And so, these tunnels have a very long history, primarily, as Larry just mentioned, in terms of ensuring some second-strike capability. And then, they are also used for other purposes in terms of storage of supplies, and so forth.

But it is not a new, the point I want to make, it is not a new phenomenon. It is part of a very sort of longstanding practice.

Mr. Burton. But it may be, but to build 3,000 miles of tunnels is going to take more than a week anyhow.

Mr. Fravel. It has taken about four decades.

Mr. Burton. Sure, it took more—

Mr. TKACIK. I would add that a Georgetown study, which I thought was very good, documented that I think at least half of the tunnels had been built since the mid-1990s.

The other thing is that we do have a good sense of what China's fissile material production capacity is. They absolutely refuse to discuss fissile material cutoff and any kind of enforcement or inspection.

Mr. Burton. Okay.

Mr. TKACIK. So, we don't know.

Mr. Burton. The other thing I would like to ask—and you may have already answered this question—when Mr. Wang went into our Embassy and was there for some time and he was refused asylum, and he was a real potential source of intelligence information, I would like to get your take on why we would even consider letting him out and letting him be captured by the Chinese.

Mr. TKACIK. Well, I think China—

Mr. Burton. Well, just 1 second. And I understand that we had the Vice President of China coming in, and that might be part of it.

And the other thing is, I read in my preparation here that there are some instability prospects in China and there is a possibility that there might be some kind of a coup.

So, if you could comment on those two things in the remaining

time I have, I would appreciate it.

Mr. TKACIK. In my days in the State Department, I had to deal with a couple of walk-ins, three separate walk-ins. I have to say that the State Department doesn't really train you in how to deal with these things. You sort of learn about it by experience. I think, by the last one, we figured it out.

But in the case of Wang Lijun, who seems to have gone into the American Consulate, I really don't know if the reports that he filled out an application form for asylum are correct. I am not sure that

that is——

Mr. Burton. Well, my goodness, he was there for 24 hours.

Mr. TKACIK. Well, he was there for—

Mr. Burton. I mean, I can't imagine him just saying, "I want asylum. I am a high-level person in the Chinese Government. I am here. I want to stay. I have got information for you," and we say, "Oh, we haven't filled out the forms. We are going to keep you."

Mr. TKACIK. Yes, I don't think that is—I think what had happened is that he actually did fear for his life. My understanding is that he approached the British Consulate in Chongqing first, and this whole mystery surrounding the death of a British citizen in Chongqing last November really heightens this enigma. I think he went to the American Consulate because he thought that was the only place he wouldn't be killed.

My hypothesis is that what we had was that he probably was negotiating with the Chinese Government for his life. It is basically up to maybe the committee here or the Intelligence Committee to get a briefing from the State Department on what actually hap-

pened. But we just don't have enough information.

I mean, I would also add that, if this guy wanted asylum, going to the American Consulate in Chengdu is probably the last place he should have gone. We, I think, believe that if he had really wanted asylum, he knew that he had to get out of China first before he applied for asylum and not apply for it inside.

Chairman Ros-Lehtinen. We will make the proper inquiries,
Mr. Burton. Thank you for bringing that case up.

Mr. Burton. Thank you, Madam Chairman. Chairman Ros-Lehtinen. And our Part II of this China hearing will be on human rights. And so, I am sure that we will consider his case at length.

Thank you, gentlemen, for joining us. Thank you to the audience and to the press who is here. Thank you most especially to our members. And with that, the hearing is adjourned. Thank you.

[Whereupon, at 11:55 a.m., the committee was adjourned.]

### APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

### FULL COMMITTEE HEARING NOTICE COMMITTEE ON FOREIGN AFFAIRS

U.S. HOUSE OF REPRESENTATIVES WASHINGTON, D.C. 20515-0128

#### Ileana Ros-Lehtinen (R-FL), Chairman

March 22, 2012

You are respectfully requested to attend an OPEN hearing of the Committee on Foreign Affairs, to be held in Room 2172 of the Rayburn House Office Building (and available live, via the WEBCAST link on the Committee website at http://www.hcfa.house.gov):

**DATE:** March 28, 2012

**TIME:** 10:00 a.m.

SUBJECT: Investigating the Chinese Threat, Part One: Military and Economic

Aggression

WITNESSES: Mr. Dean Cheng

Research Fellow, Asian Studies Center

The Heritage Foundation

Mr. John J. Tkacik, Jr.

Senior Fellow and Director of the Future Asia Project International Assessment and Strategy Center

Larry M. Wortzel, Ph.D.

Commissioner

United States-China Economic and Security Review Commission

Taylor Fravel, Ph.D.

Associate Professor of Political Science, Security Studies Program

Massachusetts Institute of Technology

#### By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/255-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

## COMMITTEE ON FOREIGN AFFAIRS MINUTES OF FULL COMMITTEE HEARING

Day Wednesday Date 3/28/12	Room
Starting Time 10:00 a.m. Ending Time 11:55	a.m.
Recesses (to) (to) (	
Presiding Member(s)	
Rep. Ileana Ros-Lehtinen	
Check all of the following that apply:	
Open Session   Executive (closed) Session   Televised	Electronically Recorded (taped) \( \subseteq \) Stenographic Record \( \subseteq \)
TITLE OF HEARING:	
Investigating the Chinese Threat, Part I: Military	and Economic Aggression
COMMITTEE MEMBERS PRESENT:	
See attendance sheet.	
NON-COMMITTEE MEMBERS PRESENT:	
HEARING WITNESSES: Same as meeting notice att (If "no", please list below and include title, agency, dep	
STATEMENTS FOR THE RECORD: (List any states	ments submitted for the record.)
TIME SCHEDULED TO RECONVENE	1111
or TIME ADJOURNED 11:55 a.m.	Lall
	Jean Carroll, Director of Committee Operations

#### Hearing/Briefing Title: Investigating the Chinese Threat, Part I: Military and Economic Aggression

Date:	3/28/12
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Present	Member
Х	Ileana Ros-Lehtinen, FL
Х	Christopher Smith, NJ
Х	Dan Burton, IN
Х	Elton Gallegly, CA
Х	Dana Rohrabacher, CA
Х	Donald Manzullo, IL
Х	Edward R. Royce, CA
Х	Steve Chabot, OH
	Ron Paul, TX
	Mike Pence, IN
	Joe Wilson, SC
	Connie Mack, FL
X	Jeff Fortenberry, NE
	Michael McCaul, TX
Х	Ted Poe, TX
	Gus M. Bilirakis, FL
Х	Jean Schmidt, OH
	Bill Johnson, OH
	David Rivera, FL
X	Mike Kelly, PA
	Tim Griffin, AK
	Tom Marino, PA
	Jeff Duncan, SC
	Ann Marie Buerkle, NY
	Renee Ellmers, NC
X	Robert Turner, NY

Present	Member
Х	Howard L. Berman, CA
	Gary L. Ackerman, NY
	Eni F.H. Faleomavaega, AS
	Donald M. Payne, NJ
Х	Brad Sherman, CA
	Eliot Engel, NY
	Gregory Meeks, NY
	Russ Carnahan, MO
Х	Albio Sires, NJ
Χ	Gerry Connolly, VA
	Ted Deutch, FL
	Dennis Cardoza, CA
	Ben Chandler, KY
	Brian Higgins, NY
	Allyson Schwartz, PA
	Chris Murphy, CT
	Frederica Wilson, FL
X	Karen Bass, CA
X	William Keating, MA
	David Cicilline, RI

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