

**U.S.-CHINA TRADE AND INVESTMENT: IMPACT ON
PACIFIC NORTHWEST INDUSTRIES:
FIELD HEARING IN SEATTLE, WASHINGTON**

HEARING

BEFORE THE

**U.S.-CHINA ECONOMIC AND SECURITY
REVIEW COMMISSION**

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

—————
JANUARY 13, 2005
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The Commission was created in October 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 sec. 1238, Public Law 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. sec. 7002 (2001)), as amended, and the "Consolidated Appropriations Resolution of 2003," Public Law 108-7, dated February 20, 2003. Public Law 108-7 changed the Commission's title to U.S.-China Economic and Security Review Commission.

The Commission's full charter is available via the World Wide Web: <http://www.uscc.gov>.

The Commission's Statutory Mandate begins on page 206.

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

MARCH 4, 2005

The Honorable TED STEVENS,
President Pro Tempore of the U.S. Senate, Washington, D.C. 20510
The Honorable J. DENNIS HASTERT,
Speaker of the House of Representatives, Washington, D.C. 20515

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our field hearing in Seattle, Washington on January 13, 2005. The hearing on "*The Impact of U.S.-China Trade and Investment on Pacific Northwest Industries*" gave the Commission revealing insights into the challenges and pressures facing key U.S. producers in this region that are generated by China's trade and economic development policies.

The Commission heard testimony from U.S. Representative Jim McDermott, business leaders, labor representatives, industry experts, and research policy analysts. The hearing began with a consideration of the broad economic trends in the Northwest and then moved on to focus on specific industries. Individual panels addressed the civilian aerospace industry, software and high technology, horticulture, forest products, and maritime and shipping issues. Representatives from all these diverse industries identified China's policies and commercial practices as major challenges for their industries and the regional economy.

Surprising Challenges Facing the Northwest

The Pacific Northwest region has numerous economic strengths. It is rich in natural resources and is home to several world-leading companies. These include Boeing, Microsoft, and Weyerhaeuser. Boeing is one of the world's two leading large civil aircraft producers and a major contributor to U.S. exports. Microsoft is the world's largest software company, and Washington State has 10,000 companies in the technology sector employing 138,000 employees. The Port of Seattle is the U.S. mainland port closest to Asia and it is a leading export and import terminal. This cluster of economic assets has resulted in the region being a major exporter, and Washington State has historically run a trade surplus.

With this rich and varied economic endowment, the Pacific Northwest region should be a leading recipient of economic gains from international trade and greater international economic integration. Yet, the Commission heard that despite this strong position, the Northwest region faces many of the same challenges facing other regions of the U.S. economy. In the Northwest these challenges are not as visible because the region starts from such an advantaged position, but there are disturbing similarities of trend. If these trends are not confronted and reversed, the region could find its economic advantages severely eroded a decade from now.

As has been the case in the rest of the country, Washington State has experienced a deterioration in its trading position. Between 1999 and 2003, the state's exports fell 6.8 percent while its imports rose 28 percent. As a result, the state's trade is now barely in balance, while trade with China will likely show an overall deficit for 2004.

Employment trends in Washington State also resemble the national picture. Though the state had a milder-than-average recession and recovered its pre-recession employment level sooner than the nation as a whole, the recession in manufacturing employment was deeper. The loss of jobs has been concentrated in higher paying jobs, while job creation has tilted toward lower paying jobs. These are features that are shared with other regions.

Aerospace

The panel on aerospace highlighted the challenges facing the Boeing Company. The sources of these challenges are multiple and include insufficient investment in research and development and new products, and intense competition from Airbus. However, China plays a role too. In particular, China unfairly exploits the competition between Boeing and Airbus to win concessions when it purchases aircraft. The Chinese government coordinates aircraft purchases and requires production transfer ("offsets") to China as a condition of sale. In certain circumstances, these requirements may be WTO-illegal, and longer term they pose a danger to U.S. global leadership in aircraft manufacture by helping to create what might become a foreign rival. They also result in the displacement of high-paying aerospace jobs in the United States.

Software

The panel on software and high-technology products revealed similar concerns. The industry is subject to strong incentives to outsource offshore, driven by cheaper labor costs in China and India. Moreover, offshoring stands to expand in scale, scope, and skill level as companies become more adept at it. Complicating the issue, software companies have been known to abuse the H-1B and L-1 visa programs resulting in underpaid foreign technology workers. Witnesses testified that some companies hire highly qualified foreign workers for general positions at low wages, but assign them high-level tasks. China's failure to enforce intellectual property rights is a continuing concern of business, as is the use of procurement restrictions that limit government purchases of foreign company software. Longer-term, off-shoring high-tech jobs and research and development capability may erode future U.S. technological innovation and leadership.

Ports

The ports of Seattle and Portland handle heavy traffic to and from Asia and, particularly, China. The Commission heard testimony on the continuing threats to national security that result from inadequate security at our nation's ports. Indeed, the Commission learned that, despite the fact that waterborne trade continues to rise at dramatic rates, fewer inspections of certain categories of containers entering through our nation's ports occur now than prior to the terrorist attacks of 9/11.

Horticulture/Forest Products

China continues to use an array of non-tariff barriers to prevent imports in both the horticulture and forest products industries. With regard to forest products, the Chinese government is heavily subsidizing the development of domestic forest products capacity and this promises to reduce future U.S. exports. The Northwest's large and successful horticulture industry is threatened by growing imports from China and lack of reciprocal access to the Chinese market.

Finally, witnesses expressed dismay at the U.S. Government's failure to use effectively trade law safeguard measures against Chinese imports that were negotiated as part of China's WTO accession agreement. These safeguards were intended to mitigate the damaging effect of near-term surges in imports from China. Bringing safeguard cases is difficult, expensive, and risky for small companies, and the current Administration's categorical rejection of several Section 421 safeguard cases approved for relief by the International Trade Commission has undermined confidence in the process. This, in turn, stands to deter companies from seeking relief that they deserve.

Based on these findings and the Commission's other work on these issues to date, we present the following preliminary recommendations to the Congress for consideration.

Recommendations:

- Congress should establish and fund a federally mandated corporate reporting system to gather sufficient data to provide a comprehensive understanding of the trade and investment relationship with China. Within such a system, companies should be required to report to the Commerce Department their initial investments in China and the shift of production capacity and job relocations resulting from these investments, both from within the United States to overseas and from one overseas location to another, and their contracting relationships with Chinese firms.¹
- As part of any mandated corporate reporting system, Congress should require the Commerce Department to maintain an authoritative account of U.S. firms' investment in R&D centers in China and a comprehensive assessment of their activities, including any technology transfer, offset, or R&D cooperation agreed to as part of the investment.²
- Congress should amend and tighten the legislation governing the H-1B and L-1 visa programs. These programs were intended to make available foreign workers to fill only those jobs for which there is a shortage of appropriately qualified American workers. Under this program, foreign workers are supposed to be paid the prevailing wage. In practice, companies have filled low-wage generic positions with over-qualified foreign workers who then are assigned high-level tasks. Companies should be required to show evidence of having first attempted to fill positions with American workers, and the prevailing wage for each position should be set by reference to the qualifications of each worker who holds the position.³

¹ Commissioners Reinsch and Wortzel dissent from this recommendation.

² Commissioners Reinsch and Wortzel dissent from this recommendation.

³ Commissioner Reinsch dissents from this recommendation.

- Congress should encourage the Administration to engage in a dialogue and raise strong objections with the Chinese government concerning its new government software procurement rules. These rules require Chinese government entities to purchase domestic software or “qualifying foreign software.” The criteria for qualifying foreign software have yet to be defined. The absence of such criteria has inhibited U.S. manufacturers from entering into government business and appears intended to shut U.S. firms out of this lucrative market.
- Congress should consider new measures to strengthen research and development conducted in the U.S. in industries such as aerospace and other high-technology sectors crucial to America’s future economic growth. These measures should aim to discourage the transfer of R&D facilities outside the United States.
- Congress should direct the Commerce Department to investigate ways to diminish the transfer of technology to China that is vital to U.S. national security and economic competitiveness by way of production transfers required to facilitate sales (“offsets”), particularly in the aerospace field. The investigation should identify the extent to which such transfers are required by Chinese government rules or regulations for commercial sales and therefore are potentially WTO inconsistent.
- Congress should direct the Department of Homeland Security to give greater priority to threats posed by waterborne shipping. As part of this effort, specific attention must be paid to the need for enhancing inspection of container seals and ensuring that appropriate paperwork accompanies these containers. Import and export containers must be refused entry without proper documentation. Proper attention must be given to ensuring that bonded agents and other personnel are able to appropriately and adequately inspect all containers. Technological approaches to inspecting containers and ships must supplement, not replace, human inspections.
- Congress should direct the United States Trade Representative (USTR) to investigate an alleged \$2 billion in subsidies from the Chinese government to radically expand China’s paper products industry, including creating fast-growing tree plantations. USTR should also investigate China’s practice of eliminating tariffs on raw logs and high grade paper machines while maintaining or increasing tariffs on imports of finished wood products, thereby supporting expansion of China’s wood products manufacturing industry at the expense of its trading partners’ industries.

Thank you for your consideration of our recommendations. In addition to the above findings we reiterate those contained in our 2004 Annual Report. We hope you will find the hearing record and our findings and recommendations helpful as the Congress continues its assessment of the implications of China’s growing role in global trade and manufacturing.

Sincerely,



C. Richard D'Amato
Chairman



Roger W. Robinson, Jr.
Vice Chairman

CONTENTS

	Page
THURSDAY, JANUARY 13, 2005	
U.S.-CHINA TRADE AND INVESTMENT: IMPACT ON PACIFIC NORTHWEST INDUSTRIES	
Opening remarks of Chairman C. Richard D'Amato	1
Prepared statement	2
Opening remarks of Commissioner George Becker, Hearing Cochair	14
Prepared statement	15
CONGRESSIONAL PERSPECTIVES	
Statement of Jim McDermott, a U.S. Congressman from the State of Wash- ington	3
Prepared statement	8
Discussion, Questions and Answers	9
PANEL I: WASHINGTON STATE TRADE AND INVESTMENT WITH CHINA	
Statement of Joseph J. Borich, Executive Director, Washington State China Relations Council, Seattle, Washington	16
Prepared statement	18
Statement of Rick Bender, President, Washington State Labor Council, AFL- CIO, Seattle, Washington	24
Prepared statement	27
Statement of Robert E. Scott, Director of International Programs, Economic Policy Institute, Washington, D.C.	29
Prepared statement	31
Panel I: Discussion, Questions and Answers	40
PANEL II: AVIATION/AEROSPACE	
Statement of John F. Walsh, President, Walsh Aviation, Annapolis, Mary- land	52
Prepared statement	55
Statement of Owen E. Herrnstadt, Director, Trade and Globalization Depart- ment, International Association of Machinists and Aerospace Workers (IAM), Upper Marlboro, Maryland	60
Prepared statement	62
Statement of Mark Blondin, President and Directing Business Representative, International Association of Machinists and Aerospace Workers (IAM), Dis- trict 751, Seattle, Washington	69
Statement of Richard Schneider, Aerospace Coordinator, International Asso- ciation of Machinists and Aerospace Workers (IAM), Upper Marlboro, Mary- land	70
Statement of Heidi Wood, Aerospace/Defense Analyst, Morgan Stanley, New York, New York	72
Panel II: Discussion, Questions and Answers	74
PANEL III: SOFTWARE/HIGH-TECH	
Statement of Marcus Courtney, President, Washington Alliance of Technology Workers (WashTech), Communications Workers of America (CWA) Local 37083, Seattle, Washington	90
Prepared statement	92

VIII

	Page
Statement of Ronil Hira, Ph.D., P.E., Vice President, Career Activities, Institute of Electrical and Electronics Engineers-United States of America, Assistant Professor of Public Policy, Rochester Institute of Technology, Rochester, New York	95
Prepared statement	97
Statement of Jesse M. Feder, Director and Counsel for International Trade and Intellectual Property, Business Software Alliance (BSA), Washington, D.C.	104
Prepared statement	106
Panel III: Discussion, Questions and Answers	111

PANEL IV: AGRICULTURE

Statement of Thomas I. Wahl, Director, IMPACT Center and Professor, School of Economic Sciences, Washington State University, Pullman, Washington	126
Prepared statement	128
Statement of Christian Schlect, President, Northwest Horticultural Council (NHC), Yakima, Washington	135
Prepared statement	136
Statement of Rod Christensen, Manager, Far West Spearment Oil Administrative Committee, Kennewick, Washington	137
Prepared statement	139
Panel IV: Discussion, Questions and Answers	142

PANEL V: SHIPPING/MARITIME

Statement of M.R. Dinsmore, Chief Executive Officer, Port of Seattle, Seattle, Washington	151
Prepared statement	154
Statement of Nathaniel "Sam" Ruda, Marine Director, Port of Portland, Portland, Oregon	158
Prepared statement	161
Statement of David A. Blackburn, President and CEO, Thomas G. Faria Corporation, Uncasville, Connecticut, Representing the National Marine Manufacturers Association	164
Prepared statement	167
Panel V: Discussion, Questions and Answers	169

PANEL VI: FOREST PRODUCTS

Statement of Charles Dale Lovett, Special Projects Coordinator, Pulp and Paperworkers Resource Council (PPRC), Member and Representative, Paper, Allied-Industrial, Chemical and Energy Workers International Union (PACE), Wickliffe, Kentucky	182
Prepared statement	184
Statement of Ivan Eastin, Professor and Acting Director, Center for International Trade in Forest Products (CINTRAFOR), College of Forest Resources, University of Washington, Seattle, Washington	188
Prepared statement	190
Panel VI: Discussion, Questions and Answers	196

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

Letter from James R. Cranney, Jr., Vice President, U.S. Apple Association, Vienna, Virginia, to C. Richard D'Amato, Chairman, U.S.-China Economic and Security Review Commission, dated January 14, 2005	204
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U.S.-CHINA TRADE AND INVESTMENT: IMPACT ON PACIFIC NORTHWEST INDUSTRIES

THURSDAY, JANUARY 13, 2005

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION,
Washington, D.C.

The Commission met at the Bell Harbor International Conference Center, Bell Street, Pier 66, Seattle, Washington at 8:30 a.m., Chairman C. Richard D'Amato and Commissioner George Becker (Hearing Cochair), presiding.

OPENING REMARKS OF CHAIRMAN C. RICHARD D'AMATO

Chairman D'AMATO. Good morning. The hearing will come to order.

Welcome to the U.S. China Commission's first hearing of 2005. We are delighted to be in Seattle to learn about the short- and long-term impacts of U.S.-China trade and investment on the Pacific Northwest economy. I want to express my gratitude to the many people that helped make this hearing a reality, and also to Representative Jim McDermott for taking time out to be with us this morning.

This Commission was established by the U.S. Congress to investigate the national security implications of our trade and economic relationship with China. Members of the Commission are appointed by the Republican and Democratic leaders of U.S. Senate and House of Representatives. Congress has directed us to examine how our deepening economic relationship with China affects our basic economic health and prosperity and our national security. In conjunction with this mandate, we've been holding a series of hearings throughout the country to get a firsthand look at how this relationship is affecting different sectors of our economy.

This time last year the Commission held a hearing in Columbia, South Carolina, where we heard testimony from local manufacturers about China's impact on jobs and the U.S. base, particularly in textiles, in that particular region. In September of last year we held a similar hearing in Akron, Ohio, that focused on industries particular to the upper-Midwest region. At both hearings witnesses expressed concern that China is unfairly advantaged by the continuing undervaluation of its currency and its extensive use of subsidies for its export industry.

There is a stark comparison with our hearings in Ohio and South Carolina, states whose economies are suffering badly from the effects of so-called globalization. Seattle and the American Northwest have been a major American success story in marketing aerospace, software, high technologies, agriculture and forest products. Never-

theless, our hearing intends to explore what we see are early signs of concern in all of these sectors with China, and we want to understand what long-term challenges face the Northwest, in hopes that they can be effectively met and countered at an early stage.

Today we have a series of panels on how U.S.-China trade and investment patterns are impacting the aerospace, information technology, agriculture, forest products and shipping and maritime industries. In addition to general economic impact, the Commission is interested in the larger security-related questions. What is the nature of the U.S. aerospace industry's contributions to China's growth as an aerospace power? How has this affected the U.S. defense industrial base? What are the implications of U.S. software and high-tech firms adopting China as a base for research and development? What impact does this have on our ability in the United States in the long run to continue to innovate?

These are just a few of the questions we hope to examine today. I know that the Congress will be keen to learn the answers, as well.

And with that I would like to turn over the proceedings to my Cochair of today's hearing, Commissioner George Becker.

Commissioner Becker.

[The statement follows:]

Prepared Statement of Chairman C. Richard D'Amato

Good morning, and welcome to the Commission's first hearing of 2005. We are delighted to be in Seattle to learn about the short and long term impacts of U.S.-China trade and investment on the Pacific Northwest economy. I want to express my gratitude to those who made this hearing possible and to Representative Jim McDermott for taking the time to be with us.

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There is a stark comparison with our hearings in Ohio and South Carolina, states whose economies are suffering badly from the effects of so-called globalization, including massive shifts in manufacturing capacity to China, outsourcing, competition from artificially cheap imports, and unfair Chinese trade practices. Seattle and the American Northwest have been a major American success story in marketing aerospace, software, high technologies, agriculture and forest products. Nevertheless, our hearing intends to explore early signs of concern in all these sectors with China, and we want to understand what long-term challenges face the Northwest, in hopes they can be effectively met and countered.

Today, we have a series of panels on how U.S.-China trade and investment patterns are impacting the aerospace, information technology, agriculture, forest products, and shipping and maritime industries. In addition to general economic impact, the Commission is interested in the larger security related questions. What is the nature of the U.S. aerospace industry's contribution to China's growth as an aerospace power? How has this affected the U.S. defense-industrial base? What are the implications of U.S. software and high-tech firms adopting China as a base for research and development? What impact does that have on our ability to innovate?

These are just a few of the questions we hope to examine today, and I know that the Congress will be keen to learn the answers as well.

With that I would like to turn over the proceedings to the Cochairs of today's hearing, my colleagues, Commissioner George Becker and Ambassador Robert Ellsworth.

Cochair BECKER. Thank you, Mr. Chairman.

The first person that we're going to hear from is a friend, I'm sure, to all of the Commissioners up here, Representative Jim McDermott of Washington. He's championed many of the issues that we're fighting for and that we think need to be implemented, and he's a Democrat from the Seventh District in Washington.

Mr. McDermott.

**STATEMENT OF JIM McDERMOTT
A U.S. CONGRESSMAN FROM THE STATE OF WASHINGTON**

Congressman McDERMOTT. Thank you.

Mr. Becker and Members of the Commission, we welcome you to Seattle. This is my district.

When I say where I'm from I always say I'm from Seattle because if I say I'm from Washington nobody can quite figure out where you're from. But you now can tell the difference between Washington and Seattle. Today is a beautiful day and I think it's the best type of winter days. You won't do any better than this in wintertime. And it is good to see a number of friends here.

As a jumping-off place for your first hearing this year, I don't think you could have picked a better place than Seattle to begin that. We have a long history.

When China was opened up our Senator, Warren Magnuson, was a very good friend of Zhou Enlai, and in fact had many personal tête-à-têtes with him. The fact that you have ships from China landing in Seattle—it was the first port they came to—and we have had a tie really as long as trading has reopened with China in any significant way.

We have, of course, other ties through people that you will hear later, but this is a city which has had a long relationship with the Chinese, and I think a positive one in most respects, and I think for that reason we are very interested in being a part of this hearing.

By way of the Port of Seattle, which you could see out of your hotel windows this morning, Washington State exports to China many agriculture products. People think of this state sometimes as trees and airplanes, but in fact this is a farm State. Our major industry is the export of farm goods, and we have the best fruits and vegetables in the world. We sell them all over Asia, including in China, and to the Chinese. Our apples are over there and our cherries are over there, and we've had lots of experience in getting into China with our products so you'll find that people here are very knowledgeable about the intricacies of trade with China.

The increased buying power of the Chinese and their growing demand for our products really holds substantial opportunities for our agricultural sector in particular. As they move more and more to the cities and they do less and less agricultural production in China, it makes it open for us to have an impact, both with wheat and other kinds of produce.

The growing transportation and technological needs in China have resulted in the sale of billions of dollars worth of commercial aircraft and computer hardware and software, which all is manufactured here in the city. Trade globalization with the Chinese has helped many of our local industries and supports thousands and thousands of jobs and will continue to do so.

You are in probably the most trade-dependent city in the United States, in that one out of three people are involved in foreign trade, either in producing the goods or in the shipping or the handling of coming and going goods. So we are very, very interested in this whole issue.

I told you the positive side briefly. There is a down side and that's that the United States has a massive trade deficit with China. The Chinese recently estimated that our December trade deficit with China was \$11.1 billion. Yesterday's newspaper—if you got up this morning early enough to read it said the trade deficit was 60.3 billion in November. Now, 11 billion of that is Chinese. So you can see the impact of Chinese trade on our economic situation in this country.

December was the seventh consecutive month that we've had a major increase in our trade deficit. So my constituents frequently ask me, what does this mean? What's a trade deficit really mean?

Well, the United States bought \$11.1 billion more from China than we sold them, which means we borrowed that money, and we are continuing to build this trade deficit, which is, in many people's eyes, one of the things that did not get discussed in the last campaign and is one of those issues that is going to have to be discussed in the four years.

Sooner or later we're going to have to pay that debt. Sooner or later we're going to have to pay \$11.1 billion for the things that we bought in December 2004. I don't know what year it is, when it will happen, but someday we're going to have to pay that. Presumably, if there is such a thing as a market that actually works, we're going to have to pay.

The trade deficit is not popular. I guess I don't have to tell you that. You were in Ohio and some other places, but it isn't popular here, either. And it's eroding the public's confidence in the whole idea of the proliferation of free trade agreements. I think that it's one of the things that Mr. Zoellick and others are running up against now. There was a period when free trade was much more positively viewed than it is today in the Congress and in the population generally.

Now, there are a lot of reasons for our trade deficits with China, and I'm sure this Commission is more familiar with them than I am because you've been going around the country. But there seem to be a couple of areas where we have had significant problems. One is, of course, the currency manipulation, and then there's the cheap labor. You don't have to be an economist from MIT to grasp what the currency manipulations do, nor the cheap labor aspects. And persuading China to do anything to allow its currency to float is going to be difficult. They have their problems too. They want to keep people working. But I think we need to use every tool that we have to push to make the trade more open.

China's come a long way. I visited China in 1977. I was in the second delegation of legislators who went over there the year after Mao died, so I've seen the transition. I visited in '72, and then again in '82, when Seattle set up the sister city relationship with Chongqing in western China. I was one of the five official delegates who did that, then I was back in '92 and '95, and so I've seen the progression. I remember when you looked across the Huangpu River in Shanghai and it was rice paddies as far as you could see. If you've been to Shanghai in any recent period and looked at Pudong today, you understand why people say that the Chinese national bird is the construction crane. It's been an amazing change in what's gone on. And it was a long and lengthy process to get China into the WTO, and gradually we finally made that happen, but quite simply, the United States still has a lot of work to do to eliminate the barriers of trade erected by the Chinese Central Government.

I read with some interest the report that was released by this Commission, which says that a million and a half people have lost their jobs between '89 and 2003 because of our trade deficit. Economists may argue about that number, but even if it's a third off that's still a million jobs lost to one country. It's a huge impact on us. And over the course of the last several years there's been a chorus of people, even in this city, who blame China for some of the economic woes, and it's getting louder.

Now, I think the critics have some validity. I think there is some truth to what they say. But I think the Congress needs to look at our domestic policies, as well, that affect the efficiency of our economy and the ability to sell American goods, before it blames everything on the Chinese.

I came to the Congress in 1989 and at that point Japanese bashing was in style, and because we have lots of ties to Japan, I told the Speaker at that time, Tom Foley, you know, I'll be glad to do whatever I can to try and deal with this Japanese bashing. Let's talk a little bit about this rather than just simply blaming the Japanese for everything.

Well, you don't hear much about Japan today, but you do hear more about China, and China is sort of slipping into our "they're the cause of our problem" role, and I think we have to be very careful, as we look at our relationship with China, that we not say that all the problem is out there and refuse to look at ourselves.

I'd like to talk just briefly about a couple of areas that I think are important for us to think about. What this country has—certainly what this area has—is the highest quality and the most skilled workers in the world. That didn't happen by accident. That happened by planning and by investing in the educational system and in good labor laws that were enforced and gave people an opportunity to move up and become very good technicians and production workers in this area. I think wages in the United States will always be higher than those in China and I don't foresee us dropping down to China. That's not going to happen, and it's something we really can't control, but there are some things we can control, and one of them is the whole question of a policy in this country for retraining.

If you look at Europe, or look at a lot of places around the world, you see the sort of ethos in the country that you are going to continue to learn throughout your working years, that the job you start with is not the job you're going to finish with when you're 65 years old. You're going to train and maybe be laid off and then train for something else. We make that very difficult in this country. It's sort of up to the worker. Further, we have really not done a good job in dealing with so-called displaced workers, and I think that that is an area where the Congress and the Federal Government really needs to take a very careful look, if we're going to continue to compete with our foreign competition.

What's happening right now in many respects is that we are skimming off the rest of the world. You can see lots and lots of Chinese and lots and lots of Indians and lots and lots of Russians and all kinds of places around the world where we are skimming off workers who are already trained, and bringing them in, rather than training our own people. I think that that is a political issue and a long-term investment issue that we really must deal with.

The issue of healthcare. I feel like Johnny One Note here because I've been singing this song since I went to Congress, but the cost of healthcare is rising nearly 10 percent every year, give or take a few percentage points, and this impacts America's employers and their ability to compete worldwide. And I would have to respectfully disagree with the President. I do not think that malpractice reform is the sole problem that has to be dealt with. Now, there's a whole series of other things, and to put the focus on malpractice in my view is really not looking comprehensively at the problem we face in this country. More and more employers are dropping their healthcare coverage. You see Governor Schwarzenegger from California already yelling at the White House, "You can't cut my Medicaid budget." Employers are simply shifting the cost of healthcare to the Federal Government.

Wal-Mart, for instance, goes out, and when they hire somebody they give them the applications for Medicaid in the states, so that they can qualify for the local programs. When you see that kind of thing going on you realize that healthcare is not something that is going to go away, obviously.

In fact, we've got this huge industry making more and more possibilities. My mother is 95, my father died at 95, and Members of Congress, many of us have parents in their nineties. It's not uncommon. So we have an aging population, partly through the success of our healthcare industry, and we have got to figure out a more efficient way to pay for it.

Finally, I think that we need to strengthen the Federal programs, like the Federal-state unemployment insurance programs, so that these programs can react more flexibly to the changing nature of what's going on. Our unemployment situation was set up for a state that had fishing and lumbering. Well, you couldn't get out in the woods in the wintertime so everybody went on unemployment for three, four months, then you got off, and you went to work in the woods again. That's how it was set up. And the same is true for fishing. Sometimes you can't go fishing, so you go on unemployment, then you come off, and you go on—and then you go back to fishing.

Look at it in terms of how to make it the most flexible for the layoffs and the ups and down swings of employment, and I really think that our workers and the public are going to feel more and more unrest, and feel more uneasy, if we don't figure out a way to deal with the unemployment situation.

So in summary, I would say that we must do more to shape our trading relationship with China and with the rest of the world in a manner that deals with outcomes that the American people are willing to accept. We have to proceed with a two-pronged approach, first by ensuring that we have an environment that allows employers and employees to be truly competitive, and secondly, by being more forceful in demanding that our trading partners play by the rules that we all agreed to.

I see that one of the things that's happened is the Chinese passed a law that prohibits procurement of anything outside of China. We pass these laws in the Congress all the time. Buy America, buy America, buy America. Well, the Chinese have now decided they'll buy Chinese, and if you're going to have a free flow of trade you've got to make sure you deal with things like that. You cannot accept them, and suddenly say, we're not going to buy anything that isn't made in China. That is one of the things that we really are going to have to look at.

The other thing is that I think what we see in Iraq is just a little teeny piece of a much larger mosaic. We now have a new competitor, and that's the Chinese, in energy. I remember when I went to China the first time. You could hardly cross the street because there was a sea of bicycles. Well, if you go to China today there's no sea of bicycles anymore, it's all cars, and it's a big change because their use of energy is going to get them involved in a whole lot of other places in competition with us. Just one little aspect of that is their unwillingness to support efforts to end the abuses in Sudan. Why? Because they're buying Sudanese oil.

And this whole issue of the oil of Central Asia, how that oil gets out from Turkmenistan and those areas under the Caspian Sea. There are a lot of people that would like to have that oil. Europe would like to have it, let's take it through Turkey, maybe it should go down through Iraq or Iran, or maybe it should go through Pakistan, or maybe it should go in the Xin Jiang and go into China.

There is a whole lot of our relationship with the Chinese that I think we need to be thinking about now. Most people are unaware of the huge growth in the use of energy by the Chinese, and I think it's one of those issues that's coming down the road which we are going to have to face, and you're faced with a very interesting problem, that is, trying to develop a consensus that you can present to the Congress that we can implement in a national policy. We want to be responsive to our own people, both the workers and the business people, and business is very interested in what's going on in China in terms of their ability to outsource, and workers here would like to have a job so they can buy the things that are coming in. There is a real tension in this society, which I think you have a huge challenge to meet.

So my congratulations on your willingness to sit and listen to this and then go away and try and figure out. Now, what do we tell the Congress to do?

We'll wait with open arms and bated breath to hear your answers. Thank you.

[The statement follows:]

**Prepared Statement of Jim McDermott
A U.S. Congressman from the State of Washington**

Chairman D'Amato, Members of the Commission, on behalf of my constituents and the State of Washington, welcome to Seattle.

Seattle is such a fitting choice to hold this hearing on U.S.-China trade because our businesses and our workforce symbolize both the challenges and opportunities that result from our region's strong trading ties with China.

By way of the Port of Seattle, Washington State exports to China many agricultural products because we have some of the best fruits and vegetables found anywhere in the world. The increasing buying power of the Chinese and their growing demand for our products hold substantial opportunities for America's agricultural industry, and Washington's in particular.

Furthermore, the growing transportation and technological needs of China have resulted in the sale of billions of dollars worth of commercial aircraft and computer hardware and software manufactured or designed in Washington State. Trade liberalization with China has helped many of our local industries and supports thousands and thousands of jobs and will continue to do so. As you know, however, we are also feeling a downside to freer trade with China. The United States has a massive trade deficit with China that continues to grow, and alarms policymakers like me.

Just this Tuesday, according to the *New York Times*, China reported that the U.S. trade deficit with China grew for the seventh consecutive month, to a record \$11.1 billion. So when my constituents ask what this trade deficit means, I have to tell them it means that the United States bought \$11.1 billion more goods and services from China than we sold to them.

It means that the United States borrowed \$11.1 billion from the Chinese to pay for those goods and services we imported from China.

It means that we are going to—sooner or later—repay China \$11.1 billion, plus interest, just for our December 2004 purchases.

Our trade deficit with China is not popular and is eroding the public's support for the proliferation of free trade agreements that we currently are considering.

There are many reasons for our trade deficit with China, and I am sure that the Commission is more familiar with those reasons than I am, but it appears to me that China's currency manipulation and cheap labor are among the most important. Getting China to allow its currency to float will be a difficult thing to achieve, but the United States must use every tool it has to push for such action. China has come a long way in terms of economic reform and it has been rewarded for doing those reforms, but, quite simply, the United States still has a lot of work to do to eliminate the barriers to trade erected by China's central government.

I read with great interest the report released this week by this Commission which says that 1.5 million American jobs were lost between 1989 and 2003 because of our trade deficit with China. I'm sure that there are economists that will quibble over the numbers in the report, but even if the report's numbers are off by a third, we have still lost a million jobs because of a trading relationship with one country.

Over the last two years, the chorus of people who blame China for our economic woes has grown louder. While I think the critics of U.S.-China trade have valid points, I think that the Congress needs to look first at our domestic policies that affect the efficiency of our economy and our ability to sell American goods and services abroad, before it blames the policies of foreign governments for our problems. I'd like to suggest a few areas where the Congress should begin working.

First, to retain and attract quality employers, the United States must have the most productive, creative, and skilled workforce in the world. The wages of American workers may always be higher than wages of Chinese workers. It is something we cannot control. But what we can control—what we can ensure—is that our workers are provided real opportunities to attend postsecondary education and to obtain the continuing education that will enable them to outcompete their foreign counterparts.

Second, we have to do something about healthcare in this country. Healthcare costs are rising nearly 10 percent every year and they impact American employers' ability to compete globally. President Bush may say that we can reform healthcare by simply pursuing malpractice reform, but consider this: medical malpractice liability represents two percent of all medical costs. So even if medical malpractice did

not exist, the costs of healthcare would continue to soar. We need real healthcare reform in this country. After all, how can we have the most productive workforce in the world if our workers cannot get medical treatment, or if they go bankrupt trying to pay for it?

Third, we need to strengthen the Federal programs, like the Federal-State unemployment insurance program, so these programs can better react to the changing nature of work in America and the fact that workers face a more unstable work environment and a more competitive market than any previous generation.

In summary, I feel that we still have an opportunity to shape our trading relationship with China, and with the rest of the world, in a manner that improves outcomes for Americans. But we must proceed with a two-pronged approach by first ensuring that we have an environment that allows employers and employees to truly be competitive and, second, by being more forceful in demanding that our trading partners play by the rules to which they agreed.

Lastly, Mr. Chairman, I would like to take a moment to discuss with the Commission some troubling emerging issues. The removal of apparel quotas and the imminent dominance of China in the textile and apparel industry will devastate the economies of many poor countries. The ripple effect of the Multifiber Arrangement is going to be felt like a tsunami for some developing countries, particularly those in sub-Saharan Africa.

China's growing demand for energy is changing geopolitical dynamics all over the world. Already, we find China resisting efforts by members of the United Nations Security Council to take action to stop the genocide in Sudan. I believe this is because of China's growing reliance on Sudanese oil. China is a key player in helping control nuclear proliferation on the Korean Peninsula and as a result enjoys growing influence in the region. Economically and geopolitically, China greatly impacts America's global influence and ability to protect its interests. Given that, I truly feel that the United States should not only do more to ensure that China plays by the rules of international commerce, I believe that we should do more to spur the democratization of China's political system. After all, the reason that so many Members of Congress supported Permanent Normal Trading Relations was that many of us believed that economic liberalization would encourage democratic reform.

I thank the Commission for coming to this great city and would be happy to try and answer any questions that you may have.

Discussion, Questions and Answers

Cochair BECKER. Thank you, Congressman. In just a few short minutes you put your finger on just about everything we're going to cover here today, and it was very good and very accurate, especially your opening remarks on the deficit. You know, for years everybody just shrugged that off. The deficit with China now is increasing between 20 and 25 percent every year. You figure that out and it's going to double—the deficit will double within about four years. And when we look at jobs, when we look at what we're trying to do, the deindustrialization of the United States is what I call it, the stripping of our industrial might, adds to the problem, because we literally can't make a lot of the things that used to provide good jobs and good incomes in this country. I enjoyed your remarks very much.

I have a question. I don't need to talk about the vibrancy of Washington State's export policy.

Congressman MCDERMOTT. You can do that.

Cochair BECKER. I can do that, okay. I will talk about it, then.

Washington State has a reputation for having the most vibrant export policies in the country. I guess my question is: Is it by accident or is this by plan? Do leaders here have a plan as to what's going to happen in five years or 10 years down the road? Because I sense that even within Washington, with a good solid export ban, it's starting to head south.

Congressman MCDERMOTT. Well, as I said a little bit earlier, I think our relationship to China is both an accident of history and

geography. We have the closest port to Asia. We're a day shorter to Asia than it is to Los Angeles. In fact if you were looking out here this morning you were looking at the access to the railroads that are going to Chicago. Some call this Chicago west. So some of our involvement with China is really accidents of history and fate, but I also think there's been some planning.

There have been a lot of people working on this issue, and they've seen it as, if you will, our advantage, and feel that therefore it should be fostered. The State has had a China relations committee, and before, a business council and Chinese friendship association. Recently, the Puget Sound regional council has taken an aim at this issue. There are four counties around Seattle that are a part of a regional council, and they've put together what they call a Partnership for Prosperity, which is really an attempt to look at how to create another 100,000 jobs here and deal with how to remain competitive with China.

So there are real efforts being made locally by local people to deal with what's happening. It's headed by a guy named Bob Drewel, who used to be a community college president and then went on to be a county executive in a county to the north. This is King County you're in right now. North of us is Snohomish County, and he was the county executive up there. That's where the naval base is, in Everett, Washington. People all along this Sound have worked together. There's been lots of competition between Tacoma and Seattle, the ports and all the rest, but there's also a lot of efforts to work together to develop a plan. So it's not been all by chance that this happened. It is really people thinking about how to make our port a good place for them to come. They could go other places. They could go to San Francisco or they could go to Los Angeles, even though it was another day on a boat, but we have done a very good job in the Port here trying to make it the best place.

Our biggest competition, actually, is Vancouver. I sit on the Ways and Means Committee and we constantly have delegations coming back saying we've got to get rid of some of the taxes that we put on shippers when they come in here because they could go an hour north to Vancouver and get on the Canadian National Railway and run into Chicago.

So we're in a unique situation. We're not in the center of the country, we're right on the edge, where we really actually have to look at the Canadians, and I think you have to factor that into your thinking as you think about Seattle and Washington State as a port.

Cochair BECKER. Ambassador Ellsworth.

Ambassador ELLSWORTH. Thank you, Congressman.

Well, I too want to thank you for taking your time to come and explain to us your views on this question of economic and security relationships. It was a brilliant presentation, very subtle, very nuanced.

Let me just ask a couple of questions to ask you to zero in on a couple of points. One point was what we can do here to improve our competitiveness vis-à-vis China, both with regard to exports and with regard to imports. One of the things you spoke about was training and education on a lifelong basis. This is my first question.

What can the Federal Government do to stimulate and support and help that kind of an effort? Because I really am a bug on education and training, and I think that you're absolutely correct and it's also going to take time. The effects of it won't be felt for maybe a generation, but we do have to start sometime. I would like you to touch on that and then your thinking on it.

The other question is this. You spoke about the trade deficit and so forth, but there is also, of course, a fiscal deficit. In this country we have a huge fiscal deficit because of our budget deficit and the fiscal policies of the government. And, of course, you realize, I'm sure, that a lot of that is funded by the Chinese. They buy our government paper—I'm not sure that anybody knows exactly how much, but it's tens of billions of dollars per annum of our government debt that piles up over there. What in your judgment are the implications of that? Is that something that is sound for our government to be doing? I don't. If it's not, what can we do to stop it?

Those are my two questions, education and training, and the Chinese accumulation of U.S. Government paper to fund our fiscal deficits. Please.

Congressman MCDERMOTT. I think there are a number of things, and you're correct in picking up that what I'm talking about is the lifelong learning issue. I hear from people here in Washington State, Well, I got laid off at X, and I went back to the community college and I got training in XYZ, and I went back and then they said I was too old or they didn't want to invest in me because I'm 54, and they didn't want to hire me. The problem in this country is that we don't have a commitment to our own workers to say, If you go get certain training we can put you in a different part of the company because it's changing. We've got all kinds of opportunities. I can give you the situation in our own state: We have a deficit of four-year college seats for people that go to the community college. You can go to your local community college, and supposedly that guarantees you a seat in one of the universities in the state. In fact, what happens is you don't make it. We had 1,500 kids last year that could not go from community college to the state level. So then they have to go to a private school, where it's much more costly, and they probably can't afford it. So we have put impediments in the way of our own kids, and I think that Washington State is no different than a whole lot of other states, where there has to be more investment done. If you will, to steal a line, perhaps, from the president, maybe we should leave no worker behind. There is really a situation where you are saying to our workers, yes, things are changing, and it's all up to you, but then they can't cope with it on their own.

The unemployment benefits have to be coordinated with their ability to get a Pell grant or whatever. You can't say to somebody, well, if you're going to college you can't go and get unemployment benefits because you are not looking for work. We have very stringent rules about how long you can get unemployment.

Correcting things that went on back in the '60s, which you may remember, when a lot of college kids would work the summer, then get on unemployment through the school year, then go out to work again and then get back on. Well, you can't do that anymore. In fact, you can hardly do two things at the same time. So I really

think that the Congress needs to look at the national use, not only of our Pell grant and our aids and grants for college students, but also the use of unemployment in coordination with somebody who's 50 years old and would like to go back to work. I think that is within our purview and that it's something that ought to be dealt with.

The issue of the deficit, I don't know. I mean, you must be a real conservative because I like to hear that. There are some guys in the Congress who I consider real conservatives, who actually make sense on this business about giving tax cuts and digging a huge hole. I was in California last Sunday for the baptism of my first granddaughter. There's a year-and-a-half-old kid, and we're just shoveling debt onto her. She doesn't even know it yet.

Ambassador ELLSWORTH. Yes, but the Chinese are financing it. Does that make it all right?

Congressman MCDERMOTT. Well, there are certain problems with having yourself funded from the outside, and I think that the Congress has to begin to look at that as a threat.

There's an old saying the Romans had that if I owe you a dollar I'm in your debt but if I owe you \$10,000 you're in my debt. We're in the position now where we owe so much outside this country that we could easily get into serious difficulty.

There's an interesting book called *The End of the Empire*, by a guy named Manuel Todd, where he talks about the cold question of oil being denominated in Euros rather than in dollars, and if the world economy suddenly decides we're going to denominate everything in Euros because it's a better currency than the dollar, we are going to be in serious trouble.

The Chinese are our biggest debt holder. The Japanese are next, I think, and then the EU in various pieces is the third. And as I said in my opening remarks, that did not get one single comment in the whole campaign. Neither one of them, Democrat or Republican, said boo about what I think is a huge issue that this country has got to face. I think that this is one of the issues that this Commission can point to and focus the light on for the Congress that the Congress has to begin to think, What does it mean when we owe all that money out to strangers? The Chinese are kind of in a bind too. If they decide they want to pull their money out of the United States and put it in the European Union, well, they need us to buy stuff, they don't want us to collapse. The very interesting thing going on right now relative to Seattle is that the European Union put sanctions on the sale of arms to China because of what happened in Tiananmen Square in 1989. The EU just lifted the sanctions—

Didn't lift them?

Commissioner TEUFEL DREYER. Not yet.

Congressman MCDERMOTT. They're getting close to it. Well, okay. You know the nuance a little bit better than I do, but if I could see it, I know it's coming.

Commissioner TEUFEL DREYER. Yes.

Congressman MCDERMOTT. Because Airbus wants to sell in competition to Boeing. You can see these things out there that tell you this situation, as we have known it is changing radically, but I don't think the American population has any concept. You have

more knowledge than 99.99 percent of the people in the United States about the impact of what this relationship really is all about, and I think it is incumbent upon you and I hope that you will do a very direct and hard-hitting job at laying it out for the Congress so they can't miss the point.

Cochair BECKER. Congressman, can we take one more question from the Chairman?

Congressman MCDERMOTT. Sure.

Chairman D'AMATO. Thank you very much, Congressman McDermott. You're very generous with your time. I just have one more question that I think is so central to the future of this region, in that there's such a heavy component of technological development and technology firms, Microsoft and Boeing being the leaders, but tens of thousands of firms, high technology, and then you have the problem with the Chinese unwilling or unable, or both, to enforce their intellectual property protections. This last year the American Chamber of Commerce in Beijing, in their annual report, focused on this particular issue as the most important issue for American business, and China was losing billions of dollars here, and the Chinese government does not seem to be willing to do much about it. So the question is: How much of this can we take and do we need to get aggressive with regard to the Chinese, an IPR protection, such as, for example, the question of bringing a dispute settlement issue into the WTO framework or doing something bilaterally? Just your views on it, given the fact that this region is so vulnerable to these kinds of problems.

Congressman MCDERMOTT. As I mentioned earlier, there has been a letter sent to the Chinese government by Members of Congress on this procurement issue, and certainly it is one where we are trying to apply some pressure. As to whether we should use the WTO—you're asking me a question that has many ramifications, and I think that I understand that talking doesn't necessarily always work, but I would exhaust every attempt in talking with the Chinese about this before I exercised the sledgehammer of a WTO action. Now with respect to Airbus and Boeing, and I think it's fair to say that Boeing has never been very eager to get involved in the WTO, but there comes a point at which you've got to say, Hey, look, this thing has got to stop.

That is one of those things that perhaps your Commission can lay out for the Congress: how it should proceed in a step-by-step manner. I don't think we can continue to ignore it, because it's only getting bigger.

It used to be that a movie would be shown here in the United States at a premier, and it would have already been on the streets in China a week before, because somebody was sitting in a premier somewhere and taped it on a video cam and away they went with it. So we've been dealing with this kind of stuff for a long time. It has not gotten better, and I think it's about time for some real strong actions to be taken.

I understand that in everything a knife cuts both ways, so you have to be careful about what you say you're going to do. But I think that you really have to at some point say, we've got to do something about this.

Chairman D'AMATO. Thank you very much.

Cochair BECKER. Thank you, Congressman McDermott, for a very enjoyable presentation and giving some insights here that are really very valuable to the Commission.

Congressman MCDERMOTT. Thank you very much. Thank you for coming, and come back again.

**OPENING REMARKS OF COMMISSIONER GEORGE BECKER
HEARING COCHAIR**

Cochair BECKER. We're not quite ready to start the first panel yet but it's all right for them to come up and sit down. I want to make a few opening remarks myself on this. This is the fourth public field hearing that we've had in the United States since early last summer. We had one in San Diego, one in South Carolina, and one in Ohio.

Our Chairman introduced me as Commissioner Becker, which is fine. I want to tell you, though, I have another life, a rather broad and extensive one in the labor movement. And the natural instinct all my life has been to keep my ears close to the ground because that's where the workers are.

I've come to some definite conclusions concerning trade. America does not exist solely for multinationals to play chess with the factories and move them around from one country to the other. The heart and soul of America I believe are the small, medium-sized and large but independently owned manufacturing companies. There's hundreds of thousands of them throughout the United States. These are companies that employ American workers and maintain American factories. And that's what's built this country's strong middle class and strong economy.

The South Carolina and Ohio hearings were unique. We're used to seeing companies pit themselves against other companies and unions but this wasn't the case in either one of those two hearings. They were very emotional hearings. Workers and companies came together on the problems that they have in competing and surviving. We've heard from a broad range of companies—steel, textiles, the rubber industry, the parts industry and machine tooling. That's a broad spectrum of America. And all of them, the companies themselves, the CEOs and the workers, were singing out of the same songbook, so to speak.

In the case of the workers, there was a lot of despair and anger over what has happened to them, a lifetime of work gone, wages and benefits cut, the ability to support their families and meet their needs and in many cases a loss of dignity and self-worth.

The companies, good companies, that had a sense of loyalty, both to their workers and to communities, were trying very hard to stay in business and compete as best they could. They have borrowed monies, sometimes asked the workers for concessions if they had to, but in the end many just couldn't make it. They could not meet what is commonly being known now as the "China price." And it's getting harder and harder.

It wasn't too many years ago, back in the mid-'80s and the '90s, when we talked about layoff problems and plant closures in the United States, workers and companies were pointing fingers at each other. In the steel industry, for example, the smokestack industry—and not just steel but other major industries in the United

States—they talked of the rust belt. And everybody blamed the other side for what was happening. That's gone. What's happening in America today is everything is up for grabs. China has expanded from the low-tech items that they used to make into advanced technology products, into high-tech. Everything is at risk. Hand tools, machine tools, the whole works.

So it's changing, and they are plenty of signals out there that we need to and our government needs to like the Congressman said. I'll add a few more pieces of evidence. Our manufacturing base in America is being ripped right out from underneath us. We're being flooded with cheap imports; we have a soaring trade deficit that I said is increasing at the rate of 20 to 25 percent every year, with no end in site. We have an exchange rate problem that China's money is undervalued that nobody wants to deal with. It's been estimated anywhere from 15 to 40 percent.

Our government has also failed to enforce WTO rules and other rules that we have in trading with China. And, we have an incredible loss of jobs and plant closure problems in the United States. So here we are in Seattle.

We had two exciting hearings in South Carolina and in Ohio where we received insightful testimony as to what is happening from workers and companies in those areas, and we hope we will get the same thing here in Seattle.

With that we'll go forward with the first panel.

Mr. Joseph Borich, Executive Director of the Washington State China Relations Council in Seattle, Mr. Rick Bender, Washington State Labor Council, AFL-CIO, in Seattle, and Dr. Robert Scott, Ph.D., Director of International Programs for the Economic Policy Institute in Washington, D.C.

We'll proceed in the way that I introduced you, and we will keep comments to seven minutes. They will be timed. Then the Commission will ask questions, and each one of the Commissioners will limit their examination to five minutes. Thank you, and we'll start with Mr. Borich.

[The statement follows:]

**Prepared Statement of Commissioner George Becker
Hearing Cochair**

The Commission is pleased to be meeting today in Seattle to continue its comprehensive investigation of how the U.S.-China trade and investment relationship is affecting vital regions and sectors of our economy. This is the fourth in a series of field hearings the Commission has held across the United States since early 2004.

Before we begin I would like to join the Chairman in thanking Representative Jim McDermott for taking time out of his busy schedule to speak before the Commission and kick off today's hearing.

In June of last year, the Commission issued our second comprehensive report to Congress. We did so with a unanimous vote—Democrats and Republicans, Commissioners with varied backgrounds in government and in the private sector. While the Commission's report is comprehensive, its conclusion was simple: *"a number of the current trends in U.S.-China relations have **negative implications** for our long-term economic and national security interests, and therefore that U.S. policies in these areas are in need of urgent attention and course corrections."*

Washington State's economy is deeply involved in trade with Asia, which is the destination of almost half of Washington State's exports. China is the destination of almost 10 percent of Washington exports—the third largest export destination for the state.

The key Pacific Northwest industries we are focusing on today—aerospace, high-tech, agriculture, forest products, and shipping—have all been affected by China's

rise as an economic and technology power. These industries see China as a vital market, but they also face major challenges from China's own development in these sectors. How these industries seize these market opportunities and meet these challenges has ramifications not just for the Pacific Northwest economy, but also for the U.S. economy as a whole.

There are several key concerns that the Commission hopes to explore today. First, U.S. aerospace and aviation industry corporate strategy has focused on China as both a manufacturing base and a consumer market. The Commission is deeply concerned about the transfer of aerospace jobs and technology to China. The loss of high-paying quality jobs is a blow to the well-being of working families, while the transfer of technologies risks creating a future commercial rival and also holds national security dangers. Companies may see such transfers as being in their private interest, but is it in the national interest? And is China applying illegal pressures to force companies to transfer production as a condition for winning contracts?

Second, high-tech and software companies such as Microsoft are finding China to be a desirable place to locate high-end R&D. Again, this erodes the high quality job base in the U.S., while shifting of R&D centers may undermine U.S. high-tech leadership. Again we must confront the question of whether what is good for companies at the individual level is also good for the nation.

Third, we will be looking at the apple and mint industries and the forest product industry. Apple and mint producers have battled with China over unfair trade practices and there are reports of China subsidizing its own forest product industry. All of these industries are at a competitive disadvantage because of China's undervalued currency. This suggests that agriculture and forest products have some of the same unfair China trade concerns as manufacturing.

Lastly, given that the Pacific Northwest is a key shipping hub for U.S.-China trade we want to understand the components of this trade—what is being shipped into the area, and how has the mix changed over time. This can give us a window into the nature of recent developments in the Pacific Northwest.

In general, we want to understand not only how industries are fairing in their trade with China today, but where current trends will likely take them in the next decade. I look forward to a fruitful and engaging dialogue with the panelists.

Our first panel will present an overview of Washington State trade and investment with China. We are pleased to have with us Joseph Borich, Executive Director of the Washington State China Relations Council. Mr. Borich will discuss the Washington State-China trade and investment relationship from the perspective of private businesses. Next we have Rick Bender, President of the Washington State Labor Council, who will discuss labor's perspective on this relationship. We will close the first panel with a presentation by Dr. Robert Scott of the Economic Policy Institute. Dr. Scott will present the findings from a recent commissioned study on the employment effects of U.S. trade with China.

We will break for lunch around noon before beginning our afternoon panels dealing with the software and high-tech industries and the agriculture, forest products, and shipping and maritime industries.

We will hear from the witnesses in the order in which they were introduced. So that all of the Commissioners can have adequate time to discuss these important issues with the witnesses, we ask that each witness speak for no more than 7 minutes. At the end of the panel's presentation, each Commissioner will be recognized for 5 minutes.

We are very pleased to be in Seattle today and I look forward to today's discussion.

PANEL I: WASHINGTON STATE TRADE AND INVESTMENT WITH CHINA

STATEMENT OF JOSEPH J. BORICH, EXECUTIVE DIRECTOR WASHINGTON STATE CHINA RELATIONS COUNCIL SEATTLE, WASHINGTON

Mr. BORICH. Thank you, Commissioner Becker, and let me begin my remarks by saying that I would really like to express my thanks and appreciation to the Commission and to you personally for inviting me to meet with you today. And let me also say that I can assure you that while I have not always agreed with the specific conclusions and recommendations that the Commission has drawn over the past four years, I nevertheless recognize the impor-

tance of your mandate and I support your work overall. And in keeping with your expectations, I'll keep my remarks brief and limit myself to what I believe are the more salient points of my written testimony.

The organization I represent, the Washington State China Relations Council, is a 25-year-old association of Washington businesses, academic institutions and cultural organizations, all of which have a significant stake in China, and therefore in maintaining constructive and stable relations between the U.S. and China. Our organization, with more than 130 members, includes many names familiar to the Commission, I'm sure: The Boeing Company, Microsoft, Weyerhaeuser, Starbucks, PACCAR, Costco Wholesale, University of Washington and Washington State University, among them. I should hasten to add, though, that our organization also includes scores of small to medium-sized businesses as well as several significant agricultural organizations in the state.

Washington is one of only a handful of states willing to support an organization whose sole purpose is to create and strengthen commercial, academic and cultural ties with China. Among these few states, the Washington State China Relations Council is by far the oldest such organization. Founded in 1979, our first executive director was Dr. Robert Kapp, who until recently was president of the U.S.-China Business Council and who I believe has appeared several times before this Commission.

The reason why the State of Washington has supported and continues to support an organization like the China Relations Council is simple. International commerce is absolutely essential to the vitality of the state's economy, and China is the state's third-largest and fastest growing trade partnership.

Overall international trade, both exports and imports, supports about one job in three in the state of Washington. By the end of this year exports alone will support nearly one job in three. We are in fact the most trade-dependent state in the union.

Two-way and throughput trade between Washington and China in 2003 exceeded \$15 billion—I'm not sure of the exact figure, it won't be out for a couple more months, but it was significant—of which sales of Washington products to China accounted for about 3.2 billion.

Now, although transportation equipment, in particular aircraft and aircraft parts, accounted for more than half of all of Washington's sales to China in 2003, our exports to China were spread among more than 80 industries. In fact, there is scarcely a sector of this state's economy not involved in some way with China trade, and on a per capita basis Washington trades more with China than any other state.

A recent study by the Washington State Department of Community Trade and Economic Development ranked China as the number one future export market by Washington State companies. We believe that Washington is ideally positioned to see further growth in trade with China, as well as rapid expansion of two-way investment in the coming years. As a center for information technology, biotechnology and medicine, aerospace, agriculture and environmental technology, Washington has the products, technologies and services being sought by China's producers and consumers.

In sum, we see a very strong and continuing linkage between this state's economic prospects and the China market. That said, the China Relations Council and its members recognize that there remain significant challenges to doing business with China. As an organization, we believe that China's speedy and full implementation of its WTO commitments and those made to the U.S. in our bilateral market access agreement offer the best prospects for mitigating those challenges and giving Washington businesses, farmers and workers fair access to the benefits of commercial relations with China.

While we have a number of concerns regarding nontariff barriers restricting the flow of Chinese imports and remaining limits on services, including trading distribution rights, our chief concern is, and will likely remain for some time, inadequate protection in China of intellectual property. Washington companies own some of the world's most important trademarks, patents, copyrights and proprietary technical information. The threat to our companies of having to compete with Chinese knockoff products and of damaged corporate reputations because of inferior Chinese products masquerading as originals not only in China but globally is very costly to Washington State China Relations Council members and to our state as a whole.

And let me add just briefly, I don't think it's a question of will, I think China is concerned—at least as concerned as we are about better protection of intellectual property. After all, there is a growing corpus of domestic intellectual property in China that is equally vulnerable as foreign intellectual property in China, and China's leadership is well aware that if stiffer measures aren't taken, that not only foreign investment in China but domestic investment in China will become problematic. There is much that remains to be done in this critical area, and we hope that the Commission will continue to focus on the problem.

That concludes my formal presentation. I'll be pleased to take your questions at the appropriate time, and thank you again for providing me with this opportunity to meet with you.

[The statement follows:]

**Prepared Statement of Joseph J. Borich, Executive Director
Washington State China Relations Council, Seattle, Washington**

Thank you for inviting me to meet with you today. The organization which I represent, the Washington State China Relations Council, takes a keen interest in the work of the Commission and in government policies and legislation in general that could enhance, or detract from, constructive, stable and mutually beneficial relations between the United States and China.

The reason for this is simple: international commerce is absolutely essential to the vitality of this state's economy, and China is our third-largest and fastest growing trade partnership.

International trade has always played a key role in Washington State's economy. In 2003, Washington exports to its top 50 markets were valued at over \$34 billion (total income for the state in 2003 was \$193.7 billion). Over the past 30 years, Washington exports have contributed to nearly one-half of the state's new jobs. It is estimated that by the end of 2005, one in three jobs in Washington will be directly or indirectly supported by international sales. Already, Washington exports support one job in four; if you add in imports, the proportion of jobs supported by international trade goes to one in three. Washington is the most trade dependent state in the nation.

Washington's leading export industry sectors in 2002 remained key sectors in 2003. After aerospace-related exports which were valued at over \$20 billion in 2003,

the top performers were oil seeds/fruit/grain (\$1.6 billion), electric machinery/sound and TV equipment (\$1.4 billion), industrial machinery (\$1.4 billion), cereals (\$1.1 billion), optic/photo and medical/surgical instruments (\$809 million), mineral fuel (\$735 million), and wood products (\$679 million). Although not counted in merchandise trade statistics, the sale of Washington services to China—from architecture to software—would add tens of millions more to our total exports to China.

Two-way and throughput trade between the State of Washington and China in 2003 totaled over \$15 billion, of which sales of Washington products represented \$3.2 billion. Leading sectors included aerospace (\$1.78 billion), oil seeds/fruit/grain (\$878.3 million), iron and steel (\$61.6 million), industrial machinery (\$60.2 million), optic/photo and medical/surgical instruments (\$49.8 million), pulp and related products (\$45.9 million), seafood (\$40.5 million), and wood products (\$33.8 million). But, Washington exports to China were spread among more than eighty industries. There is scarcely a sector of this state's economy not involved with China trade. On a per capita basis, Washington trades more with China than any other state; in aggregate terms we would rank number two or three.

That is why China is so important to Washingtonians. That is also why Washington business, agriculture and academic institutions created the Washington State China Relations Council 25 years ago and continue to support this organization today. (I would note here parenthetically that the first executive director of the WSCRC was Dr. Robert A. Kapp.)

The WSCRC is the oldest state-level, non-profit organization promoting commercial, academic and cultural relations with China. Our more than 130 member companies, colleges and universities and cultural organizations range from the largest in the state (in some cases, largest in the world) to some of the smallest. They represent manufacturing, services, agriculture, transportation and high-tech—virtually everything this state has to offer. They support the WSCRC because of China's importance to their overall goals and because the WSCRC assists them in meeting their goals. Beyond supporting our members, the WSCRC is committed to strengthening grassroots ties with China, deepening mutual understanding and developing business, academic and cultural opportunities in China for our state.

How do we accomplish this? Let me cite a few recent examples:

- October 26–27: “U.S.-China Economic Summit.” Together with our partners, China's Development Research Center (its top economic think tank) the National Committee on U.S.-China Relations, and the law firm Dorsey and Whitney LLP, we brought to Seattle American and Chinese economists, government officials and business executives to discuss China's development strategy and Sino-U.S. economic relations. Among the discussion topics were China's current economic situation and future prospects, its reform and development strategy; China's rural development and agricultural trade with the U.S.A.; intellectual property protection as it relates to foreign investment and economic cooperation; and further development of rule of law and government transparency.
- October 19–21: “Market Access Strategies 2004—China's Environment,” held in Seattle, brought 40 Chinese environmental professionals to participate in a special program promoting business in Washington environmental products, equipment and services by giving the Chinese access to cost-effective and practical information on environmental technologies, management, and policy and compliance issues. We expect to follow up this program with an environmental industry study mission to China in the fall of 2005.

In addition, we will be hosting another event later this month, “World Expo 2010: Shanghai's Emergence as a World-Class City,” that will provide Washington State companies an opportunity to interact directly with the Shanghai World Expo Organizing Committee, which is responsible for procuring the billions of dollars worth of products, technologies and services Shanghai will need as it prepares to host the 2010 World Expo.

We also work closely with the Washington State government and private organizations to promote exchanges with China. Delegations from Washington State co-organized by the WSCRC included those led by Governor Locke in 1997 and 2003; Washington State's Secretary of State in 1999; the Trade Development Alliance of Greater Seattle in 2000; and the Seattle Chamber of Commerce in 2003. In that same vein the WSCRC has also hosted many delegations from China, including one led by China's Minister of Commerce.

We firmly believe that more contact at all levels, not less, serves the overarching interests of both countries and brings benefits—both tangible and intangible—to the residents of this state.

Another service the WSCRC provides (primarily to its members) is a periodic newsletter, the “China Update,” which provides reporting on and analysis of current

events and trends in China and in U.S.-China relations. I have appended several articles from the “China Update” for your reference.

I apologize if I have gone on at too great a length in describing the WSCRC and some of its activities. I did so to underscore the fact that business and academe in Washington support the WSCRC and its activities precisely because of the importance this state attaches to China. Although I am not at liberty to discuss the activities or business plans of any WSCRC member (or, indeed, any company or organization), I can say that in general for Washington business China is already, or is rapidly becoming, the most important foreign market and key factor to overall success.

A recent study by the Washington State Department of Trade and Economic Development ranked China as the No. 1 future export market by Washington State companies. We believe Washington is well-positioned to see further growth in trade with China, as well as expansion of two-way investment in the coming years. As a center for information technology, biotechnology and medicine, aerospace and environmental technology, Washington has the products, technologies and services being sought by China’s producers and consumers. Washington companies have a rich history of business relations with China and are keen to expand commercial ties both here and in China.

The above notwithstanding, the WSCRC and its members recognize that there remain significant challenges to doing business with China. As an organization we believe that China’s speedy and full implementation of its WTO commitments offers the best prospect for mitigating those challenges and giving Washington businesses, farmers and workers fair access to the benefits of commercial relations with China.

As the dramatic growth in most categories of our state’s exports to China over the past three years indicates, the half of China’s WTO glass that has been filled—especially on tariff reductions—has had a salutary effect on our state’s economy and underscores for us the desirability of China fulfilling the rest of its commitments in a timely manner. Among our concerns are the sometimes capricious and opaque applications by China of standards-related actions in agricultural and high-tech trade that seem designed primarily to interfere with imports of certain products and technologies. We also have considerable interest in China meeting its commitment to grant trading and distribution rights to companies both foreign and domestic licensed to conduct business in China.

I think it is fair to say, though, that our chief concern is, and will likely remain for some time to come, inadequate protection in China of intellectual property. WSCRC members and, more broadly, Washington companies own some of the world’s most significant trademarks, patents, copyrights and proprietary technical information. The threat to our companies of having to compete with Chinese knock-off products and of damaged corporate reputations because of inferior products masquerading as originals not only in China, but globally is very costly to WSCRC members and our state.

We applaud the efforts China has made to strengthen the legal framework for protecting intellectual property. We further applaud the detailed plan enunciated in September 2004 by Vice Premier Wu Yi to put teeth in China’s legal protections through education programs and tougher enforcement. It is certainly in China’s interests to turn this problem around. Unfettered theft of intellectual property risks curtailing not only additional foreign direct investment, but the contributions of domestic creativity that are vital to China’s economic development. There is much that remains to be done in this critical area. We trust that this Commission and the Administration will continue to focus on the problem.

If I may, I would like to offer a few general observations based on my experiences as a Foreign Service Officer for 25 years—most of that time working in China, or on China issues in the State Department—and as the Executive Director of the WSCRC.

- For the past twenty-five years, China has been embarked on a program of transforming its economy, and with remarkable success. Yet, it remains in many respects a fragile economy with great disparities among various regions and sectors. China’s economy will strain to meet the rising demands of a population already more than 1.3 billion and projected to grow to about 1.6 billion by the middle of this century. China’s principal concern over most of this century thus will be how to achieve balanced, steady growth and development throughout the country. China’s economy still has many structural weaknesses that, in the short run at least, are likely to be exacerbated by its accession to the WTO. So, too, is social and political cohesion fragile in some respects. It may well be that the threat from China—if there ever is one—will result not from the success of its modernization effort, but rather from the failure of that effort.

- A constructive, cooperative partnership between China and the U.S. must be the foremost foreign policy goal for both governments in this century. How well both sides manage that relationship will largely determine whether the 21st century is remembered as one of peace and prosperity, or one of conflict and suffering. Although there are many areas where our interests are identical or are in parallel, there are and will likely remain fundamental differences in our two systems. Given the importance of each country for the other, we must continue to manage our differences successfully. Therefore, both sides need to keep their list of expectations short and focused on what is truly essential to our respective national interests.
- Try though we may, we are not going to “fix” China. The threat of sanctions and other coercive actions have simply not worked and always carry the risk of unintended (and unwanted) consequences. We can, perhaps, influence China’s policies and the course of its development—at least on the margins—but only if we remain fully engaged from the head-of-state level on down to the grass-roots. While “engagement” may sound like a truism, it is not without obstacles whether intended or not. I am referring here specifically to the policy and practice of U.S. visa processing in China. Long delays and the high rate of refusals for Chinese applying to come to Washington for business or study are seriously impairing our state’s businesses and educational institutions.
- Finally, I must question the wisdom for reconsidering our one-China policy. As then-Director of the State Department’s Taiwan Coordination Staff from 1992–1994, I had a role in a full-dress, interagency Taiwan policy review. Although room was found for a few marginal adjustments to that policy, the core principles as embodied in the three Joint Communiqués and the Taiwan Relations Act could simply not be voided or substantially altered without putting at severe risk stability in the Taiwan Strait and indeed, East Asia as a whole. As inelegant and unreflective of the dramatic changes in Taiwan that have occurred as this policy might be, I would posit that for the United States there are still no good alternatives to continuing to encourage both sides to seek a peaceful resolution.

Thank you again for the opportunity to offer my comments today.

**APPENDIX
EXCERPTS FROM THE “CHINA UPDATE”**

RENMINBI REVALUATION—PROS AND CONS (AUGUST 2003)

Assuming that the U.S. Government and not markets should be managing trade with China (an assumption I would not support), persuading Beijing to revalue the RMB vs. the U.S. Dollar is probably the least government-intrusive means of lowering our trade deficit. Increasing the value of the RMB should in theory make Chinese exports to the U.S. more costly, while lowering somewhat the price of U.S.-made products sold in China.

The RMB is currently trading within a very narrow range of 8.276–8.28 to the U.S. Dollar, a peg it has maintained with great consistency (even through the Asian financial crisis of the late 1990s) since it scrapped its dual currency system in 1994. Over the past year or so as a weak economy and burgeoning trade deficits lowered the U.S. Dollar against the Euro (it would also have probably declined against the Japanese Yen except for repeated interventions by Japan’s central bank) the pegged RMB has dropped with it, effectively mitigating a price increase for Chinese exports and giving no advantage to U.S. exporters. Some economists estimate that the RMB is currently undervalued by anywhere from 15–40 percent.

But, determining just how undervalued the RMB is (if at all) cannot be easily accomplished. Basing a determination solely on China’s current account surplus and foreign exchange reserves is misleading. Since China maintains capital controls, foreign currency cannot move freely in and out of China. If those controls were lifted and Chinese citizens were free to exchange their collective equivalent of over USD1 trillion in savings for Dollars or Euros and invest or spend them abroad, there could be a run on foreign, convertible currencies creating pressure to drive the RMB value even lower than it is now. So, dropping capital account controls and allowing the RMB to float freely against other currencies might have the opposite effect from what Treasury Secretary Snow and others are seeking.

Even if China’s government allows a limited revaluing of the RMB and establishes a new peg at a somewhat higher rate the effect on overall trade flows for the U.S. and Europe will probably be very limited to non-existent, even if it lowers marginally the U.S.’ bilateral trade deficit with China. Much of what China exports to the U.S. are labor intensive products such as toys, footwear and textiles. As China’s

share of the U.S. market for such products has grown to over 60 percent in the last decade, so has Taiwan's, South Korea's and Hong Kong's combined share declined by roughly the same amount. Forcing up the import costs of such products from China by revaluing the RMB will not bring manufacturing and jobs back to the U.S.; rather, it will drive production to even lower-cost countries.

High-end products such as computers are for the most part assembled rather than manufactured in China. The sophisticated components that inform high-end products are largely manufactured in the U.S., South Korea and Taiwan, then put together, encased and (somewhat misleadingly) labeled "Made in China" by low-cost Chinese workers. In fact, over half the value of China's imports and exports is accounted for by this kind of export processing.

At the same time that trade with China and other Asian countries continues to grow rapidly and our trade deficit with China is mushrooming into uncharted territory, our overall trade deficit with Asia is declining as a percentage of our global trade deficit. This is so because of trade displacement within Asia (i.e., Japan, South Korea, Taiwan, et al. shifting production of U.S.-bound exports to China), and the growing share of the U.S. market going to the EU, Canada and Mexico. Revaluation of the RMB may slow the trade displacement trend within Asia, but it will do little or nothing to ease our global trade deficit.

But, you may ask, wouldn't RMB revaluation boost sales of U.S. products in China, even if it does next to nothing to reduce U.S. imports? Perhaps somewhat in the short run, but U.S. investment in China is increasingly aimed at China's large and rapidly growing domestic market, and thus is substituting for direct exports of products manufactured in the U.S. A significant lowering of imported goods prices because of a RMB appreciation might create a temporary spike in U.S. exports to China of both producer and consumer products, especially now that both producers and consumers there are ramping up spending. But over time more and more of Chinese demand for U.S. products will be supplied by U.S. manufacturing in China.

In any event, the arguments for and against RMB revaluation may be moot, at least for the time being. Despite some indications in July 2003 that Beijing was contemplating both a wider trading band for the RMB and eventual relaxation of capital account controls, China's Premier Wen Jiabao in early August 2003 said that "To keep the stable RMB will not only benefit the stability and development of the economic and financial order in China, but also the economic and financial order of surrounding countries, and the international economic and financial order." In other words, relaxing currency controls and allowing the RMB to float would, in the opinion of China's government, put the future development of China's burgeoning but still relatively underdeveloped economy and the global financial system at considerable uncertainty if not outright risk. In that, Premier Wen is probably right, although not for reasons that redound to China's glory. The possibility of unobstructed capital flight and the impact on China's state banking system of suddenly exposed \$500 billion in bad (and mostly unrecoverable) loans should give pause to China's Premier, and the heads of central banks everywhere.

SUMMER OF OUR DISCONTENT (JULY 2004)

Although the threat of imminent conflict in the Taiwan Strait remains relatively low, tensions there have risen steadily over the past five months since the re-election of Taiwan's President Chen Shui-bian. Despite the close margin of victory (Chen won by about 30,000 votes of the 13 million cast and the two referenda he placed on the ballot were both defeated under Taiwan's referendum rules), the widespread view is that Chen will not be deterred from pursuing his pro-Taiwan independence agenda, especially if the DPP and its coalition partners win a victory in the legislative elections coming later this year.

The expectation that there will be four more years of Taiwan independence salami-slicing by Chen has raised alarm in Beijing, led to rancorous debate over the PRC's recent "soft" policy toward Taiwan, and created a fair amount of consternation for U.S. policymakers. And, although Chen sought to assuage in his second inaugural address the most extreme concerns over his quest for Taiwan independence (as he did in his first inaugural in 2000), he nevertheless left the door wide open for future referenda, as well as a "re-engineering" of the ROC constitution during his second term. While "re-engineering" apparently does not include such explosive issues as a name change for Taiwan or a declaration of independence, it probably does include, at minimum, the Taiwan indigenization of the ROC constitution which, *inter alia*, would almost certainly embed in it the concept of Taiwan sovereignty.

Relations across the Taiwan Strait remain essentially frozen with no prospect in the near term, at least, for a resumption of cross-Strait dialog. Beijing will not drop its insistence that Taiwan accept the “one-China” precondition for the resumption of dialog, nor will Chen accept that precondition. The political impasse weighs more heavily on Beijing than it does on Taiwan, or at least on Chen Shui-bian. With no apparent prospect that Chen will ever yield to Beijing’s “one-China” precondition, or even treat with the PRC under any conditions save Beijing’s acceptance of Taiwan sovereignty, the long simmering debate in the PRC over how to deal with Taiwan is reaching full boil again.

In the 1996 and 2000 Taiwan elections, the PRC sought to influence the outcome by adopting hard line tactics. In 1996, the PRC launched massive joint force military exercises near the Taiwan Strait that included test missile firings over the northern and southern tips of Taiwan. In 2000, China’s top leadership warned of “dire consequences” if Chen were elected. In both cases, the hard line approach failed to achieve Beijing’s desired result. Mindful of that fact and aware of the growing economic integration between Taiwan and the PRC, China’s leadership opted more recently to forswear cruder attempts to influence political outcomes in Taiwan and focus instead on maintaining Taiwan’s international isolation while playing the economic integration card for all it was worth. The judgment behind this policy shift was that as time went on, frustration in Taiwan over diplomatic isolation plus the growing attraction of the PRC’s increasingly powerful economy would make some kind of cross-Strait accommodation a plausible alternative for the majority of Taiwanese.

This policy and the judgment behind it failed its first test in the 2004 Taiwan elections, though not by much. Although Beijing might take some solace from the whisker-thin majority that Chen received, they could do so only by choosing to ignore the fundamental political and socio-cultural shift that has taken place in Taiwan over the past four years. That shift does not auger well for a Taiwan embrace of the Mainland. The process of “indigenization” is now well underway and with it, the increasingly widespread acknowledgement among Taiwanese that they are politically, culturally and historically distinct from their cousins on the Mainland. This tectonic shift toward a distinct self-identity has been accompanied by a similar shift in the political center of gravity in Taiwan. As recently as the 2000 election the KMT was able to include in its platform a call for eventual reunification. By 2004, the coalition “Pan-Blue” successor to the KMT was forced to spend a good bit of its campaign defending its candidates against DPP charges that they were too close to China and not pro-Taiwan enough. In short, the differences among political parties in Taiwan over whether Taiwan should seek any arrangement with the PRC has narrowed greatly, and shifted toward the “no deal” end of the spectrum.

This shift has left Beijing without an effective Taiwan policy. The dwindling number of “soft approach” advocates cling to the view that indigenization need not inevitably lead to permanent, sovereign separation (or a Taiwan Strait conflict to prevent that from happening), and that even an indigenized Taiwan could still be persuaded to join in some arrangement with the motherland especially if the PRC continues on the course of economic and political reform.

Nevertheless, Beijing hardliners seem once again on the ascendancy. The PRC, for example, was quick to use the divisive Taiwan election and angry demonstrations that followed in its immediate aftermath as a possible pretext for direct intervention, stating that China could not stand idly by if Taiwan descended into chaos. More recently, the PRC has chosen to give significant publicity to its annual military exercises in the Taiwan Strait, in contrast to the low key approach it had taken in recent years. This year’s exercise involved 18,000 troops, the largest force assembled for this exercise since the near-crisis in the Taiwan Strait in 1996. Moreover, this year’s exercise featured a display of virtually all the high-tech equipment in the PLA’s arsenal. More thought is reportedly now being given in Beijing toward a possible early “surgical strike” against Taiwan, rather than wait until after the 2008 Beijing Olympics for a larger scale and possibly prolonged conflict.

Whether anticipating the worst or simply seeking to send signals of its own, Taiwan has also stepped up military exercises and publicity of its war preparedness. For the first time since the late 1970s, Taiwan this summer resumed practice take-offs and landings of its fighter aircraft on Taiwan’s expressways near air force bases, an emergency procedure that would be put into play if its bases were knocked out by PRC air strikes. Taipei is also reportedly seeking Singapore’s and the Philippines’ cooperation to evacuate Taiwan’s leaders in case of war.

Heightened tensions in the Strait have been abetted somewhat by the unfortunate timing of Pentagon activities. Unprecedentedly large-scale U.S. Navy exercises this summer culminated in positioning seven of the twelve U.S. carrier groups within striking distance of the PRC in July. In June, U.S. war game planners proposed

that in the event Taiwan were attacked by the PRC it could retaliate by hitting high value PRC targets such as the Three Gorges Dam.

Although it is extremely unlikely that the U.S. political leadership intended either of these activities as a signal to Beijing (and, in fact, the White House was probably not aware of the war games proposal until after the media got a hold of it), the reactions in both Beijing and Taipei served to underscore once again the unavoidable shadow that the U.S. casts over the Strait, whether we like it or not. That being the case, our policies toward the Mainland and Taiwan must be clear and consistent. They are currently neither, thus raising the risk of conflict in the Strait.

President Bush made clear upon taking office that he wanted to end nearly 30 years of creative ambiguity over our relations with Taiwan and the Mainland. As an outgrowth of that desire, two salient points have emerged over the past three years that sum up the Bush Administration policy toward the issue of cross Strait relations. Point one was delivered in April 2001 when Bush said that the U.S. would “do whatever it takes” to defend Taiwan if it were attacked. Point two surfaced during a press conference with PRC premier Wen Jiabao when he warned against unilateral action by either side that could destabilize the Taiwan Strait. On the latter point, he was specifically referring to President Chen’s just-announced plan to conduct a referendum in conjunction with the March 2004 Presidential elections in Taiwan. There are also two other points to our policy which did not originate with the Bush Administration, but which the Bush Administration has embraced—that the U.S. does not support Taiwan independence and that it desires a peaceful outcome to the Taiwan Strait issue, one that is acceptable to both sides.

On the surface we appear to be delivering a fairly clear message: “PRC: don’t attack Taiwan; Taiwan: don’t provoke an attack by the PRC; both sides: work together to solve this issue.” Why, then, are tensions rising in the Taiwan Strait? Because our actions have not matched our words and indeed are shrouding our supposedly clear policy in greater, not less, ambiguity, creating a vacuum which both Beijing and Taipei feel pressed to fill.

The principal “actions” culprit is our continuing—indeed, accelerating—support for Taiwan’s military. Soon, Taiwan will begin taking delivery of the \$18.2 billion arms package that President Bush approved in 2001. The package includes Patriot anti-missile batteries, submarines and anti-submarine aircraft. The U.S. military is also permitting, even encouraging, more direct contact, communication and coordination between the U.S. Pacific Command and Taiwan’s military commanders.

The rationale for our continuing efforts to beef up Taiwan’s military capability (which by now irrefutably abrogate our pledge to China in the 1982 Joint Communiqué to “gradually decrease the quantity and quality” of arms we would sell to Taiwan) has been that a Taiwan confident of its capability to resist a Mainland attack would be more willing to talk with the Mainland and seek an arrangement acceptable to both sides. What has happened instead is that our growing support for, and involvement with, Taiwan’s military is being increasingly viewed on Taiwan (and especially by the ruling party leadership) as a signal of U.S. support of Taiwan’s political goals, including eventual independence. As a senior Mainland diplomat said to me recently: “When you tell Chen Shui-bian not to destabilize the Taiwan Strait, that has no teeth; when you sell \$18 billion worth of arms to Taiwan, that has teeth.”

While a cut-off of arms sales to Taiwan would be politically unsupportable in the U.S., we need to formulate a more precise and convincing rationale for any future sales or military-to-military contacts with Taiwan, one that would advance our goal of peaceful resolution of the Taiwan Strait issue. Our position now is anything but precise, is not advancing our policy goal, and is being subjected to a variety of interpretations in the manner in which it is articulated among various agencies of the U.S. Government. The policy vacuum we are creating invites miscalculations on both sides of the Strait that could quickly transform into armed conflict.

Cochair BECKER. Thank you very much.

**STATEMENT OF RICK BENDER, PRESIDENT
WASHINGTON STATE LABOR COUNCIL, AFL-CIO
SEATTLE, WASHINGTON**

Mr. BENDER. Mr. Chairman and Members of the Commission, for the record, my name is Rick Bender. I’m President of the Washington State Labor Council, AFL-CIO.

I want to thank you for the opportunity to testify today on this very important topic, on behalf of more than 450,000 unit members that I represent here in the state of Washington.

My comments today will put into a general context labor's perspective on trade and the impact of globalization on the lives of working men and women and the economy of the state of Washington.

In my travels over the years I've often heard others comment on how wonderful the economy of Washington State must be, an economy that reaps the rewards of free trade. Some have even called Washington State a free trade nirvana.

Indeed, Washington State has historically been a trade surplus state. One in three—or one in five—are either directly or indirectly dependent on trade. We have deep-water ports that are vital and bustling with strong and climbing revenues.

Well, in part I'm here today to talk to you about things that are not always what they seem to be. The future in Washington State is not as rosy or optimistic as the past might have seemed. Our state has begun to feel the structural dislocations that other parts of the country began feeling quite some time ago.

It's not a coincidence that the opening challenge to the World Trade Organization and to China's application to be a WTO member occurred in the streets of Seattle several years ago. Over 40,000 trade unionists, environmentalists, faith-based leaders, students and community members raised the question that has become ever more resonant with time: At what price and on what basis will globalization continue?

The question being asked was whether the low road or the high road was to be taken to global economic growth and distribution. Hanging in the balance to these questions are issues no less important than the nature of democracy and sovereignty, labor and human rights, environmental standards, and the overall health and safety of our communities.

When I studied economics at the University of Washington and at UPS, the prevailing wisdom on trade was David Ricardo's theory of comparative advantage. As I recall, every country would be better off if they specialized in the production and export of those things they did best. I recently read that the author of the economics textbook most of us used, Paul Samuelson, is beginning to question the validity of this theory given outsourcing in a global market of skilled labor.

I'm here to tell you what labor sees on the ground are thousands and thousands of workers losing through trade, even though shareholders may be prospering. The lower cost of iPods and consumer electronics does not compensate for the loss of high-wage, high-skill jobs to China. Lower prices at Wal-Mart are not compensating for the aerospace machinists and engineering jobs that are gone forever, or for the threat posed to our agricultural and fruit-processing jobs that form the backbone of the economy of eastern Washington.

Our national trade deficit with China has been rising at an alarming rate over the past two decades. For 2004 the trade deficit is estimated to be over \$150 billion. What is most troubling is that China can now compete with the world with low wages as well as with high-tech. So much for comparative advantage.

Unfortunately, U.S. Department of Commerce doesn't publish country to state trade balances so I can't paint a clear picture of the Washington State-China trade balance. However, I can share with you the results of the recent study entitled "Washington State Job Exports: An Analysis of the Role Trade Plays in Manufacturing Job Losses." This report by the Job Export Data Project, of AFL-CIO Industrial Union Council, for the first time attempts to measure job loss by cause. I have included the whole report in my written testimony.

One of the important policy debates surrounding the problems in manufacturing sector is whether trade-related factors, import competition and offshore outsourcing, have been responsible for the dramatic decline of U.S. manufacturing jobs. Underlying this debate is whether U.S. Federal trade, tax and other policies have promoted this job loss.

The Job Export Data Project has taken a first step in addressing this issue by examining plant closures and worker layoffs as reported by states in their Worker Adjustment and Retraining Notification Act notices and Trade Adjustment Act petitions. It is important to note that given reporting threshold requirements, these numbers, while they're good, still tend to underestimate the problem.

Like many other states, Washington has been losing high-paying family wage manufacturing jobs. Between January of 2001 and August of 2004 Washington State lost 66,700 manufacturing jobs. This represented about one out of every five manufacturing jobs here in the state of Washington.

According to the report, over the same timeframe nearly 90 percent of the WARN-associated layoffs by Washington State manufacturers—27,196 job cuts involving 14 firms—were trade related. The Boeing Company alone accounted for the lion's share of these layoffs, 23,814 job cuts in all, but nearly half of the non-Boeing layoffs, 3,382 of the 7,177 cuts, were due to trade. No industry was spared. Lumber and wood products, paper and allied products, electronics, food manufacturing industries all took trade-related hits.

Even given the underestimation problem of this data, the results still show that 41 percent of Washington's plant closures and layoffs in manufacturing sector were brought about by competition from foreign imports at offshore outsourcing. Exacerbating this problem is the fact that the new jobs being created pay on average one-third less than the jobs we are losing.

I would like to briefly share one non-Boeing example with you. In the late 1990s China, the world's largest producer of juice concentrate, dumped apple juice concentrate on the U.S. market. Washington's juice concentrate industry was hit hard and hundreds of workers represented by Teamsters and operating engineers were laid off.

Cochair BECKER. Mr. Bender, you've exceeded the time limit. Just wrap it up as quickly as you can.

Mr. BENDER. I sure will, Mr. Chairman.

Here's the concern that we have. As you well know, Washington State is very strong in terms of our apple production, and we represent about one-half of the U.S. production but only one-eighth of China's apple production. While China exports 90 percent of its

juice concentrate production, it's currently about three percent. China's goal in terms of global apple trade is to export 25 percent of the world market. You can imagine what that impact is going to have on our eastern Washington farmers and the economy in Washington State if that happens. So we are very much concerned, this is an important topic.

I want to thank you for your time and effort. Trade has impacted many of the people that I represent, and remember, behind all these numbers are people trying to make a living, trying to support their families that have devastating impacts upon them as well as the economy in the state of Washington.

[The statement follows:]

**Prepared Statement of Rick Bender, President
Washington State Labor Council, AFL-CIO, Seattle, Washington**

Mr. Chairman and Members of the Commission, for the record my name is Rick Bender, I am the President of the Washington State Labor Council, AFL-CIO. I want to thank you for the opportunity to testify today on this very important topic on behalf of the more than 450,000 union members that the Washington State Labor Council represents.

My comments today will put into a general context labor's perspective on trade and the impact of globalization on the lives of working men and women and the economy in the state of Washington.

In my travels over the years I have often heard others comment on how wonderful the economy of Washington State must be, an economy that reaps the rewards of free trade. Some have even called Washington State a free trade nirvana.

Indeed, Washington State has historically been a trade surplus state. One in five jobs are either directly or indirectly dependent on trade. We have deep-water ports that are vital and bustling with strong and climbing revenues.

Well, in part, I am here today to tell you that things are not always what they seem. The future in Washington State is not as rosy or optimistic as the past might have seemed. Our state has begun to feel the structural dislocations that other parts of the country began feeling quite some time ago.

It is not a coincidence that the opening challenge to the World Trade Organization and to China's application to be a WTO member occurred in the streets of Seattle several years ago. Over forty thousand trade unionists, environmentalists, faith-based leaders, students, and community members raised a question that has become ever more resonant with time: At what price and on what basis will globalization continue?

The question being asked was whether the low road or the high road was to be taken to global economic growth and distribution. Hanging in the balance to these questions are issues no less important than the nature of democracy and sovereignty, labor and human rights, environmental standards, and the overall health and safety of our communities.

When I studied economics at the University of Washington back in the early 1970's, the prevailing wisdom on trade was David Ricardo's theory of comparative advantage. As I recall, every country would be better off if they specialized in the production and export of those things they did best. I recently read that the author of the economics textbook most of us used, Paul Samuelson, is beginning to question the validity of this theory given outsourcing in a global market of skilled labor.

I'm here to tell you that what labor sees on the ground are thousands of workers losing through trade even though shareholders may be prospering. The lower cost of iPods and consumer electronics does not compensate for the loss of high wage/high skill jobs to China. Lower prices at Wal-Mart are not compensating for the aerospace machinist and engineering jobs that are gone forever or for the threat posed to our agricultural and food processing jobs that form the backbone of the economy of Eastern Washington.

Our national trade deficit with China has been rising at an alarming rate over the past two decades. For 2004 the trade deficit is estimated to be over \$150 billion. What is most troubling about this is that China can now compete with the world with low wages as well as with high tech. So much for comparative advantage.

Unfortunately the U.S. Department of Commerce doesn't publish country to state trade balances, so I can't paint a clear picture of the Washington State-China trade balance. However, I can share with you the results of a recent study entitled,

“Washington State Job Exports: An Analysis of the Role Trade Plays in Manufacturing Job Loss.” This report by the Job Export Database Project (JEDP), of the AFL-CIO Industrial Union Council, for the first time attempts to measure job loss by cause. I have included the whole report with my written testimony.

One of the important policy debates surrounding the problems in the manufacturing sector is whether trade-related factors—import competition and offshore outsourcing—have been responsible for the dramatic decline of U.S. manufacturing jobs. Underlying this debate is whether U.S. Federal trade, tax, and other policies have been promoting this job loss.

The Job Export Database Project has taken a first step in addressing this issue by examining plant closures and worker layoffs as reported by states in their Worker Adjustment and Retraining Notification Act notices and Trade Adjustment Act petitions. It is important to note that given reporting threshold requirements these numbers while good will tend to underestimate the problem.

Like many other states Washington has been losing high paying, family wage manufacturing jobs. Between January 2001 and August 2004 Washington State has lost 66,700 manufacturing jobs. This represented one out of five of our manufacturing jobs.

According to the report, over the same timeframe, “nearly 90% of the WARN-associated layoffs by Washington State manufacturers—27,196 job cuts involving 14 firms—were trade-related. The Boeing Company alone accounted for the lion’s share of these layoffs, 23,814 job cuts in all, but nearly half of the non-Boeing layoffs—3,382 of 7,177 cuts—were due to trade. No industry was spared: Lumber and wood products, paper and allied products, electronics, and food manufacturing industries all took big trade-related hits.”

Even given the under-estimation problems of the data, the results still show that 41% of Washington’s plant closures and layoffs in the manufacturing sector were brought about by competition from foreign imports and offshore outsourcing. Exacerbating this problem is the fact that the new jobs being created pay on average one-third less than the jobs we are losing.

I would like to briefly share one non-Boeing example with you. In the late 1990’s China, the world’s largest producer of juice concentrate, dumped apple juice concentrate on the U.S. market. Washington’s juice concentrate industry was hit hard and hundreds of workers represented by the Teamsters and the Operating Engineers unions were laid-off. In 1999 the U.S. Trade Authority charged China with dumping and applied retroactive tariffs on 5 of China’s 9 concentrate exporters. Three years later most of these tariffs were reduced on appeal. While China’s concentrate industry continues to grow our workers have been dislocated.

The threat posed by China’s apple production is even greater. China’s 2004 apple harvest has been estimated at 1 billion boxes, this accounts for one out of every two apples in the world. Put another way this represents about 88 billion apples or enough to feed every man, woman, and child in the world a dozen apples each.

Washington State’s apple production represents one-half of all U.S. production but only $\frac{1}{8}$ of China’s apple production. While China exports 90% of its juice concentrate production it currently exports only 3% of its apple harvest. China’s goal is to export 25% of the global apple trade within four years.

While Chinese apples are currently prohibited from U.S. markets it is only a matter of time before the U.S. market opens to China. Given the concentration of the tree fruit industry in Eastern Washington, and the relative lack of economic diversity in this region, the potential negative impact on tens of thousands of workers in Washington State, local communities in Eastern Washington, and state revenues is enormous.

These brief comments I hope have given you an overview of labor’s concern about unfettered free trade and the challenge that China poses for the economy in the Pacific Northwest and for workers in Washington State.

Rapid globalization has gone well beyond free trade theory. The existence of a global skilled labor market, offshore outsourcing practices of U.S. multinational corporations, continued currency manipulation by China, and continued repression of labor and human rights in China has created a tremendously non-level playing field for trade. You have your work cut out for you grappling with these issues.

I want to close by thanking you for coming to Washington State to listen to us and for your interest in understanding the impact of U.S.-China trade relations in the Pacific Northwest.

Cochair BECKER. Thank you very much.

And let me tell all the panelists and the future ones, too. Your entire statement, whether you get a chance to cover it all or not, will be put into the record.

Robert Scott.

**STATEMENT OF ROBERT E. SCOTT, Ph.D.
DIRECTOR OF INTERNATIONAL PROGRAMS
ECONOMIC POLICY INSTITUTE, WASHINGTON, DC**

Dr. SCOTT. Good morning, Mr. Chairman and Members of the Commission. Thank you for having me here today. My name is Robert Scott, and I'm a senior international economist with the Economic Policy Institute in Washington, D.C.

The rise in the U.S. trade deficit with China between 1989 and 2003 caused a displacement of production that supported 1.5 million jobs, as shown in my recent study for the Commission. I'm going to summarize parts of that study today and also some of the work of Kate Bronfenbrenner and Stephanie Luce that's also been supported by the Commission.

Now, the 1.5 million jobs reflect the effect on labor demand in terms of lost job opportunities in an economy with a worsening balance between exports and imports. Most of those lost opportunities were in the high-wage and job-hemorrhaging manufacturing sector. The loss of job opportunities grew each year during the 1990s and accelerated after China entered the WTO. The loss of these potential jobs is just the most visible tip of China's overall impact on the economy.

During the 14-year period covered by my study there's been a significant shift in the kinds of industries suffering displacement. It's a shift that runs counter to our expectations. Where the largest impact was once felt in labor-intensive low-tech manufacturing industries like apparel and shoes, the fastest growth in job displacement is now occurring in highly skilled and advanced technology areas once considered relatively immune, such as electronics, computers and communications equipment.

Next I'll briefly summarize major findings in the study.

Nationwide the loss of job-supporting production due to growing trade deficit with China has more than doubled since China entered the WTO in 2001. The 1.5 million job opportunities lost are distributed amongst all 50 states and D.C.

In the Northwest job losses rose from 10,800 in the four year '97 to 2001 period to 12,000 jobs in the two-year period between 2001 and 2003. So clearly the annual rate of job loss has accelerated dramatically since China entered the WTO.

These findings are supported by the research of Professors Bronfenbrenner and Luce for the Commission. They've found that there's been, quote, "a major increase in production shifts out of the U.S. in the last three years, particularly to Mexico, China, India and other Asian countries."

Between 2001 and 2003, after China had entered the WTO, the growth of the trade deficit with China displaced production and supported 5,400 jobs in Oregon and 6,600 jobs in Washington, according to the results of my study. China's exports, as I said, of electronics, computers, communications equipment, along with other products that use highly skilled labor and advanced tech-

nologies, are growing much faster than its exports of lower-value, labor-intensive items.

China's also on the verge of gaining advantage in more advanced industries, such as autos and aerospace products.

As a result, China is now responsible for the entire \$32 billion trade deficit in advanced technology products, a truly remarkable finding.

Between 1989 and 2001 the Northwest has suffered small net losses in employment and agriculture. In the past two years, according to some of our data, although different from what we've heard just now this morning about apple juice, trade has supported a gain of 1,200 jobs in Oregon and 1,700 jobs in Washington in agriculture. Important to note, however, that these gains were offset by the loss of 5,000 manufacturing jobs in Oregon and 5,900 jobs in Washington. Thus China trade has resulted in a net loss of jobs for both states. We can't stress that too much in our assessment of the China trade effect on the Northwest economy.

Finally, the government has failed to develop critically needed data on import and export trade flows to state and regional level. Bronfenbrenner and Luce also note that companies are making increased efforts to cover up shifts of production to China and other countries. U.S. Government needs to mandate reporting of such production shifts and such trade flows by U.S. and foreign multinationals operating in this country. I know that these problems have been a concern of the Commission in the past.

I have just a couple minutes left. I'll very briefly summarize these results in charts, and make a couple of key points. I'm sorry this one's so small, but the point of this chart is to show that the U.S. trade balance, that is, the fourth line in this chart, measured in dollars, has increased from \$6.1 billion in 1989 to 125.6 in 2003, a growth of 119 billion, a twenty fold increase, just a remarkable increase. I note that the ratio of exports to imports is about six to one, the most imbalanced trade relationship in our history.

In terms of job opportunities created and displaced, the U.S. trade deficit generated had a negative 85,000 job opportunities in '89. This estimate rose to over 1.5 million jobs in 2003, for a net loss, as you see in the next-to-last column, of 1.460 jobs in the entire '89 to 2003 period.

I'm going to break that down now in the next couple of slides. You see that on an annual basis the trade balance, the red bar on the bottom, has been accelerating dramatically, from five and a half billion a year in the early period to over \$21 billion a year in the later period.

Losses have accelerated from 70 thousand jobs a year in the early period to 230,000 a year nationwide, in the period since China entered the WTO.

The final slide summarizes nine cases from the Bronfenbrenner and Luce study of actual plant closures and shifts to other countries. China does not appear on this list for Washington and Oregon, but there have been plants lost to other countries. We were hemorrhaging jobs just in the first three months of 2003, as shown in the Bronfenbrenner and Luce study, with a total loss of approximately 1,500 to 1,700 jobs.

I see my time is up. I'll just conclude that China is engaging in a number of unfair trade practices, particularly in terms of exchange rates, its abuse of human rights, and its violation of our trade laws, and we are highly deficient in refusing to take much more aggressive actions.

Thank you. I appreciate your time, and am sorry for running over.

[The statement follows:]

**Prepared Statement of Robert E. Scott, Ph.D.
Director of International Programs
Economic Policy Institute, Washington, DC**

***U.S.-China Trade, 1989–2003:
Impact on Jobs and Industries in the Northwest***

Good morning Mr. Chairman and Members of the Commission. My name is Robert Scott and I am a senior international economist with the Economic Policy Institute in Washington, D.C. Thank you for inviting me to testify today. The rise in the United States' trade deficit with China between 1989 and 2003 caused the displacement of production that supported 1.5 million U.S. jobs, as shown in my recent study for the Commission. Some of those jobs were related to production or services that ceased or moved elsewhere; others are jobs in supplying industries. These jobs reflect the effect on labor demand—in lost job opportunities—in an economy with a worsening balance between exports and imports. Most of those lost opportunities¹ were in the high-wage and job-hemorrhaging manufacturing sector. The number of job opportunities lost each year grew rapidly during the 1990s, and accelerated after China entered the World Trade Organization in 2001. The loss of these potential jobs is just the most visible tip of China's impact on the U.S. economy.

During the fourteen-year period covered by my study, there has been a significant shift in the kinds of industries suffering job displacement, a shift that runs counter to initial expectations. Where the largest impact was once felt in labor-intensive, lower-tech manufacturing industries such as apparel and shoes, the fastest growth in job displacement is now occurring in highly skilled and advanced technology areas once considered relatively immune, such as electronics, computers, and communications equipment.

Major Findings of This Study Include:

- Nationwide, the loss of job-supporting production due to growing trade deficits with China has more than doubled since it entered the WTO in 2001. The 1.5 million job opportunities lost are distributed among all 50 states and the District of Columbia. In the Northwest, losses rose from –10,800 in 1997–2001 to –12,600 in 2001–03, despite the fact that the latter period was half as long as the former.
- These findings are supported by the results of research by Kate Bronfenbrenner and Stephanie Luce for the Commission, who found that there has been “a major increase in production shifts out of the U.S. in the last three years, particularly to Mexico, China, India and other Asian countries. (Bronfenbrenner and Luce 2004, i)”
- Between 2001 and 2003, after China entered the WTO, the growth of the U.S. trade deficit with China displaced production that supported a net total of –6,300 in Oregon and –6,400 jobs in Washington.
- China's exports to the United States of electronics, computers, and communications equipment, along with other products that use more highly skilled labor and advanced technologies, are growing much faster than its exports of low-value, labor-intensive items such as apparel, shoes and plastic products.
- China is also on the verge of gaining advantage in more advanced industries such as autos and aerospace products.
- Consequently, China now accounts for the entire \$32 billion U.S. trade deficit in Advanced Technology Products (ATP).
- Between 1989 and 2001, the NW suffered small net losses of production that supported employment in agriculture. In the past two years, these trends have reversed and trade has supported production that employed 245 jobs in Oregon

¹The term “job opportunities” refers to actual or potential domestic jobs that could be supported by the amount of production represented by a given volume of imports or exports.

and 330 in Washington. However, these gains were more than offset by the loss of $-4,800$ manufacturing job opportunities in Oregon and $-4,300$ jobs in Washington.

- The U.S. Government has failed to develop critically needed data on import and export trade flows at the state and regional level. Bronfenbrenner and Luce also note that companies are making increased efforts to cover up shifts of production to China and other countries. The U.S. Government needs to mandate reporting of such production shifts by U.S. and foreign multinational companies operating in this country.

China's entry into the WTO was supposed to provide openings for sufficiently rapid growth in U.S. exports to reduce the trade deficit with China. While the export growth rate has increased since 2001 (from a very small base), the value of those exports has been swamped by a rapidly rising tide of imports. The WTO is a free trade and investment agreement that has provided investors with a unique set of guarantees designed to stimulate foreign direct investment and the movement of factories around the world, especially from the United States to low-wage locations such as China and Mexico (Scott 2003). Furthermore, no protections were contained in the core of the agreement to maintain labor or environmental standards. China's refusal to revalue its exchange rate, despite enormous demand for its currency, is also a major contributor to the growth of the United States' trade deficit. Thus, the WTO and the broader process of globalization have tilted the economic playing field in favor of investors, and against workers and the environment, resulting in a race to the bottom in wages and environmental quality.

Dissecting Trade and Employment Flows

An analysis of the effect of trade on the domestic economy begins by considering the impact of both imports and exports. If the United States exports 1,000 computers to China, many American workers are employed in their production. If, however, the United States imports 1,000 computers from China rather than building them domestically, then a similar number of Americans who otherwise could have been employed by the office machine industry and its suppliers will have to find other work. Hence, increases in exports support domestic employment, while increases in imports displace domestic production that could have supported more jobs in any given sector. Some analysts examine only the benefits of growing exports to the economy, while ignoring the role of imports. This is especially true at the state and metropolitan level, because the U.S. Census Bureau generates a series of reports on exports from these regions. No comparable statistics on domestic production displaced by imports are available from the U.S. Government. My report is designed in part to begin filling that gap with estimates of the employment effects of imports and exports from China at the state level.

Overview

Total trade flows between the United States and China are shown in the top half of **Table 1**. U.S. exports increased from \$5.8 billion in 1989 to \$26.1 billion in 2003, a four-fold increase. Imports rose from \$11.9 billion to \$151.7 billion in the same period, a twelve-fold increase on top of a base that was already twice as large as exports. As a result, the U.S.-China trade deficit increased \$119.5 billion, or nearly two thousand percent. The rate of growth of U.S. trade with China has accelerated since 1989, as shown in **Figure 1**. Between 1989 and 1997, U.S. imports from China grew an average of \$6.4 billion per year; while exports increased about \$1 billion per year. Thus the trade deficit widened \$5.5 billion per year, on average, in this period.

Between 1997 and 2001, import growth increased more than 50 percent, to \$10 billion per year, export growth picked up slightly (to \$1.4 billion), and the trade gap expanded by \$8.6 billion per year. Between 2001 and 2003, import growth jumped to \$25 billion per year, a 150 percent rise in only 4 years. Exports grew rapidly, but not enough to offset the explosion in imports, so deficits increased, on average, \$21 billion per year in 2002 and 2003, and these figures were restrained by the 2001 recession. The effect on the U.S. economy from trade trends with China has clearly jumped onto a different plane.

The employment impact of a change in trade is determined by its effect on the trade balance, the difference between exports and imports at the detailed sectoral level.² Ignoring imports and counting only exports is like balancing a checkbook by

²The model used in this study breaks the economy down into either 184 or 192 discrete sectors or "industries." It is assumed that equal amounts of labor are required to produce one dollar's worth of imports or exports in that sector. Thus the employment effects of a \$10 trade sur-

counting deposits but not withdrawals. The many officials, policy analysts, and business leaders who ignore the negative effects of imports and talk only about the benefits of exports are engaging in false accounting.³

The labor content of U.S. trade is shown in the bottom half of Table 1. Between 1989 and 2003, the growth in U.S. exports to China created demand that supported 199,000 additional U.S. jobs. In the same period, the growth of imports displaced production that could have supported an additional 1,659,000 jobs (note that the growth of imports displaces domestic jobs, so the labor content of import growth is reported as a negative number in Table 1 and throughout this paper). As a result, growth in the U.S. trade with China eliminated a net 1,460,000 domestic job opportunities in this period.

These estimates include both the direct and the indirect effects of changes in trade flows on employment. Direct effects include the employment that could be supported by a given level of steel imports, while indirect effects include employment supported by the steel industry in other manufacturing sectors (e.g., machine tools), as well as jobs in service industries (e.g., computer programming or temporary help). Manufactured goods make up the vast majority of the United States' trade with China. In 2003, 79 percent of U.S. exports to China were manufactured goods, as were 99 percent of imports. However, only 40 percent of the jobs supported by growth in exports and 79 percent of the jobs supported by growth in imports were in manufacturing in the period between 2001 and 2003. The differences between these two shares (29 percent for exports and 19 percent for imports) reflect differences in the relationships of the industries involved with production that supports jobs in sectors such as transportation, utilities, services and government.⁴

Some economists reject the general notion that trade growing deficits can cause a net loss of job opportunities. Their most common argument is that employment levels are determined by macroeconomic policies such as monetary and fiscal policies and, most relevant to trade, exchange rates, and that, in the long run, the economy is usually at full employment. In fact, when the economy is operating at full employment, as in the late 1990s, growing trade deficits affect the *distribution* of jobs rather than the overall *number* of jobs in the economy. Growing trade deficits resulted in less employment in manufacturing and more jobs in non-traded goods such as services, retail trade and construction (Bivens 2004).

In the long run, monetary and fiscal policies are usually adjusted to maintain full employment. If jobs in traded-goods industries pay better than the alternatives for workers affected by trade deficits, then the most important effects of growing trade deficits will be on the distribution of wages and incomes. Numerous studies have borne this out, demonstrating the significant negative effects that trade has had on the distribution of income over the last few decades of variable but generally growing trade deficits (TDRC report, chapter 3). In addition to offering higher wages for workers with comparable education and skills, manufacturing jobs also tend to offer better benefits as well.

On the other hand, the economy has operated well below potential output since 2001 because total employment growth has failed to keep up with growth in the working-age population (Price 2004). In this environment, the persistence of large and growing trade deficits has had a depressing effect on the overall level of employment, as well as its distribution across major sectors of the economy. The growth in the global U.S. trade deficit reduced manufacturing jobs by 1.78 million between 1998 and 2003 alone (Bivens 2004). In 2003 the manufacturing sector represented only 11.2 percent of total U.S. employment of 129.93 million jobs. But for the loss of these jobs in manufacturing, and in the economy as a whole, the manufacturing

plus in agricultural products (industry 1) are the same whether they represent imports of \$0 and exports of \$10, or imports of \$90 and exports of \$100.

³We distinguish carefully between total exports and domestic exports, and between consumption imports and general imports in this analysis. Domestic exports are goods produced in the U.S. Total exports also include goods produced in other countries and shipped through the U.S. Only goods produced in the domestic economy support employment in this country. Analogously, consumption imports are goods consumed in this country, while general imports also include some goods that are transshipped elsewhere. While their consumption imports were only 0.5 percent less than general imports in 2003, domestic exports were 6 percent less than total exports in that year. Hence, this later distinction has a significant effect on the trade balance and employment effects of U.S. exports. Foreign exports (the difference between total and domestic exports) were only 0.6 percent of total exports in 1989, so the value of goods transshipped through the U.S. has been growing over time, relative to total trade.

⁴Note that the same sectors that used to be included within manufacturing are now treated as part of the services sector, for example software programming. Some trade in these industries is included in our data set. Therefore, a small share of services jobs reported represent direct employment effects. See table 3b below.

share of U.S. employment would have been 1.4 percentage points (12.3 percent) higher in 2003 than it actually was.

Unintended Results of China's Entry Into the WTO

The claim that new trade agreements will create jobs and raise incomes in the United States has frequently been made by supporters of these agreements in both Republican and Democratic administrations. In practice, the results of China's 2001 entry into the WTO have confounded these expectations. U.S. exports to China increased by \$8 billion between 2001 and 2003, as shown in Table 1, an increase of 44 percent. U.S. imports increased by \$50 billion, or 49 percent, on a base of imports that was nearly six times the value of exports in 2001. As a result, the trade deficit increased by 50 percent in this two-year period alone. The growth in this deficit exceeded the expansion in the deficit over the eight years from 1989 to 1997, and the four years from 1997 to 2001.

Figure 2 examines the changing employment effects of trade with China. Growing trade deficits eliminated production supporting about 70,000 jobs per year between 1987 and 1997, and 105,000 jobs per year between 1997 and 2001. Between 2001 and 2003, job displacement soared to 234,000 per year, more than twice the rate of the preceding four years. This change is particularly noteworthy because total U.S. domestic employment fell from 2001 to 2003. Between 1997 and 2001, the U.S. global trade deficit increased by 31 percent (7.8 percent per year). Between 2001 and 2003, it grew 10 percent (5.1 percent per year).

Trade and Employment Displacement in the Northwest

The growth of trade deficits with China displaced production supporting jobs in all 50 states and the District of Columbia throughout the study period. Exports from every state have been offset by faster-rising imports. Tables 7a and 7b provide detailed estimates of job gains due to the growth in exports, jobs displaced due to growing in imports, and the trade balance for each state. In every case, many more jobs are lost due to growing imports than are gained through increasing exports.

In the Northwest, 13,400 job opportunities were lost between 1989 and 1997 (**Table 2a**). Job losses rose from -10,800 in 1997-2001 to -12,700 in 2001-03, despite the fact that the latter period was half as long as the former (**Table 2b**). On an annual basis, losses accelerated from 1,000 jobs per year in the 1989-97 period, to 2,700 in 1997-2001 and 6,350 in 2001-2003. Not only are the rates of job losses growing rapidly, but the rate of increase is accelerating. Between 1989-97 and 1997-2001 this rate increased 62%, and between 1997-01 and 2001-03 it increased by 134%. These data provide strong evidence that the loss of job opportunities to China in the NW is going to increase rapidly in the future unless policies are adopted to slow or reverse the growth in the bilateral trade deficit.

Between 1989 and 2001, the NW suffered small net losses of production that supported employment in agriculture. In the past two years, these trends have reversed and trade has supported production that employed 245 jobs in Oregon and 330 in Washington. However, these gains were more than offset by the loss of -4,800 manufacturing job opportunities in Oregon and -4,300 jobs in Washington.

Even within agricultural, perceived gains obscure the inherent volatility of this industry. Net U.S. exports increased 7-fold between 2002 and 2003, from \$0.4 billion to \$2.7 billion. However, the average level of net U.S. exports in this sector between 1997 and 2003, a more reliable indicator overall competitiveness, was \$0.7 billion, or about one-quarter of actual exports in 2003.

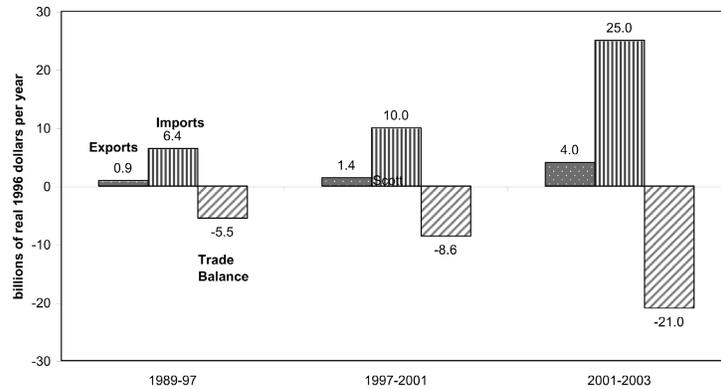
Within the manufacturing sector, several industries were particularly hard hit. The electrical equipment industry (especially audio/video and communications equipment) suffered the largest losses in the Northwest, growing from -2,400 in the 1989-97 period, to -1,700 in the (much shorter) 1997-2001 period and -2,200 since 2001. Data on the semi-conductor industry has only been available since 1997. Losses there rose from -1,000 in 1997-2001 and to -1,200 in 2001-03 (again, a doubling in the annual rate of job loss).

Perhaps most surprising are the changes in trade-related production supporting employment in the aerospace industry. Between 1989 and 1997 exports supported 900 new positions in Washington (with no impact in Oregon), one of the few sectors with a net gain. By 1997-2001 these gains fell to 100, and there was no net change in production supporting employment in 2001-03. This may be the harbinger of significant declines in employment directly related to trade with China. Note that these estimates may understate the impact of trade on aerospace and other sectors, because U.S. firms may be outsourcing production destined for sales in third country markets. This may be particularly important in aerospace because it is so heavily dependent on export sales.

Conclusion

Growing trade deficits with China have displaced production supporting 1.5 million U.S. jobs since 1989. The rate of job displacement is accelerating, especially since China entered into the WTO. China's entry into the world trading system was supposed to open up its vast domestic markets to products from around the world, and the United States engaged in extensive negotiations with China to ensure that it obtained its share of these benefits. These benefits have yet to materialize. Instead, multinational companies from around the world have used the protections for investment and intellectual property provided by the WTO to rapidly expand investment, production, and exports from that country. The United States remains China's primary market for exports. In just 15 years it has rapidly transformed its export profile from one dominated by clothing, shoes and plastic products, to one in which electronics, machinery, transportation equipment, other fabricated metals, chemicals, and medical equipment account for more than half of exports. China's leading-edge industries are gaining increased market shares in the motor vehicle and aerospace sectors, which have provided the most durable foundations for the United States' industrial base for generations. That shift, in turn, reduces the demand for high technology workers and highly skilled business professionals in the United States. It is hard to overstate the challenges posed by this export behemoth.

Figure 1:
Growth in U.S. Trade with China 1989-2003



Source: USITC (2004)

Figure 2:
Job losses Accelerated After China Entered WTO in 2001,
annual job losses

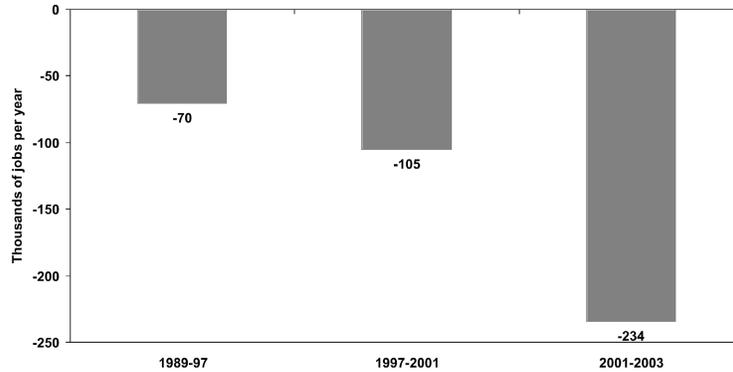


Table 1
U.S. trade with China and trade-related job creation and displacement, 1989-2003

U.S. trade with China (billions of constant 1996 dollars)

	Changes in:										percent 1989-2003
	Dollars										
	1989	1997*	1997*	1997*	2001	2001	2003	1989-97*	1997-2001*	2001-2003	1989-2003
U.S. exports	5.8	13.1	12.5	18.1	26.1	7.3	5.6	8.0	20.3		347.75%
U.S. imports	-11.9	-63.4	-61.8	-101.7	-151.7	-51.5	-39.9	-50.0	-139.8		1171.71%
U.S. trade balance	-6.1	-50.3	-49.3	-83.6	-125.6	-44.2	-34.3	-42.0	-119.5		1960.19%

U.S. trade-related job creation and displacement (thousands of jobs)

	Changes in:										percent 1989-2003
	Jobs										
	1989	1997*	1997*	1997*	2001	2001	2003	1989-97*	1997-2001*	2001-2003	1989-2003
U.S. exports	66	131	131	177	264	65	46	87	199		302%
U.S. imports	-161	-790	-798	-1264	-1820	-629	-466	-556	-1,659		1029%
U.S. trade balance	-95	-659	-667	-1086	-1555	-564	-420	-469	-1,460		1531%

*1997 results for SIC based analysis

*1997 results for NAICS based analysis

Source: EPI analysis of Bureau of Labor Statistics, Bureau of Economic Analysis, U.S. Census Bureau

Table 2a
Jobs created or displaced due to growing trade
with China: by state by major industry, 1989-1997

Industry	Oregon	Washington	NW total
Agriculture, forestry, fisheries	-273	-343	-617
Mining	*	*	*
Construction	*	*	*
Manufacturing	-5,110	-4,123	-9,233
Mfg. Industry	*	*	*
Food and kindred products	*	*	*
Tobacco	*	*	*
Textile mill products	*	-112	-141
Apparel and related products	-317	-324	-642
Lumber and wood products, except furniture	-391	-449	-840
Furniture and fixtures	-163	-150	-313
Paper and allied products	*	-162	-187
Printing, publishing, and allied products	-113	-190	-303
Chemicals and allied products	*	-122	-175
Petroleum refining and related products	*	*	*
Rubber and miscellaneous plastics products	-284	-145	-430
Leather and leather products	*	*	*
Stone, clay, glass, and concrete products	*	*	*
Primary metal products	-147	-146	-293
Blast furnaces and Basic Steel Products	*	*	*
Fabricatd metl prod exc mach & transp equipment	-172	*	-240
Machinery, except electrical	-414	-406	-820
Computer and Office Equipment	-341	-353	-694
Electrical & electronic mach, equip, & supplies	-1,523	-860	-2,383
Household Audio and Video Equipment	-156	-309	-464
Communications Equipment	*	*	*
Transportation equipment	-126	913	787
Motor Vehicles and Equipment	*	*	*
Aerospace	*	916	933
Scientific & prof instr; photograph & opt gds etc	-130	-445	-576
Miscellaneous manufactured commodities	-1,112	-1,353	-2,465
Transportation	-228	-278	-506
Communications	*	*	*
Utilities	*	*	*
Trade	*	*	*
FIRE	-112	-212	-324
Services	-684	-1,350	-2,035
Government	*	*	*
Special Industries	*	*	*
TOTAL	-6,651	-6,738	-13,389
addendum: Job opportunities lost per year	-831	-842	-1,674
Manufacturing share of total	76.8%	61.2%	69.0%

*Small numbers (less than 100) are excluded. Note: Totals may not match due to excluded industrie

Source: EPI analysis of Bureau of Labor Statistics and Census Bureau data.

Table 2b
Jobs created or displaced due to growing trade
with China: by state by major industry, 1997-2003

Industry	Oregon		Washington		Northwest	
	1997-2001	2001-2003	1997-2001	2001-2003	1997-2001	2001-2003
Agriculture, forestry, fisheries	-193	1,225	-257	1,663	-451	2,888
Mining	*	*	*	*	*	*
Construction	*	*	*	*	*	*
Manufacturing	-3,800	-5,040	-3,145	-5,902	-6,945	-10,943
Mfg. Industry	*	*	*	*	*	*
Food and kindred products	*	*	*	*	*	*
Tobacco	*	*	*	*	*	*
Textile mill products	*	-196	*	-125	*	-321
Apparel and related products	-118	*	*	*	-207	*
Lumber and wood products, except furniture	-345	-152	-290	-279	-635	-431
Furniture and fixtures	-530	-531	-291	-300	-821	-831
Paper and Allied Products	*	*	-109	-120	-129	-191
Printing, publishing, and allied products	*	*	-122	-225	-199	-245
Chemicals and allied products	*	*	*	*	*	*
Petroleum refining and related products	*	*	*	*	*	*
Rubber and miscellaneous plastics products	*	*	-132	*	-214	*
Leather and leather products	-102	-615	*	-1,109	-140	-1,724
Stone, clay, glass, and concrete products,	*	*	-119	*	-165	-142
Primary metal products	-197	-181	-159	*	-356	-277
Fabricated metal products excl. machinery & transport equipment	-275	-269	-206	-294	-481	-563
Machinery, except electrical	-409	-510	-465	-436	-874	-946
Commercial and service industry	*	*	*	*	*	-110
Computer equipment	-319	-269	-379	-225	-698	-494

Table 2b
Jobs created or displaced due to growing trade
with China: by state by major industry, 1997-2003

Industry	Oregon		Washington		Northwest	
	1997-2001	2001-2003	1997-2001	2001-2003	1997-2001	2001-2003
Engines, and turbines	*	*	*	*	*	*
Industrial machinery	*	*	*	*	*	*
Electrical & electronic machines, equipment, and supplies	-1,120	-1,821	-563	-1,185	-1,683	-3,006
Audio and video equipment	-160	-986	-134	-393	-294	-1,379
Communications equipment	*	-100	*	*	*	-184
Navigational instruments, optical media	*	*	*	*	*	*
Semiconductors	-727	-532	-290	-616	-1,017	-1,148
Transportation equipment	-125	*	*	-486	*	-518
Motor vehicles and equipment	*	*	*	-472	*	-496
Aerospace	*	*	101	*	105	*
Medical equipment	*	*	*	*	*	*
Miscellaneous manufactured commodities	-279	-479	-505	-962	-784	-1,441
Transportation	-242	-292	-356	-333	-598	-625
Communications	*	-143	-151	-184	-215	-327
Utilities	*	*	*	*	*	*
FIRE	-110	-105	-231	-273	-341	-378
Services, trade, and special industries	-947	-958	-1,056	-1,416	-2,003	-2,374
Government	*	*	*	*	*	*
Total	-5,467	-5,392	-5,370	-6,629	-10,837	-12,021
addendum: Job opportunities lost per year	-1,367	-2,696	-1,342	-3,314	-2,709	-6,011
Manufacturing share of total	69.5%	93.5%	58.6%	89.0%	64.1%	91.0%

*Small numbers (less than 100) are excluded. Note: Totals may not match due to excluded industries.

Source: EPI analysis of Bureau of Labor Statistics and Census Bureau data.

Panel I: Discussion, Questions and Answers

Cochair BECKER. Okay. We'll start with the questions. Now, Commissioner Wortzel.

Commissioner WORTZEL. Thank you very much, Mr. Chairman, and thank all of you for your great testimony.

Mr. Borich, Joe, how are you doing? It's good to see you.

Mr. BORICH. You too.

Commissioner WORTZEL. Two points on page 5 of your written testimony really piqued my interest. I'd like to press you on them a little bit and ask for your ideas on the subject.

First, you talk about the problems of visa processing, the slowdown of visa processing and what that has done to business. Academia has complained about this also. I'm interested in hearing your thoughts on how China uses the visa process and how it manipulates the visa process to limit flow of ideas, to limit inquiries into human rights, and to limit inquiries into labor practices. People like Andrew Nathan and Perry Link haven't been able to get a visa to China since 1989. Ambassador Jim Lilley, who was ambassador to China, couldn't get in there for five years. The government of the People's Republic of China has refused to let this Commission travel to China as a Commission to meet American businessmen in China and look around. Beijing as much as implied that if we conducted any Commission business while in China on a tourist visa, we'd be arrested. So I'd be interested in your thoughts on what the Department of State could do about that.

The second area that caught my attention was your statement that you question the wisdom of reconsidering the one-China policy. As you probably know, that is one of the recommendations of this Commission: To examine the one China policy. It didn't say change, it said examine, to rethink the one-China policy. The Deputy Secretary of State could not accurately state the one-China policy of the United States in a recent press interview. The Secretary of State couldn't accurately state the one-China policy of the United States in an interview.

I think I understand it. I would characterize it this way. The United States government understands that the position of China is that there is only one China, and Taiwan's a part of it. We acknowledge that's you're the Chinese position. That doesn't mean we agree with that. Furthermore we, the United States Government, accept and acknowledge that the government of the People's Republic of China is the sole legitimate government of China. But, as far as I know, the government of the United States, since 1945, has never taken a position on the sovereignty of the Island of Taiwan. The U.S. government has never said Taiwan is part of China.

So I may be wrong but I'd ask your views on these issues. You have a lot of experience in the State Department on these issues.

Mr. BORICH. I think your characterization of U.S.-China policy, going back at least to the Shanghai communiqué of 1972, is quite accurate. I'm not sure if Deputy Secretary Armitage and Secretary Powell were guilty of a mental lapse in their respective statements on our China and Taiwan policy or if they were perhaps trying to nudge that policy in another direction. I think they'd have to speak for themselves on that.

As for your question about China's visa policy, if I may offer a broad definition first and then deal with the point you mentioned specifically. In general, China's policy on admitting foreigners is quite a bit more liberal than our own, and where there are restrictions apart from those that you mentioned specifically, those restrictions are generally responses on a reciprocal basis to restrictions that other countries impose on travel by Chinese, and the United States being the point in particular. There's no question that China, as other countries, has a policy of keeping out what it would term undesirable aliens, just as the United States does. What differs remarkably between the United States and China, of course, is how we define undesirable aliens, which today mainly means terrorists, and China, which takes a somewhat broader and, more often than not, politically focused view, thus Falun Gong and others are categorically restricted from entering China, and unfortunately so is this Commission.

Commissioner WORTZEL. Thank you.

Cochair BECKER. Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you very much. Thank you to all of our witnesses for appearing today and for lending your expertise to our deliberations. We appreciate it. I have several different questions for each of you.

Mr. Borich, I was very interested in Commissioner Wortzel's questions, too. I had a different question about something that you said about Taiwan. I'll take you back to page 5 of your testimony, where you questioned the wisdom of reconsidering the one-China policy. Then on Pages 10 and 11 of your submission you've essentially gone through a fairly stringent questioning of yourself. I was wondering about an inconsistency there. What you said in 10 and 11 is, "our policies toward the Mainland and Taiwan must be clear and consistent. They are currently neither, thus raising the risk of conflict in the Strait." I was wondering what you saw was a problem of doing a reconsideration in light of the fact that you've essentially made a case that the status quo is not working particularly well.

Mr. BORICH. I have two responses to that. One, that I was kind of feeding off one of the Commission's recommendations, and it seems to me I may have misread your recommendation, that it wasn't simply rethinking or reconsidering or reexamining our Taiwan/China policy, but that there was a fairly clear implication that we should make some radical changes in it. Now, if I misread that, I apologize.

My main point here was that every administration since the Nixon administration, despite occasional deviations from what I would describe as a center line in our policy toward Taiwan and China, invariably, whether it was Clinton in '93 calling for linkage with MFN extension to human rights or the Bush administration in 2001 labeling China a strategic competitor, at some point, and usually sooner rather than later, these policies have always tended back toward the center again, and I think for very good reasons, because there really aren't a lot of options out there that don't have enormous risks for the United States as well as for China and Taiwan.

I don't think our policy today, despite President Bush's efforts to clarify it, is terribly transparent or easily apprehendable by either Taiwan or China. We have said certain things, which I mentioned in my testimony. In April 2001 Bush said, "We will do whatever it takes to defend Taiwan." In December of 2003, when Chinese Premier Wen Jiabao said, "We oppose any action by either party"—"unilateral action that might upset stability in the Taiwan Strait," and thus we come up with, by implication, a policy that, yes, we will do what it takes to defend Taiwan if China attacks it, but Taiwan, don't do anything to provoke an attack by China.

At the same time, we continue to thicken our military relationship with Taiwan, and I recognize there are certain valid reasons for that, but on the one hand, I feel we're sending a set of signals to Taiwan's leader Chen Shui-bian that whatever we say, don't worry about it, because we're throwing all this stuff at you and we're increasing military cooperation between CINCPAC and Taiwan and we will defend you. And I just fear that without having a clearly defined set of goals in the context of our one-China policy, may I add, that we pursue, and where our actions are clearly consistent with what our policy is in every case, we are creating a vacuum that either Taiwan or Mainland China or both may feel free to step into.

Commissioner BARTHOLOMEW. Hence the need, of course, for the fact that the Commission has called for a reassessment. We believe that we need to take a look at what's working and what isn't.

Mr. Chairman, I see that our time is running out. May I ask one more question?

Cochair BECKER. Yes.

Commissioner BARTHOLOMEW. I have questions for both our other witnesses, but one more question for Mr. Borich. You also mentioned in your written testimony the need for both the United States and China to keep their list of expectations short and focused on what's truly essential to our respective national interests. What would you place on that list?

Mr. BORICH. First and foremost we should continue to work closely with China on matters of regional and global security, as we are in the war on global terror, for example, and to manage as best we can, and hope that China does the same, the security element of our relationship as it impacts on East Asia and the Taiwan Strait in particular. I think that's crucial. Obviously we have a number of bilateral economic and commercial issues that need careful tending and management, as well.

By the way, forgive my bias. I'm a little less concerned about the growing trade deficit with China, since it is almost totally offset by declining trade deficits with other countries in East Asia. They've shifted much of their manufacturing for export to the United States from their home countries to China. But nevertheless, whether it's a significant economic issue or a political issue, I think our trade deficit with China is something that needs careful tending and management and close cooperative work by both sides. Certainly the question of intellectual property protection is one where we need China's full cooperation, and we need to continue through a combination of cooperative efforts and exhortations to get China to protect not only our intellectual property but its own.

Cochair BECKER. Commissioner Wessel.

Commissioner BARTHOLOMEW. Hopefully we'll have a second round.

Cochair BECKER. Yes, I hope we will.

Commissioner WESSEL. Thank you, Mr. Chairman.

I have a general question for the panel as a whole because I seem to be missing something. Mr. Bender, you talked at length about what's happened to jobs on the ground here of the workers in the state. And as far as I can tell from the mandate we have, which is from Congress, our primary concern is what's happening to the citizens here on our ground, both their economic and military security.

Dr. Scott, your study is a startling one, not only in terms of the breadth of the impact, the 1.5 million jobs, but when PNTR was debated in Congress, people were talking about textiles and plush toys and shoes. Your study points out that we're talking about high-tech—the crown jewels of our own economy. What we were told in the '90s, the information age—that these are the bright stars on the horizons. Don't worry about steel, don't worry about some of our basic industries, we're going to train our workers, we're going to do all of that.

We have heard not only from this panel but from many panels over the last months about currency manipulation, yet our own administration refuses to call it that. We heard just two days ago that our administration or some of our administration officials are in China saying, IPR is a real problem and, you know what, we mean it this time, despite, I believe, there being four separate agreements on IPR. Each one of which has been broken by the Chinese, and each time we say, "give it time, let's work it out, don't worry about the piracy, don't worry about the job loss here." What am I missing?

If the government doesn't stand by the people, if it doesn't stand by the businesses and say, "we're not going to take it anymore," the Chinese are right to do what they're doing. They're doing it for their own people. When are we going to start sticking up for our own people and what should we be doing? Any of the panelists?

Dr. Scott?

Dr. SCOTT. Thank you, Commissioner Wessel.

I think that we need to take a much tougher stand on exchange rates. You've heard about this. I just read in the paper yesterday that China has acquired \$200 billion in U.S. foreign exchange reserves in the past year alone. They are financing something approaching a third of our total trade deficit. This is an intervention on an unprecedented scale, and this is totally illegal under the terms of the IMF and the WTO. The U.S. would be totally within its rights to take action, tariff action in particular, in response to this kind of abusive behavior. And just one example of China's unfair trade practices.

The Europeans, of course, are being hurt as much or more than we are because their currency is being forced to absorb all of the pressure for the U.S. dollar to adjust. So I think that the U.S. and Europe need to get together and put pressure on China to devalue, and as I've been saying in the last couple of days since my study came out, the U.S. faces a calamity in this massive growth of our

global and in particular the China trade deficits, and if we don't respond we're going to be faced with a financial earthquake. So we can either decide to gradually devalue the dollar in coordination with our trading partners or we can delay action until currency and financial markets adjust, which could easily result in a hard landing for the economy. If we go the latter route the costs will be much higher to the domestic economy than if we handle the problem head on.

Commissioner WESSEL. Before we turn to the other panelists for their views. I've been involved in public policy for a long time. I remember President Reagan talking about the twin deficits in the 1980s, not only the skyrocketing budget deficit but also the skyrocketing trade deficit. What am I missing? Aren't we involved or aren't we facing a similar situation?

Your numbers on the screen just a minute ago pointed out trillions of dollars of accumulated trade deficits. Congressman McDermott said at some point we're going to have to pay that back. How do we pay it back, out of our standard of living?

Dr. SCOTT. Yes, it will come directly out of our standard of living. In fact, I did an interview yesterday with a reporter, who asked me what the accumulated deficit of \$2.4 trillion is costing us, and I worked it out on the back of an envelope, and if we assume market interest rates rise to the expected level of three to four percent in the next year or so, the cost of servicing this accumulated deficit works out to about \$200 for every man, woman and child in this country every year, and that deficit is growing massively over time. So it's going to take a toll on our living standards, there's no way to avoid that, and it's going to get worse until we begin to curtail the growth of our trade deficit.

Commissioner WESSEL. Mr. Bender, Mr. Borich?

Mr. BENDER. I'll take it from a different context. One of the concerns that we have in organized labor is that it seems that when our country negotiates these trade agreements, that labor rights, environmental rights, human rights are not put at the same level as intellectual property rights, for example, and other things that are important to the multinational corporations. I think if we could put us at the same level, have strong enforcement mechanisms in these trade agreements that would do a lot to help level the playing fields for this country and the state of Washington.

Commissioner WESSEL. I certainly agree with you that they should all be on a level playing field and get the same attention, but in China we see that nothing's being enforced, so everything's being ignored.

Mr. BENDER. I would be interested to give you a little comment that I read in the Los Angeles Times, and this was the Mexican government. They were kind of saying, Look, we're in trouble now because all these jobs that we got through the maquiladoras, the Chinese government is now advertising trying to get those maquiladoras to move to China, and in the article it said, You can come to China, you don't have to worry about labor unions, you don't have to worry about environmental rights, you don't have to worry about regulations, and we pay our people lower. Our concern is this race to the bottom, the lowest common denominator, and we haven't dealt with this issue at all.

Mr. BORICH. I think that, first of all, on the increase in China's foreign exchange reserves, of that \$200 billion, approximately 100 billion of it flowed into China in the last quarter of 2004. Of that \$200 billion, approximately 60 billion was accounted for by new foreign direct investment, 10 billion or less was accounted for by China's total global trade surplus, which was \$10 billion or less, and the remainder was what is described as hot money, which is basically private funds flowing back into China speculatively, on the assumption that China is going to revalue the RMB at some point in 2005, and these are private sources of funds that because of this RMB evaluation their investment, if you will, in China will appreciate considerably when they cash in the RMB or dollars for the foreign currency later on. So I think that by just the mere speculation that China might revalue the RMB has fueled most of the very sizable increase in China's foreign exchange reserves over the last quarter of 2004.

I'm not sure I would agree with the statement, which seems to me rather broad, that China enforces nothing, whether it's human rights or labor rights or whatever. That said, obviously it's a system with enormous weaknesses in it, and the pattern of abuse or ignoring abuse in China varies dramatically from area to area, as does attempts to enforce intellectual property rights. I think China's overall problem is that political power has devolved to such a point that localities, even whole provinces, can ignore laws, regulations, policies by the Central Government that doesn't suit that particular locale and its purpose.

Cochair BECKER. I want to make a comment before I pass it on to our Chairman, Commissioner D'Amato. You know, a good portion of my life I've listened to economists and government representatives telling us that the deficit was really good for us, that it showed confidence in America, it showed how well our economy is doing which is why all these countries wanted to put money into America. Yet all the time the deficit kept going higher. We had a deficit commission, and now we're into the China Commission, and it's still accelerating at runaway rates. If the deficit is so good why doesn't every country want one? Why are we the only country that seems to be willing to gather a deficit under our folds and hold onto this? We've heard that it's not sustainable for the last 12 years, year after year after year, but yet we keep letting it go on. Just a comment on that.

Commissioner D'Amato?

Chairman D'AMATO. Thank you very much, Mr. Chairman.

I want to get back to the state of the economy here. Compared to where we were in Ohio and South Carolina, we're kind of in dreamland here. There is this sense of the Northwest having this tremendous export-led economy, three of five jobs, direct, indirect, on the export growth. The question I have is: Are the leaders in the Northwest looking ahead? Can you actually foresee what the trends will be in—let's say 10 years?

And the reason I say that is the analysis that we got from our staff and others prior to coming here indicated tremendous pressures on some of the more successful aspects of the economy here. Horticulture. You're in a surplus situation. Trends I see, given

what the Chinese are up to in horticulture, it may be that we could be in a serious deficit in horticulture in the Northwest in 10 years.

Same thing is true of a huge program in China to build their own forest products industry. That's not going to be to the Northwest's advantage.

Right now we're sort of even-steven on aerospace. One of the analyses we had shows that probably in the year 2004 the net situation tradewise for the state of Washington will be slightly in deficit, and not much in surplus, even if it's still in surplus.

My question is: Are we looking ahead. I know it's hard to project, but we don't want to be here in 10 years and have the kind of testimony that we got in Ohio. We want to avoid that. The purpose of this Commission is not just to identify problems to the Congress but also to propose some solutions. What to do about these trends that we see that may be adverse. Let's get in front of those trends now, instead of what we saw in other parts of the country.

So my question to you, Mr. Borich, you're in a position to take a look at the economy. Can you project five, 10 years down? Are you going through that exercise? And if you are, what do you see as the problems that we need to pay attention to?

Mr. BORICH. Thank you. An excellent question.

I share some of your concerns about horticulture, particularly tree fruit. I think that China will pose a very strong challenge. They are the world's largest apple producer today. They have problems with quality, they have problems with transportation, they have problems with storage, they have problems with global marketing, but we cannot assume that these problems are going to be insoluble forever.

Well, let me put it this way. I think the one thing that will help our state's agriculture and agricultural exports, for the time being, at least, is China's continued insistence on agricultural self-sufficiency. I don't think that's going to hold forever, and when that determination, that national security, depends on food self-sufficiency finally dissolves, as I think it will eventually, China is going to turn increasingly away from grain production, for example, and other kinds of crops that are both land and technology intensive, and devote more of its resources to where its comparative advantage is, in labor-intensive agriculture in things like tree fruit. When that day comes, then I think much of the state's agriculture and the markets that sustain it are going to face a serious challenge.

How well we react to that is right to the heart of your question. How can we best prepare for this state? It's coming. Or in aerospace. At some point in the future. China's graduating more engineers today than we are, and at some point in the future they're going to have the capacity to make commercially viable commercial aircraft. What do we do?

I didn't catch all of Congressman McDermott's testimony but I did catch the tail end of it, and I totally agree. We've got to invest more in our education system and our research institutes. We've got to find ways to bring more technology to business, to agriculture, that will allow us to keep what our comparative advantage truly is, and that is a technology-based economy with a highly trained work force. That is really where our comparative advantage

lies, and as long as we maintain that advantage I think we will continue to adapt and continue to advance not only our state's economy but also the nations.

Chairman D'AMATO. Thank you.

Let me follow up with just one point. I think it would be important to try and mount an exercise to do some projections based on our best knowledge of what's going on now and see where we're going to be in five or 10 years in the region, and see what kind of solutions we need to start bringing to bear and hand off whatever problems we have. I think that exercise is absolutely critical.

Mr. BORICH. I absolutely agree.

Mr. BENDER. Mr. Chairman, let me just comment. What I'd like to say is that there's no question education and training is extremely important to the work force that we have in this state and in this country, but I'm still trying to deal with the problem when these companies are giving us the bottom line and they're telling us that, I can hire an engineer in India for one-fifth the cost of an engineer here, then how do we compete? I mean, to me that's a question we need to answer, because if the answer is going to be strictly going to the lowest common denominator, we're going to be in serious trouble in this country in the years coming up.

Chairman D'AMATO. Thank you.

Dr. SCOTT. Let me just add that there's a tremendous distinction that's really growing between the national interest of the U.S. as a location of production and the interest of U.S. businesses in maximizing returns for their shareholders, and increasingly as our businesses are being acquired by foreign companies, this gap is growing. We know that just last month IBM's PC business was acquired by the number one Chinese computer maker, Lenovo. These kinds of changes are fundamentally altering the interest of multinational companies producing here, and one of the recommendations of the Trade Deficit Review Commission was that when the public makes investments, in particular in research and development, that benefits particular companies, there ought to be strings attached. Those investments ought to be tied to the location of production here in the U.S., and I think that's becoming even more important given the change in ownership of our corporate base.

Chairman D'AMATO. Thank you.

Cochair BECKER. Thank you.

Commissioner Reinsch.

Commissioner REINSCH. Thank you, Mr. Chairman.

Dr. Scott, I have one quick question for you. I've got some other questions about your methodology but I haven't done all my homework yet so I'm not going to bore this group with those. I'll get back to you later on methodology.

There is one question, though. Your report cites job opportunities lost during the period, 1989 to '02. What proportion is that of all the jobs lost during that period for all reasons?

Dr. SCOTT. Since 2001 as a whole, nationwide, we're down about a million jobs. The loss in jobs due to trade with China in fact exceeds that amount. So what we're talking about are, as I said, job opportunities. These are jobs in manufacturing that could have been created if we had a balanced trade with China, and if we look at the manufacturing sector in particular, since 1998 we've lost

about 3 million jobs in manufacturing overall, and according to a study done by my colleague Josh Bivens recently, about 60 percent of those jobs lost since '98 are due to growth in the trade deficit. And we can go into further detail much later about technically how we measure this and so on, but as I said in my testimony, what's happening here is we're changing the composition of the labor force. We're pushing people out of good jobs in manufacturing, that pay relatively high wages, with full benefits, into employment in places like Wal-Mart, that pay wages barely above the minimum level, with few if any benefits.

Commissioner REINSCH. Yes, I don't disagree with you on the consequences. I'm trying to get a better understanding of the reasons.

And that leads me to my other question, which really follows the thread that Commissioner D'Amato began. It seems to me that several of you—the other two of you in particular—discussed directly or indirectly comparative advantage and how we're dealing with it with respect to China, and it seems to me what we've been learning is that while it was hard to create comparative advantage when the factors of production were relatively immobile, that's not true anymore, and we're dealing with an analytical framework in which comparative advantage is dynamic, not static, and we find ourselves increasingly on the losing end, losing comparative advantage to other places for a variety of reasons, China not being the only one, but that's our mandate and it's probably the biggest one, anyway.

It seems to me that the United States' recent historic response to that has been what Mr. Borich referred to, which is to run faster, exploit our advantages, and attempt to either recapture or maintain the advantages that we have, focus on high-tech, focus on education, et cetera, and I think both you and Congressman McDermott in particular did an excellent job of pointing out some policy deficiencies that we have in trying to do that. In some respects the private sector may have done a better job of that than the government has in the last 10 years, but we'll see.

I guess the question I have for all three of you is whether that is still the correct policy response or whether we're moving into an era where that simply isn't good enough and we're going to have to think of something else?

Mr. BORICH. The correct response being focusing on staying ahead of the rest of the pack?

Commissioner REINSCH. Running faster, working harder.

Mr. BORICH. Well, whatever the ultimate ideal policy mix is, I would maintain that that is and will remain the critical element, the key element. That is what has helped make this country what it is, and that I think is what will sustain this country in the years ahead. I think it has to. I don't think there's any other single factor that could possibly replace that, whether you're talking about pulling out of the WTO—I'm not suggesting you are, but pulling out of the WTO or slapping trade barriers on Chinese imports. We're in a different era, and I think that era is one that will continue to emphasize for us good science, good technology, a highly skilled work force, a constant stream of new scientists and engineers coming on line, efficient ways of moving primary research and its re-

sults from the laboratories and into to the work places and into agriculture. I just don't see a single thing out there that could possibly substitute for that.

Mr. BENDER. I'll be brief.

Let me tell you what my frustration is, and there's no question that we need to try to stay ahead in terms of education and training. We have a highly skilled work force. But I can give you an example with The Boeing Company, for example, with one of our unions, the engineering union, SPEEA. They developed a new technology for a new part of a plane. After they developed it, not only that part and that technology was exported overseas. And our people became extremely frustrated here. We dealt with the technology here, we developed this new technology, we should be providing jobs here for our workers here in this country, and both the jobs and the technology that we developed here was exported overseas. I don't know how we fight that, because it's very frustrating for the workforce.

Commissioner REINSCH. That was going to be my question. What's the government supposed to do about that?

Dr. SCOTT. Pardon me, Mr. Bender. Please, finish.

Commissioner REINSCH. Dr. Scott has the answer.

Mr. BENDER. Maybe he has the answer, because I'm frustrated, because, they keep telling us that we need to educate our worker force, they need to be highly educated, we need to be innovative in terms of technology. We helped develop this new technology and then we find out the technology and the jobs that we developed are being exported to lower-cost countries. We're going back to the lowest common denominator again, and I don't know how we fight that.

Dr. SCOTT. I'd like to make a couple of points. First, there's a path-breaking study that you may be aware of on "Global Trade and Conflicting National Interests," by Ralph E. Gomory and William J. Baumol that was published in 2000, by MIT Press. Baumol and Gomory showed that we face a different kind of trade now. It's not a win-win trade world anymore. We've got winners and losers, and countries compete for advantage, particularly in the key high-tech industries that you're talking about, and the way they compete is through developing strategic plans for industries, through targeted spending on research and development and training, and, frankly, the U.S. has just disarmed itself in that game. We have perhaps the weakest set of high-tech research policies of any major developed country in the world. So we are losing that game, and if we wish to retain these industries we need to develop new policies that are much more strategically oriented to support just the kinds of industries that Mr. Bender has been talking about.

My second point concerns exchange rate policies again. I can't stress this issue enough. The U.S. also had a massive global trade deficit in the mid 1980s which was caused, in part, by a heavily overvalued dollar. President Reagan's Treasury Secretary, James Baker, engineered a coordinated reduction in the value of the dollar of approximately 50 percent. This devaluation reduced the trade deficit down to almost zero. Exchange rates do work, they do help address some of the problems we're talking about here today, and we have to address that problem, as well.

Commissioner REINSCH. Thank you.

Cochair BECKER. We're starting to run into a little bit of a time crunch. We've got two more Commissioners we'd like to hear from, and so let's keep our questions and our answers as short as we can.

Commissioner Dreyer.

Commissioner TEUFEL DREYER. Mr. Borich, I also question the consistency and the objectivity of your statements on Taiwan. You talk about the 1982 communiqué, in which we promised to gradually decrease the quantity and quality of arms we sell to Taiwan. That, as you probably know, is a partial statement, in that the promise was predicated on the reduction of tensions in the Taiwan Strait. You also mentioned that our military support of Taiwan might be taken as a symbol of U.S. support for their eventual political goal of independence.

Our military sales are tied to the Taiwan Relations Act, which, as you state, is one of the pillars of America's China policy.

As for the eventual goal of independence, that is not necessarily the end goal of people in Taiwan. Polls show that what they don't want is unification with an undemocratic Mainland, and so that is a misstatement in your statement.

Assuming the Mainland doesn't become democratic, I hope that you do not mean to imply in your statement that this denies the people of Taiwan the right to self-determination, which has, after all, been an important core element of U.S. policy ever since we came into existence. It was reiterated by Woodrow Wilson later, and even by Bill Clinton, when he said any solution would have to have the assent of the people of Taiwan.

And finally, when you speak of your conversation with the Chinese military officer, "when you sell \$18 billion worth of arms to Taiwan, that has teeth." A, the United States has NOT sold \$18 billion of arms to Taiwan, and B, the statement shows no recognition of what prompted the offer of the sale, which is a tremendous Chinese military buildup, with the explicit aim of taking over Taiwan, as shown by the sorts of hardware they're putting their money into.

Okay. My question is for Dr. Scott, and it's twofold. One, I was very surprised, since we all know that economists don't necessarily agree with each other, but almost all economists were agreed that the Chinese currency was undervalued. The real argument among them was over how much it was undervalued. In the first week in December the Treasury Department came out with a statement that the Chinese currency wasn't undervalued. I'd like your take on what caused that announcement. Was it a political statement, which had no economic validity, which I'm prepared to believe, or something else?

The second part is, I notice that from your chart here, that a lot of the countries we are losing these industries to are not low-wage countries, they're high-wage countries. Sweden and the UK are really high wages, and Canada has wages that are comparable or higher than ours. What are we doing wrong?

Dr. SCOTT. To your first question, very briefly, there are a number of criteria that the Treasury Secretary has to take into account when he produces a report twice a year on exchange intervention by foreign countries, and one of those is whether a country such as

China has a global trade surplus, and if so, whether that country is intervening in foreign exchange markets so as to depress the value of their currency. The Secretaries report in November 2004 stated that China had a global trade “deficit in the first half of 2004 of \$7 billion.” The report notes that “China has publicly stated its commitment to move to a flexible exchange rate regime.” Thus the Secretary chose to ignore other evidence that China has sizeable global trade surplus, and thus made a judgment that China wasn’t significantly intervening. Essentially they just chose to ignore the obvious.

Commissioner TEUFEL DREYER. Okay.

Dr. SCOTT. It was a diplomatic speech.

I think it was a serious mistake. We did find serious intervention in a number of countries in the late ’80s and early ’90s, Taiwan and Korea, we intervened, and we succeeded in convincing those countries to revalue their exchange rate.

In terms of this chart, you’re absolutely right; it’s what struck me, as well, as we put it together. And I think what’s going on is what I talked about a moment ago. It’s not just rich versus poor countries, it’s rich versus rich countries competing for slices of the high-tech pie, and we are simply losing that race.

Commissioner TEUFEL DREYER. Thank you.

Cochair BECKER. Ambassador Ellsworth.

Ambassador ELLSWORTH. Thank you, Mr. Chairman.

I have two quick questions, one of which can be answered later, if you wish, and that relates to the extent to which we and other wealthy countries are funding China’s economic boom, that is to say, with our foreign direct investment. China I think was either the first or the second highest recipient of foreign direct investment last year.

Number one, says Mr. Borich.

And so to what extent are we funding that and shooting ourselves in the foot in that way, along with other ways?

You don’t need to answer that now unless you have an answer handy, but if you could send us a little two-sentence note later, we would be very grateful.

The other question I have is this, and this also should probably, since we are out of time, be addressed if you wish in some other way, maybe by a follow-up couple of paragraphs. In what ways do you think in your own judgment these economic problems or challenges to the United States emanating from China adversely affect our national security?

Thank you, Mr. Chairman.

Commissioner BARTHOLOMEW. Mr. Chairman?

Cochair BECKER. We have a follow-up from Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you, Mr. Chairman.

First, one quick comment. It honestly never ceases to amaze me when I hear that excuse for the Chinese government’s lax enforcement of intellectual property rights. Frankly, people carry it over to their lax enforcement of obligations having to do with the proliferation of weapons of mass destruction when people say that they don’t have control and so they can’t do it. But I just would like to state that it’s our understanding that the Chinese govern-

ment has 30,000 people whose job it is to monitor Internet access by the Chinese population. It's very hard to believe that given that they have that level of monitoring going on of what their population is doing, that they can't do more in terms of intellectual property rights protection and in ultimate proliferation of weapons of mass destruction.

That said, one question I would love to ask all of you. I'm really struck, Dr. Scott, not only by the statistics that you provide, but by the acceleration that you talk about, that our trade deficit with China has doubled since China entered the WTO. I'd like to hear from all of you for the record what that means for our economic future if this trend continues. How long can it continue and what does that ultimately mean?

Mr. Bender, the Commission, both in South Carolina and in Ohio, heard a lot about what was happening to the communities in those states because of the job losses, and I'd like some of your thoughts, please, on what does this mean for Washington State communities as these trends continue that you've identified, and what does it mean for the livelihoods of people and their lives?

Thanks very much, Mr. Chairman.

Cochair BECKER. I want to thank the panel for a very lively discussion and tell you that I appreciate the way that you engaged the Commission on this. There are some of the questions that we would expect feedback from you, as we don't have time to get answers right now. We would appreciate that very much.

Thank you for attending.

Mr. BORICH. Thank you.

Mr. BENDER. Thank you.

Dr. SCOTT. Thank you.

Cochair BECKER. We're going to take a short break here, but the next panel can go ahead and seat themselves if they would like.

(Short recess.)

PANEL II: AVIATION/AEROSPACE

Cochair BECKER. This section is on aviation and aerospace. The speakers will be in the order as I introduce them. Mr. John Walsh, President of Walsh Aviation, second, Mr. Owen Herrnstadt, Director of the Department of Trade and Globalization for the IAM, Mr. Richard Schneider, Aerospace Coordinator for the IAM, and Mr. Mark Blondin, President and Directing Business Representative of IAM District 751 in Seattle. Last is Ms. Heidi Wood, Aerospace Defense Analyst from Morgan Stanley.

We're pleased to seat this panel, and we'll start off with Mr. Walsh. Remember, seven minutes for the testimony, five minutes for the Commissioners.

STATEMENT OF JOHN F. WALSH PRESIDENT, WALSH AVIATION, ANNAPOLIS, MARYLAND

Mr. WALSH. Thank you for inviting me.

As a brief introduction, Walsh Aviation is a consulting service that I started 10 years ago in Annapolis, Maryland. My clients are in the aviation subcontracting community. They work as suppliers to both Boeing and Airbus. I also do consulting services for the De-

partment of Trade and Industry in the United Kingdom and also for Industry Canada and Ottawa.

Prior to my consulting activity I was with a company called Rohr, an aerospace subcontractor in Southern California. Rohr was the major supplier of engine pods and nacelles to both Boeing and Airbus and as well as McDonnell Douglas at the time. I did that for 20 years. I've been watching the struggle of the primes for over 30 years.

I have provided a prepared written statement. It wasn't in time to make your briefing book. I was trying to get some last-minute data. My remarks essentially focused on the civil side of the aircraft market. There's lots of data, market share kinds of stuff that talk about the cycles in the statement.

I would like to address four main points in my oral presentation this morning. Those points are covered in detail in the written statement.

First, production rates I believe will be up at Boeing, and up sharply, faster than what's been announced or even speculated upon. Secondly, I believe the 7E7 will be a pivotal program for Boeing and that it will help allow them to gain back some of their lost market share. Third, I believe China and its airlines will play a key role in how Boeing performs both in the near and long term. Fourth, I'm going to try and make a general assessment of what's the impact of all that on the Pacific Northwest region.

I've also been asked to provide my vision of what things would look like 10 years from now, but let me save that for last.

On the increasing commercial production rates at Boeing, first the good news: From a base of 285 aircraft delivered in 2004, I believe they're going to go to 350 or 400 aircraft by 2006. Most of the industry has numbers associated lower than that. The bad news: Boeing is down 50 percent from its 1999 peak. During that same period Airbus was virtually flat, with 300 aircraft from 1999 to 2004. That ended in 2004 with 320 aircraft deliveries, so they beat Boeing on the delivery side.

I believe Airbus is going to go up even faster, up to 450 aircraft or perhaps 500 aircraft by 2006. So what I'm suggesting is another steep cycle that's right out in front of us. I believe this cycle is a supply push phenomenon, to coin a phrase, in which Airbus is doing the pushing. The Asian airlines are pulling from a demand side, but Airbus is the dominant player in this game. Boeing will be forced to react with its own production increases.

Second point. Importance of the 7E7. This is a major commitment and a gutsy but necessary move by Boeing. The 737 and 777 will be leading the parade in terms of production rate increases. The 757 is essentially out of production. The 747 and 767 have been reduced to one a month. 737, a Renton program, 777 an Everett program, will have to carry Boeing for the next three or four years. 7E7 introduction is 2008, so it's going to be a while. The 7E7 is not without risk to Boeing. The 747 has a very high composites content, electric actuation systems, replacing hydraulic systems, an advanced cockpit, an aircraft that will be absolutely rich in technology, delivered at a 767 price. A very formidable challenge. It's different from the A380 and the A350 being offered by Airbus. Not to take away from the very significant industrial accomplishment

of the A380. Those aircraft I think are still going to be regarded as aluminum aircraft, whereas the 7E7 will take on the label of an all-composite aircraft.

If delivered as advertised, this could be a real showstopper at the airlines, with significantly reduced weight and significantly reduced maintenance costs as drivers. So it could be one of these paradigm shifts that we've all talked about in the past and that never really materialized. This is a big program.

Moving to my third point, the importance of China to Boeing. Boeing has done well in the past in China. Boeing has done extremely well in Japan. Airbus has publicly announced that China is their number one target. They want to do five percent of their aircraft manufacturing in China, and they're after the Chinese airlines as well as the Chinese suppliers. Both the Chinese airlines and Chinese suppliers know they're being pursued, and they're going to play hard to get. Chinese airline orders, once obtained, need continual maintenance, have lots of government influence, and there are often times lots of surprises as to where the aircraft actually get delivered.

I do feel that the indigenous Chinese aerospace manufacturing segment is not a threat to Boeing over the next 10 years. They're making gains in business jets, they've got plans for regional jets, but I think it's going to be a while before they're at Boeing's doorstep.

I see I'm getting close to being out of time.

My fourth and last main point is what will be the impact on this to the Pacific Northwest? Rates are going up. That's a good thing. But it is the 737 and 777 programs that will provide the growth. The 737 has a lot of work in Wichita, Kansas, at the Boeing plants. The 777 has probably less U.S. content than other Boeing programs. There's more of an offset issue with that.

The Pacific Northwest region is a powerhouse source of talent, resources and capabilities, but unfortunately the game has eroded to the point where its aircraft selling price is driving the market, and that's going to be the name of the game in future aircraft sales campaigns.

Last but not least, my vision of the commercial aircraft 10 years from now. 10 years is a difficult vision, but my projections are Boeing and Airbus will still be hip deep in commercial aircraft production; no one leaves, no one really enters. Boeing's market share will be back up a bit with the 7E7, and in that 10-year time period we'll be arguing about who's got the 45 percent, who's got the 55 percent. At the end of the 10-year period I boldly predict Boeing and Airbus will still not particularly like each other, it will still be confrontational, and there will still be a need for more Commission hearings to sort these things out.

Again, thank you for your invitation. I look forward to your questions.

Cochair BECKER. If I'm here in 10 years I'll see that you're here.
Mr. WALSH. Thank you.
[The statement follows:]

**Prepared Statement of John F. Walsh
President, Walsh Aviation, Annapolis, Maryland**

I would like to extend my thanks to the Commission for inviting me to make a statement on my analysis and thoughts on the aviation and aerospace sectors and their inter-relationships with China and the Pacific Northwest Region of the United States.

Walsh Aviation is an Annapolis, Maryland based consulting service. I have been operating as an independent consultant for the last 10 years with a client base of 55 companies to date. My clients are predominately in the aircraft component manufacturing and material supply sector. I also provide consulting services to the Department of Trade and Industry (DTI) in London, and Industry Canada in Ottawa.

Prior to starting my consulting company I served as Director of Market Planning and Forecasting for Rohr Industries (now a part of the Goodrich Corporation). Rohr was the major manufacturer and supplier of nacelles (or engine pods) and thrust reverser systems for Boeing, McDonnell, and Airbus commercial jet transport aircraft. During my 20 years at Rohr (1974–1994) I got to witness, on a firsthand basis, the struggles and battles of the aircraft manufacturers as they worked their way through the ups and downs of the aerospace marketplace.

In a nutshell, I have been watching the prime aircraft manufacturers in the commercial transport aircraft market sector slug it out with each other for more than 30 years.

Commercial Transport Aircraft Manufacturing is a Cyclical Market

I may be stating the obvious by bringing your attention to the cyclical nature of the commercial transport aircraft market but it is a prerequisite to understanding the nature of the market. Depending on what part of the aviation cycle you are in the airlines and the aircraft manufacturers often behave in very different and divergent patterns.

Earlier Aerospace Cycles

All of the aerospace cycles in the past have been a bit different. Just when you think you have learned something from the last one the next one comes along and doesn't behave in the same manner. Production rates are rising and falling at rapid rates but the drivers for the up and down movements can be very different.

In the aircraft production cycle which started back in 1984 (252 aircraft delivered) and lasted through 1992 (603 aircraft delivered) there were large gains in airline passenger traffic driving the market. The worlds' airlines were fiercely competing amongst each other to capture this growing market. The airlines were literally beating Boeing, McDonnell Douglas, and Airbus over their heads to increase aircraft production rates. This was a somewhat classic demand driven cycle with airlines overestimating their aircraft needs. This oversupply of aircraft, particularly with the U.S. airlines, coupled with the first U.S. invasion of Iraq in 1991 led to the significant 50% decline in aircraft deliveries from 1992 (603 aircraft delivered) through 1995 (330 aircraft delivered).

The next upside segment of the cycle which started in 1995 was very different. It was not the classic airline demand driven cycle. Boeing, looking at the lay of the land in 1994, sensed that the airlines were past most of their major problems and that conditions would soon be ripe for selling new aircraft. The plan, as I interpreted it from market events, was for Boeing to crank up production rates at a very rapid pace and essentially "flood" the market with aircraft deliveries. Airbus was still a relatively small producer at that time with its 124 aircraft production level in 1995. Boeing would have the advantage of being able to offer early deliveries to the airlines at attractive prices (because of perceived efficiencies of high rate production) and its competition could not respond in a timely manner. In my opinion. It was a manufacturer led "supply push" by Boeing that was the major market driver in the upside of the cycle from 1995 to 1999. The airlines later jumped on it but it was Boeing that was leading the drive to increase production.

A great plan, but it did not work. The rate increase was so large and so fast (18 aircraft per month to 43 aircraft per month in 18 months) that Boeing and a number of its major suppliers could not execute it without significant disruptions and cost overruns. In November 1997 Boeing was forced to suspend production on the 747 line for 20 days and curtail the introduction of new aircraft into the 737 line for a 25 day period. The production line shutdowns were the first in company history.

The "plan" did not, however, stop Airbus from increasing its production rate from the 124 aircraft level in 1994 to 294 aircraft in 1999. Airbus essentially met the Boeing rate increases with their own production increases, spooling the total market

up to a peak of 867 aircraft in 1999. The down side of the cycle extended to 2004 with a drop in total production levels back down to the 605 aircraft level.

Where Are We Today?

Most of the reasons for the down side of this cycle were readily visible. The terrorist events of September 11, 2001 and the subsequent fall off in the demand for air travel were the more obvious major drivers for the market decline. A more in depth analysis indicates that a number of airlines were already experiencing problems with declining air fares and having too much aircraft capacity on hand from the Boeing led "supply push" by the end of the year 2000.

On the demand side of things we are now seeing the long awaited rebound in airline traffic. Preliminary world traffic growth (in revenue passenger miles) data indicates that total scheduled airline passenger traffic grew at a 14% annual rate in 2004. This follows annual world passenger traffic declines of 2.9% in 2001, 0.5% in 2002 and 0.9% in 2003. We are now, for the first time after three years, above pre 9/11 world traffic levels. World freight traffic showed a similar rebound with preliminary estimates of 13% growth in revenue ton miles in 2004. The Asian airlines, and particularly China's airlines, are leading the pack in terms of traffic growth in 2004. In 2003 there were significant traffic declines in China as the result of the SARS epidemic that surfaced throughout the region during the 2003 time period.

The world airline profit picture is also improving. Major annual operating losses of \$11.8B were reported in 2001 with operating losses of \$4.9B reported in 2002 and \$0.9B in 2003. The "best guess" estimate is for something close to breakeven world airline operating profits for 2004. There are not a lot of airlines that are actually reporting meaningful profits at this point in the cycle, but it is clearly getting better. Increased fuel prices have curtailed what could have been a return to operating profits in 2004 on a world wide basis. It would be prudent for the world's airlines to take a little more time to rebuild their balance sheets and get back to higher utilization rates for their existing aircraft fleet before ordering more aircraft. Unfortunately, the airlines have shown that they are historically not a "prudent" group of buyers.

In this current cycle, Boeing reached its peak production rates in 1999 with delivery of 573 aircraft and appears to have bottomed out in the 2003-2004 time period with deliveries of 285 commercial jet transport aircraft in 2004. That's a 50% decline (peak to trough) in unit deliveries for Boeing.

The picture at Airbus is quite a bit different. Airbus's production rate in 1999 (Boeing's peak year) was 294 aircraft and continued to increase somewhat to a peak of 325 aircraft in 2001 and then bottomed out in the 2002-2003 timeframe at 303 and 305 aircraft respectively. Airbus ended the year 2004 with 320 aircraft deliveries. Airbus in the current aircraft cycle was able to achieve flat deliveries as compared to Boeing's 50% decline in the same time period.

Today's Winners

If you look at the numbers for the last three years Airbus wins on aircraft orders, aircraft deliveries, and aircraft backlog. It is important to note it's not exactly a rout. Boeing still maintains a market share that is in the 47% to 48% on orders/deliveries or 43% or so on backlog depending on how you decide to measure it. It is clear that Boeing is no longer number one or the "world's largest commercial aircraft manufacturer." Unfortunately, for Boeing, being "very close" to being the world's largest supplier does not seem to matter to the media when it comes to publication time.

Airbus has made impressive gains in the market with its products over the last five years. It has cost Boeing something in the order of at least 20 points in market share. Airbus has clearly out-ordered and out-delivered Boeing at the bottom of the aircraft cycle. What are the reasons for the impressive gains? In my opinion, the aircraft products offered by both companies are generally regarded to be about equal. Recent airline sales campaigns are now suggesting that Airbus has become even more aggressive on aircraft pricing. Boeing at the same time is reported to have backed off in reducing their prices to the newly established threshold levels of what it now takes to sell airplanes.

As aircraft price becomes the dominant sales discriminator then the aircraft cost line gets to receive even more of a corporate focus for both companies. The pressures to outsource will become a compelling strategy to implement a quick fix for quick results to a long term problem.

Where Do We Go From Here?

Boeing has stated its plan to deliver approximately 320 aircraft in 2005. The Airbus publicly announced plan is to deliver 350 to 360 aircraft in 2005. When it comes

to delivery plans in 2006 both manufacturers become a bit circumspect as to what their plans are.

Let's move to the market drivers for the emerging upside of this current cycle. In my opinion, it will be another manufacturer led "supply push" that is the major market driver for the next wave of oncoming increases in production. The big difference is that this time around it will not be led by Boeing. It will be led by Airbus. Boeing, in my opinion, will be forced to react and follow with its own increased production rates but for this cycle it is Airbus leading the parade.

Most independent forecasters believe that aircraft production levels will be up in 2005 and 2006. The point where I diverge from most of the aircraft forecasters in the industry is in the rate of the production buildup. I believe production rates will be going up at a rather rapid rate starting from the base of 605 aircraft in 2004 accelerating through 2005 and reaching 800 aircraft per year in 2006 (Boeing with 350 aircraft and Airbus with 450 aircraft). If I am right with my forecast, that would take Boeing from 285 aircraft deliveries in 2004 to 350 aircraft deliveries in 2006, a 23% increase in the two year period. Airbus would move from 320 aircraft deliveries in 2004 to 450 aircraft deliveries in 2006, a 40% increase in the two year period. If anything, these numbers could be larger and the pace could be faster than most would expect, particularly with regard to my projections for Boeing production rate increases.

As we start calendar year 2005 Boeing is currently at production rates of 1 aircraft per month for the 717, 17 aircraft per month for the 737, 1 aircraft per month for the 747, 1 aircraft per month for the 767, and 3 aircraft per month for the 777. The 757 program is currently being phased out of production with the last 757 delivery to take place in June of 2005. Continued production of the 767 is viewed as being highly dependent on the startup of the highly publicized U.S. Air Force Tanker program. The recently launched 7E7 program which is intended to be a 757/767 replacement aircraft is scheduled to begin deliveries in 2008.

Looking ahead, for Boeing it appears that 2005-2006 production will be dominated by the 737 (an Renton program) and the 777 (an Everett program) until the 7E7 (an Everett program) starts deliveries in 2008. The 7E7 development, tooling, and production startup will add significantly to the activity levels at the Everett operation during 2006 and 2007.

If you adopt my 800 aircraft forecast for 2006 with Boeing getting 350 and Airbus 450 then it's a 44%/56% (Boeing/Airbus) market share split which would point to further declines for Boeing's market share over the next two years.

As we start calendar year 2005 Airbus is currently at production rates of approximately 20 aircraft per month for the A320 and approximately 7 aircraft per month for the A330/A340. The A300/A310 programs are at a modest 1 or less per month combined production rate and the newly launched A380 is currently scheduled for first delivery in July/August of 2006. The recently announced A350 program, a derivative of the existing A330/A340 programs is being designed to combat the Boeing 7E7 program and is scheduled for first delivery in 2010.

So where does this all leave us? I think it points to a market that is headed up and headed up sharply. Maybe it should not—but I believe it will. Airbus is pushing it on the supply side and the Chinese airlines are pulling it from the demand side. Boeing will react to it. The rest of the airlines and the industry will join in on the premise that "the train is leaving the station, so get on board or you will be left behind." This is one cycle that Boeing cannot afford to miss. This is also an excellent time for Airbus to make major inroads into the Chinese market by locking in significant orders for aircraft and Airbus knows it.

What happens at the top or on the upside of this current cycle? It appears to me to be a market that might be Airbus's market to lose. The biggest threat to Airbus, in my opinion, would come from a failure to accomplish the 50% increase in production by 2006 that I have projected.

The aggregate market in terms of supply and demand forces will of course, over time, correct itself but I think that it is likely to be a post 2006/2007 event.

What About the Next Cycle?

Things could be a bit different post 7E7 introduction (2008 and beyond). In my opinion, if Boeing delivers the 7E7 as advertised it could become a major paradigm shift in the market for commercial transport aircraft.

An aircraft with an all composite fuselage, composite wing, emphasis on electric actuation and control versus hydraulics, etc. could be a real show stopper with the airlines. There should be significant weight savings as well as maintenance savings with this design concept that would save the airlines a lot of money during the operational life of the aircraft. Offering the 7E7 at current 767 prices is a "gutsy" move by Boeing.

The Airbus A380 is a major accomplishment for Airbus. It is big in terms of physical size (it will be the world's largest). It will, in my opinion, sell reasonably well for an aircraft of that size. The A350 response by Airbus to the 7E7 is an aggressive move. It is a derivative aircraft of the A330/A340 family but one with major changes. Airbus is committed to design and build an all new wing for the A350 as well as add a host of other improvements (including 7E7 engines). To their credit, Airbus made their decision on launching the A350 in a heartbeat. Boeing on the other hand, in reacting to the A380, agonized over this and that 747 derivative over a protracted period of time and eventually let the A380 come to market without any really competitive response (a major blunder in my opinion). The A380 and A350 will have significant composite material content in control surfaces and other major components but will still be regarded as an "aluminum" aircraft.

The 7E7 program is not without risk. It is a very bold and a substantial competitive move by Boeing. If the 7E7 wins airline acceptance, Boeing can be expected to introduce the technology gains from the 7E7 to a new series of narrow body aircraft to replace the current 737 program (introduction in the 2010–2012 timeframe?). In my opinion, Airbus will be forced to follow suit and take the all composite aircraft route.

In my opinion the 7E7 program followed by a new all composite series of Boeing narrow bodies could have a much larger impact on the airlines versus the Airbus A380 and A350 programs. It may be "the industry event" that allows Boeing to regain some of its market share? Time will tell. In any event it will be a few years off. Airbus appears to have the upper hand, in my opinion, in the pre 7E7 introduction timeframe (2005–2008).

Strategic Directions

The Airbus Strategy

I believe you can capture the essence of Airbus's commercial aircraft strategic direction in two words—"Beat Boeing." "Beat" is not at the corporate level (at least for now) or expressed in terms of profitability. It is at the commercial market sector level. It is in numbers of aircraft. It is in annual orders for aircraft, or in annual deliveries of aircraft, or in backlog in terms of number of aircraft. It's a game of who will have the words "world's largest commercial aircraft manufacturer" used in their media bylines and who gets to be referred to as the "world's second largest commercial aircraft manufacturer."

The Boeing Strategy

I believe you can also capture the essence of Boeing's commercial aircraft strategic direction in two words—"Contain Airbus." In my observations of Boeing's past behavior in the marketplace, it used to be "Stop Airbus" and prior to that it was "Ignore Airbus." It was the "Ignore Airbus" strategy that in retrospect allowed Airbus to get that all important foothold in the industry in the early 1970s.

China's Impact on Boeing

China's impact on Boeing needs to be addressed from three different perspectives: China's airlines as a source of future aircraft sales, China's aerospace subcontracting capability as an outsourcing vehicle, China's potential as a future competitor as a prime manufacturer of commercial transport aircraft.

China's Airlines as a Source of Future Aircraft Sales

Boeing historically has done well in selling aircraft in China and throughout most of Asia. "Relationship building" has been discussed as one of the key elements of Boeing's past success story in Asia. Boeing has a very strong position within Japan in terms of selling aircraft and in using Japanese subcontractors to build components and subassemblies for Boeing aircraft.

Airbus has publicly stated that they have targeted China to be "their Japan." The A380 has in the neighborhood of 3% Japanese material and manufacturing content. To date, the A380 has not made any sales inroads at the Japanese airlines. It's not from lack of trying on Airbus's part. Airbus is currently offering Chinese subcontractors up to a 5% risk sharing interest in the newly launched A350 program.

The long term traffic growth rates for China are impressive. Most forecasts indicate a level of 8% to 9% per year over the next twenty years. The U.S. markets are viewed as mature and with a growth rate of a nominal 3% per year tend to not make much of a media splash. The point that is being missed is the large difference in the fleet base from which the growth rate starts compounding. China's airlines have a fleet of some 600 or so Boeing and Airbus aircraft and another 100 or so Russian built aircraft. The base fleet of Boeing and Airbus aircraft housed within the U.S. airline system amounts to 5,200 aircraft.

Aircraft orders from Chinese airlines have a number of controlling influences that can impact the conversion of an “announced” order to a firm order and from a firm order to a delivered aircraft. The Civil Aviation Administration of China (CAAC) and other central government commissions still control who flies where, who gets the new aircraft ordered, and what types of aircraft the airline can operate. Safety concerns associated with too many new aircraft being introduced into the China airline system in any one year has been an issue. The Chinese government has also been adamant about having Chinese flight crews fly their aircraft. Flights to and from Taiwan and the Chinese Mainland also get to be a bit of a political hot potato and receive high levels of government intervention in the airline planning and aircraft ordering process.

Historically Boeing is perceived to have an edge in receiving orders from China’s airlines due to the need for China to show concern for the large U.S.-China trade imbalances that currently exist. Commercial transport aircraft orders are big dollars. They tend to make big headlines. The EC continues to grow in size and has recently surpassed the U.S. in terms of GDP. The U.S. “edge” may get a bit blunted over time as China’s trade imbalances also begin to grow with the European Community countries.

So the bottom line message is China’s airlines are very important to Boeing but they are not by any means the “entire” market. The Civil Aviation Administration of China (CAAC) has stated that they believe that China’s fleet will grow from its current 700 aircraft fleet level to 1,200 aircraft by 2010 (an increase of 100 aircraft per year in fleet size).

China’s Aerospace Subcontracting Capability as an Outsourcing Vehicle

Chinese aircraft subcontractors are not yet in the same category as their Japanese counterparts who are highly sought after for their ability to provide close tolerance assembly work and provide high levels of labor productivity.

Most of the Chinese manufacturing resources reside in the China Aviation Industry Corporation commonly known as AVIC. It is a state run organization with a large number of employees. The Chinese government recently split it into two companies AVIC I and AVIC II to make it less unwieldy. The two resulting pieces still seem to be a bit too large and both AVIC groups appear to lack a clear direction or focus.

It may well be a requirement for Boeing to place additional subcontract work in China to sell aircraft to Chinese airlines and not necessarily as an added source of lower cost production.

China’s Potential as a Future Competitor in the Role of a Prime Manufacturer of Commercial Transport Aircraft

The Chinese are currently working out how to design and develop business jets and how to assemble regional jets. The Russians are engaged in somewhat similar efforts.

The raw talent and raw resources are there but it needs to be organized and managed into something that would earn the respect of the world’s airlines. In my opinion, both of these countries will be absorbed in exploring these two less complex market sectors for some time to come. That is a good thing for Boeing and Airbus.

What Does This All Look Like 10 Years From Now?

Ten years is a little difficult to predict in this market with any degree of accuracy but the next 5 years does look like it could be a bit rough for Boeing, the Pacific Northwest, and the United States in terms of the production of commercial transport aircraft.

The world press and media coverage of the A380 introduction with its targeted first airline delivery in July/August of 2006 will paint a rather impressive European victory message in the 2005/2006/2007 timeframe. It may have an impact on the airlines’ decisionmaking process during the next few years.

The good news is that, in my opinion, Boeing production rates are going to start to move up. I guess the bad news is that they should be going up even faster than Airbus, but let’s focus on the good news part of the message which will affect the near term outlook.

Boeing’s aircraft product lines are very much a U.S. product. Boeing lists the U.S. share of its total aircraft (less engines) as 86% for the 737 aircraft and 76% for the 777 aircraft. These work share numbers are always subject to some interpretation as companies listed as U.S. suppliers often subcontract work to non-U.S. companies and the companies listed as non-U.S. suppliers subcontract to U.S. companies, particularly material suppliers.

If I am right with my 350 aircraft number for Boeing in 2006 that is a 23% increase over 2004. The 737 program has a relatively high amount of component and

subassembly activity in Wichita Kansas so the Pacific Northwest region might receive less of a bounce than the gross production rate increase would suggest.

My ten year crystal ball "vision" of the future says that by 2015 Boeing will have regained its market share position to the level that Airbus and Boeing are trading off "who has the 45% share and who has the 55% number" as the market share battle ebbs back and forth between the two companies.

I predict that in ten years both Boeing and Airbus will still be "hip deep" in the commercial transport aircraft market and will still not particularly like each other. Upward movement of the regional jet suppliers Bombardier and Embraer may have also split the market up a bit in terms of who is serving the shorter range market needs of the airlines. The threat of market entry by Russia and/or China with their own indigenous aircraft will be more of an issue to deal with at that time.

Cochair BECKER. You may have a question in your mind as to why there's not a Boeing representative sitting at the table. We did our very best at every level that we operate, to get a Boeing representative. We started with the CEO and then tried for somebody high up that would be in a position to give us more than just marketing and sales figures, but they wouldn't come. I think it's a sad day in America for that to happen, but it's almost understandable that I'm sure Boeing is concerned about pressure being applied to them internally, and I think this is true of a lot of companies that do business in China.

But in any event, we couldn't get them.

Next we'll hear from Owen Herrnstadt.

**STATEMENT OF OWEN E. HERRNSTADT
DIRECTOR, TRADE AND GLOBALIZATION DEPARTMENT
INTERNATIONAL ASSOCIATION OF
MACHINISTS AND AEROSPACE WORKERS (IAM)
UPPER MARLBORO, MARYLAND**

Mr. HERRNSTADT. Thank you, Mr. Chairman, Commissioners.

My name is Owen Herrnstadt. I'm the Director for Trade and Globalization at the International Association of Machinists and Aerospace Workers. Seated to my left is Mr. Mark Blondin, President and Directing Business Representative from IAM District Lodge 751, which represents several thousand aerospace workers, not only at Boeing but also at other companies. Seated to my right is Mr. Dick Schneider, who is the overall Boeing Coordinator for the IAM.

And if it meets with your approval, what I would like to do is briefly go through my oral testimony and then turn to my colleagues, Blondin and Schneider, for their additional comments.

Cochair BECKER. Whatever written testimony you have will go into the record from each of you.

Mr. HERRNSTADT. Thank you very much, Mr. Chairman.

The IAM represents more aerospace and related workers than any other union in the U.S., probably the world. We are members, work for both prime and subtier contractors, producing and assembling, servicing and maintaining a wide variety of products, directly and indirectly related to the aerospace industry. Given our unique position in the U.S. aerospace industry and our deep concerns with respect to the development of China's aerospace industry, we're obviously honored to appear before you today.

In order to fully understand our deep concerns, we broken our written testimony into three parts. First, the current state of the U.S. aerospace employment, which is a very sad state indeed; second, a review of the aerospace industry as we know it, burgeoning

in China; and third, some proposals for policy makers, in an effort to mitigate some of these threats.

First of all I need not elaborate, the crisis that U.S. aerospace workers find themselves currently in. In the past 15 years or so over 500,000 workers in the industry have lost their jobs, several hundred thousand more workers have lost their jobs in related industries. One of the reasons for this loss appears to be the lack of a comprehensive policy by U.S. policy makers to stem this crisis, a forward-thinking policy, which will in effect lead to not only the stabilization but the increase in the number of good and decent jobs in this industry.

The negative impact also on U.S. aerospace workers is exacerbated by the apparent fact that other countries have implemented comprehensive policies in this precise industry. After all, what were once fledgling aerospace industries in other countries are now significant U.S. competitors.

In our testimony in 2001 the IAM singled out China for developing an effective industrial development of the aerospace industry in that country. During our 1998 visit to China to tour aerospace facilities, IAM participants noted the broad capacity in this industry in China. My colleague, Dick Schneider, was one of those IAM members on that mission.

How did China develop such an aerospace industry and how are they developing it? Well, there are obviously many different ways. One is through offsets and outsourcing and other forms of mechanisms that are related to that.

There are many, many companies that are involved with activities in China. Obviously Boeing is one. They're joined by Airbus, Eurocopter, Brazil's aerospace, as well as many other endeavors, which are elaborated on in my written testimony.

China also has the dubious advantage of a work force that does not enjoy fundamental human rights. I need not elaborate on that to this Commission. That's also in my written testimony, and I know it's something that this Commission has looked at for some time. The AFL-CIO's recent Section 301 petition, filed last spring, also elaborates on the direct link between low wages in China and the trade deficit. Dr. Rob Scott also previously just testified on that.

As China's aerospace industry further develops its lower cost basis, derived in part from a work force that cannot legally form its own labor unions, let alone engage in meaningful collective bargaining, represents a further detriment to U.S. workers.

In order for the U.S. aerospace industry to remain competitive three things need to be addressed and need to be addressed quickly. One is to acknowledge the dangers of outsourcing and offsets; two, to adopt the implementation of economic impact statements, so that we are aware in five years, 10 years down the road where we will be particularly when it comes to government programs; and three, to assure that internationally recognized labor standards are used, adopted and enforced in this industry, that this industry leads the world in the recognition of international labor standards.

In my time remaining I'd like to call upon my colleague, Mr. Blondin, for some additional comments.

[The statement follows:]

**Prepared Statement of Owen E. Herrnstadt
Director, Trade and Globalization Department
International Association of Machinists and Aerospace Workers (IAM)
Upper Marlboro, Maryland**

Executive Summary

The International Association of Machinists and Aerospace Workers (IAM) represents several hundred thousand workers in North America in a variety of industries, including shipbuilding and ship repair, electronics, woodworking, defense and transportation, and of course aerospace. Given our unique position, we very much appreciate the opportunity to appear before you today.

U.S. Aerospace Employment is in Crisis

The importance of the U.S. aerospace industry to our nation's economic and physical security cannot be questioned. The industry is directly responsible for the employment of hundreds of thousands of individuals. Indirectly, it is responsible for the employment of several hundred thousand more workers. Many U.S. communities have flourished because of the industry and various regions of our country have grown economically dependent on this essential industry. The health of U.S. aerospace employment also has an affect on our nation's security. As outsourcing, co-production, and other similar activities grow in the defense aerospace industry, U.S. aerospace employment shrinks.

Despite the importance of the aerospace industry, since we last testified before this Commission, the deterioration of U.S. aerospace employment has continued at a dramatic rate. Over 600,000 jobs have been lost in the total U.S. aerospace industry since 1990. Several hundred thousand more workers have lost their jobs in related industries.

U.S. Crisis Fueled by Lack of Comprehensive Policy

U.S. policymakers' continued failure to develop, adopt and implement a comprehensive policy to promote U.S. aerospace employment fuels the current crisis. The negative impact of the lack of a comprehensive policy in aerospace is exacerbated by the fact that other countries have acknowledged and embraced the critical importance of industrial policy—especially in aerospace. After all, what were once fledgling aerospace industries are now U.S. competitors. As succinctly stated by the Presidential Commission on Aerospace, "... foreign nations clearly recognize the potential benefits from aerospace and are attempting to wrest global leadership away from us."

A country that truly understands the importance of adopting a comprehensive aerospace policy is China. In our testimony in 2001, the IAM singled out China for developing an effective industrial policy in an effort to develop its own "aerospace industry." During our 1998 visit to China to tour aerospace facilities, IAM participants reported the enormous aerospace capacity that existed in China.

How did China develop such a huge capacity for aerospace? While there are obviously many different and related methods China utilizes, one significant method used is by extracting production and technology from other countries through "offsets," one of several forms of outsourcing. "China is one of the most aggressive countries in pursuing offsets agreements and, with its market potential and minimal labor standards, it has substantial leverage in negotiating these agreements." (Jeff Faux)

China's aerospace industry serves as a supplier for premier aerospace companies like Boeing. Boeing is, of course, just one of many aerospace companies investing in China's aerospace industry, including Boeing's chief rival, Airbus. Brazil's aerospace industry is also teaming up with China. Eurocopter, a subsidy of EADS, is also involved with China's aerospace industry.

China's aerospace industry is not, however, complacent with its current programs. There are reports that "China is likely to start developing its own large aircraft rather than rely solely on foreign giants Boeing and Airbus. ..." (USAToday.com, "China Studies Building its Own Large Aircraft," 03/15/04, extracted 09/09/04.) China aerospace may also be expanding to space itself: "The Chinese plan to send more astronauts into space next year, to launch a Moon probe within three years, and are aiming to land an unmanned vehicle on the Moon by 2010. ..." (The New York Times, 1/22/04.)

China's Unfair Advantage Regarding Labor

China has the dubious advantage of a workforce that does not enjoy fundamental human rights. Failure to permit labor to enjoy freedom of association through the formation of legitimate trade unions and to engage in meaningful collective bar-

gaining, is a market distorting mechanism that artificially holds down wages. While aerospace workers in China are presumably on the higher end of the wage scale, they indisputably receive only a fraction of pay that U.S. aerospace industry workers receive and “although reliable data on comparable labor costs in China are not available, we can be confident that aerospace wages in China are below Mexican levels, and far below those in the U.S.” (Faux)

As China’s aerospace industry further develops, its lower cost basis, derived in part from a workforce that cannot legally form its own labor unions let alone engage in meaningful collective bargaining, represents a further detriment to U.S. workers.

Proposals to Restore the U.S. Aerospace Industry and U.S. Aerospace Employment

In order for the U.S. aerospace industry to remain competitive against a growing threat from China, the following proposals should be given serious consideration by U.S. policymakers:

- 1. Acknowledge the growing threat of offsets as well as other forms of outsourcing and implement an effective response for mitigating their negative impact.**
- 2. Adopt the implementation of Economic Impact Statements.**
- 3. Assure that Internationally Recognized Labor Standards, particularly those reflected by the International Labor Organization’s Conventions, are incorporated and effectively enforced throughout the industry.**

* * * * *

While these proposals address the U.S. aerospace industry as a whole, they are particularly significant when referring to China. After all, China has in part developed its aerospace industry through the use of offsets and other forms of outsourcing which poses a significant threat to U.S. aerospace employment. China’s lack of recognition for internationally recognized labor standards as well as other fundamental human rights has also given it an unfair advantage in world competition. As China’s aerospace industry develops, this unfair competition will be exacerbated in a tightening global market resulting in an increasingly negative impact on the U.S. aerospace workforce.

Comments

I. Introduction

The International Association of Machinists and Aerospace Workers (IAM) represents several hundred thousand workers in North America in a variety of industries, including shipbuilding and ship repair, electronics, woodworking, defense and transportation, and of course aerospace. The IAM represents more aerospace and related workers than any other union in the world. IAM members work for both prime and sub-tier contractors, producing, assembling, servicing and maintaining a wide variety of products directly and indirectly related to the aerospace industry. Our members have helped build some of the world’s largest and most successful aerospace companies—Boeing, Lockheed Martin, Pratt & Whitney, and General Electric. As we stated in comments before this Commission over three years ago, “[G]iven our membership in the aerospace industry, the IAM has a vested interest in ensuring the competitiveness of the U.S. aerospace industry and in preserving the jobs of our members in this highly competitive industry. We are also mindful that healthy and vibrant aerospace employment in the U.S. contributes to our nation’s economic security as well as our defense.”¹

Given our unique position in the U.S. aerospace industry and our deep concerns with respect to the development of China’s aerospace industry, we are honored to appear before you today.

In order to fully understand the threat that China’s aerospace industry poses, it is essential to begin with a summary of the current state of U.S. aerospace employment. After a brief review of the U.S. industry, the rapid development of the aerospace industry in China is discussed and, of course, its growing impact on the U.S. aerospace industry and its workforce. The last section of this testimony includes a summary of long overdue reforms that we urge U.S. policymakers to adopt in order to mitigate the threat that China currently poses for the U.S. aerospace industry and U.S. workers.

¹“Comments of the International Association of Machinists and Aerospace Workers before the U.S.-China Security Review Commission,” August 2, 2001 (hereinafter referred to as “IAM Comments”).

II. U.S. Aerospace Employment is in Crisis

The importance of the U.S. aerospace industry to our nation's economic and physical security cannot be questioned. The industry is directly responsible for the employment of hundreds of thousands of individuals. Indirectly, it is responsible for the employment of several hundred thousand more workers. Many U.S. communities have flourished because of the industry and various regions of our country have grown economically dependent on this essential industry. The Final Report of the Commission on the Future of the United States Aerospace Industry ("Aerospace Commission") states that the industry "contributes over 15 percent to our Gross Domestic Product and supports over 15 million high quality American jobs."² U.S. aerospace is also attributed as a major source of "[T]echnical innovation with substantial spillovers to other industrial and commercial sectors . . . [H]igh-wage employment, which spreads the benefits of rising productivity throughout the U.S. economy. . . ."³ The Aerospace Commission also noted the industry's contribution to the nation's "economic growth, quality of life, and scientific achievements. . . ."⁴

The health of U.S. aerospace employment also has an affect on our nation's security.⁵ As outsourcing, co-production, and other similar activities grow in the defense aerospace industry, U.S. aerospace employment shrinks. In addition to the direct impact on employment, U.S. dependence on other countries for aerospace defense products presents at least two other issues: first, dependence on other countries for the manufacture, development, or assembly for our defense products is as unacceptable as it is unwise, especially in a post-September 11, 2001 world. What happens when our allies become our enemies? What happens when supply chains become disrupted by unpredictable events? Second, as skilled workers in the defense industry lose their jobs, the de-skilling of America's defense workforce continues at a dramatic rate. If and when we as a country need to rebuild our defense industry, skilled workers vital for the success of such an industry will not be available.

Despite the importance of the aerospace industry, since we last testified before this Commission, the deterioration of U.S. aerospace employment has continued at a dramatic rate. Over 600,000 jobs have been lost in the total U.S. aerospace industry since 1990.⁶ Several hundred thousand more workers have lost their jobs in related industries. Sadly, the fact of these enormous job losses comes as no surprise to the IAM, nor should it to U.S. policymakers. Nearly twenty years ago, in *Jobs on the Wing*, authors Randy Barber and Rob Scott predicted that "up to 469,000" jobs in the aerospace and related industries "could be eliminated in 2013 because of offset policies and increased foreign competition."⁷ In a more recent study, Scott predicted by 2013 the industry would suffer a loss of over twenty-five percent "of the total jobs in aircraft production in 1995."⁸ These gloomy predictions are apparently reinforced by U.S. Government reports. According to the Department of Labor, the "Outlook" for employment in the U.S. aerospace industry is not rosy: between 2002–2012 aerospace employment in the U.S. will "decrease by 18 percent."⁹

The future health of the industry depends on its ability to attract new workers. The crisis in employment and the prediction that the crisis will deepen does not bode well for attracting new workers. In its Final Report, the Aerospace Commission summarized this concern:

The U.S. aerospace sector, once the employer of choice for the "best and brightest" technically trained workers, now finds it presents a negative image to potential employees. Surveys indicate a feeling of disillusionment about the aerospace industry among its personnel, whether they are production/technical workers, scientists or engineers. The majority of newly dislocated workers say they will not return to aerospace. In a recent survey of nearly 500 U.S. aerospace engineers,

²"Final Report of the Commission on the Future of the United States Aerospace Industry," November 2002 (hereinafter referred to as "Aerospace Commission") p. 1–2.

³Testimony of Jeff Faux, Economic Policy Institute, before the Aerospace Commission (hereinafter referred to as "Faux"), May 14, 2002.

⁴See, "Aerospace Commission," p. 1–2.

⁵Ibid.

⁶Aerospace Commission, p. 8–12; See also, Aerospace Industries Association, "Total Aerospace Products and Parts Plus Search, Detection, and Navigation Instruments."

⁷Randy Barber and Robert E. Scott, *Jobs in the Wing: Trading Away the Future of the U.S. Aerospace Industry*, Economic Policy Institute, Washington, DC, 1985, p. 2.

⁸Scott, "The Effects of Offsets, Outsourcing and Foreign Competition on Output and Employment in the U.S. Aerospace Industry," presented to the National Research Council Symposium on *Trends and Challenges in Aerospace Offsets*, Jan. 14, 1998.

⁹The 2004–05 Career Guide to Industries, Aerospace Product and Parts Manufacturing, U.S. Department of Labor, NAICS 3364 (last modified 2/27/04).

managers, production workers, and technical specialists, 80 percent of respondents said they would not recommend aerospace careers to their children.¹⁰

III. U.S. Crisis Fueled by Lack of Comprehensive Policy

U.S. policymakers' continued failure to develop, adopt and implement a comprehensive policy to promote U.S. aerospace employment fuels the current crisis. Indeed, the Aerospace Commission finding that "U.S. policy towards domestic aerospace employment must reaffirm the goal of stabilizing and increasing the number of good and decent jobs in the industry" has yet to be embraced.¹¹

The negative impact of the lack of a comprehensive policy in aerospace is exacerbated by the fact that other countries have acknowledged and embraced the critical importance of industrial policy—especially in aerospace. After all, what were once fledgling aerospace industries are now U.S. competitors.¹² As succinctly stated by the Aerospace Commission, "... foreign nations clearly recognize the potential benefits from aerospace and are attempting to wrest global leadership away from us."¹³

A country that truly understands the importance of adopting a comprehensive aerospace policy is China. In our testimony in 2001, the IAM singled out China for developing an effective industrial policy in an effort to develop its own "aerospace industry." In that testimony, we recounted the IAM's "Mission to China" in 1998 to observe the development of the aerospace industry in that country. As we noted, the U.S. International Trade Commission (USITC) had already found with respect to China, "... the nation's aviation sector intends to pursue a principal role in commercial aircraft manufacturing."¹⁴

During our 1998 visit to China to tour aerospace facilities, IAM participants reported the enormous aerospace capacity that existed in China.¹⁵ China's huge industrial capacity has been noted by other observers as well.¹⁶

How did China develop such a huge capacity for aerospace? While there are obviously many different and related methods China utilizes, one significant method used is by extracting production and technology from other countries through "offsets," one of several forms of outsourcing.¹⁷

"China is one of the most aggressive countries in pursuing offsets agreements and, with its market potential and minimal labor standards, it has substantial leverage in negotiating these agreements."¹⁸ As explained by one business person in referring to China, "[T]hey're interested in having total access to technology. . . ."¹⁹

¹⁰Final Report of the Commission on the Future of the U.S. Aerospace Industry, 8–5, Dec. 2002; citing Lean Aerospace Research Agenda and Lean Aerospace Initiative, p. 11.

¹¹Aerospace Commission, p. 8–12.

¹²E.g., European Aeronautic Defense and Space Company/Airbus.

¹³Aerospace Commission, p. 1–2.

¹⁴See, IAM Comments citing U.S. International Trade Commission, *The Changing Structure of the Global Large Civil Aircraft Industry and Market: Implications for the Competitiveness of the U.S. Industry*, Investigation No. 332–384, Nov. 1998 (hereinafter referred to as Investigation No. 332–384), at 5–1, citing Leslie Symons, "The Rise and Fall of Soviet Influence on the Chinese Aircraft Industry and Air Transport," Chapter 16, in *Transport and Economic Development—Soviet Union and Eastern Europe*, (Berlin: Osteuropa-Institut 1987), p. 450.

¹⁵See IAM Comments.

¹⁶This enormous capacity in aerospace appears to be consistent with China's booming economy: "China's current level of investment in new factories is unprecedented and will deliver an even greater supply shock to global industry in the next five years, producing even greater losses in U.S. manufacturing jobs, . . ." AFL-CIO, Section 301 Trade Petition, 3/16/04. GlobalSecurity.org, <http://www.globalsecurity.org/military/world/China/Avic.html>. no. 67 Jiaodaokou Naka Jie, extracted Sept. 9, 2004.

¹⁷The IAM has decried the use of offsets for many years. As we have stated on many occasions, offsets mandating the transfer of technology and/or production in return for market access, is increasing at an alarming rate. Offsets have resulted in a growing, global competition as well as overcapacity, which in turn has resulted in the loss of U.S. jobs directly and indirectly.

Of course, offsets also lead to threats to our national security as emphasized by the China National Aero-Technology Import and Export Corporation issue of the mid-1990's involving technology transfer and military equipment. (See, U.S. General Accounting Office Report to Congressional Reporters, *Export Controls, Sensitive Machine Tool Exports to China*, Nov. 1996.)

¹⁸Faux.

¹⁹The Wall Street Journal, "China's Price for Market Entry, Give Us Your Technology, Too," Feb. 26, 2004. It should be noted that this quote was not directly in reference to the aerospace industry. As also explained in the article, "China officially agreed to phase out many tariffs and technology-transfer requirements as part of its entry in December 2001 to the World Trade Organization. But China didn't sign a key piece of the WTO agreement that would have prohibited its top planning agency from making such demands, and government negotiators have continued

Notably, while offsets are used by U.S. aerospace concerns to gain market access, its success is questionable. After all, U.S. exports to China are relatively limited. U.S. aerospace exports to China constituted slightly more than 5 percent of total aerospace exports.²⁰ As some have concluded, the small percentage of exports to China “indicates that the benefits from offsets have been limited, while the costs in terms of job losses and lost technologies are significant.”²¹

China’s aerospace industry serves as a supplier for premier aerospace companies like Boeing. “Currently, more than 3,400 Boeing airplanes—nearly one-third of the Boeing world fleet—include major parts and assemblies built by China.”²²

Boeing acknowledges the importance of China’s aerospace industry. The following comments by the President of Boeing China, David Wang, indicate the nature of its relationship with China:

- As China’s premier aerospace partner, we have a sincere desire to share knowledge with our Chinese partners . . .²³
- Boeing’s cooperation with China’s aviation industry has achieved remarkable accomplishments . . . Today, China’s aviation manufacturing companies are playing key roles in Boeing’s global supplier network . . . Boeing’s industrial partnership with China is real and current . . .²⁴

The China Boeing website lists work performed in China in some detail. Included in the information provided by the company is an entity named “BHA Aero Composites Co., Ltd.,” which is described as “a joint venture between Boeing, Hexcel, and AVIC I for secondary composite structures and interior parts.”²⁵ Boeing recently announced that it would also rely on China to provide parts for the new 7E7 program:

Two state-owned Chinese manufacturers will provide parts and assembly for Boeing jets, including its next generation 7E7 Dreamliner, the planemaker said yesterday. The Boeing co-signed a memorandum of understanding in Beijing with China Aviation Industry Corp. I and China Aviation Industry Corp. II for a deal that the Boeing Co. said was valued at several hundred million dollars.²⁶

Boeing is, of course, just one of many aerospace companies investing in China’s aerospace industry, including Boeing’s chief rival, Airbus. Airbus Chief Executive Noel Forgeard explained his company’s philosophy with respect to China: “Airbus is not only selling aircraft in China but is also committed to the long-term development of China’s aviation industry.”²⁷ As previously noted, China is working with Airbus in many different endeavors, including a recent report that parts of the A380 will also be produced in China: “European aircraft maker Airbus has subcontracted a state-owned Chinese manufacturer to make parts for its super-jumbo A380 plane, in a deal worth about \$170 million. China Aviation Corp. I (AVIC I) will make panels for A380 nose-landing gear . . . China’s Shenyang Aircraft Corp., affiliated with AVIC I, would also be subcontracted to make A330/A340 forward-cargo door projects . . . Five Chinese companies are now making parts for Airbus.”²⁸ Other reports indicate that—

Airbus will increase its annual subcontracting commitments in China—largely for aircraft doors, wing sections and landing gear parts—from the current 30 million euros to 60 million euros in 2007 and 120 million euros by 2010 . . . The company was also discussing the possibility of setting up an “Airbus China” operation which would assemble planes in the country.²⁹

Brazil’s aerospace industry is also teaming up with China. “Empresa Brasileira de Aeronautica, SA, the world’s fourth-largest commercial aircraft maker, plans to develop new regional jets with China Aviation Industry Corp. II. . . .”³⁰

²⁰ *Top Twenty U.S. Aerospace Export Manufacturers*, Aerospace Industries Association, 2004, citing, U.S. Department of Commerce, Bureau of Census as its source.

²¹ *Faux*.

²² Boeing Press Release: “Boeing Takes Delivery of Shenyang Aircraft Corp.’s First 737 Horizontal Tail Center Section,” 11/25/04; see also “Boeing Press Release: Chinese to Partner on Boeing Airplanes, 7E7 Dreamliner,” 6/10/04.

²³ “Boeing News Release: Boeing Provides Important Support to Civil Aviation University of China,” 9/01/03.

²⁴ “News Release: Boeing and China’s Industrial Cooperation Reaches New Milestone,” 10/14/03.

²⁵ Boeing China website, extracted 09/09/04.

²⁶ Seattle Post Intelligencer, “Chinese Companies to Make 7E7 Parts,” 6/11/01.

²⁷ The Australian: Airbus Enlists China, 6/14/04, extracted 09/09/04.

²⁸ *Ibid.*

²⁹ “EADS chief outlines ambitious plans for China market,” Beijing (AFP), 12/7/04; extracted from <http://news.yahoo.com>, 12/7/04.

Eurocopter, a subsidiary of EADS, is also involved with China's aerospace industry. "France's Eurocopter and Singapore Technologies Aerospace have signed with Hafei Aviation, a listed arm of one of China's top military contractors, to make helicopters for domestic civil use."³¹

China's aerospace industry is not, however, complacent with its current programs. There are reports that "China is likely to start developing its own large aircraft rather than rely solely on foreign giants Boeing and Airbus. . . ."³²

There are also reports that "China is developing a new stealthy fighter jet aircraft and many of the design concepts and components have already been created. . . . This new aircraft is the first Eastern rival to the West's F/A-22 Raptor and F-35 Joint Strike Fighter to be put into development. . . ."³³

China aerospace may also be expanding to space itself. In an article headlined "The Next Space Race: China Heads to the Stars," *The New York Times* raises the "possibility" of a space race with China noting:

The Chinese plan to send more astronauts into space next year, to launch a Moon probe within three years, and are aiming to land an unmanned vehicle on the Moon by 2010. . . ."³⁴

IV. China's Unfair Advantage Regarding Labor

China has the dubious advantage of a workforce that does not enjoy fundamental human rights. Failure to permit labor to enjoy freedom of association through the formation of legitimate trade unions and to engage in meaningful collective bargaining, is a market distorting mechanism that artificially holds down wages. There is certainly no dispute that wages in China are low, even compared with those from developing countries. A recently reported study calculated that "[T]he cost of Chinese factory labor is a paltry 64 cents an hour."³⁵ While aerospace workers in China are presumably on the higher end of the wage scale, they indisputably receive only a fraction of pay that U.S. aerospace industry workers receive and "although reliable data on comparable labor costs in China are not available, we can be confident that aerospace wages in China are below Mexican levels, and far below those in the U.S."³⁶

According to the AFL-CIO, China's lower wage rates in turn, directly results in the loss of thousands of manufacturing jobs in the U.S. As the AFL-CIO's Section 301 trade petition to the United States Trade Representative argued:³⁷

By lowering wages by between 47 and 85 percent, China's labor repression also diverts millions of manufacturing jobs from countries where labor rights are not so comprehensively denied, increasing unemployment and poverty among workers in developed and developing countries. Highly conservative methodology show that China's labor repression displaces approximately 727,000 manufacturing jobs in the United States, and perhaps many more.³⁸

Examples of China's refusal to honor internationally recognized labor standards are abundant and are described in a variety of international reports. For example, the U.S. Department of State Country Reports on Human Rights Practices concerning China annually describes numerous human rights violations, including violations of international labor standards.³⁹ Violations of human rights are described in other reports as well, such as those issued by Human Rights Watch and the International Confederation of Free Trade Unions.

As China's aerospace industry further develops, its lower cost basis, derived in part from a workforce that cannot legally form its own labor unions let alone engage in meaningful collective bargaining, represents a further detriment to U.S. workers.

V. Proposals to Restore the U.S. Aerospace Industry and U.S. Aerospace Employment

In order for the U.S. aerospace industry to remain competitive against a growing threat from China, the following proposals should be given serious consideration by U.S. policymakers:

³¹ Reuters, CNN.com, "China Makes Links with Eurocopter," Nov. 21, 2003.

³² USAToday.com, "China Studies Building its Own Large Aircraft," 03/15/04, extracted 09/09/04.

³³ Janes—"China Reveals New Stealth Fighter Project," 12/11/02, extracted 09/09/04.

³⁴ *The New York Times*, 1/22/04.

³⁵ "Just How Cheap is Chinese Labor," BusinessWeekOnline, 12/13/04.

³⁶ Faux.

³⁷ Submitted to the U.S. Trade Representative's office, 3/16/04. The petition was subsequently rejected.

³⁸ AFL-CIO 301 Petition submitted 3/16/04.

³⁹ See U.S. State Department, Country Reports.

1. *Acknowledge the growing threat of offsets as well as other forms of outsourcing and implement an effective response for mitigating their negative impact.*

The issue of offsets and other forms of outsourcing are significant and pose a major threat to the U.S. aerospace industry and its workers.⁴⁰ The U.S. cannot delay any further in formulating an effective response to this market distorting mechanism. Among other things, efforts to move quickly to reinvigorate bilateral and multilateral negotiations that will lead to the elimination of the use of offsets by signatories to various trade agreements and trade organizations must be made. Such agreements should be aggressively enforced. In addition, as suggested before, a permanent commission “consisting of representatives of industry, government, labor, and academia” should be established “to develop a comprehensive policy to address the numerous issues related to offsets and outsourcing.”⁴¹

2. *Adopt the implementation of Economic Impact Statements.*

As has been said before, “taxpayers should know whether their hard-earned dollars are going to support good jobs at home or are going to create jobs in other countries.”⁴² Unfortunately, information gathered by the U.S. Government pertaining to the number of aerospace and aerospace related jobs that are moved to other countries by companies who receive contracts, awards, or forms of support funded by U.S. taxpayers is lacking. The U.S. Government should adopt effective methods for gathering this information so that it knows the true employment impact of its decisions. Information gathered should be examined prior to making any decision regarding funding and should be accessible to the public. Information should also be analyzed to determine employment impact in the short, medium, and long-term. For example, if a government funded transaction involves a transfer of technology and/or production, an analysis should be conducted regarding the transaction’s ultimate impact on U.S. employment.

3. *Assure that internationally recognized labor standards, particularly those reflected by the International Labor Organization’s Conventions, are incorporated and effectively enforced throughout the industry.*

The adoption of internationally recognized labor standards are not only moral issues, they are also economic issues and are directly related to the issue of “fairness.” U.S. aerospace workers should not have to compete with workers in other countries where basic human rights are neither recognized nor respected. Without effective mechanisms to incorporate these internationally recognized labor standards, countries like China threaten to drive wages and benefits in the United States down as our workforce competes in a labor market with workers in Xian, Shanghai, and elsewhere. U.S. industry should take pride in leading a world aerospace industry that recognizes and enforces these fundamental human rights.

* * * * *

While these proposals address the U.S. aerospace industry as a whole, they are particularly significant when referring to China. After all, as explained in this testimony, China has in part developed its aerospace industry through the use of offsets and other forms of outsourcing which poses a significant threat to U.S. aerospace employment. As also stated in this testimony (as well as in numerous other documents), China’s lack of recognition for internationally recognized labor standards as well as other fundamental human rights has also given it an unfair advantage in world competition. As China’s aerospace industry develops, this unfair competition will be exacerbated in a tightening global market resulting in an increasingly negative impact on the U.S. aerospace workforce.

VI. China Aerospace Industry—A Future Global Leader?

Will China’s aerospace industry remain behind the U.S. aerospace industry? China is implementing an industrial policy that is poised to contribute to growing global competition. As discussed in this testimony, China has the capacity, skilled workforce, and, of course, the “will” to make this a reality.

At the outset, we explained the contributions of the aerospace industry to our country—jobs, products, skills, and innovations—which serve as the basis for our

⁴⁰ While some claim that offsets actually create jobs, their conclusions are speculative at best. On the other hand, the workers whose jobs have actually been transferred to other countries know all too well what offsets mean for them—the loss of a good and decent job here at home.

⁴¹ See Dissent of Commissioner R. Thomas Buffenbarger, Aerospace Commission, (“Dissent”) Nov. 2002.

⁴² See, Dissent.

nation's economic and physical security. It is not surprising then that China seeks the same benefits from developing its own aerospace industry. However, while U.S. policymakers are seemingly reticent to leave the future of the industry to aerospace corporations and the tightening global market, China is aggressively implementing a comprehensive industrial policy aimed at securing its position as a strong and vibrant aerospace producer.

We are well aware that some skeptics dismiss our alarms over the growing threat from China. For them, China does not have the skilled workforce, technology and related ability to produce "quality" products to compete with the U.S. Of course, this same response was made years ago with respect to Japan. That response was proven to be incorrect as "Made in Japan" became a sought after label by some consumers who believed it represented high quality, technologically advanced goods. And, lest we forget, forty years ago, the notion that Europe would house one of the top two commercial aerospace companies in the world would have been hard to believe. No one finds it to be hard to believe now, however—least of all the U.S. aerospace industry.

Will China follow Europe's rise in this vital industry? The answer to this question will have a serious impact on our nation's aerospace workers, and, of course, our nation's economic and physical security.

**STATEMENT OF MARK BLONDIN
PRESIDENT AND DIRECTING BUSINESS REPRESENTATIVE
INTERNATIONAL ASSOCIATION OF
MACHINISTS AND AEROSPACE WORKERS (IAM)
DISTRICT 751, SEATTLE, WASHINGTON**

Mr. BLONDIN. Thank you.

I represent approximately 40,000 machinist union members at Boeing—not at Boeing at this time but in this area. The fact is, only 17,000 members remain in the factory, about 8,000 are retired, and that leaves 15,000 that have been laid off. And if you've heard Boeing's statements, not a lot are going to come back, they want to keep this employment stable, and it's been tough. And you talk about opportunities. That doesn't leave an opportunity for the next generation. Someone mentioned where are we going to be in 10 years. Well, I'll tell you, I hired in at 19 years old. My great grandfather started at Boeing. My mother retired there. I had brothers, cousins, aunts and uncles that worked there. We had that opportunity. That opportunity isn't there in manufacturing for the next generation. I don't have a member under the age of 30 right now working in our factory. The average age is 50 years old. Like I said, I hired in there at 19 years old. You don't see that no more.

And what's wrong with machining and manufacturing? There's nothing wrong with that. They say get training. Train for what? We heard that high-tech jobs are going away. Who are you going to service when nobody is creating the economy to go buy that service?

They say get a service job. I got members out there, took a 50 percent pay cut and no healthcare benefits, that are out there trying to survive and pay mortgages and worrying about sending kids to college, because of what's happened to this industry. Mr. Walsh hit it on the head: The game's changed. It's about chasing sales and trading jobs for sales, and there is no policy in this country. The export policy is exporting our jobs. That's what we've seen.

We can't compete with wages, pennies on the dollar. We can compete in the workforce and support lean manufacturing and process improvements—and be efficient, and our members have done that.

I want to give you some quick numbers.

Looks like we got a new time.

Cochair BECKER. I wasn't counting all three of you as under seven minutes.

Mr. BLONDIN. That's good. I won't be too long, but I want to give you some numbers here.

In 1989 there were roughly 44,000 IAM workers in the Boeing factories right in this Puget Sound region, and that year I believe the number of deliveries was about 284, so somewhere under 300 deliveries. 44,000 IAM members. This last year we delivered just under 300 aircraft, roughly the same, with 17,000 members, so, you do the math, nearly 30,000 less workers.

Now, we don't build airplanes the same. Everybody knows that. There are efficiencies. And as I said, our members have been key into improving the way you build an airplane. But I don't give 30,000 jobs worth of efficiencies. These jobs that went overseas not only to China and Japan and Malaysia, you name an overseas aerospace company and I guarantee that Boeing has got some work there. These were good American jobs—that went away.

The domestic content of the airplane, they (Boeing) used to be pretty happy that they could say, we had 65 percent domestic content. I don't believe they can claim 50 percent domestic content now. And we need help to fix the game.

I have no problem with incentives for American companies to be able to survive as long as the payback is they create and maintain good American jobs. And healthcare plays into it too. We're protectionist and it comes to getting cheap medical care and drugs but we sure aren't protectionist when it comes to good-paying American jobs. It's too easy for business to go overseas. It's too easy. I'm okay for a partnership that creates jobs and opportunities for the next generation. I just don't see it right now.

Cochair BECKER. Your colleague?

**STATEMENT OF RICHARD SCHNEIDER, AEROSPACE COORDINATOR
INTERNATIONAL ASSOCIATION OF
MACHINISTS AND AEROSPACE WORKERS (IAM)
UPPER MARLBORO, MARYLAND**

Mr. SCHNEIDER. Well, thank you for the opportunity again, Commission. I had the privilege of testifying before you in the year 2001.

I feel a little embarrassed, however. I guess I've been one of the fortunate few to be able to visit China, where the Commission has not been able to achieve that goal.

Let me say this right at the outset about the Chinese. The Chinese people themselves, on a visit, are the most wonderful people that I've met in the world. They're just generous, they're just a wonderful, wonderful people. And they treated us very well while we were there. However, the government of China, as has been said, is a communist country. It's a totalitarian government, and they want what we have here in the United States, and that's our jobs.

And we talked about Wal-Mart earlier in somebody else's testimony. I feel right now with the onset of a global economy that we're all in now, that the United States is kind of like Wal-Mart. We're for sale. We're for sale, and to go back to the comments of Commissioner Becker at the outset, the America that I grew up in

was not about corporate America manipulating the rest of us into dollars for themselves and their shareholders.

When I went to work in a machine shop, when I got out of the United States Army, I had a job for life if I wanted it. Nobody said I didn't. I worked at the job that I had until I moved on and upward in the union. And if I hadn't moved onward and upward in the union I'd still be working at the same job that I started out with. The American dream—the American dream was you got out of school, you went to school, you educated yourself, you went, you worked, and hopefully you had a job for life. That's the way it used to be. And now the new dialog in this nation is, Well, let's retrain ourselves. Well, Mark hit it on the head. Retrain ourselves for what? It changes daily.

I represent workers. I represent every Boeing worker in North America. I represent every worker employed by Healthrie Communication, Lavinol Corporation, which is a French-owned company, British Aerospace in Irving, Texas, a British-owned company. These are companies where Boeing has sold fabrication facilities off. And, again, we've been able to negotiate contracts with the new owners, but still, our members, when they went to work for Boeing, expected to have that job for life. That was the American dream. To buy the house, to support your kids, to educate your kids. And that's changed.

And American workers didn't change that. We go to work, we punch the time clocks, we collect our paychecks, we go home, we make the house payments, we feed the kids, we put the money away to send our kids to school, and that's changed. That's changed. America's changed.

To quote a colleague of mine that is a fellow coordinator in the IAM's aerospace department, this nation in 20 years is going to be a third-world country, and what has happened, our good friend Lou Dobbs said it last night on his nightly television show, somebody has pitted the middle class America against Chinese wages. We can't do that. Unions have been saying for years to employers, we can't compete against Chinese wages. We just didn't start saying it five years ago, 10 years ago. We've been saying it for 50 years.

When the maquiladoras started up on our Mexican borders, organized labor said, Look, that's fine, but it's going to cost us 500,000 jobs. Fortunately somebody in government determined it was only going to be 10,000 in a 10-year period.

Well, our numbers were right on the dime, we lost a half million jobs to our neighbors in Mexico, and that was 500 manufacturing jobs that American workers no longer enjoy.

And the same thing is going to happen and is happening around the world, particularly China. And when is it going to stop? And if we take the numbers that have been projected, where are we going to be in 20 years? Where is the American worker going to be in 20 years? Where are the members that I represent going to be in 20 years? And more importantly and personally, where are my grandchildren going to work? And I have 10 of them. What are they going to do?

So Commissioners, I appreciate being here today, and I know that it's an awesome task, there are many challenges, there are many questions, there are many points of views, but to me this is

not a Democrat or Republican or independent—it's not a political problem. It's a problem for America, and America's got to solve it, and somebody a heck of a lot smarter than I am I hope has the answers, and I hope we're able to help you in some fashion. Thank you.

Cochair BECKER. Thank you.
Ms. Heidi Wood.

**STATEMENT OF HEIDI WOOD
AEROSPACE/DEFENSE ANALYST
MORGAN STANLEY, NEW YORK, NEW YORK**

Ms. WOOD. Thank you very much, Mr. Chairman, and fellow Commissioners, for having me.

We have a report out and notes—statements in the back, but we're going to confine our comments to two areas. One is China's importance to Boeing. And very quickly we're going to touch on what we'd like to see in terms of Boeing's changing of its strategic direction.

First I want to discuss the Chinese market as part of an overall Asia. We've described Asia Pacific, which includes China, as the backbone of Boeing's commercial aircraft group, and I'd like to take a few moments to describe why. The U.S. and European markets have predominated Boeing's aircraft deliveries over the last 40 years, but that market now appears to be fully saturated, and future aircraft opportunities appear to be confined largely to replacement, with some small areas of modest growth. The U.S. major carriers, when you look at it as a percentage of Boeing's deliveries, have declined from 34 percent of Boeing deliveries in 1999—in 1990 to an estimated six to eight percent in 2004.

The U.S. market overall is declining as a—in terms of—the U.S. market is declining in its overall importance, as well. If you take a look at the global fleet, the U.S. market has declined from 42 percent in 1997 to 39 percent today, and we expect that the U.S. market will decline as a percentage of the global market share about two to three percent per year over the next decade.

The greatest opportunities, then, for future growth are really going to be in Asia Pacific region and China specifically. I'd like to give you some statistics to give you an indication why. First of all is the low fleet aircraft density. There is one plane for every 63,000 Americans in the United States; there is one plane for every 2 million people in China. So clearly this is a highly unsaturated market. More importantly is that it's an area that's going to experience very robust economic growth. We took a look at the Morgan Stanley estimates for China. It's expected to grow at eight percent a year over the next 10 years. That's in comparison to the United States, which is expected to grow at a rate of 3.6 percent a year over the next decade. So again, China will significantly outpace most of the other major regions in the world.

But thirdly, I think an area that is possibly underappreciated is the types of planes that are flown in China expected over the next decade, and also specifically in the Asian Pacific region. There's a tendency to clump aircraft together, but there is actually a very big difference between single-aisle aircraft and twin-aisle aircraft. If you think conceptually, a single-aisle aircraft is about a \$30 million jet. Because Boeing and Airbus compete on a very level playing

field, we think Boeing enjoys somewhere in the mid to—mid to low single-digit margins on those \$30 million planes. Twin-aisle aircraft run in the range of \$150 million per plane, and we think Boeing enjoys 15 to 20 percent average margins on those planes.

So when you realize that the twin-aisle market is very attractive and then you look at the world globally and you say, Well, where do the twin-aisles reside, it's very interesting to see that 73 percent of the U.S. market and the European market predominantly operate those single-aisle aircraft, those \$30 million jets, but 53 percent of the fleet in the Asia Pacific region is twin-aisle, and so that really marks the sweet spot for aircraft deliveries, and that's going to be—we've referred to Asia Pacific as Boeing's fortress, and that's where Airbus is going to most significantly attack them, because not only does it have an unsaturated market, great opportunities for growth. Again, remember that GDP is highly correlated with aircraft demand, and then obviously they operate the most attractive forms of aircraft, the twin-aisle aircraft.

And there's a second order of effect of the growth that's going to be taking place in China throughout the rest of Asia, which bears considering. Remember that China is not a service economy but manufacturing economy. There's only two ways those products that are being manufactured in China will leave China's shores, through shipping containers and secondly through aircraft, so we think belly cargo and cargo aircraft are going to experience significant growth as products have to move outside of China throughout to Inter-Asia and then out to the rest of the world.

Boeing's strategy has been obviously one of expansion. By most measures they've made good progress. If you take a look, in 1980 there were 13 Boeing planes in China. That has expanded to 493 in 2004. China's fleet has grown from those 13 planes to 669, so Boeing's market share has declined from a hundred percent of 13 aircraft to now 74 percent today, and Airbus has gone from zero to 26 percent of China's market from 1980 to 2004.

So there is concern about Airbus's gain of market share, but we found it interesting, we looked at the fleet expansion the last seven years. In fact, China has been relatively democratic in its according of aircraft orders to both Boeing and Airbus. 60 percent of the fleet added the last seven years went to Boeing and 40 percent went to Airbus, and we would expect most possibly that that would go to 50–50 over the next couple of years.

Lastly—well, one minute left.

I'm going to talk quickly on Boeing's strategy, what we'd like to see change. There are three aspects that we think that are flaws in Boeing's strategy. One is their inadequate R&D dedication, second is branding, and third is their approach of pricing by committee. Because of time, I'm just going to talk about R&D dedication. We think Boeing spends insufficient amount of R&D. Boeing—well, our chief complaint is that insufficient spending on R&D, with the result being that Boeing has been too slow in launching the product and possibly insufficiently innovative. Some of the world's top airlines have told us this much, and we think this partly may contribute to Airbus's steady gain in market share. Boeing shelves many more ideas than it embarks on, with the resulting output of one new plane every decade. We think that's ter-

ribly slow for what we think is a high-technology product. For a high-technology company for Boeing, the R&D investment should be higher. Boeing's commercial R&D-to-sales ratio we project to be 4.8 percent in 2005. In comparison, Airbus we are projecting at eight and a half to nine and a half percent in 2005.

Their R&D-to-sales ratio has been as low as 1.5 percent back in 1999. In dollar terms, that's 500 million to a billion dollars in R&D, and that clearly is not sufficient. The low dollars spent on R&D, which gives us some baseline of how innovative a company is, has to be related when you contrast to Airbus's high level of dedication to R&D to what we're witnessing in terms of market share dynamics.

Consumer markets almost always move towards the areas of highest innovation. So we would probably be more sympathetic to Boeing's charges about unfair competition if the comparable R&D numbers were higher and all indications were that Boeing was equally as innovative as Airbus.

Airbus has announced the intention to develop or has developed three aircraft in the same time frame that Boeing proposes to do one. The A380, the A318 and the A350 have all occurred in the same time period that Boeing has come to market with the 7E7. By most measures the A318 is not going to be a successful plane, but innovators merit credit for taking risks, and not all of them will work. We'd like better—we like that better than a company strategy of being so risk adverse that they attempt to engage the market with older products.

So in conclusion, we believe Boeing's strategy is on target with respect to having very high-quality planes when they do come out, the 777 may prove to be the best commercial aircraft Boeing has ever built, and Boeing is remarkable for its dedication to safety and excellent honest communication with airlines about the maintenance of their aircraft. Boeing is heading in the right direction, we believe, with the 7E7, and is defending a well-established turf in Asia and its attempts to expand in China.

Areas where we differ on Boeing's strategy pertain to its philosophy about R&D. We don't believe that Boeing is being sufficiently innovative or is sufficiently willing to take risks. We'd like to see a clearer branding strategy, and we hope the company will address an all-too-distant by-committee approach to aircraft pricing negotiations. We believe if Boeing could better attune itself to these three areas its market share concerns could be more effectively addressed.

Thank you very much, gentlemen and ladies.

Panel II: Discussion, Questions and Answers

Cochair BECKER. Thank you. You ran a little bit over but you were talking awful fast. If you had stopped for a breath of air I would have interrupted you.

I'm going to exercise my prerogative and ask the first round of questions on this, so start my five minutes.

The first time I went to China was shortly after Nixon made his trip over there, and Leonard Woodcock was opening up the embassy. And they didn't really have an airline. So when you look at

it from that short period of time up to date, they've made remarkable strides.

Mr. Bender, the President of the state AFL-CIO in Washington, offered testimony about developing technologies with—with Boeing employees here in the state of Washington and then turning it over to some country out of the United States for them to produce. China has been known for this—what do you call it, offsetting or whatever. They've been able to move and gain technology.

Right now I understand they have the technology, the capabilities of designing mainline aircraft, to make large mainline aircraft, designing, the whole works, producing, making. They have this technology. They even go so far as to say who they got it from the United States. This goes back to the McDonnell Douglas and the MD-90.

Just what are China's capabilities?

My experience in other fields dealing with China has been that once they gain the technology they make it themselves. They make knockoffs—now they're producing automobiles that are a mirror image of some of them that we developed and took to China. Computers, cell phone, different types of technology. Do they need Boeing? Do they need Airbus? Just what are the capabilities of the Chinese now that they've moved into these technical areas?

Mr. WALSH. If I may, I think they're a bit overstated in terms of what they've stated they can do. The closest thing—they did—back in the days of Nixon, which you just addressed—they did get the opportunity to get some 707s and play around with them. There was then a long period of time that elapsed before they did a deal with McDonnell Douglas for MD80 aircraft. It took like eight years to bring it to fruition. They played around with it and when it was over—I believe it was 25 aircraft contract for five aircraft a year for a five year period, after that they shut it down and went nowhere.

At the moment they're aggressively pursuing doing their own business jets, and I do believe they have the capability to design and build a business jet aircraft. Business jets are typically five-to 10-seat aircraft. The Chinese are actively engaged with Bombardier and Embraer with regional jets, which are 50-seat aircraft. I think they have to tackle, get through and convince the world that they can do the smaller aircraft before they can move on to Boeing turf, hence my statement that suggested 10 years from now it would still be a Boeing Airbus market, but they'll be trying, they'll be moving towards competing directly with Boeing, but it will take awhile.

Mr. HERRNSTADT. If I may, your question—really there are two questions. One refers to the company and its competition, but there's also another, and I think as my colleague Schneider pointed out, there's the employment question, that also Mark Blondin pointed out, as well. It's not so much that even if there is not an immediate direct threat to Boeing, there is to the work force, the supplier end of it, the parts problem. All of those issues. That's one issue.

The second is, there is great capability and great capacity in China in terms of the aerospace industry, and as Chairman D'Amato pointed out, one of the questions is what will happen 10

years from now, and that is a serious question to U.S. aerospace workers. We're all too mindful that "Made in Japan" many years ago meant a very different thing to many people than it does today. The development of electronics and auto industry and in aerospace industry, dealing with many parts.

And also, let's not forget in terms of Europe, several years ago no one would have been taken so seriously that an aerospace consortium company from Europe would be giving Boeing such competition.

Cochair BECKER. All right. Let's move on. If anybody has any further thoughts about that, just give us an additional statement.

Commissioner Wessel?

Commissioner WESSEL. Thank you, and thank everyone for being here equally, but Ms. Wood, I want to thank you for taking the time to be here. You and your colleague, Steve Girsky, who was at our Ohio hearing, have given us great testimony, some of the most insightful, and having looked back at the facts and figures, accurate analysis of any of the firms, and we really do appreciate your taking the time to be here.

I want to follow up on the point that was just made. Mr. Walsh, I think you said that we're going to be hip deep in it. If I remember, that was your comment a couple minutes ago. And my concern is less about being hip deep in the food fight between the companies, although that is extremely important. But if I remember—and Mr. Schneider, you were talking about the Airbus employees that the union has here. So it's not just Airbus versus Boeing, it's what happens to the work force, because you represent the aerospace workers, and so it's success of the industry overall that also matters. And the food fight between the companies, while important, it's really a question of at what point does China become a major aircraft mainframe competitor.

We've seen this in our analysis, in our hearings about the question of China's platform integration—that they're great at making commodities but their ability to integrate those together, whether it's avionics, airframes, the wing technology, which I understand is sort of crown jewel in many of this, that with the—I think it's the ARJ21, which they're going to be producing in the next couple of years, the regional jet. Are Boeing and Airbus going to be expanding dramatically their production, their employment, their R&D facilities in China, so that while they may be gaining some profits, at the end of the day it's the American worker who is going to be holding the bag? What do you see is the future?

Mr. SCHNEIDER. Commissioner, you referred to me, and let me attempt to spin my point of view on it.

Having visited China and airplane manufacturing facilities in China in 1998, just let me express to you—I disagree with Mr. Walsh. Chinese are very innovative people. What we observed was they had the technology that was provided to them by American corporations. And they've been innovative enough to expand on that, and somebody said it earlier, you can buy a Boeing aircraft and disassemble it and learn how to build an airplane. I think that within the next 10 years they will have the capability to manufacture their own large-size commercial aircraft, at the expense of those folks that we represent.

Just like Mr. Herrstadt alluded to, Japan, a short number of years ago, I remember the first Honda automobile that was brought to Portland, Oregon for sale. They couldn't sale it so it wound up in the scrap heap. Now Honda today is a sought-after vehicle. And that's what's going to happen to China, and the question being is what happens to the American worker, those folks that I represent, and your grandchildren and mine.

Again, we need an industrial policy in this country. We need to enforce trade laws that are already on the books in this country, if we're going to project the jobs and the workers that we have.

Again, America is not about those folks who sit in the boardroom. America was built by hand labor, brick by brick, by American workers. And just like a Boeing aircraft, it used to be canvas coated. It's changed over the years. Our membership has trained themselves over the years to keep pace with technology. But no matter how well they train themselves today, those jobs are going to go overseas.

And to answer your question about expansion in China, it's a vicious cycle. I had the firsthand opportunity while in China to hear how the offset game is played. I heard the ABAC officials tell the head of Boeing's delegation, Well, Fred Mitchell, you know, we really want to buy that, but if you can't give us this, Airbus will. Okay? And so those two aerospace giants are pitted against one another in China, and to capture the growing need for large twin-aisle aircraft in China, the two companies are going to do whatever it takes to maintain their market share or expand their market share in China, and it's going to be at the expense of the American worker, our members.

Cochair BECKER. Ambassador Ellsworth?

Do you want to comment on that?

Mr. BLONDIN. If I could.

American workers are left holding the bag right now, with, as I said earlier, hundreds of thousands of aerospace workers displaced, and as I said earlier healthcare plays into this. What is it, 40, 50 million Americans with no healthcare insurance, and the trend right now throughout the aerospace industry—and these industry leaders sit at the same aerospace round table. In every collective bargaining agreement across the country the trend is take care of these older workers, continue to allow them to have a pension, but try to get them to agree to contracts that say future hires will get no pension. So is that what we're going to go to, that the next generation, if there is an opportunity, because we're in such a state of disarray in the aerospace industry, that future workers, if you do get a job building an airplane, you'll have limited health insurance and no pension. Is that right? They're already left holding the bag. That seems to be the direction they want to go.

I want to agree with Ms. Wood on Boeing's inability to invest in R&D. That was in our 1995 negotiations and it came up again in '99. That was the thing that we were saying. You tell us we can't compete yet you suck the profits. They had some good years in there, selling some airplanes, record deliveries, yet instead of reinvesting, sucking the profits out, paying their investors, putting it into other sectors, defense, yet telling us we can't compete in the

commercial industry because of Airbus, so you need to take less. Shortsighted policy.

And when you talk about the wing being the crown jewel, we were always told that that is our crown jewel. We would never give up that technology. That was part of Phil Condit's Vision 2016. That was one of their core competencies.

I got a call three years ago, on Christmas day, from a reporter, wanting a comment from me on Boeing in Japan negotiating. They were going to build a 747X, extended version, which got shelved, but what is your comment, was the question to me on Boeing negotiating with Japan on them designing and manufacturing the wing. Well, we followed up on it, and sure enough, Boeing was in talks with them on giving away the wing, and they have given it away on the new airplane, the 7E7. When we questioned that, as far as the Vision 2016, well, now the vision's changed. Well, you know, the wing is the wing. Anybody can do that. You sell them an airplane, they can take it apart.

Let's not forget, that technology was bought and paid for by U.S. tax dollars, and came out of the defense industry. And that was paid for by U.S. tax dollars, and now that technology is—Ah, "it's just a wing."

Cochair BECKER. Thank you.

Ambassador Ellsworth?

Ambassador ELLSWORTH. Thank you, Mr. Chairman.

Well, Mr. Herrstadt and Mr. Blondin, Ms. Wood, with all of the different things that you've said, that raised a very important philosophical question with very concrete consequences. Mr. Schneider defined the American dream as it was when he was a younger man, and then he said over and over again, America has changed. Then Ms. Wood spoke about the importance of Boeing increasing its allocation of percentage of its revenues to R&D. Then Mr. Blondin just spoke about the importance of R&D to the people you represent. So part of the reason America has changed is because of technological innovation, and the philosophical question is can you have technological innovation and still preserve adequate and sufficient jobs. I'm not talking about China right now; I'm talking about a deeper philosophical question.

I'm not expecting any of you to answer it now, but we're going to try to wrestle with this in our report because it does feed into the China situation.

If anybody wants to comment on that, you're welcome to do so, but before you do, I want to go back to Ms. Wood and to Mr. Walsh. You've talked about the China market and Asia market as driving the fortunes of Boeing, as well as Airbus too, and you talked about the size of the GDP and the number of airplanes per 2 million people and so forth. And I didn't hear anybody talk about—other than China market, to serve the China demand for aircraft transportation. Hasn't China in the last several years built 45 new airports, and isn't there the expectation, not just by Chinese-operated airlines but by airlines all over the world, a huge increase beyond the China market for airplanes? I've been told that by experts. Am I listening to those experts accurately or do you have other views?

Mr. WALSH. I think clearly the Chinese market has the fastest traffic growth rates, in the eight to 10 percent range—

Ambassador ELLSWORTH. I'm talking about the demand of Chinese operating airlines—

Mr. WALSH. Yes, that's the air travel market, yes. That's revenue passenger miles, if you will, demand for air travel.

But you got to keep it in perspective when you look at the Chinese base fleet. They have 600 or so Boeing and Airbus aircraft, and another hundred or so Russian aircraft. So you have a Chinese fleet that has approximately 700 airplanes.

When you look at the United States with its three percent traffic growth, it's coming from a base of 5,200 aircraft. So there's a big difference. There's rapid traffic growth in China, but it is starting from a small base.

There are also constraints near term on growing travel in China in particular, and they want to have their own indigenous flight crews, so training flight crews is a problem. They can only train about 700 a year. You need about four or five flight crews per aircraft. So there's a cap of about 150 or so airplanes that they can take on and fly with their own crews. There are also safety issues. So I think it's clearly the focus or the jewel in the crown for future growth for aircraft manufacturers, but it's not the majority of the market, by any means.

Ambassador ELLSWORTH. I thank you for that answer, very clear.

Ms. Wood, what I'm trying to get at, is there—are you underestimating the demand for Boeing and Airbus aircraft, when you just talk about the need of Chinese operating airlines?

In other words, supposing Lufthansa wants to increase by 10 times its flights into China and out of China. Doesn't that create demand?

Ms. WOOD. Well, that's why—actually, and when I've referred to in our writing about China and their promise of orders for Boeing and Airbus, we've often referred to it as a situation of Lucy with the football. There is often more promise of orders than actually materialize. In the 12 years that I've been following this industry, I recall many instances where there was supposed to be a big order from China, but the problem is their infrastructure really is going to take some time, and so the growth intra-Asia—intra-China, the domestic traffic growth, will not occur as quickly as the international growth, because China is obviously going to be seeking to export as much as it can internationally.

And your question about Lufthansa is absolutely correct. That again pertains to what I'm saying, which is that twin-aisle aircraft are going to be the predominant need. The wave of planes that will be flying within China is the second wave. That's probably a decade away before that's really going to be material.

I regret that I don't have time. You pose such an interesting philosophical question. It's one that we think a lot about, with respect to an inherently American quality, which is innovation, and then the desire to project jobs and how you balance that. And certainly that is something that you and the Commission are going to have to wrestle with, so I'm just going to give you or offer to you a couple of puzzle pieces from the aerospace perspective. Again, not trying to give an opinion, but I want you to understand, or at least in our opinion, that Boeing really is challenged. And I'm not so sure it can afford to swim upstream and attempt to dislocate itself

from the global labor arbitrage that is taking place overall. We follow United Technologies, and they are moving their air-conditioning manufacturing out of the states into Eastern Europe. Global labor arbitrage is going to happen, I think it's an inevitability, and I think that it's especially prevalent when you have long-cycle businesses with high costs, high labor intensity, and where pricing is going to be a factor, and I think the brutal reality is that we are not going to see pricing for aircraft being able to go up. If anything, I think we should anticipate price deflation for aircraft for both Boeing and Airbus.

If I can just take a minute to walk through this. Do I have the time, Chairman?

Cochair BECKER. Go ahead.

Ms. WOOD. Can I? Okay. Because I took notes on this, so if I can just read what I jotted down.

Because of the secular shift in air travel towards buying online and the emergence and rapid market acceptance of low-cost carriers, we've all been insured the permanent commoditization of air travel. This means that the only airlines that will survive and some that might thrive in this environment need low-cost product, because you cannot assume much in annual appreciation of ticket prices, but since taxes, security costs, labor, fuel and other costs are guaranteed to rise annually, and the number of seats on any given plane is largely finite, the math points to aircraft pricing staying flat at best but most likely point to price deflation. And so that is one of the things that really Boeing and Airbus are challenged to face, which is the—you have to start first with the end consumer, which is all of us. We buy our tickets online, we now can instantly price a Northwest versus a United versus a Delta, and we obviously go with the cheaper price, so we have commoditized permanently air travel, and from that all of the rest of the consequences come out.

Thank you.

Cochair BECKER. Again, let me remind everybody here. I'd like to listen to everybody, but you're going into your lunch hour now.

Commissioner TEUFEL DREYER. Thanks to all of you for your valuable insights on a question of tremendous importance to all of us.

I am especially interested in what people have been saying about Airbus and Boeing. It would seem to me that Boeing would have certain advantages in competing with Airbus. First, European wages are very high; second, the productivity of the European worker is lower. I have a European son-in-law and a daughter resident in Europe, and two-month vacations are normal for starting workers, benefits are generous, and so on. Decisions have to be made by entities in several nations. In the case of Airbus, pieces of planes are made in different countries and have to be transported in order to get them assembled.

In our briefing book there was a very interesting piece about how, in order to build the A380, they had to build special ferries and also to widen the Bordeaux to Toulouse Road and things like that. The question that occurs to me is why aren't we competing better given these advantages we have.

Ms. Wood mentioned that part of Boeing's problem is insufficient investment in R&D and pricing by committee. I wonder what the situation is in Airbus. How do they manage to do this?

I teach a course dealing with the European Union, and I'm familiar with the various squabbles that go on over almost petty matters within the European Union countries—for example on how you ought to define chocolate and what should be the formula for beer and it's hard to imagine that the formula for producing Airbuses doesn't have these problems.

Another question for, again, all of you is on the outsourcing issue. Might we not be creating the seeds of our own destruction here? China has been demanding offsets, which come with training for their workers. We heard testimony in a classified hearing, but this is not classified. A representative of a particular government agency explaining the problems he was hearing about from American aircraft manufacturers. They agree to give certain training to their workers in China to produce a certain article, and then as soon as the workers are trained they all disappear, and that means that the aircraft company has to train a whole new bunch of workers. They believe that China has an integrated strategy here. Some workers find out how to make a wing, certain workers find out how to make something else, and the object is that someday the whole plane is going to be made in China.

Mr. Walsh predicted that in 10 years Boeing and Airbus still wouldn't like each other very much. I was wondering if perhaps in 20 years Boeing and Airbus would be thinking how to cooperate against AVIC 1, the Chinese company producing the country's own plane.

Again, a very quick question for Ms. Wood. We were briefly touching on the A380, this 555-passenger plane, which frankly, as a flying passenger, scares me. I mean the logistics of it. I'm not talking about the plane crashing; I'm talking about boarding all the people. Dreyer's rule is that the he larger the number of passengers the surlier the flight attendants become. You mentioned cargo coming either by ship or by plane. I'm wondering if there are any plans to have larger cargo planes? Since presumably the inanimate objects can't complain and the flight attendants will get less surly and that sort of thing. These are my questions.

Ms. WOOD. Can I—

Commissioner TEUFEL DREYER. Please.

Ms. WOOD. Several issues. I'm just going to tackle them quickly, one at a time, with the 23 seconds I have. Can I take a little more time?

Commissioner TEUFEL DREYER. Just don't take a breath and he won't stop you.

Ms. WOOD. The A380, I think you can expect that this is the first variant; they'll come out with another 655-passenger variant. You're going to see cargo variants of the A380, absolutely, and I would also expect that Boeing will counter at some point with the 747, increased gross weight of some kind.

AVIC 1, I would advise the Commissioners not to anticipate that Chinese aircraft are going to be sold internationally for a very long time. The safety requirements are so high, the Chinese airlines do not want the planes, and they're very concerned about the planes.

It's important to understand that the MD-90 trunk liners had to be reshipped to the United States and material parts of it rebuilt.

The 100-passenger agreement that took place between Airbus and China fell apart ultimately because China always seeks to have systems integration capabilities, they don't have it, and as long as they don't have it I think we are a good decade away from them materially threatening us.

Talking about Europe, why Boeing may have some advantages, respectfully, I disagree, and let me explain why. One is that Airbus has shown its ability to withstand colder water than Boeing can with respect to pricing. Part of it leads to the fact that the European government has been willing to pay for certain things, so the special ferries, the road widening, all of those aspects were borne by the French government, the German government when necessary, and so those weren't costs to Airbus. If Boeing had to do similar things, Boeing would have borne those costs.

Their labor costs are higher, you're absolutely right, but the strategy that Airbus does to counter that is that they use greater number of nonpermanent employees and also part-time employees, which better enables them to accommodate the shrinking business cycles, for one.

Secondly, they have had the structural advantage. It's important to understand that there is a structural advantage to being the number two player. You can watch all the mistakes that are made by the trailblazer and you sit back and you say, Oh, well, instead of doing aircraft this and then that, they should have a family, and so Airbus is—has more automation than Boeing does in its factories, they use less labor, and they have more up-to-date factory processes than Boeing, not because one is more intelligent than the other, it's simply the structural advantage of being the number two.

And pricing by committee. Airbus's approach is much more hands on, much more personal. Even in multibillion dollar deals I think a personal touch matters, and so, in most of the biggest negotiations John Leahy and Noel Forgeard are the men right there at the spot, and Boeing's hands-off approach by committee—I think really the order book of '04 and '03 are really telling us that that is not liked by the customers, and the airlines continue to tell me that.

Thank you.

Commissioner TEUFEL DREYER. Thank you.

Anyone else?

Mr. HERRNSTADT. I'll be brief. I'd like to speak faster than Ms. Wood but I think I would have to resort to haiku.

Very, very briefly, one of the questions you posed regarding Europe, I think it would be interesting to look at the commitment of the European aerospace industry to its workers compared to the U.S. aerospace industry. If one wanted to, one could easily look at the number of layoffs that occurred post-9/11 and compare that. That may be helpful.

Second, in terms of outsourcing, it's something that obviously we have been setting off the alarm bells for years because we have experienced it in this country, and our biggest fear is that the aerospace industry here will go the way of the U.S. shipbuilding indus-

try and the U.S. machine tool industry, in part decimated because of outsourcing and because of offsets.

And lastly, I just wanted to also point out that the 1.5 million in jobs that Dr. Scott referred to also played into all of this, and while those are—numbers are exceedingly sobering, unfortunately they're not all that surprising, since we have seen these loss of jobs occur continually.

Thank you.

Cochair BECKER. Commissioner Reinsch?

Mr. WALSH. If I could summarize my thoughts on this issue. I think the biggest near-term threat to loss of U.S. jobs is Airbus penetrating China, the Chinese government favoring Airbus aircraft, Airbus aircraft have less U.S. content than Boeing aircraft, United States job gains disappear. So I think there has to be a level playing field established with Airbus selling aircraft, and if you wanted to make that level you've got to go after a market like Europe does, with a lot of government and political support into this sector of the market.

Cochair BECKER. We went into this knowing that there wasn't a level playing field. Boeing is a private company, Airbus is a private company. We're dealing with the Chinese government. They're not motivated by the same things as regular airline buyers would be in China. So it's not a level playing field. It's not going to be a level playing field, and I don't know quite how we deal with that.

Mr. WALSH. The combination of the two forces, Airbus and China, are formidable. When you put those two together and you get them working together, that's going to be very difficult for Boeing.

Cochair BECKER. Commissioner Reinsch?

Commissioner REINSCH. Thank you, Mr. Chairman.

That last comment is something worth noting. There is a subsidy issue that underlies a lot of this. The announcement two days ago by the two parties that they were going to engage in a three-month negotiation to try to produce a new agreement I think is a good sign. We'll see how well we negotiated. I was having a discussion about this during the break. We don't always come out on top on these things, but I think the fact that there's a recognition that something needs to be done and that the goal is elimination of subsidies may bode well. If we have time later you might want to comment on that, but I do have a couple questions I want to get to first, I think primarily for Mr. Herrnstadt.

We've been talking about, it seems to me, the dilemma that Boeing faces that has been I think amplified by the comments of the two analysts as to where the growth's going to be in the sector, namely that they are effectively trading off short-term sales for creating competition down the road, which is a term that Mr. Blondin referred to during the break, which is one that I've used myself. It's not that the technology transfer via offset or whatever is gratuitous; they're presumably getting short-term sales; yet what the analysts are telling us is that the main area of growth where Boeing has to look or both of them have to look for sales, is the Asian market and primarily the Chinese market.

Assuming that's correct, and if you want to disagree feel free, but how does Boeing, currently locked in this sort of death struggle

with Airbus for market share and for sales, deal with the situation where the largest and most rapidly growing buyer is making increasing demands on it for technology transfer and has another place to go if they're not met?

That's for you, Mr. Herrnstadt.

Mr. HERRNSTADT. I think you're asking a very tough question. It's the question that's been asked when it dealt with Europe. It's the whole offset question. It's the whole is it a necessary evil question, and as others have phrased it long before me, it's the prisoner's dilemma issue, particularly for U.S. workers on it. And it's a question that's been asked now for many, many years, and we've been urging, urging policymakers to address it in a sophisticated comprehensive way. We talked about it in terms of the Presidential Commission on Offsets, which I think met for half a day several years ago. And it's been raised in other forums.

It's a multilateral issue. It's a WTO issue, or it should be a WTO issue. It should be an issue that's brought forth with the Europeans. I mean, after all, we're really talking about two of the biggest commercial aerospace manufacturers, Boeing and Airbus, and if both of them were agreed to compete on a fair playing field with China to eliminate offsets, and if those agreements were enforced with respect to China, we might go towards a long way to mitigating some of the damage that occurs.

It is a tough issue, but we are not complacent to say merely that it is a necessary evil or that we accept that we're in a prisoner's dilemma. We've lost too many hundreds of thousands of U.S. aerospace jobs here, due to many other reasons, as well, and we've got to be doing everything and anything we can to stem that tide, and we've got to be taking a comprehensive approach to that.

Commissioner REINSCH. Thank you.

On that, both you and Mr. Blondin alluded to something that I think is food for further thought, and that is that when it comes to technology transfer, it probably is in the interest of both Boeing and Airbus not to engage in too much technology transfer to Chinese, because they both face the same problem down the road, which is the creation of a competitor. If the Chinese succeed in developing large mainframe aircraft, and I'm inclined to agree with Ms. Wood that that's farther away than you might think, but leaving that aside, if they do succeed it's a threat to both companies, not just to Boeing. That suggests that on some of these issues instead of getting played one off against the other, they ought to be cooperating.

The Attorney General might have something to say about that, but it seems to me if you can do it via an offset agreement, which is something that you and I have discussed in the past, we would all come out ahead, and—well, maybe not the Chinese, but Boeing and Airbus would both come out ahead, and we would have an outcome that was also more market based than the one we've got now. But that's food for thought.

Mr. Walsh, a short question. Do you agree with Ms. Wood's comments that Boeing is short on R&D expenditures?

Mr. WALSH. Yes, I believe they have been. I believe, though, that with the 7E7, that is a market turnaround in events in plans for expansion and in aggressiveness. You could argue it's too late, and

if they hadn't done it, it would be an absolute disaster, but with the 7E7 in play now, I think that's a very positive step for Boeing.

You could argue that they could go do a 747 upgrade, as well, to be in the marketplace, but they're committed now, and I think this 7E7 could turn things around for Boeing. But as I mentioned earlier, it will be awhile.

Commissioner REINSCH. I'd just say in closing, Mr. Chairman, I think that last point, the point about R&D spending, plays directly into what the previous panel was talking about. If we're going to run faster and do better, it's clear that even some of our high-tech companies have additional work they could do to meet that standard.

Thank you.

Cochair BECKER. Commissioner Bartholomew, you've got 30 seconds.

Commissioner BARTHOLOMEW. Thank you very much, Mr. Chairman, and thank you to our panelists for appearing today, particularly Ms. Wood. I'm always pleased when we see women's expertise and talent being tapped into. So we appreciate your participation. It's been very interesting.

I just want to mention, of course, "Jobs on the Wing," the groundbreaking study that you did in 1995.

For people who don't know, it was really one of the first studies that identified many of the issues that 10 years later we are talking about—the trends in technology transfer, wages, all of these issues and the implications, and I think that a lot of the trends that identified it frankly just accelerated.

My question is a bit more of a general one, though. We know that the Chinese government has been actively and systematically identifying sectors of its economy that it wants to develop, as well as identifying technology that it wants to get its hands onto. At the same time, it seems that the United States Government has been rather passive in the face of these challenges. I just wondered what your thoughts are on what the United States Government should be doing. Ten years down the road from Jobs on the Wing, I don't see that we've made any progress in identifying these problems. It's inordinately frustrating to have to see year after year, people saying the same things. What should government be doing?

Mr. SCHNEIDER. As I stated earlier, develop an industrial policy in this nation and enforce the laws, the trade laws, that we have on the books today, in all aspects, to include WTO.

I want to bring up a quick point, and just to put things in perspective, because we've been talking about Airbus and unfair competition. Boeing has another aspect in this country that Airbus doesn't have the burden of, and that's healthcare. In Europe healthcare is the right of the citizen. That's a cost that Boeing has, and this is a point. Boeing spent more in healthcare last year than they did in R&D, since that has come up. Now, that's amazing. And that's an issue that's driving businesses in America out of business and out of this country.

At any rate, I'm glad to hear that you read our book, because we've been talking and singing the song for many, many years and nobody has been listening, and I hope that somebody in the future does.

Mr. HERRNSTADT. If I may, very briefly. I referred to our written testimony regarding economic impact statements. I think it's critical that our government do and perform a comprehensive analysis of the short, medium and long-term effects that any technology transfer has on our employment, particularly when government obviously is involved on it, but I would refer you to our written testimony because I think your question is very welcomed.

Mr. BLONDIN. I believe that this country's at a disadvantage because we have a private company, Boeing—Airbus is not a private company, it's a consortium of four countries. They subsidize that company with—you know about Launch Aid. Until you get to the point that—where they're treated—Boeing either gets the same government subsidies, which isn't going to happen in this country, or Airbus is truly on their own to make a profit, to where you can't sell an airplane at all costs just to beat Boeing, that's got to happen. The playing field's got to be level.

But the philosophy of this country also isn't about jobs. Over there it is. Ms. Wood probably has the numbers and Owen, I'm sure you do. We met in 2002 with Noel Forgeard, the CEO of Airbus, and his statement to us at the time was that, the philosophy of the Airbus is different than Boeing in that we don't subcontract as much. We feel that Boeing has lost control of their product because it's out all over the world more than we are.

Now, I don't know how true that statement is right now, but as Owen said, after 9/11 the work force in Airbus remained somewhat stable, while Boeing's was shut 50 percent.

Cochair BECKER. Commissioner Wortzel.

Commissioner WORTZEL. I'm a little bit skeptical, as the two of you are, that we're going to see great competition from China in the large aircraft market. Perhaps in small-capacity regional jets China can be competitive. Maybe you can help me out with a question I've been wrestling with in a number of years of watching Chinese military-related high-tech industries, and I think that the aircraft industry falls in there. This is a country that began in 1977 working with Rolls Royce on an aircraft jet engine, turbine jet engine, and is only beginning to produce its own this year. This is a country that in 1986 or '87 got access to the Israeli Lavi aircraft, which is essentially the plan and design for the F-16 aircraft, and has yet to be able to produce this aircraft. This is a country that from 1949 to today has not designed and produced, and still to this day does not produce a bomber, which is kind of close to a big airliner. So, my question is, why can't it do those things? And if it can't do those things, why are we so worried?

Mr. WALSH. Putting together a commercial transport aircraft is a very, very challenging activity. I think they've tried, I think they've walked up to it, I think they've seen the challenges, and I think perhaps they're more content with providing parts of aircraft and aircraft components, and that's where the near-term threat is. I think offering themselves as a threat to building aircraft does bring Boeing and Airbus to the table in terms of having them supply parts, and that's where I think the biggest job threat is, in the parts end of the business, as opposed to full-blown head-on aircraft competition.

Mr. SCHNEIDER. If I may, real quickly. Boeing sold its first aircraft to China in 1972. One of our good friends, Fred Mitchell, was on part of that business team that accomplished that goal. But, to create a market in a—I won't call it a backwards nation, but it was a backwards nation at that time. You had to create an infrastructure. Well, Boeing built that infrastructure, and continued to build the infrastructure. Air traffic control system, that's all Boeing, training pilots, that's all Boeing. And now you've got Airbus coming in doing the same thing.

If you're a government with as many mouths to feed as there are in China and you have two companies that are willing to come in and spend their money, okay, give you technology, spend their money in building your infrastructure, giving you the technology, why would you want to immediately snap up and when you got the cash cow coming your way and just offering you anything you want, that's what's going on.

But never underestimate the Chinese people. They're an intelligent people. A human being around the world is a human being. I've been in a lot of countries. And there are a lot of smart people in China, and when they decide they want to do something, you're going to see them do it. The technology is there. When they want to make the move they'll make the move, again, I think within a 10-year period you're going to see them with an aircraft flying, a large commercial aircraft. It's a difference of opinion between some people.

Mr. BLONDIN. We did lose a lot of jobs to China on plastics and composites. We had a building down in Auburn, been there for years and years, thousands of people used to work in that building. At the time Boeing shut it down and put that process assembly work in China, and other countries, several hundred workers—this was just in the last few years—were displaced, and Mr. Walsh is correct. There are a lot of parts and components that are out there, and you can say, well, when are they going to build their own airplane, put their own decal on it? It doesn't matter. When you have parts and components built outside of this area, overseas, those cost real people jobs.

Cochair BECKER. Commissioner D'Amato. Thank you.

Chairman D'AMATO. I want to thank the panel. I think this has been a very illuminating panel. I must say that I may not be shocked but I'm very disappointed in what I have to hear, what I hear from Ms. Wood and others, about The Boeing Company. What I get is a picture that's not very favorable, it's a picture of a company that's aging, that doesn't do enough of its own R&D, that's cautious, that doesn't seem to care about its own people. I'm not sure that Boeing Company hasn't lost its way. It's afraid to come here and testify before this Commission; afraid the Chinese will push them around. We can't leave the future of aerospace in the hands of a company like Boeing. That's my opinion of what I've heard today.

Now, let me ask you, Ms. Wood, I have before me an executive summary of the Commission on the Future of the United States Aerospace Industry. You were a member of that Commission, I see here. And this Commission—was it two years ago?

Ms. WOOD. Yes.

Chairman D'AMATO. I want my colleagues to understand what they're saying. "The Commission's urgent purpose is to call attention to how the critical underpinnings of this nation's aerospace industry are showing signs of faltering and to raise the alarm." Pretty strong language. Pretty strong language here.

Ms. WOOD. I wrote that.

Chairman D'AMATO. Did you write that language, Ms. Wood?

Ms. WOOD. Yes, that's me.

Chairman D'AMATO. Well, now, it seems to me what we need is about 10 or 12 Burt Rutans around this country and start feeding them some Federal funds to get this industry back on its feet. I mean, do you think that what we need is a new program of Federal sponsored R&D across the board to jump-start the aerospace industry again?

Ms. WOOD. I think we need to have a concerted policy and we don't. I think it's very interesting. I follow Bombardier—I follow Embraer and I was recently in Brazil twice over the last four or five months. It's an interesting thing when you look at Japan, you look at China, you look at Russia, Brazil, the EU, almost every country outside of our own highly values aerospace capabilities, design, manufacturing, production, as being one of the preeminent stars of a real sign of being a true advanced economy. We take it for granted, and we will suffer the ramifications of that unless, as the report said—and we've tried to urge and I've tried to use language as strong as I could say, that this is really called out to attention.

I do believe that one fundamental tenet strength that we have as Americans is that we're very innovative, and so I count on our ability to innovate to keep up with and stay ahead of the changes, the global labor arbitrage, for example.

When Mr. Schneider asked about what his grandchildren will do in the future, my hope is that they will design supersonic commercial aircraft rather than bending metal. So I don't mind low-cost, low-value-added businesses leaving our country, but I hope that the highest value ones, engineering and some of the critical parts of aircraft manufacturing, will stay here.

But really first and foremost, we need to really go back to where we were with Kennedy in the late 1960s, where we viewed it as a preeminent aspect of our national security to pay attention to this.

Chairman D'AMATO. Thank you very much.

Are you aware, have the recommendations that this Commission that you sat on in aerospace—have they been implemented at all or not?

Ms. WOOD. A few of the implementations have been taken. They've made some progress. Certainly not as much as we would have liked. But I think that we hopefully we made noise, and I think that's the first step that any Commission can take, is a—bang loud enough.

Chairman D'AMATO. Thank you very much.

Mr. HERRNSTADT. Chairman D'Amato, our President of the machinist union, Tom Buffenbarger, also served on that Commission, and the Commission also said two things: one, "Foreign nations clearly recognize the potential benefits from aerospace and are at-

tempting to wrest global leadership away from us,” and there was also a finding about U.S. policy towards domestic aerospace, “Employment must reaffirm the goal of stabilizing and increasing the number of good and decent jobs in the industry.” Hopefully those types of initiatives will be carried forward.

Chairman D’AMATO. Thank you.

Yes?

Mr. WALSH. Yes. I would suggest that your comments about Xeroxing Burt Rutan is good for the long-term implications in this country, but I think clearly for the Commission, near term getting behind the 7E7 program is going to be a big step for the United States to regain where we’ve been, and then from that point, further competition for Boeing coming within this country is a great idea.

Cochair BECKER. Just a quick question. Does Boeing have extensive R&D facilities in China?

Mr. WALSH. I don’t believe so. I think they’ve put in very modest engineering facilities within Russia, within China, within eastern European countries, but it’s a very small guarded kind of development today.

Cochair BECKER. That’s the exception rather than the rule.

Ms. WOOD. There is a facility in Russia, they’re doing some work in India, but these are very small, and it enables them to do 24-by-seven R&D, but it’s really not—I’ve watched over the last couple of years. It hasn’t really expanded. And there are very, very rigorous laws about what Boeing can do and allow to go into China.

And one last puzzle piece that I would throw your way was a comment made about if China and Airbus were to really get together and how dangerous that might be to Boeing. I think it would also be important to understand the very close relationship between U.S.-Sino relations politically and Boeing. Boeing is very often used as a—they get second-order benefits and negatives that relate to our relationship, and being that we’re the last remaining global superpower, I think the ability for China to pair together with Airbus and just go wholeheartedly and deny Boeing orders I think would be quite difficult to achieve, given where we stand globally as a world power.

Cochair BECKER. I want to thank the panel for participating—

Commissioner REINSCH. Mr. Chairman, one more thing, if I may.

Cochair BECKER. Sure. Why not.

Commissioner REINSCH. Just for the record, I want to take exception to Commissioner D’Amato’s comments about Boeing. I don’t think that they were appropriate; I don’t think they advanced the ball. The company has a lot of competitive challenges. I think they made some wise decisions. There’s clearly some more that they can do. This panel has been very useful in pointing some of those things out. I don’t think we need to attack the company.

Cochair BECKER. Thank you very much.

[Whereupon, at 12:18 p.m., a luncheon recess was taken to reconvene at 1:00 p.m., this same day.]

**AFTERNOON SESSION, 1:08 P.M.
THURSDAY, JANUARY 13, 2005**

PANEL III: SOFTWARE/HIGH-TECH

Cochair BECKER. The first one is Mr. Marcus Courtney, Washington Alliance of Technology Workers, CWA Local 37083, out of Seattle, and Mr. Courtney is going to give a labor perspective on China's impact on the U.S. software and IT industry. Dr. Ron Hira, Assistant Professor of Public Policy, Rochester Institute of Technology in New York. Mr. Hira will give an academic assessment of China's impact on the U.S. software and IT industry, focusing on public policy issues and responses. Mr. Jesse Feder, Director and Counsel for International Trade and Intellectual Property, Business Software Alliance, in Washington, D.C.

I want to welcome the panel, and we'll start with Mr. Courtney.

**STATEMENT OF MARCUS COURTNEY, PRESIDENT
WASHINGTON ALLIANCE OF TECHNOLOGY WORKERS (WASHTECH)
COMMUNICATIONS WORKERS OF AMERICA (CWA) LOCAL 37083
SEATTLE, WASHINGTON**

Mr. COURTNEY. Thank you, Mr. Chairman, and other Members of the Commission, for the opportunity to speak with you today.

Everybody has copies of my written testimony so I'm not going to read it in full. I just want to talk about some of the highlights, in particular going to talk about three things. One thing I do want to focus on is the state of the nation's high-tech economy, what's happening here locally in the high-tech economy, then move to some specific examples around the issue of offshore outsourcing within the high-tech economy, in particular with an eye toward China, then kind of wrap up and talk a little bit about how these issues are impacting high-tech workers, not only here in the Puget Sound region but throughout the entire country.

I think one word currently describes what's going on in U.S. high-tech job creation in the U.S. high-tech economy, and that word is "crisis." WashTech came out with a report in September 2004 called America's High-Tech Job Bust, and it was an economic analysis of seven regional high-tech labor markets throughout the country, and what was going on with those labor markets since an economic recovery was declared in November of 2001. And one of the things I think we need to remember in terms is this perspective is that we have been, quote, in an economic recovery for more than three and a half years, but even though we're this far into an economic recovery, one of the things that's starting to happen is this is a real serious lack of job growth and job creation, and one of the things I have in my testimony is a chart that talks about IT industry employment in key metropolitan areas. I just want to briefly talk about that because I think it's very critical and helps frame the whole debate.

And when you take a look at March 2001, which was the employment right after a recession started in the nation, we had a little over 2.1 million jobs in March of 2001 within the U.S. high-tech industry. By April 2004 we had 1.7 million jobs in terms of the U.S. high-tech economy. So it wasn't necessarily a jobless recovery for high-tech workers, it was actually a job-loss recovery for high-tech workers.

And then when you go bullet down and you talk about the regional labor markets that are absolutely critical to America's high-tech infrastructure, Boston, Chicago, Dallas, San Jose, San Francisco, Seattle, Washington—and the Washington, D.C., area, every major high-tech job area except for Washington, D.C., has fewer jobs today than it did three and a half years ago, and that is still going on currently here in the Seattle area. The high-tech industry is treading water. It's adding absolutely zero jobs.

And I think what's absolutely remarkable and stunning about this is we have to remember that during the late 1990s and early 2000 it was full employment in the high-tech industry. It was around two percent and then in some cases one percent unemployment rate. Today high-tech workers are facing double unemployment rates from where it was just a few years ago. Now, it's six, seven and in some areas eight percent unemployment rates. It's actually higher for high-tech workers facing unemployment than it is for workers in the overall economy. So I think that these statistics show exactly why I'm saying it's a crisis.

And that leads to the question: What is going on? Why is the high-tech industry failing to create so many jobs? I think one of the key underpinnings of this reason is the fact that companies are increasingly sending their work overseas and are creating jobs in low-cost labor markets. And this is very true. It's not just true in high technologies, it's true in financial services, it's true in the legal environment, it's true in the healthcare environment. The U.S. services economy and the corporations that are the underpinning of employment in that economy is rapidly expanding and exporting America's best paying, best skilled jobs overseas.

Now, let's take a look at a few examples, and in the Seattle area it's not just one or two companies, it's a whole range of companies. It's Boeing, Safeco, Washington Mutual and Amazon. And one of the things we have heard often in terms of the international trade debate is the issue that the U.S. is going to focus on highly value-added service jobs and we're only going to see the low-level jobs move overseas, and that's going to be true in high technology. Well, I'm here to tell you, the companies are aggressively and rapidly moving over the most advanced and sophisticated forms, not only of research and development but also testing and—testing customer service, technical support, it's ranging in the whole options of the software production cycle.

And in fact, Microsoft's Brian Valentine is a senior vice-president of the Windows Operating Division; he gave a presentation in July of 2002 called India—Touch Down India—Run with the Ball, and in this presentation he wanted to encourage managers to pick a project in offshore today. In particular he is talking about India in this case, and one of the reasons he was saying was because two heads are cheaper than one, but also he was talking about that you have to remember that moving this production development is critical because Redmond is no longer the center of the universe. And they're really trying to emphasize this corporate shift that Redmond is no longer just the universe.

And recently Business Week did a cover story about the China price. No, not of the China price, they did a cover story about innovation in the 21st century in technology. And when you turn to

that issue of innovation and they talked about high technology and they talked about Microsoft. It showed the research and development facility in Shanghai, and it said, quote, "Step inside the labs of Microsoft's advanced technology center outside Beijing for a lesson in 21st century innovation." The facility employs more than 500 engineers, cost \$80 million, and is Microsoft's most important facility for developing graphics, handwriting recognition and voice synthesization.

Again, it's not just that they're working in India but they're also developing sophisticated research and development technology facilities in China.

And however, it's not just Microsoft. Business Week has also reported on the whole issue of 3Com Technologies. In terms of their router, it was the first router ever developed outside the U.S., where they used primarily a majority of Chinese engineers working with U.S. engineers, and one of the things that 3Com talked about was the idea in China it's not just two heads are cheaper than one, it's four heads are cheaper than one. And one of the things that's driving this rapid shift is the whole issue of low-cost labor, and that is having a serious and economic impact in terms of job creation, wage and benefits for U.S. high-tech employees, and we need to find solutions to these problems.

[The statement follows:]

**Prepared Statement of Marcus Courtney
President, Washington Alliance of Technology Workers (WashTech)
Communications Workers of America (CWA) Local 37083
Seattle, Washington**

Mr. Chairman and Members of the Commission:

Thank you so much for the opportunity to testify before you today on such critical matters. WashTech is a local of the Communications Workers of America and we are organizing high-tech workers in the U.S. for union representation. Over the past two years we have gained international recognition regarding our work in highlighting the issue of white-collar technology jobs moving overseas. I am President of WashTech and worked in Seattle's high-tech industry during the 90's before helping found the union.

I am going to talk about three things. One, what is happening in the high-technology economy at a national and local level. Secondly, look at corporations that are moving work abroad, where and what kind of work is going with a focus on China. Finally, discuss the impact of these changes for everyday workers and what we need to do about it.

State of National and Local High-Tech Economy

One word describes the high-tech economy in the U.S.—crisis. I don't use this word lightly, but looking at the economic trends in this industry for the past several years that is the word that describes it best. Most know that the U.S. has lost some 2.7 million manufacturing jobs since 2000. What is not known is that more than 700,000 high-tech jobs have been lost in the U.S. during the past four years.

In the fall of last year, WashTech released a report called America's High-Tech Bust. We commissioned the University of Illinois at Chicago to do the research that looked at employment rates in seven major high-tech cities around the U.S. The study found that in every major high-tech city in the country, there are fewer jobs today than four years ago. What is striking about that fact is that an economic recovery was declared back in November 2001. The high-tech industry lost a whopping 200,000 jobs after a recovery was on. See the table below. The U.S. high-tech industry has experienced a job loss recovery.

The Seattle area technology economy mirrors the national picture. The Washington State economy lagged behind the rest of the country in coming out of the recession. It was fifteen months ago that the Washington State recovery started. However, today the Seattle high-tech economy has fewer jobs than it did three years ago.

Month to month snapshots of the economy, and not longer-term trends is what gets reported by the mainstream media. What you hear from the media in these re-

ports is that the economy is bouncing back, based on slight increases in the monthly jobs picture. However, that analysis fails to look deeper at a darker trend happening in the economy. The U.S. high-tech economy, once the envy of the world for job creation, has not generated any significant number of new jobs for more than three years! In fact it is generating fewer jobs. In Washington State, the home of Microsoft this is also true. Never before have we been this far into a “recovery” and new jobs have failed to materialize. A sector that once had full employment is now seeing unemployment rates above 5%.

High-tech workers in the U.S. and especially in Washington State are more concerned than ever regarding their job security, their wages and benefits.

IT Industry Employment in Key Metropolitan Areas (Not Seasonally Adjusted)

	March 2001	November 2001	March 2002	March 2003	March 2004	April 2004
Nation	2,146,800	1,949,800	1,876,700	1,763,700	1,744,000	1,743,500
Boston, MA-NH PMSA ¹	71,200	59,100	55,500	48,700	46,700	46,900
Chicago, IL PMSA ²	63,400	57,200	54,200	49,100	47,300	47,000
Dallas, TX PMSA ³	56,300	50,000	47,000	42,800	39,100	39,300
San Jose, CA PMSA	92,500	75,900	70,200	64,500	61,500	61,900
San Francisco, CA PMSA ⁴	54,900	37,300	33,100	29,500	27,900	28,000
Seattle-Bellevue-Everett, WA PMSA ⁵	59,200	54,500	52,800	50,400	52,700	52,800
Washington, DC-MD-VA-WV PMSA	165,600	157,300	155,300	157,300	160,400	161,400

¹ Employment data for NAICS 5180 (ISPs, Web Search Portals and Data Processing) is not available for the Boston PMSA and therefore undercounts total IT employment in the region.

² Employment data for this series for the Chicago PMSA includes employment in NAICS 5180 (ISPs, Web Search Portals, and Data Processing) and NAICS 5415 (Computer Systems Design and Related Services). It does not include NAICS 5112 (Software Publishing), for which employment data is unavailable.

³ Employment data for NAICS 5112 (Software Publishers) is not available for the Dallas PMSA.

⁴ Employment data for this series for the San Francisco PMSA includes employment in NAICS 5180 (ISPs, Web Search Portals, and Data Processing) and NAICS 5415 (Computer Systems Design and Related Services). It does not include NAICS 5112 (Software Publishing), for which employment data is unavailable.

⁵ Employment data for NAICS 5180 is unavailable for the Seattle PMSA.

U.S. Corporations Exporting Jobs

The question has to be asked; what is causing the high-tech job crisis? Clearly the offshore outsourcing of technology worker by America’s leading corporations is a leading cause of why jobs are not getting created here in the U.S. The WashTech/TechsUnite offshore tracker has found more than 300,000 white-collar jobs from hundreds of U.S. companies moved abroad.

In the local economy, white-collar job exporting is becoming a major trend. It is not just happening in technology, but in accounting, banking, legal, insurance, and medical industries. The names of local companies that are moving work abroad is a who’s who of major local employers; Microsoft, Boeing, Safeco, Washington Mutual, and Amazon just to name a few.

A myth about globalization is that it is only focused on “low level jobs.” But in fact companies are exporting all aspects of white-collar work overseas. From customer service all the way to R&D. While India has garnered the most attention as the prime location, companies are developing a global supply chain of labor, and increasingly looking to China to fill their employment needs.

Now I want to give some examples of companies moving work abroad, what kind of work, and where is it going with a particular eye toward China.

WashTech released a presentation by Brian Valentine, a Microsoft Senior Vice President of the Windows operating division, called “Touch Down India—Run with the Ball.” In this presentation, he outlined to managers how the company is going to aggressively pursue offshoring and offshore outsourcing of jobs, in this case to India. The presentation reminded managers that it is not just for low-level work. That Redmond is no longer the center of the universe.

Also let them know the driving force behind the new corporate focus is that “Two heads are cheaper than one.” Today, Microsoft has stopped building its new corporate campus on the eastside, and it has been reported that the company is expanding its presence in India by building a new campus there.

A lot of attention has been focused on Microsoft and its expansion in India. However, a lot less is known about the companies growing expansion into China and its increasing focus of exporting work to that country.

Business Week Magazine in its October 11, 2004 edition focused on the innovation economy. When it featured Microsoft, it didn't feature the company's Redmond based R&D facilities but the one in China. "Step inside the labs of Microsoft's advanced technology center outside Beijing for a lesson in 21st innovation." The facility employs more than 500 engineers, cost \$80 million and is "Microsoft's most important facility for developing graphics, handwriting recognition and voice-synthesisization."

However, Microsoft's work in China isn't just R&D. In screen shots from Microsoft's employee address book, the company also employees support engineers to service U.S. customers, test engineers, program managers and developers. At least 100 and probably many more in all.

It is not just Microsoft that is exporting our most sophisticated technology work abroad. IBM, Honeywell and 3Com are all doing work in China. IBM in an internal HR conference call openly discussed how the company is going to force its U.S.-based employees to train their foreign replacement from China. The employees won't like it but IBM has to do it because the competition is doing it.

Honeywell has a five-year corporate strategy for an "accelerated path to globalization." The focus of the plan is to move at least 6,000 jobs from U.S. avionics engineering facilities to countries such as China and the Czech Republic. In making such moves, Honeywell aims to increase profit per employee by \$76,000 a year.

Business Week reported in December of last year that 3Com launched the first ever data communication switching system for corporate users that was jointly developed with China telecom giant Huawei Technologies Company. "This is the first high-end piece of networking gear sold by a U.S. company that is designed and manufactured in China. For the price of one U.S. engineer, the joint venture can throw four engineers into the task of making customized products for a client."

Not only are jobs getting exported, but our technology innovation as well.

Impacts on Workers

The new round of globalization is having a devastating impact on high-tech workers. The global economy is rapidly moving ahead, but seems to lack any moral compass or values as it does, and workers are paying a high price. Natasha Humphries, Steve Gentry and Myra Bronstein have been speaking out in the past year over the humiliating experience of training their foreign replacement. For Myra, it meant a choice between that or losing her severance pay. These experiences raise significant human rights issues. Not only for U.S. employees going through this experience, but also for the employees that are coming to the U.S. expected to do that task.

Lets think about what it must be like for an employee to be in Beijing or Bangalore on a Friday, then on Monday be sitting next to a U.S. worker who is losing their job. Are these workers aware of their rights in the U.S.? What rights do they have? Who do these employees turn to when they have employment issues?

As more manufacturing and white-collar jobs move abroad, it makes it harder and longer for employees to find work. Steven Gentry has been unemployed 18 months, 500 resumes and six months of training later, he has only gotten three callbacks for new work. Cheerleaders for global labor shifting claim that more and better paying jobs will be created in the future by these corporate strategies taking advantage of cheaper labor overseas. But as you can see that is not happening and the reality for workers is vastly different.

Globalization of the labor force is not only about exporting jobs. It also means that as more and more companies develop a global supply chain of cheap labor, it threatens the wages, job security and benefits of their U.S. counterparts putting downward pressure across this emerging global labor force.

Steps need to be immediately taken to change course. This includes mandating corporate transparency around its global workforce, more aggressive data collection investigating these trends, ending the exclusive protection of corporate property rights in trade agreements and expanding them so it recognizes the rights of communities, workers and the environment. Another issue that needs to be addressed is reforming visas programs, such as the H-1b, H1-b1, and L-1, that protect human rights and are based on real labor market conditions. Also, ensuring that workers have the right to freely join a union and collectively bargain with their employer. This is a critical component in ensuring that workers can have good paying jobs with decent benefits.

Globalization does not work when it threatens the livelihood of the majority of workers for its constant unquenchable thirst of the cheapest labor, and lowest standards. Every value, even democracy, gets squeezed out as it tries to squeeze maximum shareholder value out of the market.

It also does not protect the U.S. national interest in terms of job creation and technology innovation.

Thank you for your time and attention.

Cochair BECKER. Thank you very much.
Mr. Hira.

**STATEMENT OF RONIL HIRA, Ph.D., P.E.
VICE PRESIDENT, CAREER ACTIVITIES
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS-
UNITED STATES OF AMERICA
ASSISTANT PROFESSOR OF PUBLIC POLICY
ROCHESTER INSTITUTE OF TECHNOLOGY, ROCHESTER, NEW YORK**

Dr. HIRA. Thank you very much, Mr. Chairman. I want to thank the Commission for inviting me to speak here today, to testify.

My name is Ron Hira. I'm a Professor of Public Policy at Rochester Institute of Technology, but I'm also here testifying on behalf of IEEE-USA. IEEE-USA represents 225,000 U.S. electrical engineers, electronics engineers, software engineers, computer programmers and the like. We're a professional society. Generally most of our members have at least a bachelor's degree in engineering or computer science. I'm the Vice President of career activities for IEEE-USA.

What we're finding amongst our membership is that offshore outsourcing and offshoring of technology jobs is having a significant impact already on the fate of our members. Although we don't have good numbers of how many technology jobs have been exported or offshored, I would commend the Commission for the two studies that you've sponsored to try to get your arms around this. Nevertheless, I think there's a lot more work that needs to go into this process, and I think we're just at the beginning of this process of technology jobs going offshore.

Now, there's already been some impacts, and we see this in the electrical and electronics engineering unemployment rates. We've had unprecedented levels of unemployment over the past four years, and the highest level last year, 2003, for electrical and electronics engineers. For the first time since we've been collecting data from the Bureau of Labor Statistics, electrical engineers were unemployed at a higher rate than the national average. That's the first time in 31 years. And we've gone through technology recessions in the past. I think that's pretty significant. And offshoring is a significant and growing factor for the poor labor market in the U.S. for engineers.

We are also seeing the poor labor market offshoring affecting salaries for the first time in 31 years, since we've been doing surveys of our members. Salaries actually declined between 2002 and 2003 for electrical and electronics engineers.

And lastly, we're seeing students shying away from computer science and electrical engineering. I was at Princeton University a couple months ago, the student chapters of the electrical engineering students there, society as well as the engineering honor society invited me, and they were very concerned. So even at the top universities we're seeing students concerned about whether they're going to have a career in these technology fields, which we heard earlier this morning are the future for the U.S. in the differentiator.

All of these effects are alarming but they're really not surprising. These are all predictable based on standard economic theory, and

there's no controversy in terms of the following three impacts that we would expect from offshoring. First, almost everybody agrees that there will be some job displacement for U.S. workers. Secondly, the economists tell us that we'll have a change in the mix of occupations in the U.S. And third, there will be wage pressure for U.S. workers on tradable occupations. And we're seeing this in terms of our membership, electrical and electronics engineers, as well as in the IT sector in general.

Now, the hope is that when workers are displaced they're reemployed fairly quickly, and what we're finding is that's actually not the case, and you can see that even with the national statistics with the displaced worker surveys. It turns out that one in three remain unemployed for a very long time for dislocated workers, and three in five take pay cuts once they do get reemployed. So there are significant negative impacts on these workers who are displaced.

And we really have to start to ask and try to answer the question of when this change in the mix of occupations, as we start to off-shore our engineering jobs and our computer science jobs and things like that, whether the new mix that we'll have in the U.S. will actually be better than what we've had here. So as the technology moves to China and India and the like, will the jobs that are left over—are these actually going to be better.

Secondly, we have to ask the question we heard this morning from the Congressman, whether the answer is training and retraining and education. Well, I can tell you that I know lots and lots of engineers that have advanced degrees that ask me the question when I go around the country, whether it's in Pittsburgh or it's in Silicon Valley—they ask me, what should I train for, where are the jobs? and frankly I don't have a good answer for them. And unfortunately I have not been able to find a good answer from anyone, including the economists who support this offshoring of jobs. They give you vague answers about we need more training, we need more skills and the like. But that's not a sufficient answer for somebody who actually needs to go out and find a job right now. So that's something that we need to focus on.

Secondly, there's been a debate amongst the trade theorists, the economists, Nobel Laureate Paul Samuelson, Jagdish Bhagwati, professor at Columbia University, talking about the outcomes from offshoring, will they necessarily be good or bad. Conventional wisdom has been that it's a win-win for the two trading partners, and what Samuelson basically says is, Well, there's no guarantee that it will be a win-win. In fact, it could be that there's a win-lose, and there are very plausible cases where China's development will actually lower the standard of living for the U.S. It doesn't mean it will happen, it means that it's a plausible case that this will happen, based on the trade theory models. And this work was also supported by Ralph Gomory, president of Sloan Foundation, as well as Professor William Baumol in their book, where they actually quantified things.

But I want to point out that for all the discussion amongst the trade theorists, these models that they use are very simple. They're based on two- and three-goods models, they don't include techno-

logical innovation, they don't include national security impacts as China starts to gain those technology jobs and whatnot.

We're seeing that technology jobs that are moving offshore are moving up the skill ladder also. So you're seeing both scale and scope as well as up the skill ladder.

And let me close out by referring to some of the things that were talked about creating competition. In the IT services area, we've already created our own competition from the Indian IT companies. These are not small players that are just growing. These are the market leaders. So companies like Infosys, Wipro and Tata Consultancy Services, their market values are larger than our largest IT services companies in the U.S. If you look at EDS, their market cap is actually less than Infosys, Tata and the like.

Lots of people made big fanfare out of the fact that Google went IPO and raised a billion dollars. Well, it turned out that Tata Consultancy went IPO just about the same time and they actually raised more money than Google in India.

[The statement follows:]

Prepared Statement of Ronil Hira, Ph.D., P.E.

Vice President, Career Activities

Institute of Electrical and Electronics Engineers-United States of America

Assistant Professor of Public Policy, Rochester Institute of Technology

Rochester, New York

I'd like to begin by thanking Commissioners Ellsworth and Becker for inviting me and the IEEE-USA to testify before the Commission on the subject of offshoring of software and high technology jobs—an increasingly important issue with serious implications for individual Americans, the future economic and technological competitiveness of the United States and its security.

My name is Ron Hira and I am an Assistant Professor of Public Policy at Rochester Institute of Technology. I am testifying today on behalf of the Institute of Electrical and Electronics Engineers-United States of America (IEEE-USA). I am currently the Vice President for Career Activities of IEEE-USA's and have previously served as Chair of its R&D Policy Committee and Career and Workforce Policy Committees.

The Institute of Electrical and Electronics Engineers (IEEE) is a transnational technical and professional society made up of more than 380,000 individual members in 150 countries. The IEEE's primary purposes are to advance the theory and practice of electrical, electronics, computer and software engineering, improve the careers of our members and increase their ability to innovate and create wealth for the benefit of the societies in which they live and work.

IEEE-USA was established in 1973 to promote the professional careers and technology policy interests of IEEE's 225,000 U.S. members.

Seventy percent of IEEE-USA's members work for private businesses, primarily in the aerospace and defense, biomedical technology, computers and communications, electrical and electronics equipment manufacturing and electric power industries. Thirty percent of these industry members work for firms with 500 or fewer employees. Ten percent of our members work for Federal, state and local governments. Another ten percent teach at American schools of engineering or work at non-profit research organizations. The remaining ten percent are self-employed and work as consultants to businesses and government.

Offshore Outsourcing and Offshoring of Technology Jobs is Having a Significant Impact on the U.S. Workforce

I applaud the Commission's efforts at estimating the number of jobs that have been offshored. The commissioned paper by Professors Bronfenbrenner and Luce was an important contribution to the public discussion. Nevertheless, no one nor organization has reliable figures on exactly how many information technology and engineering jobs have moved offshore. Even without reliable figures, its negative impacts on the U.S. technology labor market are already observable. Some of these effects include job displacement, wage depression, and discouraging young people from studying these disciplines in universities.

U.S. electrical and electronics engineers and computer scientists have experienced higher levels of unemployment over the past four years compared to any similar timespan since IEEE-USA was established in 1973. And in 2003, for the first time in history, the unemployment rate for electrical and electronics engineers exceeded the national average. There are many reasons for the persistently high levels of unemployment for our nation's innovators, including the dot-com and telecom busts and the general business climate against hiring, as well as others. However, it is apparent that offshoring is a significant and growing cause of low demand for U.S. high technology workers. While hiring seems to have picked up in 2004, it was not robust enough to offset the losses in previous years.

The poor labor market for electrical and electronics engineers and computer scientists is also causing wage depression. For the first time in the 31 years that IEEE-USA has been surveying our members, compensation actually *declined* in 2003.

Lastly, the poor labor market has caused young people to shy away from technology disciplines such as computer science in significant numbers. The Computing Research Association's Taulbee Survey found a more than 20% drop in BS degree enrollments in computer science programs across the country. Even at top schools like MIT, the drop in electrical engineering and computer science enrollments was 33% over a two year timespan. Students are responding rationally.

All of these developments are alarming, but they should not be surprising because they match what we would expect to find when high-skill jobs are offshored.

Offshoring's Effects Are Alarming But Not Surprising

Many economists believe that the amount of offshoring has little or no effect on the overall number of U.S. jobs and the unemployment rate, at least in the medium run. They use a full employment model, so they assume that the U.S. labor market clears eventually. However, most economists agree that offshoring causes the following: (1) job displacement for U.S. workers; (2) a change in the mix of U.S. occupations; and, (3) wage pressure for U.S. jobs that are now tradable across borders.

There is little disagreement that some U.S. workers will lose their jobs as their work shifts overseas. The *hope* is that displaced workers will be reemployed rapidly and at substantially the same wages. It appears that this process, sometimes called 'adjustment,' is not happening rapidly, or not at all, for thousands of displaced technology workers. The reason appears to be the unusually low levels of job creation in the economy over the past few years. Many have called our most recent recovery from recession, a jobless one. Unfortunately, there are few good explanations for why the recovery has not generated the number of jobs we would expect. Some have said that it is due to productivity increases, but that explanation is simply tautological.

The latest Bureau of Labor Statistics' Displaced Worker Survey, released in January 2004, provides us some insight into the reemployment rates for workers. For workers who were displaced between 2001-2003, it shows that 35% were unemployed in January 2004, and of the 65% who were employed, only 43% earned at least as much as they did before displacement. So, the empirical data do not support the economists' hope that displaced workers will be reemployed rapidly (one-in-three remain unemployed) and at substantially the same wages (three-in-five took pay cuts).

These results are mostly consistent with longer term results from the displaced worker surveys conducted from 1979 onwards. A large share of displaced workers remain unemployed for extended periods of time and even for those lucky enough to find work many take substantial pay cuts.

The second effect that economists predict is offshoring will cause a change in the mix of U.S. occupations as some jobs migrate to more efficient (i.e., lower cost labor) locations. The thinking goes, as the U.S. loses its engineering and other high skill jobs to more efficient locations, Americans will simply move into other occupations. However, there is no guarantee that the new mix of U.S. occupations will be better after offshoring. In fact, no economist is able to explain the types of new jobs that will be created. Most, including Federal Reserve Chairman Alan Greenspan, have only given vague answers about the jobs of the future, saying that they will require higher skills. If we relinquish our engineering and computer programming jobs, will we be able to replace them with better jobs? This is a key policy question that no one can answer.

It is also a very practical question that I get asked at nearly every IEEE meeting I attend. Invariably, someone asks, "What new job should I be training for? What skill sets do I need?" Unfortunately, I have no good answer for them, and I have yet to find a good one from anyone else.

The third predicted effect is wage depression in jobs that are now tradable across borders. As I mentioned earlier, these are already apparent in the IEEE–USA latest surveys.

All of these effects, plus the lack of reliable data, are understandably creating a high degree of insecurity amongst U.S. technology workers.

At the macroeconomic level, there is an ongoing debate amongst economists whether offshoring is good for America. Nobel Laureate, Professor Paul Samuelson's recent article in the *Journal of Economic Perspectives* points out the very plausible situations where offshoring can actually make America worse off. Drs. Ralph Gomory and William Baumol quantified when these situations occur in their 2001 book, "Global Trade and Conflicting National Interest." So contrary to the conventional wisdom, more trade does not guarantee a better outcome for America.

Keep in mind that these models are generally developed around simplifying assumptions. For example, they use two- or three-goods models and a limited number of trading partners. They do not explicitly take into account offshoring's impacts on technological innovation nor national security.

The Types of Jobs Moving Offshore Are Increasing in Scale and Scope and Moving Up the Skill Ladder

Some have argued that only low level jobs are moving overseas. As one major news magazine put it, why should the U.S. be concerned if 'mind-numbing' computer coding moves offshore. They argue that it simply frees up American workers to do more interesting tasks. This may comfort some, but the empirical evidence does not support the notion that only low level tasks are moving offshore.

It is clear that high-level engineering design has begun to move offshore. Many top technology firms, such as Microsoft, Intel, Google and others, have created research and development centers in low-cost countries. Venture capital firms, what some consider the lifeblood of future innovation, are increasingly asking the firms they fund to offshore as much as possible. I participated on the keynote plenary panel discussion in Silicon Valley at last summer's IEEE Hot Chips conference, a conference that brings together designers of the most advanced integrated circuits. It should give you a sense of how important offshoring is when it is a special event at the advanced chip designers' annual conference. On the panel with me were two venture capitalists, Carl Everett from Accel Partners and Vinod Dham from NewPath Ventures, both of whom said that they were pressing the start-up firms they fund, firms that design advanced electronics, to offshore as much work as possible.

Another method for assessing the types of jobs moving offshore is by searching the job openings posted on the websites of major technology corporations such as Intel and Oracle and others. My preliminary analysis of these job sites shows many high-level engineering openings at their Chinese operations. Many of these openings require advanced degrees and experience.

We are also seeing high-level non-engineering support functions move offshore. Professors Martin Kenney and Rafiq Dossani completed a revealing case study of a major U.S. high-technology firm. The firm began to move some of its financial operations to its office in Bangalore in 2001. The move was so successful that they eventually made Bangalore the headquarters for many finance functions serving company offices around the world. Many of these functions require the highest skill levels. In their study, Kenney and Dossani found that moving the function to Bangalore reduced costs, reduced headcount and improved quality. Plus, they found that the company was able to ramp up the offshore process much more rapidly than they had even planned.

There is no doubt that there will be failures along the way, but it is clear that the overwhelming trend is for work to move offshore.

The Offshore Outsourcing Companies Are Not Small Players, They Are Market Leaders

I have compared the financial reports for major IT services companies, and the results are striking. A summary table is included at the end of this testimony. It shows that two of the major Indian IT services companies, Infosys and Wipro, have market valuations that are higher than any other U.S. based company, including Electronic Data Systems (EDS), Computer Sciences Corporation, and Affiliated Computer Services. For example, in 2003, EDS had \$21 billion in revenue and about a \$9 billion market valuation. Infosys had only \$1 billion in revenue (1/20th the revenue of EDS) but a \$12 billion market valuation.

The Indian IT offshore outsourcers are not small players, they are the market leaders. And they are growing rapidly. Infosys added as many employees in the last quarter, approximately 5,000, as it did in all of the previous fiscal year. It is com-

mon to see reports of plans to double staffs amongst the Indian IT outsourcing. It is not simply coincidence that the IT job market in India is red hot, while the U.S. market languishes. Many of the jobs being filled in India are substituting for U.S. workers.

The Indian IT companies are able to earn significantly higher profit margins than their U.S. counterparts, and therefore command higher price-to-sales and price-to-earnings ratios. The Indian firms have higher profit margins because: (1) they are using a higher proportion of offshore labor, (2) tax incentives provided by the Indian government, and (3) lax U.S. government guest-worker visa programs that are exploited by the companies.

The profit margins on work that is performed offshore are higher, and since the Indian companies have a larger share of their staff located overseas, they earn higher profit margins than their U.S. counterparts.

Adding to the profit margins, are Indian government tax holidays on any software or Business Process Outsourcing (BPO) export. This is observable in the effective tax rates for Infosys and Wipro, which were between 13% and 14%, while most U.S. companies had tax rates of approximately 35%.

Lastly, U.S. government guest-worker visa policies have been helping Indian IT firms win business. The two primary visa programs being exploited are the H-1B and L-1.

The Indian IT firms use the H-1B and L-1 visa programs as a key part of their business model. The vast majority of their employees in the U.S. are on one of these two work permits. They hire very few American citizens or permanent residents.

Conceptually, the H-1B visa program is designed to allow companies to hire foreign workers when American workers cannot be found with the necessary skills. In reality, they do not first have to see an American worker and can prefer a worker on an H-1B. The L-1 visa program was designed to allow companies to transfer workers with management roles or highly specialized knowledge from one branch of their company, located outside of the U.S., to an American facility. Both programs are being used in ways not intended by Congress. It is not just an issue of displacing U.S. high-tech workers with H-1B and L-1 foreign workers with similar skills and at lower wages, the H-1B and L-1 programs are actually facilitating the export of U.S. jobs and innovation.

Through these programs, enterprising foreign workers come to the U.S. where they gain valuable experience and business contacts in their field. When their visas expire many of them go home to establish or work for new entrepreneurial businesses that compete in the U.S. market. Former H-1B and L-1 employees have significantly enhanced the competitiveness of India's IT services companies. Moreover, as confirmed in a recent study by Hal Salzman of the Center for Industrial Competitiveness at the University of Massachusetts, H-1B workers are being hired specifically by these companies to help transfer IT and other business services to their overseas locations.

IEEE-USA would be pleased to work with industry in support of balanced reforms of the permanent immigration system. But so far the only immigration reform that industry has advanced is to expand the H-1B visa caps and exceptions, while also working to limit both H-1B and L-1 visa workforce protections. H-1B and L-1 visas may help employers find low-cost workers, but they do so in a manner that is unfair to both American and foreign workers. They are, in effect, a subsidy promoting the movement of American jobs overseas. Moreover, they undermine efforts to entice American students to embark on careers in engineering or the sciences by dimming the students' chances of finding and retaining technical jobs whose rewards are commensurate with opportunities in other employment sectors.

Due to their relatively low profit margins, U.S.-based companies such as EDS and CSC, are being forced to adopt the market leaders' business models. For example, EDS announced they were moving 20,000 jobs from high-cost to low-cost countries.

Indian IT firms, concerned about the entry of even lower cost providers from China, are opening operations there. India may be the first-mover, but many other developing countries are trying to replicate India's success.

Companies Are Acting Rationally, But So Are Workers

By offshoring, company executives are pursuing what they believe is in the best interest of their shareholders. They believe that offshoring will improve their profits by cutting costs.

They should not be vilified for offshoring, since they are pursuing what they believe is in the best interest of the company. On the other hand, workers too are acting rationally by voicing their concerns about how offshoring will affect their livelihoods.

But as I said earlier, even mainstream economists agree that offshoring does not guarantee that the U.S. will be better off. What is good for companies' bottom lines may not necessarily be good for America. We should be focused on designing policies that ensure the very best outcome for America not just what is in the interests of multinational firms.

One proposed policy is to compensate those who are adversely affected by offshoring. Unfortunately, the offshore outsourcing of high-skill jobs has a number of characteristics that make it hard to compensate those who are adversely affected:

1. It is often difficult to directly identify workers who have been displaced, many of whom may not even know that they have been displaced because of trade. Companies are increasingly reluctant to reveal their plans for fear of the bad publicity that will result. Many workers are too intimidated to publicly identify themselves. They fear losing the severance package offered by their employers or that they will be blacklisted if they speak out.
2. Even if we could identify those who have been adversely affected by trade, it is not clear how we should compensate them. Do we offer subsidized re-training in some other profession?
3. Re-training and other types of assistance programs are very difficult to implement. Is it realistic to expect an electrical engineer with 20 years of experience to spend four years studying to become a nurse?

In sum, we think it is entirely misleading to describe offshore outsourcing as a "Win-Win" proposition for America and other countries, as free trade advocates so often do. The burden should be placed on those advocates to demonstrate how workers who have been adversely affected will be compensated and helped to become productive citizens once again.

These advocates assume, as part of their argument, that displaced American workers will be re-deployed. Instead of assuming, we should ensure that such workers are re-deployed in equally high skill and highly paid positions.

The Importance of Standards in Information Technology

The Commissioners asked me to address the issue of software standards and R&D. Software makers and programmers have long understood the critical role that standards play in the information technology industries. The software industry is characterized by:

- network externalities—as more users adopt a particular technology, its payoff rises exponentially,
- high switching costs—it is very expensive for a user to switch from one technology to another. This encourages lock-in to a particular technology and creates a high barrier of entry for competitors because users are reluctant to switch.
- economies of scale—packaged software is almost entirely a fixed cost. Marginal costs for reproduction are nearly zero.

For all of these reasons, standard setting is often a contentious issue. Proprietary standards that are widely adopted can enable a company to gain, and more importantly sustain, a competitive advantage, excluding competitors. It can also enable the company with the standard a competitive advantage in the value-added products and services that are built on top of the standard.

Maintaining leadership in software is not only important in its own right, but also because software has become the heart of R&D. I recently wrote an article on R&D trends for IEEE Spectrum. In our interviews with top R&D managers, my co-author, Harry Goldstein, and I found managers saying that software is taking up an ever larger chunk of development budgets and is *the* key for product differentiation. For example, Swedish telecommunications giant LM Ericsson spends about 85 percent of its R&D budget on software. The U.S. needs the very best software engineers to grow the information technology industry but they are also needed to spur innovation and growth in every other major technology sector.

Technological Innovation, Economic Growth and National Security Implications

America's economic competitiveness and national security is increasingly dependent on the superiority of our technology and technical know-how. There is a widespread belief—almost a blind faith among policymakers—that as communications, semiconductor manufacturing, electronic devices and other key technological capabilities are off-loaded to other countries, the United States will just move on to the next field, to the next "big thing."

Many observers, including government officials, argue that the next “big thing” is going to be nanotechnology, and that nanotechnology is going to generate enormous economic benefits and create many new jobs. We can only speculate on the impact that nanotechnology will have on the economy and jobs, and hope that it will be significant as some predict. However, we should not be complacent. As a nation, we are not alone in our pursuit of the frontiers of nanotechnology. China is currently the second largest producer of technical papers in nanoscience and nanotechnology, even ahead of Japan. With great cost advantages in addition to this advanced technical knowledge, we should anticipate that China will compete strongly for new nanotechnology jobs and manufacturing opportunities. China has also been increasing its science and engineering human capital at all levels, especially with a rapid increase in the number of Doctorate holders.

History tells us that technological catch-up can happen much faster than expected. Whether it was the Russia and China gaining Atomic capabilities very soon after us or the Russians beating us to space with Sputnik, we are not guaranteed our technological lead.

The recent sale of IBM’s PC line to Chinese manufacturer Lenovo was a watershed event in the history of information technology. As it was designing its PC in 1979, IBM outsourced two critical components, the microprocessor to Intel and the operating system to Microsoft. They did this in spite of their in-house ability to produce the microprocessor and operating system. Clearly Intel and Microsoft have benefited the most from the PC revolution. Will America face the same fate as IBM as we outsource the critical components of our future to other countries?

U.S. manufacturing has also been hit hard by offshore outsourcing. This has important and serious consequences for U.S. engineers and for technological innovation, economic growth and national security. Some wonder whether manufacturing matters very much since it only accounts for about 13% of the Gross Domestic Product. However, from a technological innovation point of view, manufacturing matters greatly. According to my recent calculations, in 2003 nearly 41% of American engineers work in manufacturing. According to the National Science Foundation, the manufacturing sector accounts for a disproportionately high, 62%, of all research and development (R&D) in the U.S. With the prevailing management approach to locate R&D as close to manufacturing production as possible, it is inevitable that as manufacturing moves overseas, both engineering work and R&D will follow.

More than a year ago, I dubbed the dialogue on offshore outsourcing as the *New Competitiveness Debate* because I think there are many lessons to be learned from the manufacturing competitiveness debate of the 1980s. The most important one is that it takes time and creativity to generate policy responses. There were many significant policy changes that improved the competitive position of the U.S. including the creation of the Technology Administration. Many of the ideas came from the state and local levels, what policy academics often call the “laboratories of innovation.” Some policies that were implemented might even be called protectionist, like voluntary quotas in the steel, automobile and semiconductor industries.

The key difference between the New Competitiveness Debate and the one in the 1980’s is that workers are being adversely affected *rather* than companies. That changes the feasible region and constraints on potential practical and politically palatable solutions, and I suspect makes it much more difficult to move forward. Many companies will be able to adapt to the new competitiveness challenge by substituting foreign for U.S. labor. Even if they succeed against their competition it may be without U.S. workers. The current competitiveness challenge has companies pitting U.S. workers directly against foreign workers, as companies take the latest technology and capital to the lowest cost labor. This creates a practical problem because most of our established policy mechanisms are designed to help companies succeed. That means we need to create new mechanisms that are focused on U.S. workers.

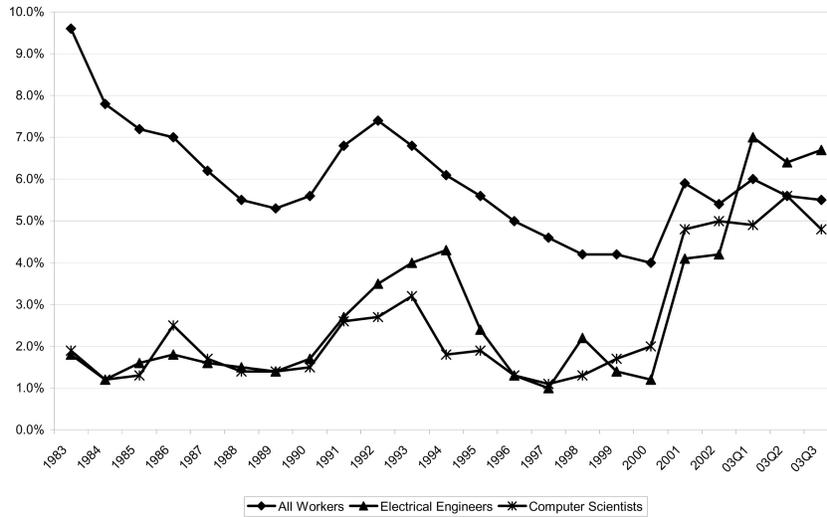
Policy Recommendations

The economic and employment challenges we will face caused by offshoring are complex. There are no easy answers or silver bullets in terms of public policy recommendations. However, there are some practical and immediate steps that we can take.

1. The Federal Government must begin regularly tracking the volume and nature of the jobs that are moving offshore. We are pleased that Congressman Wolf earmarked a \$2 million study in last year’s omnibus spending bill. This should be viewed as a step in the right direction that more agencies should follow. We also commend Senator Joseph Lieberman for his report, “Data Dearth in Offshore Outsourcing: Policymaking Requires Facts.”

2. Companies should be required to give adequate notice of their intentions to move work offshore so that the displaced employees can make appropriate plans to minimize the financial hardship, and government support agencies can prepare to provide the necessary transition assistance.
3. Congress should rethink how U.S. workforce assistance programs can be designed to help displaced high-tech workers become productive again. We are in a new era of work and lifelong learning, and new and more flexible methods are needed to provide meaningful assistance.
4. Congress should strengthen H-1B and L-1 workforce protections and their enforcement to ensure that the programs serve their respective purposes without adversely affecting employment opportunities for U.S. high-tech workers.
5. Fundamental changes in U.S. immigration law, such as those incorporated in the recent Chile and Singapore Free Trade Agreements, should be made by Congress, and not by trade negotiators.
6. Congress should take affirmative steps to ensure that the U.S. retains the domestic human resource and production capabilities needed to develop and utilize technologies deemed critical to U.S. national and homeland security.
7. As globalization narrows U.S. technology leadership, the Department of Defense and other government security agencies will need to enhance their ability to acquire and assimilate foreign technologies.
8. The U.S. needs a coordinated national strategy designed to sustain its technological leadership and promote job creation in response to the concerted strategies being used by other countries to attract U.S. industries and jobs. Senator Joseph Lieberman's proposal to create a Presidential Commission on the implications of outsourcing is a step in the right direction.

Unemployment Rates for Selected Occupations: 1983–Present



Source: IEEE–USA from Bureau of Labor Statistics.

Name	Country	Market Capitalization (US\$ millions)	Trailing Twelve Months Sales \$	Price to Sales	Sales Growth % 1 Year	Net Profit Margin 5 Yr Avg %	Effective Tax Rate 5 Yr Avg
Infosys Technologies Limited (ADR)	India	\$12,135	\$1,164	10.42	40.96	28.7	14.01
Wipro Limited (ADR)	India	\$10,512	\$1,395	7.53	36.37	19.5	13.42
Electronic Data Systems	U.S.	\$8,633	\$21,834	0.40	0.55	3.6	35.87
Computer Sciences Corporation	U.S.	\$8,107	\$14,949	0.54	30.15	3.4	30.55
Affiliated Computer Services	U.S.	\$6,404	\$4,106	1.56	8.43	8.2	38.64
Cognizant Technology Solutions	U.S.	\$3,215	\$465	6.92	60.74	13.7	31.23
Satyam Computer (ADR)	India	\$2,892	\$620	4.67	23.34	2.7	14.02
Perot Systems Corp.	U.S.	\$1,431	\$1,618	0.88	9.65	4.2	54.37

Source: Reuters News Services Retrieved August 29, 2004.

Cochair BECKER. Thank you.
Mr. Feder?

**STATEMENT OF JESSE M. FEDER
DIRECTOR AND COUNSEL FOR
INTERNATIONAL TRADE AND INTELLECTUAL PROPERTY
BUSINESS SOFTWARE ALLIANCE, WASHINGTON, D.C.**

Mr. FEDER. Good afternoon, Mr. Chairman, and Members of the Commission. On behalf of the Business Software Alliance and its member companies, I thank you for the opportunity to testify at today's hearing.

My remarks today address concerns that are shared by the U.S. software industry, both in this region and around the country. The U.S. software industry derives more than half of its revenues from exports. Trade liberalization in China and elsewhere is critical to the industry's continued growth. BSA member companies have consistently supported the WTO's trade liberalization agenda. We strongly advocated for China's WTO accession in 2001.

Our industry believes that given a fair and level playing field, we can compete in the Chinese market or in any market in the world. Yet we face an uphill struggle in China. China represents a huge opportunity for our industry. It is the second largest market for personal computers in the world. That makes it a vast potential market for PC software. But due to rampant copyright piracy, it is only the 25th largest market in the world for software sales, ranking behind much smaller countries like Denmark.

One bright spot has been the efforts of the Chinese government in recent years to ensure that the government itself uses only legal copies of software. The Chinese government is the largest purchaser of software in China, and the procurement market represents one of the most significant growth opportunities for the

U.S. software industry. And we are concerned that it is about to be closed to U.S. software and services.

In 2002 China enacted a law requiring that its government purchase only domestic goods and services. The government has indicated that it will implement this law on a sector-by-sector basis and has decided that software will be the first area subject to the new law.

As proposed, China's software procurement regulations would severely restrict the ability of American software companies to sell to the Chinese government. The draft regulation establishes a two-tiered preference system: the first tier for domestic software and the second for qualifying foreign software. Domestic software is to be heavily favored in the procurement process. To qualify as domestic software, a product must be made and primarily developed in China and the copyright must be owned by a Chinese entity. The assessment of our members is that no American software company will qualify for the first tier.

To qualify as eligible foreign software, the software provider would need to satisfy as yet unspecified levels of investments in China, R&D expenditures in China, outsourcing of work to China, and tax payments in China. It is our understanding that government agencies will still need to get a waiver for each procurement of eligible foreign software, even if it qualifies for the list.

In a market where over 90 percent of software is pirated and the Chinese government is by far the largest purchaser of legitimate copies of software, such a discriminatory procurement regime would effectively close the door to many if not all U.S. software companies.

The Chinese procurement preference will have an immediate and significant economic impact on the United States. We believe that the policy will result in a substantial decrease in U.S. exports to China, perhaps on the order of a hundred million dollars a year.

These are not theoretical concerns. We are already seeing the effects of China's restrictive procurement policy in the marketplace, even though the regulations aren't officially in force. Last November, after being castigated by a Central Government official for purchasing non-Chinese software, the Beijing Municipal Government canceled a substantial order for American software. Since then two provincial governments have followed suit, announcing substantial purchases that have been awarded almost exclusively to Chinese suppliers. Thus, China's decision to close or greatly restrict its government procurement market to much of the world's best software products is already harming the United States economy.

I must emphasize that this regulation is only the beginning of a process of implementing China's government procurement law. Other sectors will follow. There is every reason to believe that the proposed software regulation is merely the first in a series of measures that will ultimately close to foreign competition all sectors of procurement that China considers strategic to its economic development.

China's Premier has committed to address the trade imbalance between the U.S. and China by facilitating the increase of U.S. exports to China. This proposed regulation does not advance that pol-

icy, nor does it advance China's broader development goals. We have to ask, how does discouraging the active participation of U.S. software companies in China promote the development of a vibrant software economy there?

I submit that a far more effective step in promoting a domestic software industry would be to reduce the \$3.8 billion a year software piracy problem in China, and thus expand the market for domestic and foreign software alike.

According to a report on global software piracy commissioned by BSA, the global IT research firm IDC concluded that 92 percent of software placed in service in China in 2003 was illegally copied. That is the highest piracy rate of any of the 86 countries in the report.

According to an earlier IDC report, a 10 percent reduction in piracy could help the Chinese IT sector grow nearly fourfold in four years.

My written statement recommends that the U.S. Government urge China to make four specific improvements to its IP regime: extend criminal liability to enterprise and user piracy, reduce and clarify criminal thresholds, increase administrative penalties for infringement, and legalize all software use in the government sector.

Time does not permit me to go into the details of each recommendation right now. Instead I'd like to focus on a theme that cuts across all of our enforcement-related recommendations, which is deterrence. Until the law deters people from enriching themselves off of the intellectual property of others, we will not see a significant reduction of piracy in China. There are many elements to making an IP regime deterrent, but they more or less boil down to having good laws and the political will to carry them into effect.

The Chinese have taken a number of significant steps over the past decade and a half to improve its IT laws. More remains to be done. But the jury is still out as to the all-important question of political will. Working together with the U.S. Government, it is our hope that we can convince the Chinese that it is in China's own economic interest to demonstrate that political will.

Thank you again for inviting BSA to testify. I'd be glad to answer your questions.

[The statement follows:]

**Prepared Statement of Jesse M. Feder
Director and Counsel for International Trade and Intellectual Property
Business Software Alliance (BSA), Washington, DC**

I. Introduction

The Business Software Alliance (BSA)¹ is pleased to participate in today's hearing on the impact of U.S.-China trade and investment on Pacific Northwest industries. BSA represents the world's leading commercial developers of software, hardware and Internet technologies, some of which are based in the Pacific Northwest and all of which are dependent on a fair, open and competitive global trading environment.

¹The Business Software Alliance (www.bsa.org) is the foremost organization dedicated to promoting a safe and legal digital world. BSA is the voice of the world's commercial software industry and its hardware partners before governments and in the international marketplace. Its members represent one of the fastest growing industries in the world. BSA programs foster technology innovation through education and policy initiatives that promote copyright protection, cyber security, trade and e-commerce. BSA members include Adobe, Apple, Autodesk, Avid, Bentley Systems, Borland, CNC Software/Mastercam, Internet Security Systems, Macromedia, McAfee, Microsoft, SolidWorks, Sybase, Symantec, UGS and VERITAS Software.

My remarks today address concerns of the broader U.S. software industry, and highlight the impact of U.S.-China trade on our national economy.

The U.S. software industry derives more than half of its revenues from exports; thus, trade liberalization in China and elsewhere is critical to the industry's continued growth. Due to strong global demand for our products and services, the U.S. software industry has for many years remained a leading driver of economic growth in the United States as a whole (including the Pacific Northwest) and a major contributor of tax revenues and skilled, highly-paid jobs. In 2002 alone, software developers and other computer services industries employed nearly 2.6 million workers and contributed \$400 billion to the national economy.

Given the critical importance of market access to IT industry growth, BSA member companies have consistently supported the WTO's trade liberalization agenda and strongly advocated for China's accession in December 2001. As a condition of WTO membership, China committed to a program of extensive and far-reaching reforms that, among other things, require it to extend national treatment and improved market access to U.S. exports, protect intellectual property rights and initiate negotiations for accession to the WTO Government Procurement Agreement (GPA). Although China has implemented some of its WTO commitments, for example by strengthening certain IPR laws, it has not taken the steps necessary to create a fair and level playing field for U.S. software developers and other IT companies. As noted in USTR's 2004 Report to Congress on China's WTO Compliance, "China's implementation of its WTO commitments has lagged in many areas of U.S. competitive advantage, particularly where innovation or technology play a key role."

Of particular concern to the software industry is China's pending software procurement regulation, which would effectively prevent U.S. software companies from selling software products and services to the Chinese government, China's largest purchaser of IT products. When viewed in the context of China's 92 percent software piracy rate, this discriminatory measure would effectively close China's largest software market to U.S. competition. The U.S. software industry has already lost billions of dollars in export revenue due to rampant piracy and counterfeiting in China; a ban against government procurement of U.S. software would eliminate our industry's best opportunity to expand exports to China and set a dangerous precedent for China's procurement policies in other major economic sectors.

Moreover, we believe that severely restricting access of U.S. software makers to China's government procurement market will retard, rather than advance China's broader development goals. This policy will not only deny China's government the ability to use some of the world's most advanced software, it will undermine China's own efforts to encourage the active participation of U.S. software companies in developing a vibrant software economy in China.

BSA applauds the Administration's efforts to engage China's senior leaders in an attempt to resolve these and other trade issues. Vice Premier Wu Yi's commitment in 2004 to crack down on intellectual property theft, including software piracy in the government sector, is a step in the right direction, and we urge the U.S. Government to work closely with China to implement these IPR reforms in a timely manner. Also noteworthy is Premier Wen Jiabao's commitment to facilitate the increase of U.S. exports to China. The true test of this promise is whether China agrees to abandon discriminatory policies, including the proposed software procurement regulation, which would protect domestic industry at the expense of U.S. and other foreign competition. Such policies violate the spirit of openness that China embraced in joining the WTO and cannot be condoned. BSA thus urges the U.S. Government to continue to press China to keep its public procurement market open to U.S. software products and to commence GPA accession negotiations. More generally, it is imperative that all Chinese practices and policies affecting software- and IT-related trade further the goal of increasing U.S. exports.

II. The Chinese Government's Proposed Procurement Preferences Will Severely Restrict U.S. Exports and Increase America's Trade Deficit With China

China's Discriminatory Software Procurement Regulation Would Severely Limit U.S. Exports of Software Products and Services and Set a Dangerous Precedent for Other U.S. Industries

The Chinese government procurement market represents one of the most significant growth opportunities for the U.S. software industry and the global IT industry as a whole. The Chinese government is the primary purchaser of software in the world's largest emerging market for IT products. According to a recent study conducted by IDC, a leading IT research firm, the market for packaged software in China grew 19.5 percent in 2002 to reach \$1.62 billion. IDC predicts that the mar-

ket will continue to grow at a compound annual rate of 25.8 percent, making it a \$5.1 billion market by 2007. This explosive demand for software and other IT products will be fueled in significant part by government IT procurements, including China's proposed multi-billion dollar E-government initiative. In 2003, for example, government procurement of software products and services totaled \$608.4 million.

BSA is thus deeply concerned about China's plan to close its government procurement market to U.S. software and other products and services. In 2002 China enacted a law requiring with limited exceptions that its government purchase only domestic goods, services and public works. This law is applicable to every services and goods industry from which the Chinese government procures and has very significant ramifications for all U.S. industries seeking access to China's government procurement market.

China has indicated that it will issue implementing regulations on a sector-by-sector basis and has decided that software will be the first area subject to the new law. As proposed, China's software procurement regulations would severely restrict the ability of American (and other non-Chinese) software companies to sell to the Chinese government. The draft regulation establishes a two-tiered preference system—the first tier for “domestic” software and the second for qualifying “foreign” software, with domestic software heavily favored in the procurement process. To qualify as “domestic” software, a product must be made and primarily developed in China, and the copyright must be owned by a Chinese entity. To qualify as eligible foreign software, the software provider would need to satisfy as-yet unspecified levels of investments in China, R&D expenditures, outsourcing of work, and tax payments. It is our understanding that government agencies will need to get a waiver for each procurement of eligible foreign software.

If enacted, these onerous requirements would impose far greater barriers to the procurement of U.S. software by Chinese government agencies than U.S. law imposes on government procurement of Chinese software and services. In a market where over 90 percent of software is pirated and the Chinese government is by far the largest purchaser of legitimate software, such a discriminatory procurement regime would effectively close the door to many, if not all, U.S. software companies—or for that matter, any non-Chinese company.

Because U.S. software companies derive more than half of their income from exports, the Chinese procurement preference will have an immediate and significant economic impact on the United States. We estimate that the policy could result in a \$100 million decrease in U.S. exports to China. These are not theoretical concerns; we are already seeing the effects of China's restrictive procurement policy in the marketplace, even though the regulations haven't been promulgated. Last November, after being rebuked by a central government official for purchasing non-Chinese software, the Beijing municipal government canceled a substantial order for American software. Since then, the Xinjiang and Shanxi provincial governments have followed suit, announcing substantial purchases that have been awarded almost exclusively to Chinese suppliers. Thus, China's decision to close or greatly restrict its government procurement market to much of the world's best software products is already translating into lost jobs and tax revenues for the United States economy.

BSA is also concerned that such a regulation would set a dangerous precedent for other U.S. industry sectors. Given the broad scope of China's 2002 public procurement law, there is every reason to believe that the proposed software regulation is merely the first of a series of measures that will ultimately close to foreign competition all sectors of procurement that China considers strategic to its economic development. A discriminatory procurement regime of this type would deny U.S. industry a vital export market and exacerbate the U.S. trade deficit with China.

***China's Procurement Regulation Violates the Spirit of its
WTO Commitments and Serves to Protect its Domestic Industry at the
Expense of U.S. Economic Interests***

China's plan to close its government procurement market to software and other U.S. products and services would clearly violate the spirit of China's WTO commitments. In its WTO accession agreement, China committed to initiate negotiations for accession to the WTO GPA “as soon as possible.” Not only has it failed to honor this commitment, its proposed procurement regime rejects each of the fundamental tenets of the GPA, namely openness, transparency, fair competition based on merit, equality, and accountability. It would also violate Premier Wen's commitment to increase U.S. exports to China.

BSA and other industry groups have urged the Chinese government not to adopt these domestic software preferences or, alternatively, to define eligible “domestic” or “foreign” software in a way that permits unlimited competition by U.S. software companies. Senior U.S. trade officials have also raised this issue repeatedly with the

relevant Chinese authorities. It remains unclear, however, whether these messages have been heard by China's political leadership. The Chinese government appears determined to promote its domestic software industry through discriminatory government procurement policies. Software developers worldwide are concerned that China will maintain this protectionist course, unless the United States and its major trading partners take specific action.

In a recent letter to President Bush, BSA joined with a broad cross-section of IT and other U.S. industry leaders to urge that immediate steps be taken to delay implementation of the software procurement regulation pending mutual agreement of a software procurement framework that is open, inclusive and non-discriminatory and that allows U.S. and other foreign software makers to compete without restriction in China's government procurement market. We request that the U.S. Government—in cooperation with the European Union and other governments around the world—take all necessary steps, including continued work to promote China's accession to the GPA, to preserve market access for all U.S. companies to China's very important government procurement market. Time is of the essence, as China may move ahead to implement final regulations at any time.

III. Rampant Intellectual Property Theft Continues to Close the Chinese Market to U.S. Software Exports

Rampant Piracy Has Stalled Growth in U.S. Software Exports to China and Cost U.S. Companies Billions of Dollars in Revenue

Intellectual property rights yield many benefits, including innovation, economic growth and job creation. By ensuring that authors and inventors can realize a financial return on their investments, IP protections produce the incentives and resources necessary to develop innovative products and technologies. In turn, these new innovations contribute to economic growth through increased employment and tax revenues.

Three years after its accession to the WTO, the Chinese government still has not implemented all of its IP obligations. Deficiencies in its law are compounded by the failure to allocate adequate resources to effectively enforce the rules that are currently in place. The result is not at all surprising: continued widespread piracy and counterfeiting. A July 2004 IDC report concluded that 92 percent of the software used in China has been illegally copied, the highest piracy rate of the 86 countries included in the survey. China is also the world's leading producer and exporter of counterfeit software, each year flooding global markets with millions of pirate copies. Piracy on such a massive scale has significant ramifications for the U.S. software industry and our national economy, costing U.S. firms billions of dollars in revenues annually and depriving American workers of many thousands of jobs.

Rampant piracy has effectively stalled growth in U.S. software exports to China, despite China's escalating use of computer and software technologies. Consider that in 1996 China was the sixth largest market for personal computers and the 26th largest for software; it is now the second largest market for personal computers but still only the 25th largest market for software. This growing gap between hardware and software sales is the inevitable consequence of a market that does not respect intellectual property rights or reward the significant investment required to develop and market innovative software products.

China's failure to protect and enforce intellectual property rights has also hindered its ability to grow a domestic software industry (a problem that China is attempting to cure through protectionist and discriminatory industrial policies). According to an earlier IDC report, a ten percent reduction in piracy could help the Chinese IT sector grow nearly fourfold in four years. Against this backdrop, China's recent efforts to enhance IP protections are a welcome—if insufficient—step in the right direction.

China's Recent Commitments to Reduce Piracy and Strengthen its IPR Regime Should Be Closely Monitored and Enforced

In recent years China has taken intermittent steps to acknowledge the value and importance of IP rights. For example, in 1999 the State Council ordered all government ministries to use only legal software (an order that was never adequately monitored or enforced). In addition, the National Copyright Administration and other agencies have moved to implement a national Circular on IPR Protection that deals with software piracy and related issues. Such measures were due in part to China's entry into the WTO. In its 2001 Protocol of Accession to the WTO, China agreed that all of its IP laws would fully comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights and Trade in Counterfeit Goods (TRIPS) upon accession.

Despite these efforts and assurances, China has yet to rectify fully the many defects in its IPR laws and enforcement regime or to dedicate the resources necessary to combat widespread piracy. As a result, China's piracy problem continues seemingly unabated. In response, the U.S. Government and the Chinese government, whose delegation was headed by Vice Premier Wu Yi, determined to elevate the importance of the issue at the 2004 meeting of the Joint Commission on Commerce and Trade (JCCT). Following these meetings, the Chinese government committed to "substantially reduce piracy levels" and to undertake a series of actions to achieve this goal. In particular, China committed to (i) ease administrative burdens for criminal sanctions, (ii) continue and intensify a national campaign against IP infringing activities, (iii) implement new customs regulations, (iv) accelerate efforts to join and implement the World Intellectual Property Organization Internet treaties, (v) ensure government use of legal software, and (vi) conduct public education campaigns about the importance of IP rights. These commitments, while welcome, are long overdue. As the United States Trade Representative concluded, "[Such] actions are critical in light of the rampant counterfeit and piracy problems that plague China's domestic market, and because China has become a leading exporter of counterfeit and pirated goods to the world."

***Widespread Piracy Will Continue to Halt U.S. Software Exports
Unless China Strengthens Criminal and Administrative Penalties for
All Commercial Copyright Violations***

BSA welcomes China's recent promises to enhance IP protections. At the same time, simply adopting new laws is not enough; experience has shown that strong enforcement is necessary to reduce piracy levels and to reap the concomitant benefits. The U.S. Government should therefore continue to press Chinese officials for greater and more meaningful IP enforcement. More specifically, BSA urges the U.S. Government to demand the following improvements to China's IPR regime:

- **Extend criminal liability to enterprise end user piracy.** China's 92 percent software piracy rate is largely attributable to serious deficiencies in its criminal laws and procedures, which have made it virtually impossible to obtain criminal prosecution of piracy offenses. Among other serious problems, the relevant provisions of China's criminal code—Articles 217 and 218—do not treat corporate end user piracy as a criminal offense, despite its devastating effect on software industry revenues and growth. China's failure to extend criminal remedies to enterprise end user piracy violates its WTO–TRIPS obligations and should be rectified immediately.
- **Reduce and clarify criminal thresholds.** In late December, the Supreme People's Court and Supreme People's Procuratorate released amended Interpretations of Articles 217 and 218 of the criminal code which lower the thresholds for establishing a criminal copyright violation. We are in the process of reviewing the Interpretations, but our initial evaluation is that the thresholds are still too high, particularly because the phrase "illegal income" is unclear and in certain cases (*e.g.*, enterprise end user piracy) may be difficult to prove. Ultimately, the real test will be whether the amended Interpretations lead to meaningful criminal enforcement of IPR violations in the near future.
- **Increase administrative penalties.** Due to the lack of meaningful criminal penalties, software companies must rely on civil and administrative actions to enforce their rights. Civil actions, though occasionally successful, are hampered by the vague nature of Chinese intellectual property law and exceedingly burdensome procedural requirements. Administrative actions can be brought by the National Copyright Administration of China (NCAC) and local Copyright Administrations (CAs). In our experience, however, neither the NCAC nor the local CAs has the resources or interest to exercise this authority, preferring instead to "educate" organizational end users. And when administrative actions are taken, fines are rarely issued. If the Chinese government is serious about reducing piracy, it must provide these agencies with adequate training and resources, and empower regulators to impose deterrent administrative sanctions.
- **Legalize the government sector.** BSA and its member companies are heartened by China's JCCT commitment to legalize software use within the public sector, which represents China's largest consumer of software. Moreover, the Chinese government's recognition that audits are necessary to achieve this goal is a good sign that real change is afoot. These assurances are of limited value, however, if China proceeds with its domestic software procurement regime. If government institutions are prohibited from purchasing legitimate U.S. software products, legalizing China's public sector will do nothing to help those U.S. software companies that have lost billions of dollars in revenues over the

years to government piracy. The U.S. Government should therefore ensure that China does not undermine its JCCT commitments with procurement preferences that close the country's vast procurement market to U.S. competition.

All of these steps are necessary to address unacceptable piracy rates in China that cost the U.S. software industry billions of dollars in lost exports and stifle the development of a domestic software industry. No single step is sufficient on its own. The goal, of course, is to reduce piracy rates in China. Ultimately, China's progress on this issue must be measured against that goal, not against the completion of any particular step along the way.

* * *

BSA appreciates the opportunity to participate in today's hearing, and we look forward to an ongoing dialogue regarding these important issues. For further information, please contact Jesse M. Feder, tel. +1.202.530.5123, e-mail jessef@bsa.org.

Panel III: Discussion, Questions and Answers

Cochair BECKER. Thank you, panel members.

We'll go to the Commissioners now with questions.

Commissioner REINSCH.

Commissioner REINSCH. Thank you, Mr. Chairman.

First of all, I want to commend Mr. Feder for having some very concrete suggestions and proposals—mostly for China but still very concrete, and I think that's welcome, and I'd urge the Commission to consider them carefully when we make the next report.

I'd also add on the IP piracy issue, my sense is that countries get most excited about IP protection when they have something of their own to protect, and to the extent that that's happening in China, that may facilitate some of the things we would all like to see accomplished.

In any event, I just have two questions, and they are probably more for the other two panelists, but chime in if you want, Mr. Feder. The first one is my sense, and correct me if I'm wrong, is that this is a sector—and I'm thinking primarily of pieces of it like telecommunications and software more so than hardware—where market leadership really matters and first to market makes a huge difference. If you can capture a substantial share you have an enormous advantage over your competitors and whatever that other country does in terms of building its infrastructure over time; that this in fact is a race that many of our companies are competing in aggressively.

The question is how do you do you do that, compete successfully, without putting down substantial roots in these countries and in effect engaging in the kind of development of jobs over there that we've just been talking about?

Who wants to go first?

Dr. HIRA. I'll go ahead and try to address this.

I think you have to really segment the product or service that you're talking about, so if you're talking about packaged software, that's a very different business than software services, IT services. What we're seeing, at least in India in particular, is that there really isn't much of a domestic market. Almost all of the offshoring that's going on in IT software services is for export back into the U.S. or into—

Commissioner REINSCH. But isn't there going to be a domestic market sometime fairly soon, or not?

Dr. HIRA. It's hard to say. There may be, but it's not going to be very large. And this is even for domestic companies, like Infosys

and Tata. They don't have a domestic market. Almost all of their market is overseas. And certainly the Indian market is not going to be as large as the U.S. or—

Commissioner REINSCH. Is that true of China, as well?

Dr. HIRA. In China, in the services side, you're just not seeing that much of a market domestically, plus you're not seeing as much in terms of the export. I think in China, if you look at electronics, then you might be having a different discussion, where there's foundries going up and the like, and software support for the electronic design, for example, ETA type of software, Cadence, those type of companies and whatnot, that are setting up shop.

Now, it's not clear how much of that is localization, meaning serving the specific needs of the local market, or how much of it is actually setting up shop to then be a support for a global operation, so in a lot of cases. For example, Google, setting up a research lab in Bangalore or Microsoft setting up their research center in China, that's to support global operations, that's not just to support the domestic market and to do localization.

Commissioner REINSCH. Mr. Courtney, do you want to comment?

Mr. COURTNEY. Sure.

My comment would be that I think we really start to see that the companies have aggressively moved overseas and are setting up operations, that there's been a real impact in terms of what the trade surplus in that particular account has been, and information technology is a great example of that, is that that was a thing that has always had a trade surplus, in terms that we export more than we import. As companies have been aggressively moving their operations overseas, we start to see that go down, and it's dropping very, very rapidly. So I think one of the things we have to talk about is that there's a disconnect.

The notion and the idea that as companies move over and establish operations overseas is somehow going to automatically advantage and be a benefit or a plus for the U.S. workers or the U.S. economy isn't necessarily the case, and I think people like to automatically make that assumption. I think that's something that your question is saying. Companies are in this big competition, they have to race over there and set up operations, and therefore they're going to grab market share, but what we're seeing is they set up operations, they're not grabbing Chinese market share, we're reimporting the services that were once done in this country. You start seeing the effects of that, and it's actually weakening our position in terms of trade. It also is a potential threat in terms of our ability to innovate and create these new technologies.

Commissioner REINSCH. Well, actually, that's a good distinction, which reminds me that I probably wasn't clear. What I was getting at more is that the choice may not be—from a job perspective and your perspective—between a good alternative and a bad alternative; the choice may be between a less bad alternative and a worse alternative, and what they're doing may be the less bad alternative.

Mr. COURTNEY. Well, I guess my response would be—

Commissioner REINSCH. Competitive choice, I mean.

Mr. COURTNEY. Guess who are we competing against? The United States is still the largest market, and that's where most

companies wants to try to get still access to the U.S. market, and what we're seeing is that we are seeing a competition, basically, force for U.S. market between high-cost providers, such as U.S. workers, versus low-cost providers, such as in China, and companies trying to establish a global supply chain of labor in order to drive down their labor costs in order to increase shareholder value.

I think that gets into the other whole debate, in terms of what are the benefits we are going to derive from trade? If we are going to have benefits in terms of trade, how are those benefits going to be distributed? I think what we're increasingly seeing, especially in terms of the service sector, as companies are aggressively trying to expand their operations overseas and supplement U.S. labor for foreign labor, the benefits of trade as it's defined in terms of the service sector are getting increasingly narrowly and more narrowly distributed. It's not being distributed across the broad spectrum of society, it's getting increasingly distributed to the most wealthiest shareholders of I think private corporations.

Commissioner REINSCH. Well, just to close, and I won't ask you for further comment—this is the win-lose versus win-win debate, and I'm not prepared to say that the win-lose people are wrong, but this goes back to a thread that has run through today's hearing—it's still incumbent on all of us to think about solutions. If you're going to argue that trade is a win-or-lose proposition, does it follow, then, that the win proposition is no trade? I don't think that's a viable option.

Mr. COURTNEY. I think the question is how we want to engage in the world, and the idea the only way we can engage in the world right now under the current framework in which we talk about this debate is companies have to rapidly and aggressively expand their operations overseas irrespective of domestic and international consequences. One of the numbers that gets thrown around a lot is this idea of six percent GDP versus the trade in terms of the deficit in third-world countries that's a trigger point before IMF comes in and demands very strict reforms in terms of the government. The U.S. is currently at that point.

I think we really have to look at how do we want to engage in the world, and what are the ways we're going to engage in the world, and how are those benefits going to happen. We absolutely need to have trade, but the question is we need trade so that it can't always come to consequences of jobs, in terms of wages and benefits and environmental security and protection. I think we need to reshape the debate and say that if we're going to engage in trade, the values in which we're going to do that need to be much broader than just the narrow value of shareholder value.

Commissioner REINSCH. Well, I won't prolong this since obviously we don't entirely agree. I would just say that if there are people that want the IMF to come in here and critique the current administration's macro-economic policies, some of us would not object to that.

Cochair BECKER. Bill, are we okay? Is that it?

Commissioner REINSCH. Yes. Sorry.

Cochair BECKER. Commissioner Dreyer.

Commissioner TEUFEL DREYER. Two questions, one of which is occasioned by Mr. Feder's comments on IPR and the problems

therein. We've been told for a long, long time that the way for America to keep its competitive edge is to innovate, something we've been very, very good at throughout our history. Since a previous witness on a previous panel faulted Boeing for paying inadequate attention to innovation and R&D and therefore falling behind Airbus, I'm wondering if, in your collective opinions or respective collective opinions, are we doing enough to keep the United States ahead in terms of R&D?

Second question, this occasioned by Mr. Courtney's chart and some of your comments: How much of this decline do you think is cyclical and in response to perhaps world problems rather than a secular trend in the United States due to outsourcing? I am particularly concerned with the loss of high-tech jobs.

We've seen the cyclical downturn many times in the United States. SPUTNIK for example. After SPUTNIK was launched people were urged to study physics. Too many people studied physics, and some of them couldn't find jobs, everyone heard about it. There's a decline in people studying physics, then it eventually went up again. The same thing happens with MBAs. There were too many of them in the 1980s; after a while there was a paucity of MBAs and the market for them got bid up again. As I look at your chart, I see a March 2001 high. Of course we know that may be too large. There was a worldwide dot-com bust in which Singapore also for example, reeled badly. And a post-9/11 bust, as well.

I also noticed that in your chart here we have a March 2001 high, then March to November 2001, then in March 2002, it's down to a low of 155,300, and this is for Washington. Then it goes up from 157,300, 160,400, 161,400, so it's going up again. That is in D.C. And the same thing happens in San Jose and Seattle. So what do you think we're talking about here?

Obviously we are losing our high-tech edge. That's not in question. But how much of this are we exaggerating because this may be a cyclical trend rather than a secular trend?

Okay, those are my questions.

Mr. FEDER. As to your first question, about R&D, BSA member software companies spent on average 18.3 percent of their revenues on R&D, and our companies combined spent about \$27.3 billion on research and development in their last filing period, which is up 10 percent over the prior period. So I think from the answer to the question of whether our companies are doing their part in investing in R&D, I think clearly they are, and I think that has less to do with the global marketplace than just the nature of the software business and the intense competition, even right here in the United States, between software providers, many of which are BSA member companies.

I think clearly we are coming off of a double or a triple whammy. We had the dot-com bust, we had a downturn in the business cycle, and we had the post-9/11 bust, and I think that a lot of the figures that we are looking at right now reflect that, but I think we are on the upswing. It's anticipated that our companies are going to be hiring. You don't have to look any further than right in our backyard here. One of our member companies, Microsoft, just filed a master plan with the City of Redmond to expand over the next 10

years by about 10,000 employees. So I think we are now on the upswing.

Commissioner TEUFEL DREYER. Thank you.

Anyone else?

Mr. COURTNEY. In terms of that chart, there's a couple of key things that are really important. In March of 2001 was when the economic recession was declared to begin, and in November of 2001 was when the government dating cycle declared the economic recession was over and a recovery had begun, and I think those are critical aspects here in terms of you say, Well, what's the difference between a cyclical downturn, are we experiencing the effect of a cyclical downturn.

Well, historically in the U.S. economy when you've had a recession, and at this point we're almost 40 months into an economic recovery cycle, you usually start seeing by this point in an economic recovery cycle the jobs have already returned that were lost in the previous economic recession. Well, the high-tech industry, and in a lot of ways many other sectors in the American economy, that hasn't happened. The jobs haven't come back. It's not just this idea of a cyclical issue, it's actually this issue of a structural change that is going on in the economy of why we're not seeing the jobs return. And I think our argument would be one of the main factors, especially within the high-tech sector we're not seeing the jobs turn, that it's outside this idea of a cyclical downturn, it's the fact that companies are instead shifting the work abroad.

Commissioner TEUFEL DREYER. Okay, but, at least according to your chart certain areas are coming back.

Mr. COURTNEY. Well, actually, according to our chart the only area that has seen in terms of a very small percentage, is Washington, D.C., which between March 2004 and April 2004 is only up by a thousand jobs, and you could very clearly see in terms of why a thousand jobs is due to the fact is that it's due to prime the pump. Basically massive government investments in terms of purchasing services in relation to the war on terrorism. But in terms of every other major high-tech city, you actually see—you pretty much see if there is an increase it's statistically negligible. Two hundred jobs, a hundred jobs. That's not any kind of significant actual increase of jobs to actually make up for jobs lost.

Dr. HIRA. Can I add one real quick thing, just to put into perspective this 10,000 employees that Microsoft is going to expand. In the third quarter of last fiscal year for Infosys, they added 5,000 employees in one quarter. The Indian IT firms are hiring much more vigorously in India than what we're seeing here, and it's not coincidence. This is not purely additive. They're substituting for the labor here. And so we're seeing that transition. So yes, the dot-com bust, yes, the dot-telecom bust, but we wouldn't see this persistent level of very high unemployment for this long if offshoring was not a factor, and in fact there are ways you can quantify it.

Commissioner TEUFEL DREYER. Yes, so jobs are coming back but they're coming back very slowly because the increase is being shifted abroad?

Dr. HIRA. That's correct. And so 2004 was a better year than 2003, but certainly there wasn't robust job growth enough to pick up all the losses that we've had over the last four years.

Commissioner TEUFEL DREYER. Thank you.

Cochair BECKER. Let me make a small point here. I meant to tell you this before you started. We made a very serious hard effort to get somebody from Microsoft to join you on this panel today, and were unsuccessful. We thought for a while we had somebody, not as high up as we wanted, but then that person disappeared too. They have a great reluctance in testifying in public committees, and I can understand why.

Ambassador Ellsworth?

Ambassador ELLSWORTH. Thank you, Mr. Chairman, and thank you all three gentlemen for being here and for sharing your insights and your knowledge with us. Very helpful.

Mr. Courtney said at the conclusion of his remarks just now, quote, "We need to find solutions," unquote, and that's what we're looking for, too, when we report to our—to Congress, which is to whom we report. We need to offer them some ideas for some solutions.

We do—we've heard from you and from others this morning and from others in other hearings excellent analyses of the problems. For example, Mr. Hira said offshore outsourcing of electrical and electronic engineers' jobs is a process that's just starting. I believe those were your words. And then Mr. Feder spoke about the WTO and enforcement of WTO obligations as being part of the answer, in any case, part of the solution.

I just would like to ask you, just off the tops of your heads right now, spontaneously, each one, very briefly, what is your main suggestion for a solution? People were talking about the Indians and the Chinese are smart people. They're ambitious. They have the advantage of having gotten rid of socialism, and as a result of that they're in the global labor markets, with what they have to offer at the prices that they need to. So what's the solution to that? What are the solutions? Mr. Courtney, Mr. Hira and Mr. Feder, if you will, please, quickly.

And thank you again for being here and thank you for answering these questions.

Mr. COURTNEY. Well, I certainly appreciate the opportunity to testify before the Committee and share our organizational thoughts on these critical issues.

Very quickly, I think one of the things we do clearly have to look at is the regulation of corporations around the issues of trade. Clearly, one of the issues that we see is the whole issue around transparency, companies we need to regulate so they actually have to disclose very clearly what their plans are, and I think it was brought up by the idea of the IAM of the idea of an economic impact statement. I think that's one of the clear things, is corporate transparency. We need to have accountability around taxes. We subsidize the high-tech industry in Washington State, at least \$80 million every year out of the state treasury on a biannual basis, and not necessarily guaranteeing what kind of job growth is going to come around that.

There's a whole issue around the tax structure of encouraging companies to locate abroad, disadvantaging domestic investments, so we clearly have to look at the tax structure.

And I also think we need to look at the regulation of trade treaties. I think there's an imbalance of what's going on with trade treaties right now. These treaties are not necessarily on the issues of trade, they're about the protection of private corporate property rights, and they're not necessarily advantaged to the idea of trade for domestic job growth or betterment of the domestic economy, they're actually to advantage corporate corporations in their protection of their private property investment rights as they do that abroad. I think we need to rebalance that. We need to actually have trade treaties that take into account and balance the interest of the environment, communities, as well as national government, and balance that out with the interests of private shareholders.

Ambassador ELLSWORTH. Thank you.

Mr. Hira?

Dr. HIRA. Well, thanks for the question. I actually gave you eight specific policy recommendations in my written testimony, which I didn't get to, in the oral part. But let me just say, I think the first and foremost step is to acknowledge that a problem exists. Remarkably enough, there's lots of people inside the Beltway who don't think that this is a problem, who haven't taken it as seriously enough, and once we acknowledge that, then we can start to work on specific solutions.

I teach public policy. I don't think that we have a ready set of policy mechanisms and levers that we can just pull off the shelf. This is a different type of phenomenon. It's going to take time and some creativity to come up with the solutions. Senator Lieberman had a bill that he introduced in the last Congress to create a presidential commission. I think that makes a lot of sense, because it will draw some more attention and more discussion from the policy community to come up with ideas.

But I think there are some pretty basic practical steps we can take immediately. One is to begin matching workers with openings. Let's get a better handle on this—let's start to use our information technology. There are companies that say that they have openings that they can't fill them, and I know plenty of very high-skilled labor that's idle right now. Why can't we come up with a better way of matching those folks together?

Ambassador ELLSWORTH. Even if they had to move to Texas or something?

Dr. HIRA. Even if they had the move to Texas. They're not always aware of that availability.

Ambassador ELLSWORTH. Thank you.

Mr. Feder.

Mr. FEDER. Very briefly, because the red light's on, the way that we in the software industry look at this issue is partly one of education. I think Congressman McDermott brought that up this morning. An educated work force is the lifeblood of the tech industries. Second of all, in terms of global trading, the U.S. Government has to pursue aggressively improved market access in countries, to remove barriers to market access like discriminatory procurement policies, and to use the tools at its disposal to ensure that countries take their obligations under the TRIPS agreement, which is part of the WTO agreements, seriously, and both put in place and enforce appropriately intellectual property protections.

Ambassador ELLSWORTH. Thank you.

Thank you, Mr. Chairman.

Cochair BECKER. Okay.

Commissioner Wessel.

Commissioner WESSEL. Thank you all for being here today, and I have several hours of questions but I know I'm limited, so hopefully we can find a way to talk afterwards. Let me focus on just a couple of them.

Mr. Courtney, you talked about trade agreements and the need for new provisions, which I clearly agree with. The problem is we also have a lot of trade agreements on the books. I talked earlier today about IPR. I think we've had four separate IPR agreements with China, none of them have been adequately enforced, and whether or not enforced, our frustration level rises to a point where we negotiate a new one, rather than turning back to the ones we have on the books and say, you've made a deal, don't welch on it or else. That we should have an expectation, we should have a view that if we sign a trade agreement, that our competitors are going to live up to it. So, I'd like everyone's view on that in terms of enforcement.

IPR. We have laws on the books that say that if our products are being counterfeited and pirated, we can confiscate them at the borders, and I know we have a new project that we're doing some of that. If our rights are being nullified and impaired in China, we have the ability to respond to that, as well.

But I'd also like to address the question of the educated work force issue. And clearly, we all agree that we need to continually upgrade our skills, we need a better training, retraining regime. But I hear Mr. Courtney talking about all of the high-tech workers that are out of work. Certainly they have some skills, yet many business leaders, many in the high-tech field, are constantly asking Congress to raise the H-1B limits to import more high-tech workers when we have a surplus already. As far as I can tell, many of those H-1B workers go home at some point and become our worst competitors, working at one-fifth, one-eighth, one-tenth of the rate. Is there going to be a change by BSA's members in the H-1B requirements, that they are going to turn first to Mr. Courtney's workers and say, first we hire you. If there is an education gap we've all got to join together and do that? In northern Virginia they have the high-tech alliance, where they're training workers in the colleges to make sure they match the skills there.

I see Microsoft creating a \$500 million R&D facility in China. Seems to me they're doing that, creating, again, our worst competition. People are going to produce products in China, some of it for serving the Chinese market, but a lot of it's going to probably be coming back here.

Seems to me we have very shortsighted policies both about education in the high-tech industry, where it's going to find its workers, but also about enforcement. I'd appreciate anyone's comments on that.

Mr. FEDER. Well, briefly on the H-1B issue, I can't really comment on my member companies' hiring policies because they don't share that with me. What I can share with you is what I've been told by our member companies, which is that there is no cost ad-

vantage whatsoever to hiring a foreign worker in the United States as opposed to hiring a U.S. citizen in the United States. So it's not—what's driving this is not cost savings. I think it's more a question of matching up skills with a particular need a company has.

Commissioner WESSEL. I don't know enough about WashTech, but do your member companies turn to WashTech and say to them, look, we need 20 Microsoft certified engineers. Who do you have that's unemployed? Or do they say, let's go to the H-1B visa application, let's see what we can find and bring them in?

Mr. FEDER. Again, I don't have the answer to that question.

Commissioner WESSEL. Mr. Courtney, do you have—

Mr. COURTNEY. No, they don't. In fact, I think that's one of the failings in terms of the American economy, is that increasingly corporations are so anti-labor they don't even want to engage in a dialog around some of the issues.

And I think in terms of the high-tech training issue is that nobody disagrees with the value of education and training, and one of the critical things within the high-tech industry is the idea of the software production cycle. Every 18 months a new product comes out, you got to train. There's this whole concept of incumbent worker training. The idea is that when workers need this ongoing training in order to match the needs of the production cycle. The high-tech industry and the high-tech sector in this country has actually failed to create a incumbent worker training model that will help facilitate the retooling and reskilling of its work force every 18 months so it meets new production demands.

I would very much disagree with the panelist's comments the idea this isn't driven about cost when it comes to the H-1B visa. It really is driven about cost. Most studies that have looked into the issue of: H-1B visas and whether they're paid prevailing wages have found that they aren't actually paid prevailing wages. So it is really driven by cost. They say, well, it's not cheaper on an individual worker level. But companies aren't doing this one or two workers at a time, they're doing this in thousands of workers at a time. There's an economy of scale they actually gain by pursuing H-1B visas. They just don't do it for one or two workers, they're doing it for thousands of workers across the corporations, they're actually gaining an economy of scale cost savings through that, and that's something that people haven't talked about.

The labor statistics show that companies cannot be facing a shortage of skilled workers in the U.S. economy. It's not possible at this time, when you're looking at such high rates of unemployment.

Dr. HIRA. Can I throw in just one comment about the H-1B?

There are companies that have literally thousands of employees here in the U.S., and almost none of them are U.S. citizens or permanent residents. They're companies whose business model is to use H-1B and L-1 visas to bring in foreign workers, and I liken this to dumping against U.S. workers, because they cannot afford to take those wages, the wages that the H-1B and L-1s are paid, and by the way, the L-1 has no prevailing wage requirement so we have no idea what they're being paid at all. And there have been plenty of documented cases where U.S. workers have had to train

their foreign replacements, who happen to be here on H-1B and L-1s. If I'm a U.S. citizen training my foreign replacement, obviously I have better skills than my foreign replacement, so it's not a pure skills thing.

That's not to say that the H-1B is completely abused. There are many cases where companies are using it in the way that Congress intended.

Commissioner WESSEL. Just as a very quick aside, if we could in the coming days talk to you, I'd like to understand what kind of tracking there is for these visa applicants and holders, understanding what kind of longitudinal studies, et cetera, we might be able to do.

Cochair BECKER. Mr. D'Amato?

Chairman D'AMATO. Can I just follow up with you on your last comment. If this is the case, I think it's really shocking that companies are relying completely on foreign workers simply because of wages. Do we have any way of measuring this; to what extent this is prevalent?

Dr. HIRA. In fact, if you look in my written testimony at the last page, there's a table comparing companies that are in the IT services areas, and the first one I've got there is Infosys, which is one of the largest of the Indian IT services firms. Their profit margin is about 29 percent.

Chairman D'AMATO. Pretty good.

Dr. HIRA. Compare that to any of the U.S. firms, like CSC, Computer Sciences Corporation, ACS. On average they have three to five percent profit margins.

The reason the Indian IT firms are able to get a competitive advantage is twofold. One is because they use a larger share of offshore workers, their profit margins are better on offshore workers, but it's also because their profit margins are better on their H-1B and L-1 workers.

Infosys, Wipro, Tata Consultancy Services, Satyam, almost all of the Indian IT majors, as well as U.S.-based companies like Cognizant, who use the same exact business model, have almost all of their workers are foreign workers here in the U.S.

Now, Mr. Feder may or may not know, I don't know if they're members of the Business Software Alliance or not, but this is their business model. They're bringing in foreign workers, they're not looking for U.S. workers, they are not required to look for U.S. workers first. And I've done some analysis of the H-1B wages and whatnot, and they look low—now, you'd have to go into the individual cases to try to figure out whether they're really paying market wages. But they're preferring foreign workers, clearly.

Chairman D'AMATO. Well, it doesn't seem to be very logical that they wouldn't prefer foreign workers if they were given equal pay. There would be no rationality behind that. I'd like to follow this up with you later in terms of how to measure this nationwide, if there's a way to do that.

I have another question for Mr. Feder, and that is, on the standard setting—or government procurement, am I correct in assuming that you believe that this is a restraint on trade?

Mr. FEDER. Yes, it's a nontariff barrier.

Chairman D'AMATO. Nontariff barrier.

And do you think that it's actionable under the WTO?

Mr. FEDER. No. Government procurement is governed under a separate agreement, the Government Procurement Agreement, which on its WTO accession China agreed to negotiate accession to the GPA as soon as possible. Well, they have not done that.

Chairman D'AMATO. I presume, then, that this model of standard setting in order to build Chinese capabilities—if they were to do that in a variety of nongovernment procurement areas, would that be a restraint on trade?

Mr. FEDER. It could well be.

Chairman D'AMATO. And would it be WTO actionable?

Mr. FEDER. Possibly. For example, it could be a nonviolation case, where the Chinese are denying the benefits of market access concessions that they've made through this back-door means. My understanding is that a nonviolation case is something that's very difficult to establish and litigate in the WTO.

Chairman D'AMATO. Seems to me that this is a technique that they're using. We think that they're using it in wireless, as well, to fill Chinese capability and to control the market that way.

Thank you.

Cochair BECKER. Commissioner Bartholomew?

Commissioner BARTHOLOMEW. Thank you very much, Mr. Chairman. Thank you also to the members of the panel. Once again, we're really indebted to you all for your expertise and the time that you're taking to come and talk to us.

My question is really directed right now to Mr. Feder, but taking into account what Dr. Hira said about people inside the Beltway are sometimes just not hearing the situation about what's going on. Tell us again what the losses to the U.S. economy were in 2004 from pirating of software.

Mr. FEDER. Well, the figure that I gave was actually worldwide, although the lion's share of that is to the U.S., because the lion's share of the worldwide software market is U.S. But the figure that I quoted was \$3.8 billion a year, which is what we have estimated is the value of the software that is illegally copied in China each year.

Commissioner BARTHOLOMEW. And since China entered the WTO has that number changed? Has it improved, has it gotten worse? What is the situation?

Mr. FEDER. Well, the piracy rate, which is probably the easiest thing to compare year on year, has been pretty much flat. It's been hovering around 90 percent for a number of years. The dollar-loss value varies somewhat based on the price of software and so forth.

Commissioner BARTHOLOMEW. Okay.

It seems to me that it's been reported along the way that at one time between 80 to 90 percent of the software that the Chinese government itself was using was pirated. Do you know if that number is still the case?

Mr. FEDER. I don't believe it is, but it's very difficult to estimate that accurately. The Chinese government doesn't report to us what is on its PCs.

But what I can tell you is that the Chinese government is purchasing software now. There has been a decree from the top that was not fully implemented but has been implemented in pieces by

various ministries, and the Central Government has now extended that requirement to purchase legal software to the provincial governments, as well. So that is a positive step, as long as we continue to have access to the procurement market.

Commissioner BARTHOLOMEW. Right, and I was going to say, again, that we're heading into the situation where the procurement standards could be such that U.S. companies can't compete. So it's not as though U.S. companies are having a fair shake even at Chinese government used software.

Mr. FEDER. I think that's correct.

Commissioner BARTHOLOMEW. Okay.

Commissioner Wessel and I share a lot of the same views and he's asked some of my questions, but I'm struck again about the fact that we've had in the past 12 years four different memoranda of understanding that are supposed to have halted the violation of intellectual property rights. Counterfeiting continues at essentially the same rate, software is not the only industry that is being adversely affected by counterfeiting, and I'm just struck by the fact that nothing seems to be getting better. What can we do? What can anybody do? Do we just throw in the towel?

Mr. FEDER. I would hope not. I think that it certainly is an interactive problem; it's been going on for quite some time. The U.S. Government has been engaged in this issue. When I was in the U.S. Government I was part of the teams that used to go out there and discuss this with the Chinese government.

I think it's going to take time, it's not going to happen overnight. I think the key to success here is to convince the Chinese government that it is in its economic interest to shoulder the burden of enforcing the laws regarding intellectual property.

Now, that can be partly achieved through pressure through our trade laws, but also I think it's a matter of educating people within the Chinese government through a continual dialog, because they are creating intellectual property—one of the Commissioners mentioned this earlier. They are creating intellectual property in China now. It is becoming in their interest.

And I think it's a mistake to look at the Chinese government as being a monolithic entity. There are divergences of opinions. There are people in the Chinese government who understand this. We've spoken with them. They are not in the ascendancy at this point, but I think if we continue to work this issue, over time we will make a difference.

Commissioner BARTHOLOMEW. And yet at the same time that we're talking and talking about talking, the Chinese themselves, not surprisingly, are developing a capability to develop the software themselves. I think one of the things of concern is that the talking ultimately stops when there's essentially not much of a market for U.S. software left because they'll be able to produce the work themselves. Again, this has been, what, 15 years that we have been talking about these problems, and—

Mr. FEDER. Commissioner, I share your frustration, believe me. I've been working on this issue a number of years, as well. I think the array of tools that we have at our disposal to deal with the issue is fairly limited. We have WTO dispute settlement; we could bring a case. An enforcement case is a very difficult thing to prove

in the WTO context. We have a fairly limited ability to apply unilateral transactions under the Special 301 program. And I'm not sure that that would necessarily be a positive or effective step, which is why I believe the U.S. Government has stepped back from the brink each time in the past that we've gotten up to this.

So I think talking is going to have to be an essential part of this process of shifting the views of the Chinese government. We have those tools. I think at an appropriate time we may have to use them. But I think we also need to maintain a dialog and frankly be aware that we do have a limited set of tools to apply to this problem.

Cochair BECKER. Thank you very much, Commissioner Bartholomew.

I want to pick up on this just a little bit, Mr. Feder. I seem to recall you saying that the piracy that's taking place is not really for the Chinese domestic market that it's for the United States market.

Mr. FEDER. Well, no, both are occurring. Both are occurring. When I point to \$3.8 billion, what I'm talking about is software in place on PCs in China that hasn't been paid for, so that \$3.8 billion talking I'm talking about the Chinese market.

Cochair BECKER. When you say the domestic, you're talking about our market in China?

Mr. FEDER. I'm talking about sales—or piracy of PC software from whatever source in China, so whether it's sourced from the United States or from Europe or from Chinese manufacturers.

Cochair BECKER. Okay.

Let me throw something else out here. I never heard anybody mention Motorola. I've been told by knowledgeable people years ago that Motorola was the first Chinese U.S. company, that it is a Chinese company, that they moved almost all their operations to China. Is that right? Do you know? Or does anybody know?

Mr. FEDER. I don't know.

Cochair BECKER. No more, no less than Microsoft or anybody else?

Mr. COURTNEY. Well, I don't know all the details in terms of Motorola, but I think Motorola—like what you see with a lot of electronics firms, there's like two branches to it. One, there's the manufacturing process, so there's the manufacturing side of Motorola in terms of, making the actual devices, and then there are the services side of Motorola, in terms of support and research—

Cochair BECKER. I'm talking about the manufacturing.

Mr. COURTNEY. My understanding is that a majority of the manufacturing from the Motorola side has shifted overseas.

Cochair BECKER. Do you see this happening to Microsoft, for example, following this trend?

Mr. COURTNEY. Well, I don't think it's just limited to any company. It's not just a Microsoft issue. It could be any high-tech services company could follow that trend of a Motorola, where they can easily shift production very rapidly and easily across the globe very quickly. And I think that they're really trying to model that.

General Electric is actually one of the pioneers in a lot of this. One of the famous quotes by the former CEO, Jack Welch, said the ideal factory would be a barge, where you could have all the things

and move around from country to country. So, that was in terms of what he said in terms of the ideal, and I think one of the things that actually take a step back—and I know we get involved in, these big details in terms of trying to put these trends and try to apply them to the macro thing, but clearly I think one of the things that's really starting to mirror is the idea of, in terms of like the apparel factory, this idea of the supply chain, and companies have created this idea of a global supply chain for goods.

Well, now what is starting to happen is companies are trying to mirror the creation of the global supply chain that they developed for goods over the past 25 and 30 years, they're actually trying to do that now for the distribution and manufacture of labor, and I think that that's actually one of the things, so as companies do that, that we're going to see more and more companies shifting abroad.

Cochair BECKER. I guess that's what I was really getting at, is do we see this as a trend within the information technology industry, of moving more and more operations to China. If we're looking five or ten years ahead, what would we be facing in your opinion?

Mr. COURTNEY. Well, I think a great example is we recently talked about Honeywell. We obtained internal documents from Honeywell that talked about their five-year strategic globalization plan, and talked how they were going to move about 6- or 7,000 jobs from U.S. sites across the globe in places such as Mexico, India, China, and the Czech Republic, and so that companies are planning out for five and 10 years to move abroad.

I do believe we are in an economic crisis for job creation. The high-tech industry, if this trend continues unabated, we are going to see absolute implosion of the domestic market for information technology services and jobs, and I really think that we're already starting to see that, and five and 10 years ago, if we do not begin to, as Ron said, recognize that we have a serious problem, we are talking about very serious, serious long-term economic damage, and a place like Seattle is absolutely at risk for this.

Dr. HIRA. If I could just add a couple of quick thoughts.

One, I'd say that the majority of companies that I've been able to talk to and other researchers that I've talked to in the outsourcing area they're like Microsoft, they don't want to talk to you, even in off-the-record meetings. It's pretty hard to get people to come to represent companies.

But all indications are that really a lot of the outsourcing in the engineering area and the software area are really at the pilot stages and they're just beginning. Now, the initial results of those pilot projects have been very successful, and so I think we're at the beginning of this trend, and it's going to keep accelerating. Lots of companies waited until after the election, lots of companies are much smarter about their public relations in terms of releasing information on it.

The second thing that I think should disturb us a bit is the fact that venture capital firms are forcing their startup firms—the firms that they fund, the small entrepreneurial companies that are doing the most advanced technology work, they're forcing them to offshore as much of the work as possible, because you get the same kinds of advantages in terms of labor rates and whatnot for engi-

neering design, and I'm talking about the most advanced micro-processor design, most advanced IC design, integrated circuit design.

I was on a panel at a conference at Stanford University, it's called the IEEE Hot Chips. These are the most advanced designers. And I was on a panel with two VC firms. One was Vinod Dham, who was the father of the Pentium, and he's got a new venture capital firm, it's called New Path Ventures, and they're only going to fund startup firms that offshore all their work. They're going to have two or three people in glass office buildings in Silicon Valley, and all of the work will be done either in India or China or somewhere else. This is engineering design. And entrepreneurs aren't sort of born out of M.B.A. schools, they learn by working in these companies, and then they spin off their next generation of technology and next generation of companies that become the next Microsoft or become the next Cisco.

Chairman D'AMATO. Let me just follow that up on what you just said about that process. Now, if you wanted to reverse that process so that venture capitalists said it's a good idea to stay in the United States, how would you do it? You'd need to use the tax code? What do you need to do?

Dr. HIRA. Well, I think the tax code would be one mechanism. If you look at what the Indian companies do is that they basically have a tax holiday on all of their software exports, on all their IT exports, and it shows up in a competitive advantage, again, in the table that I gave you in the written testimony. Infosys's effective tax rate over the last five years is 14 percent. EDS and CSC are paying 35 percent. So they're getting a margin difference right there just from tax advantages and the like.

As Dr. Scott said this morning, you start to target some of your R&D and you start to put some strings there. You start to think about government procurement in a much more pragmatic way. You don't want to say that we don't want to offshore any government procurements so when I buy pens and pencils they have to be made in America, but certainly no one would argue that we should offshore our government-funded research, right? Where does IT services play in there, in the mix? Do you really want to offshore that?

There are plenty of companies, like EDS, Oracle and whatnot that got their starts selling to the government, including Microsoft. Microsoft was originally headquartered in Albuquerque, New Mexico. They were selling to the Department of Energy labs.

So I think we need a pragmatic approach to the government procurement. It's not all the buy American philosophy but it's not also completely open to outsourcing.

Chairman D'AMATO. Thank you. That's very useful.

Co-chair BECKER. If you'll permit me to make light for just a second, Mr. Feder, the discussions that we were having on intellectual property rights, and the fact that we've entered into three agreements, written agreements already, and they didn't work. We have an old Missouri saying that if you always do what you always did, you'll always get what you always got.

With that, the panel is dismissed, and we'll move right along to the next one.

(Short recess.)

PANEL IV: AGRICULTURE

Cochair BECKER. All right, if we can go ahead and get started now.

Let me introduce the fourth panel, on agriculture. Dr. Thomas Wahl, Director of Impact Control Center, Washington State University; Mr. Christian Schlect, President of Northwest Horticulture Council in Yakima; Mr. Rod Christensen, Representative, Far West Spearmint Oil Administrative Committee.

Welcome to the hearing, and we'll start with Dr. Wahl and follow with Mr. Schlect and Mr. Christensen.

**STATEMENT OF THOMAS I. WAHL
DIRECTOR, IMPACT CENTER AND PROFESSOR
SCHOOL OF ECONOMIC SCIENCES, WASHINGTON STATE UNIVERSITY
PULLMAN, WASHINGTON**

Dr. WAHL. Thank you, Mr. Chairman. It's an honor to be here and to talk to you and the other Commissioners.

First let me correct. I'm with the IMPACT Center, which is the International Marketing Program for Agricultural Commodities and Trade. I can't say I control much of anything. Certainly not the center. Impact Control Center, I'm not sure where that came from.

If we look at the state of Washington and the Northwest, Washington State is the most trade-dependent state in the country, and one-third of all jobs are related in some way to trade. In terms of agriculture, Washington State is the second-most trade dependent in the country, typically following California. In Washington State we produce over 300 commercial crops in viable quantities. Our leading export ag markets are Japan, Canada, Mexico and China. China's now fourth. That's a significant increase from over the last decade. China is a growing market and a competitor for agricultural products.

China's income growth, over eight percent per year and a growing population that's going to add 350 million people over the next two decades, is a significant market. However, there are also significant constraints on production in terms of agriculture. They have water issues, there are environmental issues, all of which currently place a constraint on total agriculture production and over the next few decades will perhaps significantly reduce or constrict increased agriculture production.

In the long run, as China's population continues to grow, their alternatives to increase food production are going to involve probably biotechnology, they're a very big player in that field now and becoming bigger, and perhaps more importantly, to exploit their comparative advantage. We've all heard that China's comparative advantage is in producing labor-intensive products with that many, 1.3 billion, people, and with land per worker of 15 acres per agricultural worker. Taking all the arable land in China and dividing it by agricultural workers, you end up with about 15 workers per acre. This is in contrast with the U.S. with about 2,500 acres per worker. So it's significantly less arable land per worker in China.

We look at wage rates. In China it's less than 70 cents per hour agriculture. In the U.S. it's \$9.00 an hour. So it's significantly lower wage rate in agricultural sector in China.

Now, how about productivity in agriculture? Well, if using numbers on purchasing power parity basis, Japanese workers produce about \$3,000 worth of product. In the U.S. it's about 70,000. All that combines indeed when you look at trade patterns. China is indeed exporting products that are labor intensive. They're exporting to the U.S. We import fruit juice, frozen vegetables, mushrooms, fruit parts, most of which are processed products. In contrast, the U.S. is exporting products to China. We're exporting citrus, grapes, potatoes and apples. Those are our top four horticultural exports to China.

If we look at Chinese agricultural sector and the processing sector in particular, the technology they tend to use is labor-intensive technology. It tends to be the technology that we used here 10 or 20 years ago. It's a lot less expensive for them to buy, but more importantly, it takes advantage of that excess labor. I've seen apple-packing sheds over there that are—they do have some technology, there's some mechanics there, but in general most things are done by hand, simply because it's less expensive on a permanent basis.

If you drive across the countryside in China you'll see lots and lots and lots of greenhouses. There was one valley we were in that was literally miles across. And as you look at a photograph of it, you see this sort of blue haze in the ground, clear into the distance. It's all greenhouses. Literally miles and miles and miles of greenhouses. They were growing watermelons at the time. This valley is known for their watermelons. But that's significant production capacity for vegetables and greenhouse crops. It's amazing, and any large city in China is ringed by acres and acres and acres of greenhouses. So there's significant capacity that continues to grow.

And if you look at production of vegetables versus orchard crops and others, tree fruits, you'll see that vegetables continue to increase. In terms of apples, which we've all heard a lot about in terms of competition with the U.S. and exports of apple juice to the U.S. China's the world largest apple producer. Their quality is rapidly increasing. If you look back to the early '90s, when I first went to China, half the crop went to waste. Today they're producing products that are extremely competitive in the international market, they're competing with us, and in some cases taking the markets away.

Another issue with agriculture is the value of the dollar has gone down. We would expect agricultural exports to increase, and they have to some degree, but not with China, because of the fixed exchange rate. China's using the exchange rate to subsidize their exports and place an implicit tax on imports, particularly with the U.S. We've seen the U.S. cost of products in Euros drop but not the cost of U.S. products in terms of yuan, the Chinese currency. When you look at that in terms of Chinese product in the export market in Euros, they're becoming more competitive.

I think in terms of the agriculture in the Pacific Northwest and Washington in particular, the use of technology and biotechnology, the innovative parts of it, the innovation of agriculture I think is going to be extremely important, but that involves more investment in basic and applied agricultural research. To maintain our competitive edge we have to invest in agriculture. We have to invest

in research, the R&D part of it, and above all we need to provide products that consumers want, both domestically and internationally. Thank you.

[The statement follows:]

**Prepared Statement of Thomas I. Wahl
Director, IMPACT Center and Professor
School of Economic Sciences, Washington State University
Pullman, Washington**

U.S.-China Agricultural Trade: How Competitive Are We?

Washington State producers have long been dependent on international markets. As the most trade-dependent state in the nation; Washington was the fourth largest exporting state in 2003 with an export value of over \$34 billion. One-third of all jobs in Washington directly or indirectly relate to trade. The Washington Trade Office estimates that exports alone support more than 750,000 jobs in Washington.

The leading export markets for Washington agriculture are Japan, Canada, Mexico, China, Korea, Taiwan, the Netherlands, Germany, the United Kingdom, and Spain (Figure 1). While Japan has historically been Washington's largest export destination, exports to China have increased dramatically since 1995.

China's gross domestic product is projected to continue growing by about 8 percent per year. This growth will likely continue as barriers to trade decrease and foreign investment continues to increase. Increasing incomes and a population of 1.3 billion that is projected to grow by 350 million over the next 2 decades will result in a growing demand for food in the future. Constraints on water and environmental resources will likely limit China's ability to continue to increase domestic production without advances in biotechnology or exploiting its inherent comparative advantage (Figure 2).

Measures of comparative advantage in international markets vary and are usually complicated. However, basic measures such as arable land per worker, agricultural output per worker and wage rates for agricultural workers can suggest longer run competitiveness.

Arable land per agricultural worker in the United States is about 2,500 acres per agricultural worker while China has about 15 acres per agricultural worker (Figure 3). While these measures do not distinguish between highly productive and marginally productive acres, the levels suggest that China is relatively land poor and not likely to be competitive in the production of land intensive crops such as wheat or cattle. This would suggest that agricultural production of more labor-intensive crops, including fruits and vegetables, is likely.

Agricultural output per agricultural worker in the United States is over \$70,000 and about \$3,000 per worker in China (Figure 4). The productivity of United States agricultural workers is generally much higher than the productivity of agricultural workers in China. To some degree this reflects China's low wage rate of less than \$.70 per hour for agricultural workers (Figure 5). In comparison, the wage rate for agricultural workers in the United States is over \$9 per hour.

These measures suggest that China, with its relatively abundant and inexpensive labor supply, will have a comparative advantage in producing products that are labor intensive. In contrast, the United States with a relatively abundant supply of land and productive workers should have a comparative advantage in producing products that are land intensive.

How does this academic observation compare with reality? Comparative advantage estimates for apples from 1991 to 2000 indicate that China's comparative advantage in producing apples has increased dramatically, while the United States fluctuated, but has declined since 1995 (Table 1).

These results suggest that with China's large population and relatively limited land area China will likely increase production of crops that can be produced using large amounts of labor such as apples, or vegetables such as asparagus.

In contrast, with more productive and higher paid agricultural labor, the United States will likely be less competitive producing crops that require large labor inputs or that cannot be produced using high levels of mechanization or technology to substitute for labor. The United States will likely be more competitive with wheat or crops such as cherries or wine. This does not mean that we should abandon apple production in the Pacific Northwest. Instead, it suggests that in order to be competitive in the world marketplace producers need to improve efficiency and productivity, and produce apples that are well suited to consumer's preferences.

As China becomes more competitive in the production of labor intensive products, how will agricultural trade be affected? China is the fourth largest importer of U.S. horticultural products with citrus, grapes, potatoes, and apples as the largest individual commodities (Figures 6 and 7). The top four U.S. horticultural imports from China are fruit juice, frozen vegetables, mushrooms and fruit parts (Figure 8). Note that the top U.S. exports to China are commodities while the top U.S. imports from China are processed products reflecting the lower processing costs in China.

If China allows its agricultural sector to reorient towards market forces and comparative advantage under WTO liberalization, as noted above, China's production should shift towards labor intensive products. However, under China's current fixed exchange rate system, it is not clear that comparative advantage will prevail. For example, while the U.S. dollar has depreciated against the Euro and other major currencies, it has also appreciated against the currencies of countries having economic or political difficulties (Figure 9). The falling value of the dollar has accelerated U.S. exports to countries with a falling exchange rate. In theory U.S. agriculture in particular should benefit.

However, China's fixed exchange rate provides a hidden subsidy to their export sector since products priced in dollars remain at the same price rather than having the price increase. The fixed exchange rate is also an implicit tax on imported products priced in dollars. Hence, while U.S. products should become less expensive in China and Chinese products should become more expensive in U.S. markets, they have not changed. However, China's products priced in Euros have become less expensive on the world market.

China's fixed exchange rate provides an interesting set of circumstances for U.S. agriculture. While U.S. products are less expensive on the world market in Euros so are China's products. For agriculture, the gains from a lower dollar have not materialized with China. However, the costs for U.S. importers of China's agricultural products have not increased. However, in relative terms, since European products are now more expensive, China's products are relatively less expensive.

China's increasing production of labor intensive products is in direct competition with some Pacific Northwest products such as apples and asparagus. China's apple production is the world's largest. Given the inexpensive (both in relative and absolute terms) labor costs; it is not surprising that China is one of the low cost producers. As the quality of Chinese apples continues to improve and international standards are more easily achieved, more Chinese apples will compete in North American and European markets.

While China's apple production has perhaps leveled off (Figure 2), it is likely that China will increase sales internationally, particularly in Asia, as the quality continues to improve. Most Chinese apples are Red Fuji's which are well suited to the Asian market as well as the U.S. market. Red and Golden Delicious apples have historically been the primary varieties grown and exported from the Northwest. However, in recent years as consumer tastes have shifted and prices have declined, some Northwest producers have shifted to new varieties including Fuji and Pink Lady. These varieties compete directly with Fuji's from China. Thus, it is likely that Pacific Northwest apple producers will continue to lose market share to China unless they significantly reduce costs or find new varieties that appeal to a broad base of consumers.

Asparagus exports from China have increased rapidly reaching 1,687,209 kilograms in 2003, which was approximately equal to Washington's total production of asparagus. Organic asparagus is being produced for the international marketplace and in some cases exclusively for international markets. Low labor costs have contributed to increasing exports of Chinese asparagus at competitive prices. Increased exports of other fruits and vegetables from China have resulted in reduced exports of U.S. product to Japan and other Asian destinations.

A portion of the increased Chinese production is a result of joint ventures with Japanese, Taiwanese, and U.S. companies. In the past, these joint ventures have been difficult to form requiring significant Chinese ownership. Recently foreign ownership requirements have been relaxed in China. In addition, as Chinese farmers are able to secure long-term transferable agreements to control plots of land, development of processing companies that have secured control of those plots has increased. Farmers may now sell their control outright or sublease. Villages that own the property have encouraged development by facilitating the aggregation of a number of plots to secure sufficient production capacity. In many cases the subleasing farmers are employed by the processor. These ventures have significantly increased the ability of Chinese agriculture to respond to price signals at competitive prices, although production targeted solely at specialized international markets such as certified organic may price themselves out of the local marketplace.

Competing with low cost Chinese labor will require improving efficiency, reducing costs, and improved marketing. Pacific Northwest producers of products that are direct competitors of Chinese products in the international marketplace will need to increase the use of technology to further increase the productivity of high cost labor as well as explore the potential alternatives that utilize biotechnology solutions to reduce cost, improve efficiency or increase consumer demand. Increased research in these areas will benefit all of the U.S. as increased agricultural exports offset a growing trade deficit.

(Data sources include the U.S. Dept. of Commerce, Bureau of Census; CIA World Factbook; International Labor Organization (*www.ilo.org*); China Customs Statistics Yearbook; China Statistical Yearbook and author's estimates.)

Table 1. Estimates of Revealed Comparative Advantage for Apples

Country	1991	1995	2000
Canada	0.48	0.45	0.43
China	0.23	0.53	1.23
Hong Kong	0.13	0.29	0.28
France	3.72	3.25	3.61
Germany	0.19	0.13	0.16
Japan	0.03	0.05	0.04
Korea, Republic	0.40	0.19	0.03
Mexico	0.00	0.00	0.00
United Kingdom	0.14	0.08	0.10
USA	0.82	0.93	0.88

Figure 1. Top U.S. Agricultural Export Destinations, 2003.

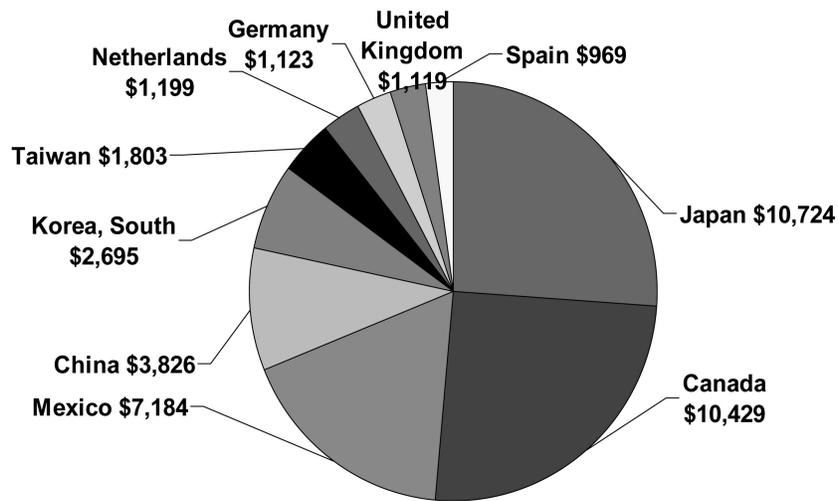


Figure 2. China's Planted Area.

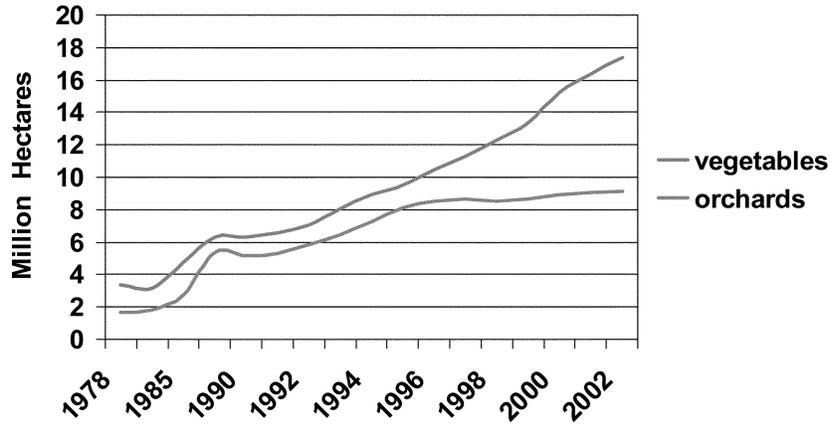


Figure 3. Arable Land Per Ag Worker.

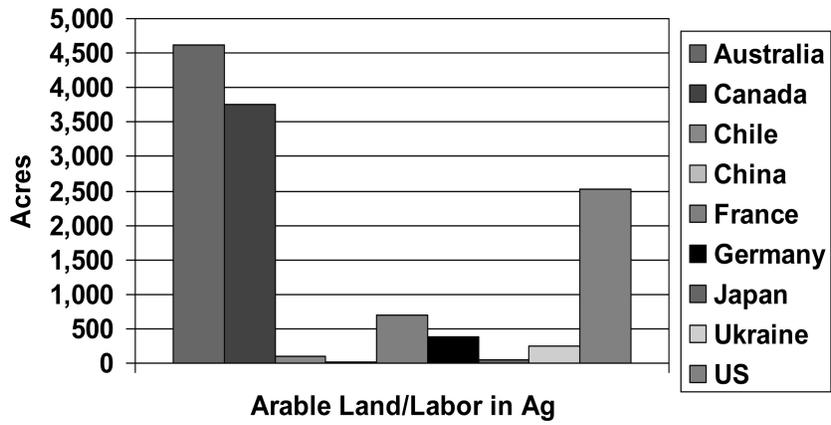


Figure 4. Ag GDP Per Ag Worker.

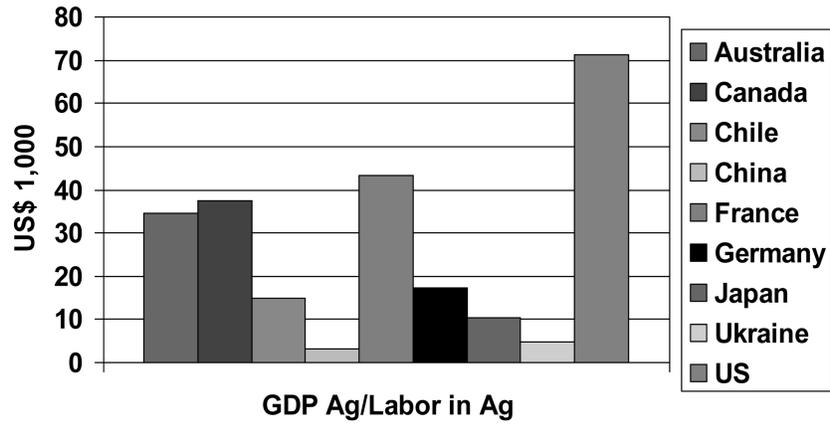


Figure 5. Estimated Ag Wage Rates.

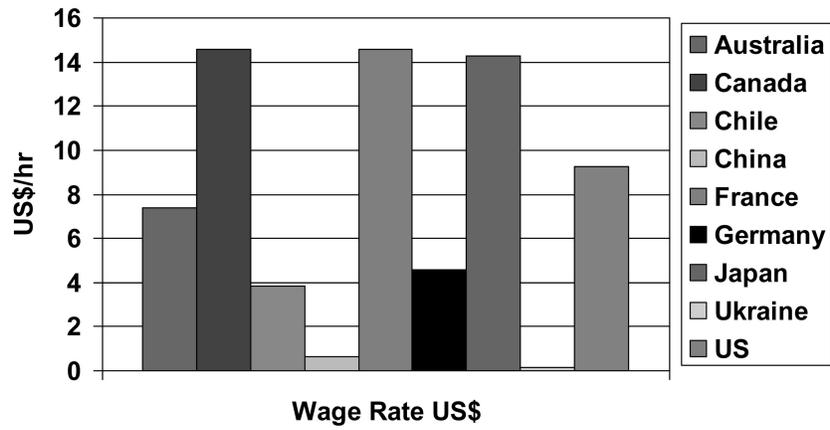


Figure 6. U.S. Horticultural Exports, 2003.

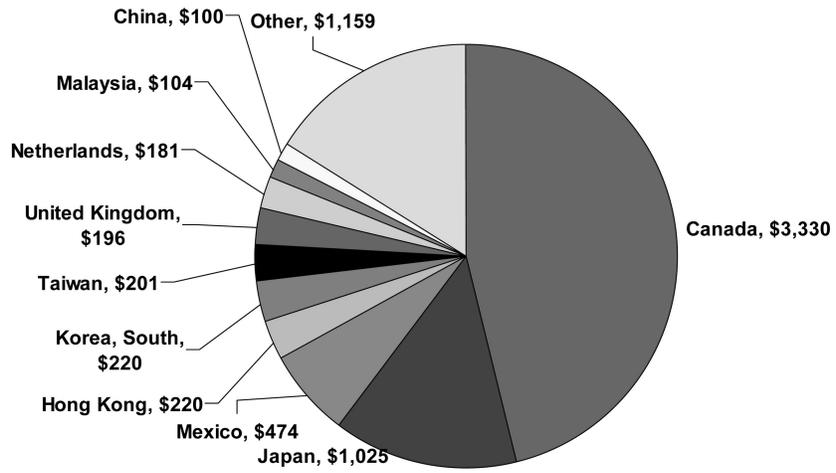


Figure 7. U.S. Horticultural Exports to China, 2003.

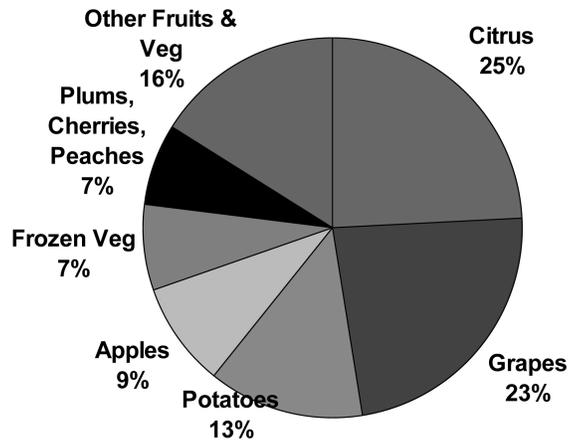


Figure 8. U.S. Horticultural Imports from China, 2003.

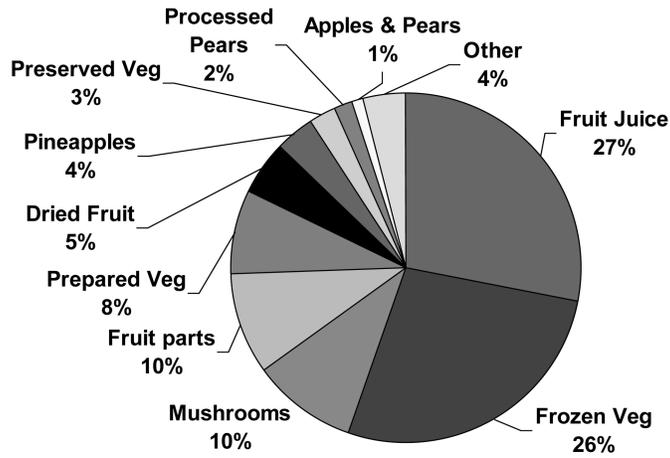
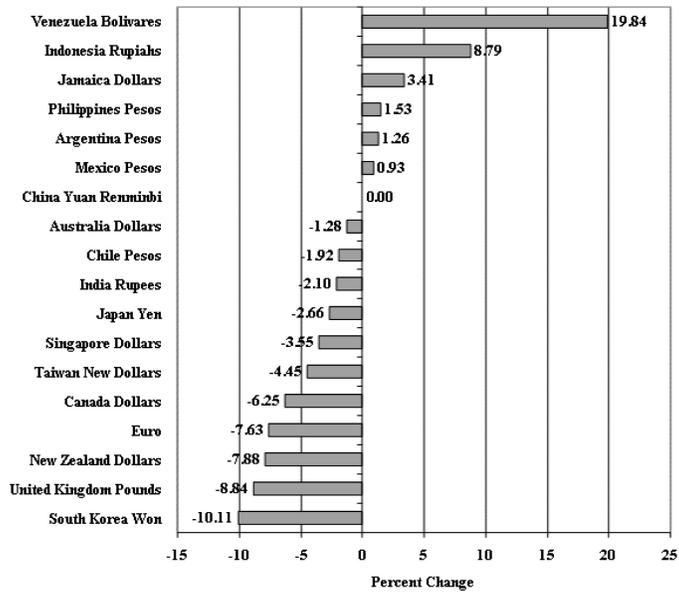


Figure 9. Percentage Change in the Value of the U.S. Dollar, 12/2003 to 12/2004.



Cochair BECKER. Thank you.
Mr. Schlect.

**STATEMENT OF CHRISTIAN SCHLECT
PRESIDENT, NORTHWEST HORTICULTURAL COUNCIL
YAKIMA, WASHINGTON**

Mr. SCHLECT. Yes.

And it is Yakima. It's a town that William O. Douglas, some of you might remember, who sat on Supreme Court, is from.

Anyway, the text of my testimony is before you, and I won't get into the details of that. I'd rather answer questions that you might have.

A couple items that Congress might do, which I understand is the focus of your work to bring recommendations to Congress. One area that's maybe particular to our industry in terms of agriculture is the technical issues and trade negotiations and sanitary/phytosanitary issues. Instead of tariffs and quotas, our issues revolve around S&P issues now.

And on pest disease, food safety, all those types of technical issues need a lot of attention, they need support at USDA. Foreign Agricultural Service, the APHIS people, Animal and Plant Health Inspection people. Trade negotiators at USTR need their budgets to be funded and there need to be a lot of expertise developed and brought to bear on these problems, because they're very difficult, whether they're mad cow issues with Canada, whether they're with avian flu with poultry in Asia, or whether they're with our types of issues. These are technical issues the United States Government needs to take the lead on, the private sector can't, and the Congress might do a better job, I think, of funding and maybe coordinating those issues.

Another area that was mentioned is just funding for basic research or applied research. Our industry has a proposal in front of Congress, the Technology Road Map Project, it's called, mainly by our research commission and the state fruit industry. They've worked closely with Washington State University I know on this project, and our national commodity group, the United States Apple Association. So funding basic research or applied research to improve the productivity both at the packinghouse level and the orchard level to retain competitiveness is I think something Congress can do.

A couple other areas just in general. One is the antidumping laws. I think they need to be looked at. All of the trade protection laws have been basically developed over the years, I think, for the manufacturing sector. It's very difficult for agriculture, especially smaller type of agriculture, where there's very many independent producers, say, of orchards, to get together and fund an antidumping case or organize themselves to fund an antidumping case, and when they do it's a very expensive process, a very lengthy process, and I think in the end you probably don't get a very big duty, in any event. But as opposed to a Boeing or a Microsoft or some other major company, bringing one of these cases through USTR or through ITC, that is very difficult for basic agriculture to do, just the way it's formed, and the legal structure of those kinds of laws.

And there are a bunch of other areas. Congress could help on immigration. I know that was an issue in the previous panel, but in our sense, we have a—basic labor at the farm level that right now

originates in Mexico. The idea that we can shut that off—or should shut that off I think is wrong, but we should legalize it and make those workers so that they can come to this country and provide that service and work and so that we can be competitive on a world market. And other issues, such as reclamation projects, water, are essential to our livelihood.

So those are some of the things that maybe Congress can do. They aren't all focused on China, but I would answer any questions you would have on China at the appropriate time.

[The statement follows:]

**Prepared Statement of Christian Schlect, President
Northwest Horticultural Council (NHC), Yakima, Washington**

Introduction

Mr. Chairman and Members of the Commission:

I am pleased to have been invited to address the U.S.-China Economic and Security Review Commission today on issues involving the deciduous tree fruit industry of this region of our country and the People's Republic of China.

I have served as the President of the Northwest Horticultural Council since 1980. The NHC is a trade association representing the national and international policy interests of growers and shippers of apples, pears, sweet cherries and other such fruits raised in Idaho, Oregon and Washington. In terms of international involvement, I am a member of the USDA–USTR Agricultural Policy Advisory Committee (APAC), past Chairman of the U.S. Agricultural Export Development Council, and on the board of directors of the Washington State China Relations Council. The Northwest Horticultural Council is located in Yakima, Washington and its website is www.nwhort.org.

The Northwest Horticultural Council supported the accession of the People's Republic of China into the World Trade Organization in December of 2001.

Background

The tree fruit industry of the Pacific Northwest has a keen interest in the markets of Taiwan, Hong Kong and the People's Republic of China. Each of these three distinct markets is important to our yearly export effort. But of the three, the People's Republic of China is the only one that is a competitive force in its own right in the production of tree fruits, especially apples and pears. In fact, the PRC is by far the world's leading producer of both apples and pears.

The majority of apples, pears and sweet cherries grown in America originate from the Pacific Northwest. As apples and pears are our most important crops in the U.S.-China trade relationship, I will focus on them while using production and trade figures from the Federal Government for all U.S. apples and pears.

• **Apples**

Over the last nine years, Chinese apple production rose from 14 million metric tons to 18 million MT, while exports went from 149,324 MT to 600,000 MT. In the same period, U.S. apple production dropped from 4.8 million MT to 4.2 million MT and exports fell from 564,329 MT to 560,000 MT. To underscore the point, China now grows well over four times the amount of apples as does the United States. As recently as 1990, China grew fewer apples than the United States.

• **Apple Juice**

In 1998–99, China accounted for 15% of global apple juice production while the U.S. had a 24% share period. In 2003–04, China accounted for 43% while the U.S. dropped to 8%.

• **Pears**

Over the last seven years, Chinese worldwide pear exports have risen from 97,000 metric tons to 350,000 MT and its processed pears have ballooned from 320,800 MT to 500,000 MT. In the same period, U.S. pear exports have dropped from 164,871 MT to 160,000 MT and processed pears from 426,033 MT to 370,000 MT.

In terms of direct impacts, U.S. imports of low cost Chinese pears increased from 148,515 cases in 2001 to 517,436 cases (approx. 20 kgs. per case) in 2003.

Industry Concerns

- Lack of confidence in the PRC's ability to effectively implement phytosanitary controls on fruit exported to the United States. Examples are when Canada in 2003 stopped importing apples from a Chinese province after inspectors found quarantine pests—exotic mites—on apples being imported to Vancouver, B.C. A similar problem arose in late 2003 when pears imported into the United States were found to have the exotic *Alternaria* fungus not known to occur in the United States. Shipments were stopped but not before the product reached grocery stores within a key production area of the state of Washington. USDA is now conducting tests to reopen our market for Chinese Ya pears.
- That scientific issues in the bilateral relationship be set according to the standards of the Sanitary and Phytosanitary Measures (SPS) section of the WTO and not be politicized. We fear negotiators—in either country—deciding access issues for apples and pears based on factors other than the merits of the dispute at hand, such as bargaining to a decision based on unrelated technical or political issues involving other agricultural commodities.
- Enormous disparity in costs of production due to wage levels and mandated worker protection requirements. For example, the minimum hourly wage in Washington State for all labor, including field workers, is \$7.35 an hour effective January 1, 2005. The estimated wage for field labor in the PRC is less than 70 cents per hour.
- Yuan pegged to U.S. dollar. The PRC's currency should be exposed to market forces thus allowing exports to be sold in line with the true strength of that country's strong economy.
- Inadequate intellectual property rights enforcement. The logo of the Washington Apple Commission is consistently being appropriated without permission in the PRC for use by sellers of domestic apples.
- Difficulty for specialty crop producers in using U.S. trade remedy laws, such as anti-dumping. Unlike major manufacturing companies, small growers scattered throughout the country need to band together, raise significant money for legal fees, and then take on a long court battle which often leads to an unsatisfactory result.
- Retaining now open markets in Taiwan and Hong Kong in light of the People's Republic of China's territorial interests.
- Poor food safety and sanitation systems in China that might result in negative health effects associated with the consumption of local fruit, in turn, resulting in a loss of consumer confidence in all similar fruit on the international market.
- An unequal duty structure. Duties of 10% with an added VAT of 13%, for an effective rate of 24.3%, face U.S. apple and pear exports to China. At the same time, fresh apples and pears entering the United States are assessed no duty.
- State aid and central planning. It is unclear what specific economic transfers actually take place in support of Chinese fruit producers, given the opaque political structures of the Middle Kingdom. However, the latest five-year plan from Beijing on apple competitiveness calls for 900,000 MT apple exports by 2007, a 50% increase over the current rate.
- Food processors in our region, especially pear canneries and apple juice manufacturers, are under intense pricing pressure due to recent surges of PRC products.
- The Doha Round. The PRC should not be allowed any new Special and Differential Treatment or other trade advantages afforded poor and developing countries as a result of current WTO negotiations. In sectors such as agriculture, China is already world competitive.

Conclusion

Thank you for this opportunity to participate in this important public hearing. I look forward to answering any questions Members of the Commission may have as a result of this testimony.

**STATEMENT OF ROD CHRISTENSEN
MANAGER, FAR WEST SPEARMINT OIL ADMINISTRATIVE COMMITTEE
KENNEWICK, WASHINGTON**

Mr. CHRISTENSEN. Thank you.

My name is Rod Christensen. I'm manager of the Far West Spearmint Oil Administrative Committee. I appreciate the opportunity to be here to represent the spearmint industry on an area that's of great concern to us, that being the impact of China on our industry here.

I am going to go through the written material. I don't think you've had that in advance because I think the spearmint industry is a very little known industry here in the U.S. and yet it has an important story to tell in terms of China.

The far western states of Washington, Idaho, Oregon, Utah and Nevada produce the vast majority of spearmint oil in the United States, and they are considered by most in the mint industry to be the premier producing areas in the world. We have been a world leader in the production of mint oil, both spearmint and peppermint, for well over 50 years. We produce the highest quality and most consistent supply of oil in the world.

For most of that time we've had a vibrant mint industry. However, globalization has hit our industry very hard. In particular, spearmint oil produced in China has had a devastating effect on the U.S. spearmint oil industry. There's been a mint industry in China since the mid-'60s. For many years it was very small and very specialized in its application, supplying small local businesses and home remedy-type pharmaceutical needs.

In the late 1980s and early '90s production began to expand rapidly and exports from China to the U.S. began to increase. There are several factors that led to these increases. First, the Chinese government policy emphasis to create capital through favorable trade balances on agricultural products. Mint oil lends itself very well to this policy, because it's not a basic food necessity, it can be produced by a relatively small number of producers, who can be cheaply subsidized to stay in business, but the end product can be sold on world markets at a very high per-unit value.

Secondly, the decision by some U.S. mint dealers to look for inexpensive foreign oil that can be blended with U.S. oil to produce a more competitive product. They went to China and took some of our technology to them, and this led to significant improvements in the Chinese mint industry, which aided them in their efforts to increase production and improve quality.

Third, the increasing availability of technical and research information via the Internet. This information was and is a very significant factor in helping the Chinese industry improve the consistency and quality of its production. Most of this information was developed at the expense of the U.S. mint industry, largely through research conducted in our land grant university system and made available at no cost to the world.

These factors have become increasingly prominent each year up to the present time. Although figures are difficult to get, Chinese domestic production has gone from approximately 500,000 pounds a year in the late '80s to about 2.5 million pounds now.

The abundant supply of oil within China is a real problem for us. Domestic demand in China for mint-flavored products, gum and toothpaste, although increasing, is not keeping pace with their increased production. There continues to be ample excess production available for export. Additionally, the need for capital coming into the country has not diminished significantly during the past decade. Government policy encourages export across the board.

So the results of these developments are really a matter of record. Here in the U.S. imports have gone from an average of 184,000 three years in the late '80s and early '90s to about 490,000

in the most recent completed three-year period, or about 166 percent increase. That represents about 28 percent of our total local demand here in the U.S.

Now, as we incurred this problem we've made trips to China and tried to study that problem, and what we've learned there does concern us greatly. We go to China for two reasons: one, to learn about their industry, and secondly, to promote our product.

Just summing down, in the area that we visited in July of this year, for example, there were over 10,000 producers, who were farming about 4,000 acres of spearmint, or less than half of an acre per producer. Other crops that they had brought their total acreage up to two to five acres.

They sell their oil through a chain of marketing that leaves the grower a very small amount of money, and yet he continues to stay in business because it is a cash crop, and he continues to exist based on the rest of his production. But he likes the cash that he can get from spearmint.

Of greatest concern to us is the low production costs incurred through this system. Since the growers use little if any power equipment, they regenerate their own roots, they till, weed, and even often control insect pests by hand; their main input cost is labor. Labor is abundant and therefore very cheap. Seventy percent of the Chinese population are peasants, most of them living on the farms and working as peasants, and competing with peasant labor is a difficult thing to do.

The result of all of this to the U.S. industry is that demand for our oil has declined dramatically, from an average of 948,000 pounds for the three-year period '88 to 2000 to 626,000 pounds for the most recent three-year, or a decrease of about 34 percent in our demand. A corresponding decrease has, of course, occurred in the number of producers, who have gone from 142 down to 60 here just in our state. Now, we know there are some other factors that get involved in that, such as consolidation, but the—all indicators show that the influx of Chinese mint oil is the major reason for our decline.

In China the use of spearmint is increasing dramatically. It's estimated that the toothpaste sector alone is increasing at an annual rate of in excess of 10 percent. And we want to be a part of that increase. But we run into one major problem, and I will sum up with that, and that problem is that as our oil goes there it faces a 17 percent duty; their oil coming into the U.S. is duty free. And so our first and major recommendation is that either the 17 percent Chinese import duty on spearmint oil be removed or an equal duty needs to be improved on their oil coming here, so that the playing field is fair. And in summary, that's what we face as an industry.

Thank you.

[The statement follows:]

**Prepared Statement of Rod Christensen, Manager
Far West Spearmint Oil Administrative Committee, Kennewick, Washington**

Good afternoon. My name is Rod Christensen. I am manager of the Far West Spearmint Oil Administrative Committee, a Federal marketing order regulating spearmint oil production in the far western United States. I would like to thank the Commission for inviting me here to testify on behalf of our spearmint producers concerning the impact that China is having on our industry.

The far western states of Washington, Idaho, Oregon, Utah and Nevada produce the vast majority of spearmint oil in the United States and are considered by most in the mint industry to be the premier producing areas in the world. We have been a world leader in the production of mint oils, both spearmint and peppermint, for well over 50 years. We produce the highest quality and most consistent supply of oil in the world.

For most of that time, we have had a vibrant mint industry. However, “globalization” has hit our industry very hard. In particular, spearmint oil production in China has had a devastating effect on the U.S. spearmint oil industry. There has been a mint industry in China since the mid 60’s. For many years it was very small and very specialized in it’s application, supplying small local businesses and “home remedy” type pharmaceutical needs.

In the late 1980’s and early 1990’s, production began to expand rapidly and exports from China to the U.S. began to increase. There are several factors that lead to these increases. First, the Chinese government policy emphasis to create capital through favorable trade balances on agricultural products. Mint oil lends itself very well to this policy because it is not a basic food necessity, can be produced by a relatively small number of producers who can be “cheaply” subsidized to stay in business, but the end product can be sold on world markets at a fairly high per unit value. Second, the decision by some U.S. mint dealers to look for inexpensive foreign oil that could be blended with U.S. oil to produce a more competitive product. This led to significant improvements in the Chinese mint industry which aided them in efforts to increase production and improve quality. Third, the increasing availability of technical and research information via the Internet. This information was, and is, a very significant factor in helping the Chinese industry improve the consistency and quality of it’s production. Most of this information was developed at the expense of the U.S. mint industry, largely through research conducted in our land grant university system and made available at no cost to the world.

These factors have become increasingly prominent each year up to the present time. Although accurate figures are difficult to get on China’s domestic mint production, estimates indicate that production there increased from less than 500,000 lbs. per year in the late 80’s, to a current annual average in excess of 2,500,000 lbs.

The abundant supply of oil within China is very problematic for the U.S. industry. Domestic demand in China for mint flavored products, almost exclusively gum and toothpaste, although increasing, is not keeping pace with their increased production. There continues to be ample excess production available for export. Additionally, the need for capital coming into the country has not diminished significantly during the past decade. Government policy seems to encourage exports across the board.

The results of these developments are predictable and, in the case of spearmint oil, a matter of record. Imports of Chinese spearmint oil to the U.S. as reported by the Department of Commerce have grown from an average of 184,000 lbs. of oil per year for the three year period of 1988–1990, to an average of 490,000 lbs. during the period of 2001–2003, a 166% increase. The 490,000 lb. average is continuing to grow each year. It represents over 28% of the total annual demand for far western U.S. spearmint oil.

Since 1996, we have made four trips to China to promote our spearmint oil there and to learn more about their industry. We have visited dealers, growers and end users of the product. What we have learned causes great concern to us.

As with most Chinese agriculture, the production of mint oil in China is conducted on a basis that is, by our standards, outdated and inefficient. It works well for them because of their low standard of living and their need to keep most of their population on the farm and working there. Centered in the Henan province in central China, spearmint oil is produced on plots averaging less than one acre per producer. Virtually all processes, planting, cultivating, pest control, and harvesting are done by hand labor. In this area, visited by us in July of 2004, we discovered that over 10,000 producers farm about 4,000 acres of spearmint, or less than ½ acre per producer. Other crops bring the total acreage per farmer to between 2 and 5 acres. They sell their oil to a collector who sells to a dealer who sells to an import/export company or a domestic end user. Returns to growers are minimal, but most growers continue to produce mint oil because it is a minor part of their operation and it provides cash for them. Hence, our conclusion is that the abundant supply of Chinese mint oil will continue with no foreseeable decrease.

Of greatest concern to us is the low production costs incurred through this system. Since the growers use little, if any, powered equipment, regenerate their own mint roots for planting each year, till, weed, and even often control insect pests by hand, their main input cost is labor. Labor is abundant and therefore very cheap. Current reports show that approximately 70% of the Chinese population are peasants, most

of them living and working on farms. Competing with peasant labor is a difficult thing to do.

The value of this cheaply produced mint oil coming into the U.S. from China has averaged \$5.23 per lb. over the past three-year period. The U.S. cost of production as published by Washington State University is over \$12.00 per lb. Even though Chinese oil suffers from inconsistency in supply of a good quality product, this price differential is enough incentive for our dealers and end users to find ways to blend and use the oil in their products. Our own technology allows for the “dismantling” of oil into components that can be used in a variety of blends. Every such use displaces demand for U.S. mint oil.

The result to the U.S. industry is that demand for our oil has declined dramatically from an average of 948,000 lbs. for the three-year period of 1988–2000, to 626,575 lbs. for the three-year period of 2001–2003. This decrease of 321,426 lbs. represents a 34% decrease in our demand. Naturally, the number of producers has also decreased during the same period from 142 in 1988 to 60 in 2004, a decline of 58%. While it’s true that competition from Canada and India and the universal trend of consolidation in the agricultural sector are contributing factors to these declines, all indicators are that the influx of Chinese mint oil is the major reason for our decline.

Like most agricultural producers in this country, we are willing to compete with this imported oil and take our lumps if we get beat. We do ask, however, that we be allowed to compete fairly. As I mentioned above, one of the reasons that we have traveled to China over the past several years is to promote our oil in China. The potential there is immense. We have been encouraged by industry trends there that show a growing middle class that is rapidly becoming consumers of “luxury” products. Among these products are gum and, more importantly—toothpaste, a major user of spearmint oil. Current estimates by the Chinese industry put the projected growth rate for the toothpaste sector in excess of 10% annually over the next several years. This is incredible growth by any measure, especially for a consumer base the size of China’s.

We want to be a part of that growth and are working to get our product into these new blends and flavors. Obviously, our work is challenging because our cost of production is significantly higher than theirs. But we are willing, and we believe, able to meet this challenge. Our superior quality and consistent supply support us in this effort.

What we cannot overcome is import duties on our oil going into China. Those duties are currently 17%. This has the effect of taking us out of the running for most business. And, it is unfair to us because Chinese oil coming into the U.S. comes in duty free. The playing field is not level. While we take our lumps as an industry here, the Chinese mint industry enjoys the protection of these duties. Further, Chinese government policy appears to be to provide economic incentives to keep peasant growers on the farm, as peasant growers, for as long as possible. The availability of cheap labor for the production of low cost mint oil seems to be sound for the foreseeable future. Under the current conditions, it is inevitable that the Chinese spearmint industry will survive and even prosper while the U.S. spearmint industry will continue to shrink and soon virtually disappear.

We have been working with the USTR office for over ten years to insure that spearmint oil is included in international trade negotiations at every juncture. Although there has been some progress made in the reduction by China of their import duties, it has been slow. We have little hope that the situation will improve significantly very soon. Our industry is small and we, along with much of agriculture, often fill the role of pawn in trade negotiations. By that I mean that the U.S. tends to lose less by giving in on agricultural issues than they do on most other issues and China tends to gain much by protecting their agricultural sector. We’re less than 2% of the U.S. population and within that group spearmint growers are a minor commodity. Our voice is often drowned out. I hope it will not be drowned out on this Commission.

We make the following recommendations.

First, our government must take a stand to bring about a timely resolution to the flagrant inequity in spearmint oil trade policies between the two countries. Either the 17% Chinese import duty on spearmint oil needs to be removed, or an equal duty needs to be imposed on Chinese oil coming into the U.S. Either would be fair and, in our view, are supportable by the facts. China’s accession into the WTO was accompanied by much rhetoric that they are a world player. They need to be held accountable for that rhetoric and play fair—to ALL concerned.

Second, beyond the surface problem of import duties, is the problem of what appears to be considerable subsidization at various levels of the mint industry in China. It is difficult to know the extent and effect of these actions because there

is a palpable lack of transparency in Chinese government agencies at every level. Included in trade negotiations must be an insistence that such policies are made known and open for discussion. It appears to us that efforts in this area are minimal if they exist at all.

I want to thank you, Mr. Chairman, and all the Members of the Commission for coming to Seattle and giving us the opportunity to provide our input on this crucial aspect of our U.S. spearmint industry. I am hopeful that progress can be made. We stand ready to help you with additional information, discussion and hard work in any way needed.

Thank you.

Panel IV: Discussion, Questions and Answers

Cochair BECKER. Thank you.

I think I'll start off with a question or two and see if some others don't sign up on this. In your written testimony here I've picked up, from reading it in advance—I didn't catch that in your reading of your statement, Mr. Christensen, but it appears that there's an unfair duty that's being applied to virtually everything within the fruit end. In the case of spearmint, what I had down, that there's a 40 percent export duty to China plus a 17 percent VAT tax.

Mr. CHRISTENSEN. VAT tax.

Cochair BECKER. There's no duty coming into the United States on their spearmint oil?

Mr. CHRISTENSEN. Correct.

Cochair BECKER. Other tariffs on fruit being shipped to China is a 10 percent duty with a 13 percent tax, effectively 23 percent, and no reciprocal tax coming back into the United States. And maybe talk about the difference in the exchange rate, and between all of this, it just prices you out of the business.

I guess my question is what have you all done about that, individually, collectively, in the state of Washington, through our USTR? Have you complained about this to the USTR?

Let me just lay it out. Have you complained about it to USTR? What have they said? What's their response? Is the government helping you fight this, or are you left out on your own? Tell us what's happening.

Mr. CHRISTENSEN. We've been going to USTR for over 10 years, and we are trying to work through them to help make sure that spearmint oil is involved in every international trade negotiation, issue, that is on the table. And there has been some relief, you know, that the duty is now 17 percent instead of 40 on spearmint oil. But the WTO schedule that we see is so lengthy that I don't think our industry is going to be able to outlast it.

Cochair BECKER. Have you just given up on this?

Mr. CHRISTENSEN. We've never given up, but we're getting pretty discouraged.

Cochair BECKER. Well, as someone put it in a prior commission, do you feel abandoned by your government?

Mr. CHRISTENSEN. I feel abandoned by our government because I feel that the playing field is not level and that we're not taking a firm stand to level that.

Cochair BECKER. Do you have any suggestions that go beyond that in any way we can deal with this? Is there anything that comes to mind that could be applied short of a WTO action?

Mr. CHRISTENSEN. I guess I'll answer that first.

Not being an expert on international trade negotiations, my response is that we need to play hardball, that reciprocity I think gets attention, and so if we can't get a relief in duties going into China, then imposing the duty on that particular commodity as it comes into the U.S.—

Cochair BECKER. Have you thought about filing a trade case?

Mr. CHRISTENSEN. We have.

Cochair BECKER. Yourselves?

Mr. CHRISTENSEN. We have.

You mean such as antidumping-type case? That type of action? Is that what you're referring to?

Cochair BECKER. How about you other two gentlemen? Any comments?

Mr. SCHLECT. Yes, I have some comments.

One, to answer your first question, yes, we have brought this to the attention of the United States Government, the tariff differential. It hasn't been a huge thing over the course of the last 20 or 30 years, at least in our case, because China currently does not export fresh apples in the United States, they export processed fruit, and they would like to import into or export to our market fresh apples, and they are currently test marketing pears, so it has not been our number one trade priority just because of the economic situations.

Back during the Dillon round in the 1950s, the tariff rate came down to about zero on a lot of products in the fresh fruit sector, just because at that time the technology did not allow for year-round shipments. In the transportation sector, it just was not a big issue for most of the crops that are seasonal. Back then, before vast refrigerated ocean transportation. So that's the reason historically why we have zero tariffs dating back to 1950s or post World War II, whereas the sugar industry or some of our other colleagues have got tariffs from here to Zanzibar because they've been at this game since the 1600s.

But yes, we've brought it to the attention of our government. They are going down. Multilateral process is working. As you know, it's not focused only on China. China just came into the WTO, what, three or four years ago. So the process is slowly working and driving down tariffs, but it is not an equal set of tariff structures, and we are working towards that goal.

Dr. WAHL. As a trade economist, I firmly believe that getting rid of all the tariffs on both sides would be to the best interests of everyone. When you look at the implementation of WTO in China, in the big scheme of things they've made a lot of progress. They've brought tariffs down a significant amount. Not far enough, and perhaps not on a fast enough schedule to perhaps save some of our industries, and maybe there's pressure that can be applied there to speed the process up.

Cochair BECKER. Okay.

Let me turn it over to Commissioner Wessel.

Commissioner WESSEL. I have a couple of questions. Thank you again for all being here.

A yes/no question, if I could, for each of you going down the line. Did you support China's accession to the WTO?

Dr. WAHL. Yes.

Mr. SCHLECT. Yes.

Mr. CHRISTENSEN. Yes.

Commissioner WESSEL. Why? If China's accession allows for the differential tariffs that you're complaining about now, so from a myopic perspective of just your industry's interest, why would you do that? Why wouldn't you have put more pressure on your state leaders, the Federal leaders, to say, we're not going to support you if we don't have the kind of access that we need to these markets?

You pointed out that getting rid of the tariff should be the goal. Well, you know, China for a long period of time and in many areas can continue their tariffs in perpetuity. Two weeks ago they raised the export tax rebate once again, so not only do they have their tax going in, they're now giving people money back for what they export to the U.S.

If you had such an unfair situation in the document itself, why did you support it?

Mr. CHRISTENSEN. My reason is because it was the only game in town, so to speak. It seemed to be the only avenue that there was hope for reducing those tariffs. We have been putting pressure on our congressman for many years, and our delegations, to try to get help from this end, and that's not coming. It doesn't appear to be forthcoming.

I talked about putting a tariff on Chinese oil coming into the U.S. It's really a pipe dream. It hasn't happened from a congressional standpoint for well over 20 years. So it's not going to happen. So, from my perspective, the WTO, getting them in, at least gave us a vehicle to deal with it down the road.

Mr. SCHLECT. The reason we did is prior to the WTO accession, China could still import product in the United States. It wasn't like they were not being able to ship in product, whether it was TV sets or apples. They could ship in if they met U.S. duties and whatever other rules were of the road. The reason why it's good to have China within the WTO as opposed to outside the WTO, in our opinion, was that at least they would be subject to some of the disciplines, and in our case the sanitary and phytosanitary section of the WTO is a very useful section to impose disciplines on the other government, in this case the Chinese, so that they cannot just impose a technical barrier without justifying to the world community that it's based on science.

So there were benefits of going into the WTO for China, and the downsides were very small in our case because we had no tariff to give up in the first place, and we only had the benefits from the technical adherence, which we hoped to have out of the Chinese, so that was the reason.

Commissioner WESSEL. Just before we go on, but I believe as you said, you're not really seeing it being enforced at this point. This is still a hope that the WTO accession agreement will over time might not be an appropriate hope, but that it will be over time enforced. Right now you're very frustrated, from what I hear, on that, and the SPS and, the other various technical—

Mr. SCHLECT. There are difficulties with the Chinese, I think, because of their history. You guys are experts on China, far more than I am, or you wouldn't be on this Commission. But as I understand the Chinese history, you have a very difficult set of issues

going back hundreds of, if not thousands of years in terms of the rule of law, and WTO and these kinds of technical agreements require the rule of law. They require bureaucracy to impose the rule of law and enforce the rule of law, and that's the disconnect that it's difficult in transitioning them out of straight communist system into the rule of law. What do you do with them. And you and I know, that's a bigger issue than our apple industry can solve, and maybe you guys will solve, or the government.

We're frustrated, but what's the alternative? There are things going on that we benefit from—we do ship at least a couple varieties of apples into China. We hope to get other varieties in. There is a process, it's not ideal, and we are frustrated, but I don't see the alternative, either.

Dr. WAHL. China in the WTO is better than China out of the WTO.

One of the things that hasn't been mentioned is in terms of their agricultural policies, the disciplines of WTO will make fundamental changes in the way Chinese agricultural policy at the farm level, at the distribution level, is implemented and executed. That's a little longer-term process but indeed that's an important consideration, and in the long term will benefit us tremendously, I think.

Commissioner WESSEL. I see my time is up, but just a quick response. I agree, China in the WTO, if everything was being adhered to, would certainly have more benefits than we had before. I do think the agreement was woefully insufficient and eliminated any leverage we had on human rights and many other issues that are vital to proliferation.

But we're not enforcing the agreement. We're living up to our end of the bargain. We basically said, you get full access to our market, do whatever the law says, we're going to abide by it. But then we sit on our hands. We heard from the last panel on software that four separate agreements, we're frustrated, piracy. You talked about the history of the rule of law. Well, we should have had our eyes open a little more in terms of how we phased in the benefits and what we expected of them and how realistic our goals were.

Thank you.

Cochair BECKER. Thank you.

I'll make a comment right here at this point. I don't believe there's any substitution for action on your part. I mean from the growers' part. The horticulture growers, the grain growers. I think you're the captain of your own ship. There are provisions in the law in which you can bring some things about, but you're going to have to do it. You can maybe persuade the government to do it. But right now you're getting more and more shipments in the horticultural field and you're getting more and more shipments in the grain field, and there are no tariffs to stop it.

Chairman D'Amato.

Chairman D'AMATO. Thank you all for coming to this very illuminating panel.

Mr. Schlect, I'd like to congratulate you on your testimony. I've read it carefully, and it's very good and illuminating.

Let me ask you about horticulture. If you were to project forward, I see here we're talking about a huge growth in Chinese apple production, huge growth in pear production, consequently,

huge growth in apple juice production. We have a surplus in that trade right now, horticulture. If the trends that you see and identified in your testimony were to continue over the next 10 years, what do you think the balance of trade would be in horticulture with the Washington State area?

Mr. SCHLECT. With China?

Chairman D'AMATO. Yes.

Mr. SCHLECT. In certain sectors it will be positive for China. In the process sector, especially in the lower end. Canned pears are a very difficult situation, canned applesauce, those kinds of process products that are lower grade fruit that are labor intensive, it's going to be very difficult to compete into the future. Where I'm more positive is on the dessert quality apples that require—where varieties are coming on board to fill consumer desires—all of you must shop at supermarkets. There's a marked difference from 10 or 15 years ago, when there were one or two varieties that you saw in your supermarket. There are now five or six or 10. And they're changing, and that's partly been response by our industry and others to meet consumer demands, and that's going to accelerate, and I think that competitiveness at that side will continue and hopefully stand us in good stead with the competition, whether it's from China or Chile or South Africa or some of the other areas of the world.

It's not just China that we're competing against or have competed against for the last 50 years. We're in a world market. But it's certainly not a good trend given the labor advantages China has and its obvious shift in its production out of some of the sectors of agriculture that are less labor intensive and lower priced into the higher priced areas, like horticulture, that are more labor intensive to use population base. So, it's a mixed message, but hell, we're optimists. Plant a tree and you don't get a crop for six years. You've got to be an optimist.

Chairman D'AMATO. Thank you.

Cochair BECKER. Commissioner Wortzel.

Commissioner WORTZEL. I really appreciate the testimony on the spearmint oil. It's something I have to admit that I was completely ignorant of prior to coming out here. And that's the value of these hearings.

What's not clear to me is whether the production of the oils—the plants that produce it, is in specific districts or areas around the state of Washington. That's a pretty bad situation when you have a 17 percent tariff that is in no way offset here in the country, and it affects a particularly regional industry, so my question is: What is your elected representative doing?

Mr. CHRISTENSEN. Our elected representative is, supporting trade missions and, encouraging promotion of our products abroad, but the problem with something like mint oil is that trade missions generally go over and promote on a wide scale to the population in general. Mint oil is a very specific product that has to be marketed to a very specific group. It's very small. As an industry we feel that the emphasis on foreign market development—the money that goes to that hasn't been very beneficial to us.

Commissioner WORTZEL. Well, that's why I asked about districts. I don't know how big the district is, but that's where—

Mr. CHRISTENSEN. Ninety percent of the mint production is in Washington, which is the leading producer in the nation, is in one district, you're right.

Commissioner WORTZEL. Okay. Enough said.

Thanks.

Cochair BECKER. Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thanks very much. Thank you to our panelists.

I join Commissioner Wortzel in saying that one of the delights of serving on the Commission is learning about things that we didn't know anything about before, and I actually had found myself wondering about spearmint oil versus peppermint oil but I think that you managed to answer some of the questions in your testimony, so thank you.

I have two sets of questions. One follow up on Commissioner Wessel's question about the WTO. Obviously we see that some of what's happening is that as tariff rates are going down on some things, there are nontariff barriers that are happening, the sanitary and phytosanitary standards. And as I listen to you I think obviously we've got two sets of issues going on. One is what is impeding your ability to export to China and the other question is what is happening as China's ability to export to the United States some of these same products. What is that going to mean? I'm curious, do you have concerns about food safety issues relating to agricultural products that would be coming into the United States from China?

Mr. SCHLECT. Yes, at least from my perspective we do, especially on the fresh side. The processed side, generally there are heat or other mechanisms that go in to cannery processes that control health problems and FDA has a pretty good system, I think, of patrolling food safety on the processed side.

On the fresh side, as you must know, this is a big issue nationwide on imported fruits and vegetables throughout the world, not just China, but China is a particular case, because, again, it's one thing to rely on a country like Canada or Denmark or some country that's an advanced economy with a rule of law and with a regulatory system intact, that if they they've inspected a plant or they've done something you can take fairly their assurance that that's been done.

China has a much different rule of law situation background, current structure. They also have a much different attitude towards food safety in terms of just how food is stored in the marketplace. Anybody that's been in China in the wet markets there's definite issues on how meat or poultry are handled as opposed to the United States.

In terms of fruit and vegetables, they do not have the controls, and there are pesticide issues they probably have on the books the equivalent of an EPA but I doubt if they have an EPA/FDA type enforcement structure. You can maybe control that at the border to some extent, but there is a food safety issue out there, and traceability is going to be a big situation into the future for all importing nations and producing nations, including the United States. China, frankly, they'll be one of the competitive disadvantages China has in the world market is their lack of food-safety expertise

and issues like traceability are going to hold them back from the broader world market.

Commissioner BARTHOLOMEW. I noticed that you mentioned in your testimony concerns about if an episode happens—these are my words, not yours—but if there is a food-safety concern, that it's got consequences for your ability to sell your products as well.

Mr. SCHLECT. Right. Most of you probably remember the Alar situation in the United States about 10 years ago. Whenever you have a food-safety situation with a product like ours or any other product in agriculture, it does not just harm the product that's directly involved, from a geographical area. If you have an issue with apple safety, consumers generally don't buy apples, period, for some amount of time, till they're assured about the source and the safety of the issue. So if China were to have a food-safety scare involving E. coli, as many of you know, apples can be a vector, especially where you have poor sanitation. If you have that type of situation and that type of fruit is on your market, the whole sector is hurt, including domestic suppliers, because the average consumer doesn't want to think, Well, gee, that apple is from Oregon or Washington and that apple is from the east. We'll go to a different product. So that's the issue with the crossover on a food-safety issue, when it gets to a consumer scare.

Commissioner BARTHOLOMEW. Mr. Chairman, can you all indulge me with one more question? And that is particularly for Mr. Christensen, but any of you can answer. One of the concerns we have heard as we have traveled around the country is the inability of small industries, small sectors that don't have the resources to fully engage in trade remedy cases. I can't imagine that the spearmint oil industry is all that large and doesn't have the deep pockets that people that you might be attempting to fight would have. Is this factoring into your thinking as you determine what kind of recourse you have, and is there some role that you think the U.S. Government should be playing in making sure that everybody has access to these kinds of mechanisms? If they exist, how are people going to be able to use them?

Mr. CHRISTENSEN. Of course we're sensitive about our funding ability, and our market promotion programs have been possible because of MAP and FAS programs exclusively.

In terms of the rest of your question, we do meet with our representative regularly and, I guess the question is what can he do. We're not sure. Other than some kind of a subsidy that keeps us in business, in terms of actually solving the problem, what can we do other than work through something like WTO. We're not going to go and change the world with our spearmint oil, change the laws of trade with spearmint oil.

Mr. SCHLECT. If I could answer that. I think in terms of the cost of an antidumping case, you're looking at \$500,000 to a million to \$2 million. Again, there are experts on the panel that have better figures than I have, but I've been on both sides, on both using the antidumping law on imported products and defending on products being exported, and they're very expensive. Your point is where industries are small or fragmented it's very difficult to get people together. It's very difficult to raise a million dollars or \$2 million and hire a Washington, D.C., or international law firm and then go

through the economic analysis that's necessary, and it's usually a one-, two-, three-year time lag, and by the time that's all over. It's very, very difficult to see the best results.

So I think that whole area of law needs to be looked at by Congress, whether it really does benefit smaller producers, and if not, if there's something that might be done. I don't have the answer.

Commissioner BARTHOLOMEW. Almost SBA-type programs to help people file cases?

Mr. SCHLECT. Well, again, these cut both ways. We export as well as import, and whatever you do here you can match, it's going to be copied in other countries, so you don't want to set up a system where we're just going to be fighting antidumping cases in other countries around the world all the time. So there has to be balance, but where you have a true price differential that's unfair, under the law there should be some mechanism that's a little easier than the present to bring that to the courts.

Mr. CHRISTENSEN. I'd just quickly add that we have pursued that to some degree, and part of our discouragement is in the potential enforcement. Even if we had a favorable ruling, would we be able to continue to reap the benefits of that ruling, because enforcement is so sketchy.

Dr. WAHL. If you look at the 300 or so crops that we produce in Washington, the vast majority of those can't afford that type of suit, and the payoff would be far enough down the road that they may well be out of business before it ever came to fruition.

Commissioner BARTHOLOMEW. Thank you. Thank you, Mr. Chairman.

Cochair BECKER. Commissioner Reinsch.

Commissioner REINSCH. Mr. Chairman, I just have one question for Mr. Christensen and Mr. Schlect with respect to your own industries, and Dr. Wahl with respect to any that you want to comment on. How much money are you spending on R&D?

Mr. CHRISTENSEN. In our industry we have what's called the Mint Industry Research Council. A big part of that budget is in the area of biotech, which we feel is probably our answer down the road for being able to compete on the world market, and, that budget is about \$500,000 a year.

Mr. SCHLECT. My brothers are growers. They don't spend a dime on R&D themselves. They're not like Boeing or Microsoft. Collectively they have gone together as an industry. We have the Washington Tree Fruit Research Commission, which has been a mandatory taxing system for the growers, and their budget is under \$5 million a year, I'm sure, but it's in one of the few states that has a relatively significant research budget. We have relied and most agricultural sectors have relied on either the Agricultural Research Service or the land grant college system funded by Congress for most R&D research.

There is some R&D research by private companies such as Tree Top, in our process fruit industry. They would do research on different ways to package apple juice or something of that sort, but basically just very, very thin on the private level. There is some collective effort but most of it is for the Federal land grant or ARS vehicles.

Commissioner REINSCH. Are the ARS and land grant systems healthy and growing? Is Congress putting more money into those?

Mr. SCHLECT. No, they're not healthy and growing, and I'll defer to the expert over to my left.

Dr. WAHL. In general agriculture research budgets have been cut consistently over the last five to 10 years. We receive a Federal special grant that we allocate in a proposal process to fund research specifically oriented at increasing exports of Washington agricultural products, looking at SPS issues, looking at technical barriers to trade, looking at trade issues in general, in food science, food engineering, economics, marketing and so forth.

Commissioner REINSCH. That's very helpful. Those of you that have been here all day notice this has come up with other panels. It seems to me this sector is not necessarily distinct from the others with respect to the need to run faster. If your competitiveness in the future is based on sort of high-end dessert quality specialized varieties, it's in your interest to develop them, and develop more of them faster and produce better versions than everybody else, and in that sense you're the same as Boeing. I mean, granted, different kind of industry.

So I was just curious. That's very helpful. Thank you.

Dr. WAHL. The land grant system has been very influential and instrumentive in developing a lot of those varieties over time; however, our resources and capacity have been greatly diminished due to budget cuts.

Commissioner REINSCH. For 150 years I think it's been doing great things, and it's made American agriculture one of the most productive and competitive sectors in the world. But we may have lost sight of the continuing need to do that. Thank you.

Cochair BECKER. For what it's worth, the USDR has several advisory committees, and on those advisory—one of those advisory committees, I don't know which one, you have representatives of horticulture products, grain products, and this group meets with the USDR periodically, they call it, but I've been involved in some of those and I've seen people that have had a sore spot just hammer away and get everybody on their side. So you have a representative of some kind on there. They should be able to speak for you. Just point that out.

All right, this panel will be dismissed, then, and we are going to switch the last two panels. Is that okay with Mr. Lovett and Mr. Eastin?

We have a person that has to catch a plane, and through no fault of his own.

PANEL V: SHIPPING/MARITIME

Cochair BECKER. I want to thank all five of you for being so accommodating on this. These things happen.

In this panel we've got Mr. Dinsmore, CEO, Port of Seattle, and Mr. Nathaniel "Sam" Ruda, Marine Director, Port of Portland, Oregon, and Mr. David Blackburn, President, Faria Corporation in Connecticut.

We'll start off with Mr. Dinsmore.

**STATEMENT OF M.R. DINSMORE
CHIEF EXECUTIVE OFFICER, PORT OF SEATTLE
SEATTLE, WASHINGTON**

Mr. DINSMORE. Thank you, Mr. Chairman, and Members of the Commission. Thank you all for being here in Seattle, and obviously at Bell Harbor International Conference Center.

A couple of themes will follow through my remarks: one, clear recognition of the long and important trading relationships between Seattle, Washington State and China, and two, the relationship with China is of critical importance to the Port of Seattle, the city, the region, and, in my humble opinion, the nation.

A little bit of historical perspective, if I may. Small bulk carrier LIU LIN HAI docked at Seattle Waterfront in April 1979, 25 years ago, was the first flying the flag of the People's Republic of China ever to call on a U.S. port. It arrived empty because China did not have products to sell at that time to the U.S. And it took back to China a load of grain worth about 5 million U.S. dollars. This signaled the beginning of trade now worth more than \$16.9 billion annually. It was also the beginning of the very valuable relationship with China in this region.

Six months after the LIU LIN HAI called at Seattle, the Port of Seattle and the Port of Shanghai signed a friendship port agreement, and obviously now in 2004 we just celebrated the 25th anniversary of that agreement. This has allowed both ports and people-to-people for exchanges of technical knowledge and management expertise.

Washington State China Relations Council was also formed in 1979, and I made the first of my many, many trips to China in 1979, and I can tell you, for those of us that have a long perspective, long in American terms, anyway, this has been a very, very important changing dynamic relationship.

When I first went to China the main highway from Beijing International Airport to the city was two-lane, and in many places, dirt road. Bicycles were then the major means of transportation.

Well into the 1980s the Park Hotel was the only building in Shanghai that was more than 20 stories high. And across the Huangpu River was an area called Pudong, mostly farmland, occasional low-rise building, and what we would refer to today as sheds and shacks.

Today Beijing is a gleaming capital with a multi-lane highway into the city. Traffic chokes the streets in so many ways, with the advent of automobiles replacing bicycles, and Shanghai has more than 1,500 buildings of more than 20 stories high. The World Financial Center, now under construction, will be the tallest building in the world when completed in 2007. Pudong is a thriving commercial area. In fact, to look across the water now, Pudong is an unbelievable modern city.

Shanghai has built a hundred miles of freeways, poured two tunnels under the river, finished four subway lines, and added light-rail lines in the adjacent and surrounding areas.

There are similar stories throughout much of China. Guangdong Province in the south flourishes with literally thousands of factories. Harbin in the north enjoys enormous progress in its economy and in its urban construction.

While much of the wealth is concentrated in China along the coastal cities, interior China is beginning to change, rapidly change, as well. Chongqing, Seattle's sister city in Sichuan Province, is also booming. New buildings rise, monorail transportation is taking shape, and much of it in tunnels drilled through the city's very, very hilly landscape. Chengdu, capital of Sichuan Province, Washington State's sister state, is experiencing similar growth and tremendous changes.

No country in the world has seen as much change in the past decade as China. It has transformed its economies into one of the world's largest, totaling more than 1 trillion in gross domestic products in 2002. It has created a middle class of entrepreneurs who have changed the political as well as the cultural face of China.

This growth and changes apply in the area of human rights as well as business and in economics. China's standards clearly, clearly don't yet meet ours. It will not become an American-style society anytime in the future, but the changes that have occurred in the last 25 years, and more directly to the Commission, in the last 10 years, are just extraordinary changes, both from an environmental standpoint commitment to the environment as well as the human rights issue which I mentioned earlier. But we should recognize the amount of change and progress that has also taken place in this relatively short amount of time.

At the Port of Seattle China became our largest trading partner last year, surpassing Japan, and will continue to be one of our major customers for many, many decades to come.

In 2003 approximately 9 billion U.S. dollars in two-way trade passed through our port alone. We've spent more at the Port of Seattle in our Seaport side than \$800 million over the past few years upgrading our terminal facilities, and we plan further expansions to accommodate the increased trade that we know and is committed to head this way.

Total exports from Washington State to China totaled more than \$3 billion in 2003 alone. Boeing Aircraft made up for more than half of those exports. In fact, when a recent news report said China may put a lid on aircraft purchases next year, Boeing's stock fell two percent.

The list of other products from Washington going to China include food products from eastern Washington, as you heard from the previous panel, computer equipment, paper products, forest products, fish, and many, many other assorted commodities. Much of that moves on container ships that call at the port and on the many air cargo flights that depart each week from Seattle-Tacoma International Airport.

Just for a minute I want to talk about other key relationships that are building up with China. This year Seattle will host Pacific Rim Sports Summit, which is the precursor to the 2008 Olympics in Beijing, which we commonly refer to as the road to Beijing. Planned is a run-up to the '08 Olympics, the event will bring together elite athletes from both nations as well as other Asian nations to compete in a variety of sports.

Along with the sports events, plans are under way for a major arts, cultural and scientific program as part of this important summit. The Fred Hutchinson Cancer Research Center and the Na-

tional Bureau of Asian Research's Center for Health and Aging are planning a Pacific Rim health summit, as well, and some of the best and brightest scientists in bio and life sciences will converge here in June also of this year.

Now, trade with China is not restricted only to goods. Several local architecture firms have extensive practice in China, exporting architectural expertise and importing the fees that they derive from that expertise. Starbucks Coffee also sees China as one of the top global marketplaces in its worldwide global strategy.

But the real story about China, and the one causing, as I'm sure you heard today, concern and fear in the United States is how we deal with China as a manufacturing powerhouse.

We will not be able to protect our local manufacturers to old-style trade barriers. When it comes to manufacturing, China will indeed almost always win, because of its low production cost.

What can we do about outsourcing jobs to economies like China? Unlike the past, when most of the jobs moving overseas were blue-collar jobs, the jobs moving now are in the high-tech fields of engineering and software development. We must make sure that we look at the entire picture.

We also need to look at insourcing. Yes, insourcing, where the number of people employed by foreign companies doing business right here in our great nation.

According to the Bureau of Economic Analysis, in 2002 there were over 84,000 jobs in Washington State in the U.S. affiliates of foreign companies. If the usual share of state workforce holds true among these workers—about 60 percent of the state jobs in the state of Washington are in the Seattle area—then more than 62,000 jobs in Seattle are inextricably tied to insourcing. That's more employees right now than Boeing, twice as many as Microsoft employs, in the Seattle area alone.

As China's wealth as a country continues to grow, its foreign reserve holdings are now among the largest in the world. China will begin to invest overseas.

What we are seeing happening here is a repeat of a principle the world's nations have become used to since the great success after World War II. To the extent that we trade with each other and our economies become entwined with one another, we are clearly less likely to go to war. As countries with political differences do more and more business together, the conflicts that separate them tend to fade into the backdrop. I've had the firsthand opportunity to see what's going on in China. As entrepreneurs and businesses began to exhibit more and more influence in our economy, the heavy hand of government slowly was lifted in a way that is very, very visible. More business translated into more freedoms.

Clearly, this is a key concept for the United States and policy toward China. We ought to support China in its economic drive. We certainly can't stop the flow of goods from China, so we ought to capitalize on it.

Two-way trade and services, often overlooked, is one of the keys to the future of this important relationship with China.

Many American and European companies are investing in China so they can gain access to that growing marketplace, that 1.2 billion populated growing marketplace. Starbucks is not investing in

China for cheap goods but to sell coffee there. Microsoft is not investing in China for cheap labor but to sell software there.

Boeing forecasts that China will need nearly 2,400 new jet airplanes worth almost 200 billion U.S. dollars over the next 20 years. Boeing not only sells airplanes to China but also is helping the Chinese import their airports and air traffic control—

Cochair BECKER. Mr. Dinsmore, if I could stop you. I've just been reminded. I've been remiss. I was supposed to blow the whistle on you five minutes ago.

Mr. DINSMORE. My apologies. Once on a roll, hard to stop—

Cochair BECKER. Can you just wrap up just as quickly as you can? And be assured that your full testimony will go into the record.

Mr. DINSMORE. Thank you.

Pacific Northwest has some of the strongest ties in this nation to China. We can benefit from the relationship that grows between us perhaps better than any other region. We can take advantage of China's growth, continue to develop our highly trained work force, and we will compete with our minds and our innovations, perhaps not with our factories.

Mr. Chairman, thank you.

[The statement follows:]

**Prepared Statement of M.R. Dinsmore
Chief Executive Officer, Port of Seattle, Seattle, Washington**

I want to thank the Commission for holding this hearing in Seattle. It is a clear recognition of the long and important trading relationship between Seattle, Washington State and China.

There is no institution for whom this relationship is more important than the place I work, the Port of Seattle. When the small bulk carrier Liu Lin Hai docked at the Seattle waterfront in April 1979, it was the first ship flying the flag of the People's Republic of China ever to call at a U.S. port. Yet when that 637-foot ship arrived in Seattle it arrived empty—China did not know what it produced that would be of interest to a sophisticated, developed economy like the United States.

The Liu Lin Hai returned to China with a load of corn valued at about \$5 million. It was a small beginning, but from that small exchange, trade with China has grown tremendously in Washington State and the rest of the United States.

In 1979, two-way trade between Seattle and China was estimated at about \$50 million, probably represented by Boeing sales of a few 707s to China. By 2003, two-way trade between China and Washington State totaled \$16.9 billion.

I have been going to China for 25 years. Six months after the Liu Lin Hai called at Seattle, the Ports of Seattle and Shanghai signed a Friendship Ports Agreement, a relationship that over the years has allowed for exchanges of technical knowledge and management experience. I may not yet qualify as an old China hand, but those of us with a long perspective can truly appreciate the changes that have occurred there.

When I first went to China, the main "highway" from the Beijing International Airport to the city was a two-lane road—hardly the "grand" entrance to a major world capital city. In Beijing itself, bicycles were the major means of transportation. The people wore drab clothes with little color. The haze and acrid smell of coal smoke from a million open stoves hung over the city in winter. Anyone traveling in China in those days almost always returned with a cough.

Well into the 1980s, the Park Hotel was the only building in Shanghai that was more than 20 stories. Walking along the Bund—in the old European colonial part of the city—a Westerner would soon be surrounded by young Chinese trying out their English. Across the Huangpu River was an area called Pudong, mostly farmland, with an occasional low-rise building.

Today, Shanghai has more than 1,500 buildings of more than 20 stories, most of them built in the 1990s. The World Financial Center, now under construction, will be the tallest building in the world when it opens in 2007. Pudong, where the center is being constructed, is a thriving commercial area. In that same period, Shanghai

built 100 miles of freeway, bored two tunnels under the river, finished four subway lines and added light rail lines in the surrounding area.

Today Beijing is a gleaming capital with a multi-lane highway into the city. Traffic chokes the streets where bicycles once reigned. Construction cranes dot the skyline as the city prepares for the 2008 Olympics—in true Chinese fashion the Chinese expect to have everything finished by 2006.

There are similar stories throughout much of China. Guangdong Province in the south flourishes with thousands of large and small factories, capitalizing on its key location near Hong Kong. In the north Harbin enjoys enormous progress in its economy and urban construction. The city grew into a major river port and now has set itself a grander goal—to become an important international economic and trade center city in Northeast Asia.

While much of the growth—and wealth—is concentrated along the coastal cities, interior China is beginning to change as well. Chongqing, Seattle's sister city in Sichuan Province is booming. New buildings rise and a monorail transportation system is taking shape, much of it in tunnels drilled through the city's hilly landscape. As the waters back up behind the huge Three Gorges Dam down river from Chongqing, the city will see even more development. Chengdu, capital of Sichuan Province, Washington State's sister state, is experiencing similar development.

No country has seen as much change in the past decade as China has. It has transformed its economy into one of the world's largest, totaling more than \$1 trillion in gross domestic product in 2002. China has consistently had the highest growth rates in the world, its GDP frequently increasing 10 percent a year. It has created a middle class of entrepreneurs who have changed the political and cultural face of China.

This growth and change applies in the arena of human rights as well as in business and economics. But those of us who have been going to China for some time now have no illusions about it. It is a totalitarian state that brooks no question about its leadership and its power. I was in Hong Kong, ready to get on a plane to Beijing, the morning of the Tianenmen Square protest 1989. Needless to say the flight was canceled. Those events still echo among many of us who watch and study China. There is corruption in some interactions between business and government—the greased palm unfortunately has replaced the iron rice bowl. Such wide-scale development in its cities could not have occurred without a ruthless land-use policy.

We Americans often talk about China in terms of human rights and the environment. China's standards clearly don't yet reach ours. China will not become an American-style civil society any time soon, but we should recognize the amount of change and progress that has been made in such a short time, and that includes both human rights and environmental concerns.

There is no nation in the world where things have changed so much so quickly for the ordinary people. China remains relatively poor although it passed a milestone in 2003 when per capita income rose above \$1,000 for the first time. But that masks the huge increase in wealth in the cities where per capita income can be four or five times as much. China still has a large rural peasant population, but in its large coastal cities, China has created one of the largest and fastest growing middle classes ever. There has never in history been such a similar period of wealth creation and transfer as there has been in China.

At the Port of Seattle, we celebrated our 25th anniversary of trading relations with China last year. But the modern-era connections between China and the Northwest began not long after President Nixon's trip to China in 1972.

Later that year, the Civil Aviation Administration of China ordered 10 Boeing 707s, shifting from a largely Russian fleet to one built by Boeing. Today Boeing aircraft represent about 70 percent of the commercial aircraft in China.

How important is China to Boeing? Recent news reports said China may put a lid on aircraft purchases next year. Boeing stock fell 2 percent on the news that day. It shows the impact of China on the regional economy, even if the initial news likely is less significant than first reports said.

At the Port of Seattle, China became our largest trading partner last year—overtaking Japan—and it will continue to be one of our major customers in the years to come. In 2003 about \$8.8 billion in two-way trade passed through the port alone. We've spent more than \$800 million over the past few years upgrading our terminal facilities and we plan further expansion to accommodate the increased trade we know is heading our way.

Total exports from Washington State to China totaled more than \$3.2 billion in 2003. Boeing aircraft made up more than half of those exports—\$1.8 billion in 2003—but the list of other products from Washington going to China includes food products from Eastern Washington, computer equipment, paper products, forest products, fish and many other miscellaneous categories. Much of that moves on con-

tainer ships that call at the port or on the many air cargo flights that depart each week from the Seattle-Tacoma International Airport.

The Port Commission recently voted to re-open Terminal 25 because our Terminal 18 has become so busy. We are considering expansions to both Terminals 18 and 5 to accommodate more growth in the future. Some commentators in the recent past forecast the end of Seattle as a viable seaport. We were losing market share to the huge ports of Long Beach and Los Angeles in Southern California and could no longer compete effectively, they said.

This could be no farther from the truth. The recent problems and bottlenecks in Southern California have shown there still is a need for the Ports of Seattle and Tacoma in Puget Sound. Shippers have learned they need another entryway to the United States. As a result, 2004 was the best year in history for the Port of Seattle. Some of our critics recently predicted we might be able to move 1.8 million containers by 2014. We reached that mark in 2004. We likely will reach two million containers this year. Our vision of three million containers by 2010 is looking better and better.

I want to talk for a minute about another key relationship we are building with China. This year, Seattle will host the *Pacific Rim Sports Summit: The Road to Beijing*. Planned as a run up to the 2008 Summer Olympics in Beijing, the event will bring together elite athletes from both nations as well as other Asian countries to compete in a variety of sports.

Along with the sports events, plans are underway for a major arts, cultural and scientific program as part of the summit. The Fred Hutchinson Cancer Research Center and the National Bureau of Asian Research's Center for Health and Aging are planning a Pacific Rim Health Summit as well.

Another factor to keep in mind is that trade with China is not restricted to goods. There is substantial trade in services, often hard to count and measure. But it is there and important. For example, several local architecture firms—especially Mulvanny G2 and Callison—have an extensive practice in China, exporting architectural expertise and importing the fees they earn. Starbucks Coffee, with a significant and growing presence in China already, also sees China as one of its top global markets in the years ahead.

But the real story about China, and the one causing concern and fear in the United States, is how we deal with China as a manufacturing powerhouse.

We need to recognize right up front that we will not be able to protect our local manufacturers through old-style trade barriers. When it comes to manufacturing, China will almost always win because of its lower production costs.

There's a good example right at our port. We use huge cranes to move containers on and off of increasingly large ships. The Shanghai Zhenlue Port Machinery Co. on the Yangtze River near Shanghai captured much of the market for these huge harbor cranes in the past 10 years, a good example of China's ability to make increasingly sophisticated equipment at world competitive prices.

The recent end to textile quotas under the World Trade Organization raises other questions about the future. Many experts believe China, and a few other places such as India, will be winners under the new system. China, aware of fears that its production will swamp the world with its low-cost production, has imposed a textile tax on its producers. But if China is a winner, the port should benefit. We already are a major port of entry for Chinese textiles.

One of the big issues in the past year has been the outsourcing of jobs to economies like China, India and Russia. Unlike the past, when most of the jobs moving overseas were blue-collar jobs, the jobs moving now are in the high-tech fields of engineering and software development. This is less of an issue in regard to China, but as the Chinese economy develops, it is likely to become more prevalent. Another way of looking at the issue is to consider the other side of the job question, what's called "insourcing," or the number of people employed by foreign companies doing business here.

According to the Bureau of Economic Analysis, there were 103,900 jobs in Washington State in 2001 at the U.S. subsidiaries of foreign companies in which the foreign ownership was at least 10 percent. In August, the BEA changed its methodology to include only U.S. affiliates where the foreign ownership was a majority. That reduced the number to 84,100 jobs in 2002, still a substantial number.

If the usual share of the state's workforce holds true among these workers—about 60 percent of state jobs are in the Seattle area—then more than 62,000 jobs in the Seattle area are tied to insourcing. That's more employees than Boeing, and twice as many as Microsoft employs in the Seattle area.

As China's wealth as a country continues to grow—its foreign reserve holdings are now among the largest in the world—China will begin to invest overseas itself.

Just recall what has happened with Taiwan to see what is likely to occur with China. Taiwan's economy is well-developed now, and Taiwanese investments and developments have flowed into the Northwest in recent years. Taiwanese investors, for example, own and are developing the Eaglemont Golf Course near Mount Vernon, Skagit County.

What we are seeing happening here is a repeat of a principle the world's nations have used with great success since World War II. To the extent that we trade with each other, and our economies become intertwined, we are less likely to go to war with each other. As countries with political differences do more and more business together, the conflicts that separate them tend to fade into the background. It becomes in both their self-interests to keep a lid on their differences. I have seen this first hand in China. As entrepreneurs and businesses began to exert more and more influence on the economy, the heavy hand of government slowly was lifted. More business translated into more freedom.

Clearly this is a key concept for the United States and its policy toward China. We ought to support China and its economic drive—we certainly can't stop the flow of goods from China to the Pacific Northwest and elsewhere in the United States—we ought to capitalize on it.

Boeing not only sells airplanes to China, but also is helping the Chinese improve their airports and air traffic control systems. Mid-level executives at Chinese airlines regularly come to the U.S. to participate in Boeing's program to teach them modern Western business practices. Local architecture firms have designed some of the top buildings in China. These companies take the U.S. expertise in designed buildings, retail space and community development and help China to create places that are people oriented. Two-way trade in services, often overlooked, is one of the keys to the future relationship with China.

Microsoft has a large and growing presence in China. Its sophisticated products still have a competitive advantage. Software will be an important part of the future for China, especially as it continues to improve its laws on intellectual property. And the lesson for us is that we can take advantage of China's growth and development by continuing to develop our own highly skilled, highly trained workforce of the future.

Clearly, the growing trade imbalance between the U.S. and China—nearly \$100 billion last year—is a political flashpoint. It is reminiscent of the backlash against Japan in the 1980s when that country became an export powerhouse.

A recent article in the Washington Post outlined how pervasive China is in our economy:

Two-thirds of the telephones sold in the United States are made in China, as are nearly three-fourths of the toys, the Post said quoting Chinese government statistics. "The Chinese company Qingdao Haier claims half of the American market for small refrigerators, according to the official Jiefang Daily newspaper. About 70 percent of artificial Christmas trees in the United States are made in factories in Guangdong, according to a Chinese financial Web site, Homeway.com, and 80 percent of the world market for cigarette lighters is controlled by small-scale factories in the city of Wenzhou in Zhejiang province," the Post said.

We can see China's emergence in the world economy as a threat or we can see it as an opportunity. The trade imbalance can be a political problem or it can be a reflection of a vibrant market between the two countries. We can dig our heels in as a nation, but we can't stop the flow of goods. What we can do, however, is capitalize on the growth.

Many American and European companies are investing in China so they can gain access to that growing market. Starbucks is not investing in China for cheap goods, but to sell coffee there. Microsoft is not investing in China for cheap labor, but to sell software. That trend is important for the Pacific Northwest where more local companies are increasing their global reach. We will continue to benefit from two-way trade and the movement of goods through our port. But for many companies here, the importance of China is not trade but new markets, new business and sales to the growing Chinese middle class.

Like trade the "sales" will not all be in goods. Seattle companies are well poised to take advantage of changes coming as China matures. Environmental companies here, for example, will be able to tap into China's growing recognition that it must increase its attention on the environment.

China will continue to be an important market for the Pacific Northwest. Boeing forecasts that China will need nearly 2,400 new jet airplanes worth \$197 billion over the next 20 years. By 2022, China's commercial airplane fleet will be second only to the United States. Much of the growth we expect here at the Port of Seattle will be from China. Other local companies—Starbucks, Costco, Weyerhaeuser and Paccar—have significant operations in China and expect more.

The Pacific Northwest has some of the strongest ties in the country to China. We can benefit from the relationship that grows between us perhaps better than any other region. We have to be ready with a vibrant, well-educated workforce to take advantage of the growing connections—we will compete with our minds and our innovations, not with our factories.

Cochair BECKER. Thank you.
Next, Mr. Ruda.

**STATEMENT OF NATHANIEL "SAM" RUDA
MARINE DIRECTOR, PORT OF PORTLAND, PORTLAND, OREGON**

Mr. RUDA. Thank you very much, Commissioners. It's good to know that Oregon is included in the scope of the Pacific Northwest region.

From time to time the Port is asked to participate on panel discussions focusing on topics dealing with international trade and cargo flows. When the topic of China is the focal point I like to remind participants that China is in fact not emerging but it's re-emerging. It's easy to forget that China led the world in GDP production up until the eve of the industrial revolution.

Given both the scale and speed of China's economic reemergence, it's appropriate for this Commission to be seeking input on the possible impacts of U.S.-China trade investment on the Pacific Northwest industries.

My comments to you this afternoon will focus on the following areas: impact on marine activity at the Port of Portland; the possibility of a sudden downturn in China's economy and the potential impact to world shipping in west coast ports.

I'm going to skip over, for the sake of time, my comments on agriculture. I think the comments that were put forth by the preceding panel were accurate, and I think my comments just follow along that. If there are any questions we can go back to it at the end.

There is little doubt that the growth in the Chinese economy has had a profound impact on the region and the state of Oregon. At the same time some caution is offered so as to avoid the easy tendency to oversimplify causal relationships. While China figures prominently in many aspects of international trade, it is by no means the only economic force responsible for the gains associated from trade nor all its losses.

Historically Oregon's largest trading partner as measured by commodity value has been Canada. In East Asia the largest trading partner has and continues to be Japan. This is then followed by South Korea, Taiwan, and then Mainland China. The dominant trade flows in Oregon continue to be exports, not imports, which happens to be counter to the national trend. This is mainly attributable to lower population densities when compared to other regions of the country. Southern California, for example, has a consumption region that includes over 20 million people.

The commodities making up this export trade are primarily computer and electronic products, agricultural products, transport equipment/machinery, wood products, and chemicals.

While working from a smaller base, exports to China have experienced growth in 2004. In 2004 we expect final trade numbers to show that Oregon exports to China will total 800 million in value. This is up from only 71 million in 1997.

As is well known to many of you present today, most of the talk on China trade concerns our nation's growing trade imbalance. China clearly figures prominently in this imbalance. I will not dive down on the numbers in too great a detail; however, it is important to note that when just isolating container volumes from Asia, shipments from Mainland China today account for over 60 percent of all cargo originating from Asia. This is inclusive of volumes from the Indian subcontinent. Nationally containerized cargo flows from China exceed those from Japan and South Korea combined by a factor of six. The growth in containerized shipments from China to the U.S. has been nothing short of dramatic. In August of 2004, for example, the rate of growth in containerized exports from China to the U.S. was just under 40 percent.

While export volumes from the Pacific Northwest remain strong, the primary Asian destination remains Japan. This is especially true, as noted earlier, for the state of Oregon.

For the Port of Portland these dynamics have contributed to the following developments. As demand for cargo space on vessels from China has increased, the relative freight gap between imports and exports has sharply increased. The freight rates on cargo originating from Asia and moving to the U.S. west coast now exceed the corresponding freight rates from the U.S. west coast to Asia by a factor of four. In some cases this freight gap is wider.

While there has always been a freight rate differential between the higher valued import cargo with that of exports, this gap has increased consistent with the large growth in the U.S. imports. In the transpacific trade, for every three containers moving to the United States there is only one full export container. In fact, this is now getting closer to a ratio of four to one. The bulk of our exports are now empty containers being returned to Asia, notably China.

The gap has been one of the contributors to recent losses in direct container service coverage to Portland. Our traditional export dominated cargo no longer presents an economic value proposition—value proposition to shipping companies sufficient to sustain multiple weekly port costs. Shippers, especially agricultural exporters, must use more expensive rail/truck services to Puget Sound ports in order to obtain ship capacity to Far East markets.

I would note, however, that Portland's experience on the west coast, especially on containers, is more the exception. Ports to the north and south of Portland are experiencing near-record volumes. Nevertheless, the trends described earlier contributed to our reaching a tipping point with respect to direct service coverage on containers.

The significant growth of the China trade, not only between China and the United States but between China and the world, has contributed to a high demand but short supply for both container and bulk vessels. For smaller niche container carriers, this has caused an escalation in daily charter hire rates, which has led to a reduction in the number of ports-of-call and the number of ships deployed in some service rotations. As a result the Port of Portland has seen additional suspensions of container services as vessels have been deployed to more profitable markets.

While Portland's recent loss of container service may be reason for alarm, over the longer term the expectation for continued growth, especially from China, does bode well for some recovery of service frequency.

While the overheated vessel market, caused in large part by the China boom, has hurt the Columbia River in container shipping, it is helping us in bulks. The high charter hire market for bulk vessels has contributed to a resurgence of grain and oilseed exports from both the Columbia River and Puget Sound. The spread in panamax bulk freight rates between the Gulf Coast and the Pacific Northwest averaged over \$20 per ton in 2004. Historically we have seen Midwest corn and soybeans flow to the PNW when the spread exceeds \$10 per ton.

China has been the 800-pound gorilla for PNW grain. The behavior of the gorilla can make or break us, and that behavior in the past has been erratic and unpredictable. The good news is that PNW grain exports are currently benefiting by China's trade behavior. U.S. exports of wheat to China will exceed 2 million tons in 2004-05, up from virtually nothing just a year or two ago. PNW export terminals are also seeing increased volumes of soybeans to China, and this looks to be a long-term trend. Finally, China is exporting less corn to its Pacific Rim neighbors, and this has led to increases of corn exports from PNW ports destinations such as South Korea.

But we should be cautious in predicting a long-term grain export boom based on the near-term behavior of the Chinese economy. We have seen similar situations like this in the past, only to witness a sudden and often unpredictable collapse of the market.

Cochair BECKER. Would you close as soon as you can, Mr. Ruda.

Mr. RUDA. In closing, I would like to discuss how the recent resurgence of China, while providing opportunities to courts and maritime industry, also brings it some risks. After a decade of rapid industrial growth, it is worth asking how long will China's expansion last and how volatile will it be. China's economy has a history of boom and bust, so growth will not necessarily be the upward straight line we have seen in recent years.

The focus by carriers, ports and transportation service providers has been to invest in systems and infrastructure to meet current and future demands stimulated by the China boom. The general belief is that there is great risk that we will be unable to build fast enough to meet projected growth. The Port of Portland subscribes to this belief. But we must acknowledge that, given the past, China volatility there remains a risk that it will abruptly enter a down cycle, as it did only six short years ago.

If we were to experience such a down turn in the near future, the impact to shipping would be devastating. Carriers and vessel owners, who have abundant new capacity coming on line over the next three years, are particularly vulnerable.

The potential impact on west coast ports is less clear, but the overwhelming reliance on west coast liner trades on China imports is concerning. What is certain is that, for better or worse, the destinies of west coast ports are now meaningfully linked to China.

Thank you.

[The statement follows:]

**Prepared Statement of Nathaniel “Sam” Ruda
Marine Director, Port of Portland, Portland, Oregon**

Thank you very much for the opportunity to address this Commission this afternoon. I would like to begin today’s testimony by offering you a very brief background on the Port of Portland.

In 1891, the Oregon legislature created the Port of Portland to dredge and maintain a shipping channel from Portland to the mouth of the Columbia River. Today, the Port owns and operates several marine terminals, four airports, including Portland International, and seven business parks. Our marine business activity consists of containers, finished automobiles and bulk commodities.

From time to time, the Port is asked to participate on panel discussions focusing on topics dealing with international trade and cargo flows. When the topic of China is the focal point, I like to remind participants that China is in fact not emerging, but re-emerging. It is easy to forget that China led the world in GDP up until the eve of the industrial revolution.

Interestingly, 800 years ago in 1275, when Marco Polo visited China, he was impressed with Chinese ocean-going ships which were far larger and more sophisticated than anything found in Europe at that time. Chinese mariners worked deep sea trade routes between Sumatra, Ceylon and southern India. They already had the magnetic compass, a navigational aid not available to European seafarers until the 15th century. In the 15th century, Chinese merchants ships were very large—up to 540 feet long with a capacity of 1,500 tons. European ships at the time were typically only 100 feet long with 300 tons capacity.

While it will take some years before China surpasses the United States in GDP output, it is abundantly clear that the Chinese economy has certainly re-emerged and is doing so at a pace that has exceeded all forecasts. By the end of 2003, China GDP grew at an annual rate of 10%. In economic circles, the focus now is on how to ensure a “soft landing” given fears of an over-heating economy.

China’s economy, which today has full access to global information technology, modern productive capacity, rapidly developing transport infrastructure, advanced educational institutions, and evolving financial markets, continues to attract significant quantities of foreign direct investment. The Federal Reserve Bank of San Francisco reports that foreign investment grew at a pace of 17% over the last 4 years; exceeded 25% last year and jumped more than 40% when compared to the 1st quarter of 2004. Also contributing to this GDP growth is significant and sustained export growth which has been rising at a rate close to 30% over the last two years.

Given both the scale and speed of China’s economic re-emergence, it is appropriate for this Commission to be seeking input on the possible impacts of U.S.-China trade and investment on Pacific Northwest industries.

My comments to you this afternoon will focus on the following areas:

- (1) Impact on marine activity at the Port of Portland.
- (2) Possible impacts on Pacific Northwest agriculture.
- (3) The possibility of a sudden downturn in China’s economy and the potential impact to world shipping and West Coast ports.

There is little doubt that growth in the Chinese economy is having profound impact on the region and the State of Oregon. At the same time, some caution is offered so as to avoid the easy tendency to oversimplify causal relationships. While China figures prominently in many aspects of international trade, it is by no means the only economic force responsible for all the gains associated from trade nor all its losses.

Historically, Oregon’s largest trading partner, as measured by commodity value, has been Canada. In East Asia, the largest trading partner has been and continues to be Japan. This is then followed by S. Korea, Taiwan and then mainland China. The dominant trade flows in Oregon continue to be exports and not imports, which happens to be counter to the national trend. This is mainly attributable to lower population densities when compared to other regions of the country. S. California, for example, has a consumption region that includes over 20 million people.

The commodities making up this export trade are primarily computer and electronic products, agricultural products, transport equipment/machinery, chemicals and paper products and other wood products.

While working from a smaller base, exports to China have experienced growth in 2004. In 2004, we expect final trade numbers to show that Oregon exports to China will total \$800 million in value. This is up from only \$71 million in 1997.

It should be noted that export volumes tend to fluctuate significantly and are influenced by a variety of factors including exchange rates, harvests and global commodity prices.

As is well known to many of you present today, most of the talk on China trade concerns our nation's growing trade imbalance. China clearly figures prominently in this imbalance. I will not dive down on the numbers in too great a detail. However, it is important to note that when just isolating container volumes from Asia, shipments from mainland China accounted for over 60% of all cargo originating from Asia, inclusive of the Indian Subcontinent. Nationally, containerized cargo flows from China exceed those from Japan and South Korea combined, by a factor of 6. The growth in containerized shipments from China to the U.S. has been nothing short of dramatic. In August of 2004, for example, the rate of growth in containerized exports from China to the U.S. was just under 40%.

While export volumes from the Pacific Northwest remain strong, the primary Asian destination remains Japan. This is especially true, as noted earlier, for Oregon.

For the Port of Portland, these dynamics have contributed to the following developments:

(1) As demand for cargo space on vessels from China has increased, the relative freight rate gap between imports and exports has sharply increased. The freight rates on cargo originating from Asia moving to the U.S. West Coast now exceed the corresponding freight rates from the U.S. West Coast to Asia by a factor of 4. In some cases the gap is wider. While there has always been a freight rate differential between the higher valued import cargo with that of exports, this gap has increased consistent with the large growth in U.S. imports. In the transpacific trade, for every 3 import containers moving to the United States, there is only one full export container. The bulk of our "exports" are now empty containers being returned to Asia, notably China.

This gap has been one of the contributors to recent losses in direct container service coverage to Portland. Our traditional export dominated cargo no longer presents an economic value proposition to shipping companies sufficient to sustain multiple weekly port calls. Shippers, especially agricultural exporters, must use more expensive truck/rail services to Puget Sound ports in order to obtain ship capacity to Far East markets.

I would note, however, that Portland's experience on the West Coast is more the exception. Ports to the north and south of Portland are experiencing near record volumes. Nevertheless, the trends described earlier contributed to our reaching a "tipping point" with respect to service coverage.

(2) The significant growth of the China trade, not only between China and the United States, but between China and the world, has contributed to a high demand and short supply for both container and bulk vessels. For smaller niche container carriers, this has caused an escalation in daily charter hire rates, has led to reductions in the number of ports-of-call and in the number of ships deployed in some container service rotations. As a result, the Port of Portland has seen additional suspensions of container services as vessels have been re-deployed to more profitable markets.

Moreover, with China markets booming and with few or no vessels available to add services or expand port calls on existing services, carriers desiring to expand China service have had little choice but to drop ports. As a result, smaller container ports such as Portland have struggled to maintain direct service.

While Portland's recent loss of some container services may be reason for alarm, over the longer term the expectation for continued growth in the China trade does bode well for some recovery of service frequency to the port.

(3) While the overheated vessel market, caused in large part by the China boom, has hurt the Columbia River in container shipping, it is helping us in bulks. The high charter hire market for bulk vessels has contributed to a resurgence of grain and oilseed exports from both the Columbia River and the Puget Sound. The spread in panamax bulk freight rates between the Gulf coast and the PNW averaged about \$20 per ton in 2004. Historically, we have seen Midwest corn and soybeans flow to the PNW when the spread exceeds \$10 per ton.

China has been the 800-pound gorilla for PNW grain. The behavior of the gorilla can make or break us, and that behavior in the past has been erratic and unpredictable. The good news is that PNW grain exports are currently benefiting by China's trade behavior. U.S. exports of wheat to China will exceed 2 million tons in 2004-05, up from virtually nothing just a year or two ago. PNW exports terminals are also seeing increasing volumes of soybeans to China, and this looks to be a long-term trend. Finally, China is exporting less corn to its Pacific Rim neighbors, and this has led to increases in corn exports from PNW ports to destinations such as South Korea.

But we should be cautious in predicting a long-term grain export boom based only on the near-term behavior of the Chinese economy. We have seen similar situations

like this in the past, only to witness a sudden and often unpredictable collapse of the market.

Turning to agriculture in general, we can say that the picture in the Pacific Northwest is mixed. A popular book written by Steven Blank is entitled "The End of Agriculture in the American Portfolio." The premise is simple: The U.S. has lost its comparative advantage in agriculture and should divest.

If you accept the premise, as many do, it would be difficult to lay blame on China. Agriculture in the PNW is varied and is still evolving. But a certain pessimism does permeate the region. Dr. Desmond O'Rourke needs to be acknowledged for his keen insights into the changing nature of PNW agriculture. His work has been extremely helpful in organizing my thoughts for this segment of the testimony.

The situation for Pacific Northwest agriculture is clearly changing. Post WWII, agriculture in the region was nurtured by many dam and irrigation projects, access to cheap land, coupled with low energy and water costs. This attracted and sustained agricultural interests, particularly large food processors. These developments also led to a robust packaging and food storage industry which had access to new and highly efficient transport infrastructure. Science and technology also contributed to the development of the region's agricultural industry and state resources where deployed to help market the productive capacity. The establishment of overseas development offices is but one example.

By the 1990's, the region's comparative advantage began to systematically erode. From a pure economic perspective, access to low cost labor, energy and water began to be an issue. The region's strong environmental focus has and continues to call into question the need for dams, irrigation networks and river navigation.

At the same time, mass markets are changing and becoming increasingly fragmented. Scale is king. Retailers are dominating the food supply and their market dominance is causing significant fall-out. Fewer, but larger suppliers remain. What Wal Mart successfully did for retail, they are also doing to food.

Internationally, the picture is also evolving. New competitors, including China, have access to cheap land, labor and water. Environmental policy in China is either lax or non-existent. We are, as an example, in year 15 of a project to deepen the Columbia River to 43 feet from the existing 40 feet. As of today, though ecosystem restoration components of the project have begun, the construction of the navigation project has yet to begin due to environmental impact concerns. In Asia, especially China, modern transport infrastructure is rapidly being developed. Asia leads the world in infrastructure projects, which include among other things, ports, bridges, roads, and airports. These are all enablers for global trade.

Nationally, goods movement infrastructure is in crisis. Our situation in the PNW is better than other parts of the country. But new investment and maintenance is required to sustain and grow transport capacity. We are living on borrowed time!

Additionally, access to new and updated post-harvest technology is allowing developing countries to meet internationally recognized food-grade quality requirements. This is a fundamental paradigm shift that has taken place over the last 5 years at a scale that is still not fully understood nor appreciated. It should therefore not be surprising to learn that the U.S. will soon be experiencing a trade deficit in agriculture for the first time in our nation's history during this calendar year. Food imports are flooding the U.S. at levels never before experienced. The American consumer is demanding it and the world is producing it and shipping it efficiently and cost effectively.

Consolidation is impacting PNW agribusiness and the pain is clearly being felt in rural areas. Some of the most common explanations for plant closures are:

- (1) Excess capacity
- (2) High minimum wages
- (3) Foreign competition
- (4) Energy costs

In the agricultural sector, the international players are varied. China is prominent in apples and juice concentrate, but it is by no means the only country in play. S. America is now a source for many agricultural products as is South East Asia.

Not all PNW agricultural is equally in crisis. Some sectors are better prepared to survive than others. But without major adjustments, the sector will continue to lose employment.

In closing, I would like to discuss how the recent resurgence of China, while providing opportunities to the port and maritime industry, also brings with it some risks. After a decade of rapid industrial growth (13.9 percent per annum since 1990), it's worth asking how long will China's expansion last and how volatile will it be. China's economy has a history of boom and bust, so growth will not necessarily be the upward straight line we have seen in recent years. China still exhib-

its the traits of a transitional economy and is therefore more prone to “crises” than more mature economies.

The focus by carriers, ports, and transportation service providers has been to invest in systems and infrastructure to meet current and future demand stimulated by the China boom. The general belief is that there is great risk that we will be unable to build fast enough to meet projected growth. The Port of Portland subscribes to this belief. But we must acknowledge that, given the past volatility of China’s economy, there remains a risk that it will abruptly enter a down cycle, as it did only six short years ago.

If we were to experience such a downturn in the near future, the impact to world shipping could be devastating. Carriers and vessel owners, who have abundant new capacity coming on line over the next three years, are particularly vulnerable. The potential impact on West Coast ports is less clear, but the overwhelming reliance of West Coast liner trades on Chinese imports is concerning. What is certain is that, for better or worse, the destinies of West Coast ports are now meaningfully linked to China.

In closing, I would like to return to my observation that China was the maritime epicenter in the 15th century. For the past 500 years, this epicenter has moved steadily west from China, to Italy, to Belgium, to London, then across the Pacific to North America in the 19th century. Now, in 2004, more than 500 years after it left China, the maritime epicenter has returned to China. But we shouldn’t despair on being left behind. If this trend continues, we can look forward to a shipbuilding boom on the West Coast of North America sometime in the 26th century!

This concludes my comments.

Cochair BECKER. Thank you.

Mr. Blackburn.

**STATEMENT OF DAVID A. BLACKBURN
PRESIDENT AND CEO
THOMAS G. FARIA CORPORATION, UNCASVILLE, CONNECTICUT
REPRESENTING THE
NATIONAL MARINE MANUFACTURERS ASSOCIATION**

Mr. BLACKBURN. Good afternoon. I’d like to thank Chairman D’Amato, Commissioner and Hearing Cochair, as well as the rest of the Members of the U.S. China Commission, for the opportunity to address you, and I have to say as an aside, I admire your resilience. I can tell by your body language you’re getting a little bit tired too. Please bear with us.

Today I represent my company, the Thomas G. Faria Corporation, as well as the National Marine Manufacturers Association, the NMMA. Faria is an active member of NMMA, and I serve on the accessory manufacturers’ division board as well as the association’s main board of directors.

NMMA is the country’s largest recreational marine industry association. Its membership includes over 1,500 corporations and businesses. They collectively manufacture over 80 percent of the recreation marine products produced in the United States.

I was wondering how I ended up in the Northwest. One of my customers is Bayliner, about 67 miles north of us, and I’ve been doing business with them for about 20 years. I believe they’re the largest boat manufacturer in the world. So we do have a tie-in to the Pacific Northwest.

There are in excess of 13 million registered boats in the United States, as well as 72 million U.S. citizens that participate in boating on an annual basis. The industry contributes more than \$30 billion a year to the nation’s economy, and provides a lifestyle and past time that is important to the quality of life of the American people. The industry is more than twice the size of the cruise ship industry, and provides over \$7 billion in wages every year.

While I represent a relatively small company, that directly provides 325 jobs, and indirectly provides another 300 jobs, one of the problems that we now as a company face has become a common thread in American industry today regardless of the size of the company. The challenge is unlike any other that I have experienced during a management career that spans over 35 years in the manufacturing sector of the United States economy. The problem I refer to is the blatant and uncontrolled counterfeiting of products by the Chinese.

The son of a Portuguese immigrant founded our company in 1956. His dad was a fisherman, not surprisingly he had an unbounded belief in the opportunities that this country could provide its citizens. We at Faria have a long tradition of pride in being able to stamp "Made in U.S.A." on our products. While we all enjoy a bargain, it is disheartening to go into our country's largest retailers and discover that 80 percent of the products on the shelf, if you turn them over, say "Made in China." The term to me has become synonymous in my mind with another American job gone. I almost feel like a criminal when I walk through a Wal-Mart entranceway.

Up until the early 1990s a segment of our annual sales were represented by what was primarily a replacement gauge market in Central and South America. The business had been fairly predictable in terms of its dollar volume from year to year, when all of a sudden a marked downtrend began to develop.

Through some investigation and consultation with our exporter to this geographic region, I discovered that counterfeit Faria gauges had started to enter the marketplace. Perhaps with a touch of naiveté, we took the legal steps to trademark or otherwise take actions that we believed would provide us protection against the infiltration in the marketplace of this counterfeit product. The counterfeiter went so far as to print our corporate name and address, Uncasville Connecticut, on the instrument dials. Much to my dismay, I soon discovered that actions to enforce protective measures proved to be ineffective.

Perhaps the most unsettling event relating to this experience occurred when a representative of our exporter was approached on the streets in the capital of Colombia and was told that if we interfered with the sale of the counterfeit product both he and his family would be killed.

Needless to say, this resulted in an extremely hostile business climate, and a product representative who became afraid to be associated with us.

The export company established in Miami eventually went out of business. The loss for us represented 10 to 12 jobs and approximately \$1 million in annual revenue.

Because the situation represented a relatively small part of our business, and with other growth opportunities facing us domestically, I decided not to continue to dedicate resources to an all-out confrontation, particularly given the initial difficulty we experienced in the law enforcement in the region, which was basically nothing.

Now, a new threat has presented itself. For the first time, to the best of my knowledge, Chinese counterfeiters have approached my domestic customers for our product in an attempt to sell them cop-

ies of our instruments. I recently came into possession of one of these counterfeit gauges. These clones bear our name, our address, as well as a label with the CE stamp on it, certifying that the product has passed a battery of tests that are required in order for the product to carry this designation and to be exported to the European Union.

In addition, the label on the case of the fake gauge also carries our catalog number, the initials of our calibrator, as well as a final tester, all misrepresentations. When the counterfeit product was checked on a test station, it was found to be grossly inaccurate.

One of the ramifications of this, beyond solely the ethical consideration, is that of creating a potential safety issue for whoever uses a counterfeit instrument. Every military Humvee being used throughout the world today and currently in Iraq has our instruments in the dashboard. I would hate to think of a vehicle engine failing at a crucial moment in Iraq, due to an inaccurate counterfeit instrument that failed to provide warning of a potentially catastrophic situation.

My possession of the counterfeit product came about as a result of a visit by an American boat manufacturer, who was also a customer of ours. They indicated that the counterfeiter had thousands of Faria gauges on his stock shelves. The Chinese company also indicated that they had produced instruments for us in the past, which was a total falsehood.

A different individual from the marine industry was in the same factory during September and indicated in the conversation with me that the director of the Chinese company was also the local head of the Communist Party and in fact the business was a government owned operation, that was making those counterfeit gauges. Well, the counterfeit gauge was actually one of non-preproducts that was being offered to customers in the marine industry, which is currently the largest single market channel for our product offerings.

More and more frequently I hear stories from my associates in the marine industry who are facing ever-increasing instances of exact copies of their products being produced in China and sold around the world. I have one gentleman working for me now in our shipping department who came to us from a marine hardware company that had been in existence since 1847.

In 1979 they employed 2,000 people. 2,000 people! That was before the Pacific Rim copied their seven catalogs and all of their products. When this gentleman left their employ recently he was one of five people left. The company is now just a memory in the history books of American industry.

A week after he joined our employ I distributed an internal employee newsletter. Part of the information contained therein referred to the Chinese counterfeiting issue. He told me afterwards that he literally became ill and almost had to go the men's room and vomit when he read the letter, as his only thought was, "Oh, my God, it's happening again." He is 50 years old, with two children in college.

A half-century ago over 40 percent of the employment in the United States was provided by manufacturing jobs. A year ago, ac-

ording to government statistics, that percentage was down to 11.2 percent and dropping rapidly.

In many ways there is little that we can do to offset the impact that countries with much lower wage bases, 65 cents an hour, and operational costs that are a fraction of ours will continue to have on the deterioration of American manufacturing's ability to compete in the world marketplace on a sales-price-only basis. However, there is a limit to how much unethical behavior we should—

Quite frankly, we of the manufacturing community are all growing tired of the rhetoric rather than the action that continues while our job base rapidly diminishes.

China was allowed to enter the World Trade Organization in 2001. Part of their commitment and obligation as a member of that organization is to protect the intellectual property of companies and to prosecute those of the citizens who participate in counterfeiting. It's blatantly obvious that China is not living up to that obligation.

The former chairman of the board of Sony Corporation, Akio Morita, once said in a speech to a group of high-level international business executives that a world power that loses its manufacturing capacity will cease to become a world power. We cannot let that happen.

Thank you.

[The statement follows:]

**Prepared Statement of David A. Blackburn
President and CEO, Thomas G. Faria Corporation, Uncasville, Connecticut
Representing the National Marine Manufacturers Association**

I would like to thank Chairman D'Amato, Commissioner and Hearing Cochair Ellsworth, Commissioner and Cochair Becker as well as the rest of the Members of the U.S.-China Commission for the opportunity to address you today.

Today I represent my company, the Thomas G. Faria Corporation, and the National Marine Manufacturers Association (NMMA). Faria is an active member of NMMA and I serve on the Accessory Manufacturers Division Board as well as on the Association's main Board of Directors. NMMA is the country's largest recreational marine industry association. Its membership includes over 1,500 corporations and businesses that collectively manufacture over 80% of the recreational products produced in the United States. There are in excess of 13 million registered boats in the U.S., as well as 72 million U.S. citizens that participate in boating. The industry contributes more than 30 billion dollars a year to the nation's economy and provides a lifestyle and pastime that is important to the quality of life for the American people. The industry is more than twice the size of the cruise ship industry and provides \$7 billion in wages every year.

While I represent a relatively small company that directly provides 325 jobs, and indirectly provides another 300 jobs, one of the problems that we now face has become a common thread in American industry today regardless of the size of the company. The challenge is unlike any other that I have experienced during a management career that spans in excess of 35 years in American manufacturing. The problem I refer to is the blatant and uncontrolled counterfeiting of products by the Chinese.

The son of a Portuguese immigrant founded our company in 1956. He had an unbounded belief in the opportunities that this country could provide its citizens. We at Faria have a long tradition of pride in being able to stamp "Made in USA" on our products. While we all enjoy a "bargain" it is disheartening to go into our country's largest retailers and discover that 80% of the products you pick up say "Made in China." The term has become synonymous in my mind with "Another American Job Gone."

Up until the early 1990's a segment of our annual sales were represented by what was primarily a replacement gauge market in Central and South America. The business had been fairly predictable in terms of volume from year to year when all of a sudden a marked downtrend started to rapidly develop. Through some investiga-

tion and consultation with our exporter to this geographic region, I discovered that counterfeit Faria gauges had started to enter the marketplace. Perhaps with a touch of naivety, we took the legal steps necessary to trademark or otherwise take actions that we believed would provide us protection against the infiltration of the marketplace with this counterfeit product. The counterfeiter went so far as to print our corporate name and address on the instrument dials. Much to my dismay, I soon discovered that actions to enforce protective measures proved to be ineffective. Perhaps the most unsettling event relating to this experience occurred when a representative of our exporter was approached on the streets of the capital of Columbia and had both his and his family's lives threatened if we interfered with the sale of the counterfeit product. Needless to say, this resulted in an extremely hostile business climate and a product representative who became afraid to be associated with us. The export company, established in Miami, eventually went out of business. The loss for us represented 10 to 12 jobs and approximately \$1,000,000 in annual revenue.

Because this situation represented a relatively small part of our business, and with other growth opportunities facing us domestically, I decided not to continue to dedicate resources to an all out confrontation, particularly given the initial difficulty we experienced in law enforcement in the region.

Now, a new threat has presented itself. For the first time, to the best of my knowledge, Chinese counterfeiters have approached domestic customers for our product in an attempt to sell them copies of our instruments. I recently came into possession of one of these counterfeit gauges. These clones bear our name and address, as well as a label with a CE stamp on it certifying that the product has passed a battery of tests that are required in order for the product to carry this designation and be exported to the EU. In addition, the label on the case of the fake gauge also carries our catalog part number, and the initials of a calibrator as well as a final tester—all misrepresentations. When the product was checked on a test station it was found to be grossly inaccurate. One of the ramifications of this, beyond solely the ethical consideration, is that of creating a potential safety issue for whoever uses the faulty instrument. Every Hummvee being used in Iraq today has our instruments in the dashboard. I would hate to think of a vehicle engine failing at a crucial moment due to an inaccurate counterfeit instrument that failed to provide warning of a potentially catastrophic situation.

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While the counterfeit gauge was actually one of our non-marine products, it was being offered to customers of ours in the marine industry, which is currently the largest single market channel for our product offerings.

More and more frequently, I hear stories from my associates in the marine industry who are facing ever-increasing instances of exact copies of their products being produced in China and sold around the world. I have one gentleman working for me now in our shipping department who came to us from a marine hardware company that had been in existence since 1847. In 1979 they employed 2,000 people. That was before the Pacific Rim copied their 7 catalogs and all of their products. When this gentleman left their employ recently he was one of five people left. The company is now just a memory in the history books of American industry. A week after he joined our employ, I distributed an internal employee newsletter. Part of the information contained therein referred to the Chinese counterfeiting issue. He told me afterwards that he literally became ill when he read the letter, as his only thought was "Oh my God, it's happening again." He is 50 years old with two children in college.

You know, a half-century ago, over 40% of the employment in the United States was provided by manufacturing jobs. A year ago, according to government statistics, that percentage was down to 11.2% and dropping rapidly. In many ways there is little that we can do to offset the impact that countries with much lower wage bases and operational costs will continue to have on the deterioration of American manufacturing's ability to compete in the world marketplace on a sales price only basis. However, there is a limit to how much unethical behavior we should tolerate from a trading partner when that behavior is costing American citizens their jobs by the millions. Quite frankly, we in the manufacturing community are all growing tired

of the rhetoric, rather than action, that continues while our job base rapidly diminishes.

China was allowed to enter the World Trade Organization in 2001. Part of their commitment, and obligation, as a member of that organization is to protect the intellectual property of companies and to prosecute those of their citizens who participate in counterfeiting. It is blatantly obvious that China is not living up to that obligation.

Akio Morita, the former Chairman of the Board of the Sony Corporation once said in a speech to a group of high level international business executives that "a world power that loses its manufacturing capacity will cease to be a world power." We cannot let that happen.

Panel V: Discussion, Questions and Answers

Cochair BECKER. Thank you very much. Very interesting testimony, and I'm sure we'll have a good discussion on it.

Commissioner Wessel.

Commissioner WESSEL. Thank you, Mr. Chairman.

Thank you, members of the panel, and thank you to our good friend and former colleague Ken Lewis for his assistance in getting you here today, Mr. Ruda. We appreciate having you on the panel, as well, and Mr. Lewis has spent the entire day taking notes and following as closely as we have.

I'd like to deal with an issue that is within your expertise, Mr. Dinsmore and Mr. Ruda, but not necessarily part of your core testimony. In preparing for this hearing, Mr. Dinsmore, your Washington Post editorial of last September, I believe it was, was provided to us, and let me quote briefly. "Homeland Security Secretary Tom Ridge met with a group of Seattle officials recently and told us he's sleeping better at night because our country is better prepared than before to defend against a terrorist attack." When I spoke with him later I said, quote, "I'm glad you're sleeping better, Mr. Secretary, because I'm not."

Yesterday afternoon Mr. Becker and I, having a little time, probably should have gone to the Pike Street Market. Rather, we went down to a number of the terminals. We went down to the Port to understand what's happening on the ground with security. And I have to tell you, I didn't sleep very well last night, as you indicated in your editorial, because of the security concerns that I heard about and in fact saw on the ground.

I think your editorial talks about the need for new protocols, new standards, and I know that you've been working with Customs, with the Coast Guard and others, but we sat there during a period of time watching the new technology, the cameras that do not necessarily have enough resolution to see the seals on the doors. We watched a large number of containers come through one terminal that were never checked, never physically inspected. We understand that there are fewer inspections done now of empty containers than there were done pre-9/11. I have to tell you that when I learned that the reefers, as I learned about yesterday, when the refrigerated containers are brought off the ships, the first thing that's done is not that somebody looks inside them but that they're plugged in to make sure that they can in fact take a charge. I hate to think that they're being plugged in and that there's some weapon in there that we are unknowingly starting the detonation process because our processes for ensuring our security are inadequate.

At the same time, we sat there, again, for a good period of time and saw that there was more attention by the terminal operators for the outgoing product that's going from the U.S. to foreign ports, or to other ports potentially in the United States, from the Port of Seattle to Portland or somewhere else, that the drivers were being questioned, that a number of other activities occurred, but still, again, for empties, no physical inspection whatsoever.

My question in part, Mr. Ruda, is: Are we seeing the same thing in ports all across the country, that the dramatic rise in U.S.-China trade, and trade all across the country, is putting such enormous pressure on our ports that actually we're less secure than we were pre-9/11, and that the attention or the desire to have technology play a greater role is eliminating the human element?

As I learned yesterday, we wouldn't have to hire one new employee to go back to the pre-9/11 of inspecting every empty, not to mention what has to be done with full cargo with the Baccus system and all the various other things.

Technology seems to be the focus, but to me people have to be an important ingredient. I apologize, Mr. Blackburn, because your issues are very important, as well. I have a limited time. I'd like to hear from both Mr. Ruda and Mr. Dinsmore their comments on what we saw yesterday.

Mr. RUDA. I will be brief.

In your comments Commissioner, I think you've accurately hit on a very important issue. Let me just try to answer it as directly as possible. In the Port of Portland's perspective, like Seattle, we're a consolidated port. We operate both a seaport and an airport, and it's very revealing to see how the issue of security is being dealt at the airport and then at the seaport.

The Federal Government has a history of being involved in airports. When you want to build a new runway or lengthen a runway, the government tells you, this is what you must do. Seaports have no such Federal involvement. Even just defining terms. Who is the seaport? Is it the carrier, is it the port authority, is it the landowner? There are many hands involved in the seaports, and jurisdictional issues, both precluding longshore labor, play very much into your issue.

So the good news is you can sleep at night, I think better on an airport side because the jurisdictional boundaries are very, very clear. And you can see that as a nation we turned on a dime in terms of implementing—whether you like it or you don't like it, good or bad, the airport experience is very different today than it was pre-September 10th, 2001.

I don't think the issue of security is necessarily related directly to the volume. Trade has been growing, it's been growing since the 1970s. The issue is in the post-9/11 world what does this mean in terms of security at seaports. The rules that came out of the Maritime Security Act primarily focus on perimeter security, access to and from seaports. There is no mandated legislation or focus on the actual containers. While there have been initiatives, Baccus, as you pointed out, there is nothing that's mandating, and in fact the whole integrity of the supply chain would almost make it impossible to inspect every container just given the amounts of volume.

So in that respect you have a logistical impossibility, the ability to open and inspect every container.

Could you isolate empty containers?

Well, the empty containers start from this country. Very few empty containers come in from—

Commissioner WESSEL. The reefers, though, are coming back in.

Mr. RUDA. That is true; they do tend to come in, the empties, since it's more of a one-way trade.

We just had a meeting, with someone from TSA based in New Jersey. They said we were at least five years away from a technology solution to container seal integrity. It is a big issue.

I will say directly that one of the obstacles in terms of inspections of containers on terminal facilities is a jurisdictional cost issue with longshore labor. That's just a fact. And it's just a question of who pays.

Commissioner WESSEL. I'm sorry. If I could just clarify. Who pays as in the terminal operator, the port, the shipper, or the carrier?

Mr. RUDA. I think that's essentially it. The terminal activity is jurisdictionally a longshore issue. The longshore, for all the appropriate reasons, are very engaged in Washington on this issue of inspection of container inspections. They would like the jurisdictional ability to do that work.

Commissioner WESSEL. In my point of view, thank God, they are. When I understood that no one can really look at these seals and that as we put these cameras in, you can't hone down enough, there's not enough resolution to actually be able to see whether the seal's been broken or what the number is—

Mr. RUDA. I think this is evolving or going to a lot of technology at the gates, but again, this is a different issue than you can read seals electronically, you can tell if they've been tampered with. Whether that will make people sleep easier at night or doors can easily be removed without tampering with the seals. These are the facts.

No foolproof solution—albeit random inspection of containers, some of which is going on today, is the answer. I would tell you, though, that I think that your comment that less containers today are being inspected than pre-9/11 is factually inaccurate. More in fact are.

Commissioner WESSEL. There are different types of inspections. Certainly Baccus, yes. In terms of the empty containers, my understanding is factually that is correct.

Mr. RUDA. You would be correct on empty containers.

Commissioner WESSEL. What are designated as empty containers, I found out that you could have up to 2,000 pounds of product in an empty container and it wouldn't show up on the scales as something that would trigger anyone's attention. So empty is a term of art.

Cochair BECKER. Let's start with the empties, Mr. Dinsmore. The empties are coming in, they're not inspected, this is what we're told. They used to inspect empties prior to 9/11. They do not inspect them now. After they check them, if they check them electrically and they need cleaning out—but that's afterwards. That's

off of the ship and in some kind of a storage area, wherever they put that.

I'm going back to your article in the Washington Post, in which you specifically point to the fact that every year in the United States we get 50,000 visits from 8,100 ships. Every day 21,000 containers enter the United States. We can verify the contents of only four to six percent of these containers. And it would require only one rogue container to bring commerce to its knees. Now, that was your complaint, and we're just picking up on that. We're not complaining that you've raised it. We're picking up on your complaint and what's being inspected down there.

Now, I don't know who's responsible for it or what steps we have to go through to have this checked out.

When there's questionable seaman aboard a ship coming in, the ship is stopped right out in the harbor there. It's not stopped out away from the harbor, where the facilities are. And the cargo's there until the Coast Guard checks these people out.

That's very unnerving to the people who work the port. They got a ship, they don't know what's necessarily on it, they know that a questionable seaman is on it. And they've raised this as a specific point. It makes sense.

A container comes into the United States, into Seattle, it has no identification at all, none, and so they issue a dummy ticket. They just write out a ticket, just like it was a shipping ticket coming in, and they stick it on the container and they bring it on in. Through their video hookup, the Internet, they can check and find out that the container was supposed to be in Singapore, say. They have no idea how it got here or who brought it, what the cargo is, and yet it's still brought in. These are questions that I think you would be legitimately concerned about sleeping well at night in the Port of Seattle. And these are the things that we're questioning you on. And we'd be happy to sit with you and go over these, all of them. There's no problem with that.

But any comments you could make on this, I would like you to do that.

Mr. DINSMORE. Thank you, Commissioner. I'll try to be brief in picking up on my colleague's comments.

I think part of the tremendous challenge is being missed here. I don't believe for a minute it's the empties going outbound that creates tremendous angst. All right? I do believe with tremendous energy it's the commerce coming in. It's the import, and in the four to five percent that are physically inspected, making sure the content is indeed what the manifest says it is.

But what is going on at the Federal level, and I'd be remiss not to say, are many different things, including a whole lot of intelligence sharing with a multitude of different regulators, including but not limited to, by your own definition, what happens when a vessel gets stopped out in a channel and it can't come into port because there's some discrepancy, whether it's with the commerce, the captain, the crew. There's tremendous amount of due diligence taking place on a vessel side.

With the 24-hour manifest rule, which was implemented, that is by definition a major, major change, and plus allowing the appropriate entities, including, not limited to U.S. Customs, to do a bet-

ter job of making sure that there is more believability in what's in the container vis-à-vis the manifest.

My major concern, and I've been very vocal in D.C., and will continue to be, we're three years three months older than we were on 9/11. We have, as Mr. Ruda alluded to—in my belief we've overreacted with our nation's airports. And the net effect is it's making travel extremely difficult, extremely costly, extremely frustrating, and costing this nation some 7 to \$9 billion a year. Yet on the maritime side of our portfolio we've under-reacted, and we have probably spent at the national level less than 1 billion U.S. dollars trying to figure it out, and I will tell you, as Mr. Ruda did, it's tremendously more complicated.

But my strong angst and concern relate to the movement of the commerce from the origin to the destination, and I'd suggest to any member of the panel, by the time it hits here it's too damn late. We need to go backwards, back to the hinterlands, where the commerce goes into the container, the relay port, take Hong Kong, where it goes from a truck onto a ship, and that's where it should be stopped.

Now, Hong Kong, as you probably know, by the end of 2004, a matter of days ago, finally can say, and rightly so, that they have inspection vis-à-vis the radiation portal and by the x-ray portal of every one of the 15,000—excuse me, Freudian slip—15 million TDUs, and that's a quantum step in the right direction, and that's where we need to start paying more attention.

We, by way of definition—and we are going to do this, no matter what happens with the rest of the testing activities with Operation Safe Commerce, C-TPAT and a multitude of Federal sponsored programs. With sister ports in Shanghai, with sister ports in Taejon, Pusan, South Korea, and Kobe, Japan, we will try, in a memorandum of understanding, already inked in late last year. We'll start to implement programs offshore that would have some value in trying to make sure content is indeed what manifests report. That is a step in the right direction, but sooner than later we as a nation need to start getting it right. We won't ever be a hundred percent safe, but from where we are today on maritime commerce to where we need to be, there's a tremendous schism to be more safe.

Cochair BECKER. Thank you.

Mr. DINSMORE. You're welcome.

Cochair BECKER. Commissioner D'Amato.

Chairman D'AMATO. Thank you.

I do want to question Mr. Blackburn, but I do want to make a comment, Mr. Dinsmore. We would be very interested in knowing what kind of initiatives you think would be appropriate to engage in with Asian ports, particularly Chinese ports, Shanghai, Taejon, so on, how much that would cost. The American taxpayer is shoveling billions of dollars annually into this Homeland Security bureaucracy. I want to know how much is coming out of that to help us on the maritime side. So you've got a lot of experience in here, and a lot of ideas about how we can make this relationship with these Asian ports more effective, so we would like to discuss that further with you to see what kind of price tag that has and how it could fit into Homeland Security structure.

But I would like to compliment Mr. Blackburn for coming here and giving us that cogent testimony. It's very important testimony because I think it's a textbook case, and it may say something about why there is almost no real enforcement of IPR problems in China. I mean, the man who's in charge of the counterfeiting operation is a member of the government of China. He's a Communist Party official. So he's the government that's supposed to enforce. That doesn't work, because he's running the counterfeit operation.

My question to you is: In this whole long horrible process that you went through, what kind of contacts did you attempt to make with the FBI or others at the Federal level to get some help? Did you try and do that, and what kind of responses did you get?

Mr. BLACKBURN. My first contact was with representative Rob Simmons from the district in Connecticut, and to his credit, he was the only politician in Connecticut who was contacted that responded to us. I don't physically have the gauge that's in that picture in my possession anymore because his office took it to the Secretary of Commerce's office, and they are currently in possession of it.

There's also bill H.R. 62 in process in Washington right now to establish severe penalties for anybody aiding and abetting any influx of counterfeit materials into the United States. However, we do international trade, and as I've already relayed to you, we have discovered that this counterfeit product is filtering into more and more foreign countries, so I expect that our export business will be impacted substantially.

One comment. I'm certainly not a port director, but listening to the testimony, it's interesting. I do have a summer home on an island called Block Island, about seven miles off the southern coast of Rhode Island.

Chairman D'AMATO. We know about it.

Mr. BLACKBURN. You know that one.

There's a passenger ferry service that runs back and forth, the Point Judith Ferry, which I use during the wintertime when my own boat's not in the water, and there are new security procedures—they also carry pallets of freight. That's basically the only way you can get things back and forth from the island. Every one of those pallets is inspected, and so far the ferry hasn't blown up, thank goodness. Seems like we have our priorities somehow out of order. But I also know that it's a totally different type of problem.

Chairman D'AMATO. Let me ask you, did you have any contact with the FBI in this area?

Mr. BLACKBURN. FBI, no.

Quite frankly, I'm not sure what assistance the FBI could give us.

Chairman D'AMATO. Well, there was a threat on your people's lives.

Mr. BLACKBURN. In Colombia. That's back about 10 years ago now.

And we tried to access enforcement—went through each of the countries in South America, got trademarks, copyrights, whatever was the law of the land in those countries. The first time we tried to actually go through public officials to get it enforced, basically

it was, "How much are you going to pay me?" It was very difficult to actually get any—have any action taken.

There was an interesting article in the Wall Street Journal—I think November 23rd, about a gentleman—I don't remember the name of the company. I wish I brought the copy for you—who spent \$600,000 on a case similar to mine, and eventually got the Chinese government to raid the plant that was producing—counterfeiting his product, and they shut them down, they were closed for I think three or four days, they were fined \$600 and then they were back in operation.

I can't afford to spend \$600,000 to shut a plant down for three or four days.

Chairman D'AMATO. One last point. You mentioned there was contact with the Department of Commerce. What was that experience?

Mr. BLACKBURN. Probably the most positive aspect of the dialog that I've had so far, and I'm sure only one of many voices that are crying out right now for assistance, is that that H.R. 62 bill is proceeding through the House. However, that isn't going to help us in terms of any additional enforcement in China.

A question was asked earlier about the WTO. I think we made a huge mistake in letting China in. If we look at history, and history was mentioned in one of the comments, there's a history of lies, deception and promises that are never kept. That's not something new. It's centuries old. So why did we not demand at least some portion of conformance to the rules that are associated with being a member of WTO, as a good-faith demonstration that they would really do what they said they were going to do, because we let them in and they haven't.

Chairman D'AMATO. Many of us ask the same question, on the panel.

Thank you very much.

Mr. BLACKBURN. You're welcome.

Cochair BECKER. Commissioner Dreyer.

Commissioner TEUFEL DREYER. Mr. Blackburn, this is absolutely terrifying testimony. Thank you for enlightening us on it.

You probably saw the 60 Minutes story on Chinese counterfeiting.

Mr. BLACKBURN. Yes, I did.

Commissioner TEUFEL DREYER. There, of course, the example they used were golf clubs, and that's bad enough, but at least there isn't a security risk the way there are regarding—

Mr. BLACKBURN. That's true.

Commissioner TEUFEL DREYER. —vehicles in Iraq.

For the other two gentlemen, I hope your ports continue to prosper and do a lot of business with China.

By the way, China just officially last week announced the birth of its 1.3 billionth citizen, and demographers feel that the actual 1.3 billionth citizen was born about four or five years ago because of all the unregistered children, so that's even more consumers for you.

But Mr. Ruda's testimony posed the excellent question of whether this economic growth can continue. There are a number of reasons that this growth could stop. One is that it rests on the myth

of the rapidly growing Chinese middle class. Chinese economists say the growth of its middle class is way exaggerated. Furthermore, we have statistics to show that the income disparities are getting worse, so that means fewer people available to buy.

But what I'm asking you two port directors is: Have any plans been made for the contingency of an economic downturn in China? Maybe you're going to tell me that there's no way you can plan for what you can do, but have you all thought about it and what have you thought about it?

Mr. RUDA. Yes, I have a background before coming to the Port in shipping, and shipping, international shipping, has always been characterized to a certain extent by booms and busts. In fact, probably more busts than booms. If you look at the shipping companies today, they're probably enjoying rates of return and profitability that they never dreamed of. So these are definitely high times in the shipping industries, and obviously some of the west coast ports are enjoying just tremendous volume increases.

Ports are different. I'll let Mr. Dinsmore speak to the situation here in Puget Sound in Seattle. Portland, we're a small guy in containers. We're about a two percent market share of the transpacific container volume. On the other hand, we're very big in finished automobile distribution. And China today doesn't figure prominently in that. It's Japan and Korea. Perhaps automobiles are an opportunity for ports in China.

We happen to be one of the largest bulk shippers from the west coast. A lot of that bulk goes to Japan, some to China, to other Asian countries.

I would think that the scale of China right now in the container world means that you are susceptible to these booms and busts.

Diversification is clearly a positive thing. We have that diversification to a certain extent at Portland. On the other hand, we're clearly a loser right now on the container side, so it's very, very mixed.

Commissioner TEUFEL DREYER. Thank you.

Mr. Dinsmore.

Mr. DINSMORE. Yes, Madam Commissioner, but we, as like Portland, invest in tremendous amount of capital in long-term strategic alignment, and we are on an ongoing basis investing hundreds of millions of dollars, last year \$750 million. You just have to do it with the long-term horizon in place.

That being said, not only is China trade growing, other trade lines are growing, and we're seeing an enormous amount of commerce come through this gateway. Many of us thought it would have arrived a few years back. Well, all good things take time and it's finally arriving.

But to the other part of your question, sort of from a strategic standpoint and an economic standpoint, in my daytime job I do what I do and I also am on many committees, including I'm chair of the Federal Reserve Bank under Chairman Greenspan, and I think it would be terribly unreasonable for any of us in this great nation to look at China as if it's a boom and bust. Last 20 years GDP has grown 10-plus percent year over year, and just like they may be guilty of understating the population, I would suggest the

GDP is understated also. And every indication we have would suggest that is a long-term continuation.

Commissioner TEUFEL DREYER. I can argue with that, but I don't have time to do so now—

Mr. DINSMORE. Thank you.

Commissioner TEUFEL DREYER. Also, I would seriously dispute what you just said.

Cochair BECKER. Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you, Mr. Chairman, and thank you to our panelists. You've provided interesting testimony.

I have a couple of questions on port security and homeland security, but before I do that I have to say particularly, Mr. Dinsmore, that I really disagree with your characterization of progress in terms of human rights in China. I would encourage you and others to take a look at the State Department's own annual country reports on human rights which year after year have been documenting a continuing deterioration in the status of human rights in China, as well as point to the cases of Catholics and Protestants who have been imprisoned for exercising peacefully their religious beliefs. And most recently as Christmas workers and farmers who have been trying to demonstrate and get recourse to some sort of change in legal structure in China themselves, internet users who had the audacity to criticize the government or propose any sorts of reforms, and people who I'll still characterize as the great democratic reformers in China who are trying to change and open that society.

That said, on the port security issue, it's my understanding that it's the practice and the protocol in China for containers to be sealed by Chinese officials on the docks rather than at the point of stuffing. Is that correct?

Mr. DINSMORE. I cannot say.

Commissioner BARTHOLOMEW. Okay.

Mr. Ruda?

Mr. RUDA. The practice of seal applications generally is at the point where the containers are stuffed. It's usually the case at the factory. If cargo is tendered loose to a port and stuffed into containers at sort of warehouse facilities at ports, then some of that activity in fact would take place at ports, but the vast majority of container seals are applied at the manufacturing site, factory site.

Commissioner BARTHOLOMEW. In China as well as in other countries?

Mr. RUDA. Yes.

Commissioner BARTHOLOMEW. Okay. Because somebody said to me the other day that indeed they thought that that wasn't the case, raising the specter of tampering with the cargo containers before they get to the port and are sealed, and what the possible consequences were up here. But I'll take you at your word on that one.

We've been talking about empty containers. Concern has been raised, I understand it, that you don't think that empty containers are that much of a risk, but concern has been raised that al-Qaeda might have a presence here in the United States already. I suppose it is remote, but there is a possibility that empty containers could be tampered with before they get to the port. There could be an explosion in a port before empty containers are loaded

onto ships and interrupt commerce, which I think is a big concern of course about ports, anyway. I presume of the major issues that you worry about at night, this is not one of them. Is that what you're saying?

Mr. DINSMORE. Well, I hope what I said, Madam Commissioner, was in the context of the question. The larger concern is as I stated it.

Should we care about empty containers actually being empty? Absolutely, yes.

And I will tell you in Seattle a whole lot of these empty containers are indeed inspected at the place that they're drayed from. Now, how many and what the percentage of the containers that would go uninspected, I cannot say.

Commissioner BARTHOLOMEW. Mr. Ruda, any comments or thoughts on that?

Mr. RUDA. Yes, it's an issue that personally I spend a lot of time thinking about, and I think anyone in the port industry, it's something that's really weighing heavily on their minds, and frankly, it's troubling when you don't have a solution. The issue is what to do.

And the problem is that it's positioning the issue of the risk with containers, is that more or less an issue that any car on the road?

I'm from New Jersey. I notice that now you have Easy Pass, which now you don't have to pay that toll to get into the Lincoln tunnel. Every car going through the tunnel as we're seeing in Iraq, the biggest cause of deaths have not been weapons of mass destruction, it's been low-tech car bombs. So what to do. Basically if you were to inspect every container, every car, every truck, you'd essentially become a police state, and the issue is, okay, so you do open up containers, and then once you open up the containers, well, what are you looking at? You're looking at 5- to 6,000 individual boxes in corrugated cardboard. To actually physically inspect a container at the box level, take out the cargo, besides the expense, is just huge time consumption. The ports physically couldn't even do this. There's too much volume. I think that Mr. Dinsmore talked about some major improvements that have happened that have had I think some substantive improvements, including the 24-hour manifest system. We caught a shipment of illegal arms being transhipped to South America through this manifest system.

So are we making some progress? Yes, but I don't think we should kid ourselves into thinking that we have found the silver bullet here. It's a big issue, and the issue is no greater or smaller for cars, for trucks going over bridges and tunnels than it is for containers.

Commissioner BARTHOLOMEW. Mr. Dinsmore, anything else?

Okay. Thanks, Mr. Chairman.

Cochair BECKER. Ambassador Ellsworth?

Ambassador ELLSWORTH. Thank you, Mr. Chairman, and I want to thank all three of our panel members. Mr. Blackburn, thank you for telling your story here and coming and illustrating it. And Mr. Ruda, thank you for coming up from Portland, and also for your very insightful and extremely sophisticated testimony. And thank you especially, Mr. Dinsmore, the CEO of the Port of Seattle, which I guess includes the airport as well as the seaport.

Mr. DINSMORE. Yes, it does.

Ambassador ELLSWORTH. Your testimony was very interesting because it gave us an understanding, I think, better than we had, of the extent to which Seattle wants a strong and healthy trading relation with China. Am I right? Does that capture one of your main points?

Mr. DINSMORE. Yes you are indeed right.

Ambassador ELLSWORTH. And one of the things that you said was, "We can"—I'm quoting from the last paragraph of your testimony. "We can benefit from the relationship that grows between us perhaps better than any other region," meaning the Northwest. "We have to be ready with a vibrant well-educated work force to take advantage of the growing connections. We will compete with our minds and our innovations, not with our factories."

Now, that's a direct quote from the concluding two sentences of your testimony.

I don't know if you were here earlier in the day but earlier in the day, from the very first witness that we had, which was Congressman McDermott, clear on through, our panel members have—and Commissioners too have agreed, for the most part, that education and training on a life-long basis was a key to a successful handling, as it were, by the United States of the challenges from China. Would you agree with that? Is that your point too?

Mr. DINSMORE. Absolutely.

Ambassador ELLSWORTH. And what about here in the Northwest? What's happening to make that come true? Because those things take awhile to have an effect, maybe a generation. What's going on here in the Northwest that you're interested in and that you see happening along that line?

Mr. DINSMORE. Well, I was not here when Congressman McDermott spoke, but I've heard Jim speak before about the same issue, and I was not here also when representatives of organized labor, including Rick Bender, spoke, but I think there's an easily recognized agreement between for sure the Port of Seattle and many of my colleagues in business and organized labor. It's time we changed the paradigm. The paradigm that goes from more wages to more benefits, and benefits being an extraordinarily high-cost item, especially healthcare. It's time that we also allocate monies for retraining, reschooling, reeducation, with our workforce.

And to change that by your own definition, which I agree with, is going to take years, not months, but we're doing some of that already at the Port of Seattle. I know some of my colleagues are doing it across this region. But that is indeed by definition going to take time.

And when I talk about the last comment, about competing in manufacturing, what I'm really talking about is the lower-end manufacturer, not the higher skilled—the higher tech, the aerospace and other kinds of manufacturing. It's the lower kind of manufacturing. Including what we've already lost as a nation, the textile manufacturing. That is by definition offshore, and in my humble opinion is going to stay offshore. It follows the low-cost common denominator of wages.

But there are so many things that we can do as a nation heading down the path of the service application, the retraining of our work

force, the making sure there's value added, because as economies, not only China, become more sophisticated and more developed. I think we have a wonderful opportunity if we start focusing collectively on what is going to be an outcome, and that is these jobs—some of these jobs will continue to go offshore.

Ambassador ELLSWORTH. Thank you.

And Mr. Ruda, what about the Port of Portland, do you think the same thing about education and training?

Mr. RUDA. Well, I think that those—

Ambassador ELLSWORTH. I'm not talking just a vague generality, everybody's—

Mr. RUDA. But I think in that comment I think you really put your hand on the real issue. Going back to the first President Bush, he was supposed to be the education president. The problem is we talk in very broad terms. When we say education, what does that actually mean? Intangible actionable changes.

I've never really heard—and I'm outside my shipping sphere so please forgive me, but I've thought of this issue, and our rhetoric just completely—

Ambassador ELLSWORTH. The red light's on, so let me just say that I appreciate what you're saying, but I am interested and I think the Commission is interested in what somebody like the Port of Seattle, for example, or the Port of Portland, for that matter, thinks and is doing or trying to stimulate to happen in this field of education in the context of our relationship overall with China. And I would invite you—we haven't had a vote on this, but I think that the Commission would welcome, if you want to do it, either one of you, a little paper, a small piece, on what it is that you're doing with your colleagues in business and in labor and in the education field here in this region, to do something about this that's concrete and specific.

Thank you, Mr. Chairman.

Cochair BECKER. Thank you.

Commissioner WORTZEL.

Commissioner WORTZEL. Thank you very much, gentlemen. I really appreciate your testimony, and I hope you can get those gauges straight. I use them on the boat.

I want to associate myself on one issue with Commissioner Bartholomew, and that is in taking issue with one point in Mr. Dinsmore's testimony. I've been in and out of China for 27 years, myself. There have been tremendous changes, I agree with you. And economic freedom there has improved maybe 400 or 500 percent. The ability to exercise choice in the marketplace in China is unbelievable today compared to the way that it was when I first went in there. But I have to say that in what we as Americans would categorize as human rights; the right to associate and form unions; freedom of speech; freedom of the press; freedom to worship; the right of political association, the right to organize politically, and to articulate one's political interest as a group or a faction; freedom from extrajudicial arrest and imprisonment, there hasn't been an awful lot of improvement in China in my observation. I'd encourage you to make those distinctions between economic freedom and human rights. I have to do this when I testify in front of Congress. I think those are different things.

Mr. DINSMORE. Are you looking for a response?

Commissioner WORTZEL. You're welcome to respond.

Mr. DINSMORE. Thank you.

I accept and take the points as given, but I do indeed have a different perspective. And it is with about the same amount of time, numerous times into China. I hope I didn't say that they are changing at the speed and as if we want them to change and by American standards, but I can tell you in every category, every place I look, with many colleagues that I've come to know over the years, there is tremendous change. And one of the brightest spots on the horizon in my mind is the new president Hugen Tao, who I just had the fortune to meet with in Santiago, Chile, at APEC, I think will be the new leader of China, that is by definition more Clintonesque than everybody I've ever seen, with similar thoughts as to part of what we're talking about here today at these hearings.

Cochair BECKER. Commissioner Wortzel, for one last question.

Commissioner WESSEL. A request more than a question. Mr. Dinsmore, I want you to understand that your article in the Washington Post did spark a lot of attention, as I'm sure you know, certainly within the Washington community. It was well received by a lot of people who are very concerned about security, and I know that was why you made those comments.

I would hope over the coming days that, we can all, Mr. Ruda and others, have a dialog. We're clearly all concerned with port security, homeland security, as Americans, not just as Commissioners here, and I think there is a connection between the increasing volume of trade and the decreasing ability to inspect our products. And I'd be happy to, with the things that I saw, have those people involved sit down with you so that we can hear firsthand together and talk to some of the other authorities that you referenced in your article: Customs, Coast Guard, et cetera. You heard Senator Boxer, and many others talk at great length about port security. Unlike the question of the Lincoln Tunnel, I'd rather stop it at the borders first. That's our highest priority. Certainly we have a domestic problem, whether it's Oklahoma City or many other things, but you're the point of first disembarkation for these containers, not just the shipping but also the air security. We'd like to help provide whatever assistance we can to get those people at the table with you and then to talk to the right authorities.

Mr. DINSMORE. Thank you.

Commissioner WESSEL. Thank you.

Cochair BECKER. I want to thank the panel, and I appreciate very much the others out there for agreeing to switch us around. I think we got you on schedule, haven't we, Mr. Dinsmore?

Mr. DINSMORE. You did. Thank you, Mr. Chairman.

Cochair BECKER. Thank you very much.

(Short recess.)

PANEL VI: FOREST PRODUCTS

Cochair BECKER. Well, I think we can call ourselves to order here.

The panels are getting smaller, and the audience matches it. So we ought to have a fine time here.

This is the forest products panel, a very important area for us, and I know it is for you. Mr. Dale Lovett, who is a representative of the PACE Union, International Union, and Dr. Ivan Eastin, who is the Acting Director and Professor at the Center for International Trade in Forest Products, University of Washington.

We'll start off with Mr. Lovett, and I appreciate very much you accommodating Mr. Dinsmore. We wouldn't have had him. He had a flight that he had to catch, so we wouldn't have been able to have the discussion that we had a little while ago if you hadn't helped us out. I appreciate it very much.

Mr. Lovett.

**STATEMENT OF CHARLES DALE LOVETT
SPECIAL PROJECTS COORDINATOR
PULP AND PAPERWORKERS RESOURCE COUNCIL (PPRC)
MEMBER AND REPRESENTATIVE
PAPER, ALLIED-INDUSTRIAL, CHEMICAL AND
ENERGY WORKERS INTERNATIONAL UNION (PACE),
WICKLIFFE, KENTUCKY**

Mr. LOVETT. Good afternoon. I want to thank the Commission for giving me the opportunity to testify here today, and I also want to go on record as thanking my President of my union, Mr. Boyd Young, for asking me to represent the Paper, Allied-Industrial, Chemical and Energy Workers International Union here today.

It is our hope that your work will lead to better trade policies for the United States and a better approach to trade with China.

Now, trade with China is a complex issue, but what makes it so difficult for those of us in the forest product industry is China's emerging economy and markets should represent a shining place for the U.S. to decrease our trade deficit with China, but it doesn't. You see, China doesn't have the forests to support their domestic demand for fiber-based product. Until recently their manufacturing facilities were small and inefficient and not able to meet environmental standards. And paper and wood product manufacturing is capital intensive, not labor intensive. So China shouldn't possess a natural advantage, but believe it or not, China is backing a domestic expansion of its forest product industry like never witnessed in history.

According to a report commissioned by the American Forest and Paper Association, China is subsidizing a massive expansion of its pulp, paper and wood manufacturing capacity. Government monies were granted to the tune of 1.67 billion U.S. dollars for renovation of 21 state-owned paper mills across China from 1998 to 2002.

China is also using its trade policy to bolster its forest product industry. In 1999 the government eliminated tariffs on raw materials to supplement their manufacturers' need for fiber. Evidence even exists that logs and chips are being smuggled into the Mainland. We are now exporting 28 percent of our supply of recycled paper, with over half of those exports going to China. Maintaining tariffs on the importation of finished goods and eliminating them on raw materials is a simple way to import the jobs that manufacturing supports.

The Chinese also has provided tariff exemptions on the import of high-grade paper machinery to support its industry. Meanwhile,

China has maintained the tariffs on imported value-added wood and paper products. I'll say this much, China seems to have this game figured out. If they can continue to play the trade game their way long enough, they'll put many global producers out of business and increase their market share.

And I want to share a personal story here with you, to sort of make this point. Back this past summer, my friend and coworker, Max Webb, went to Germany to receive maintenance training from a supplier who was fabricating a new calendar stack for the paper machine at our mill. And while he was there he noticed several other state-of-the-art machines being prepared for shipment. And when Max asked the supplier where the new equipment would be installed, he was told every one being prepared at that facility with the exception of ours was headed to China.

The equipment's going to China, the raw material is going to China, and the living wage job that supports our communities, our families and our nation are vanishing into thin air. Since the year 2000 over 40,000 of my union's jobs in the paper industry have been lost. I have brothers and sisters from all over the United States who are out of a job, and these families are hurting. And you multiply that 40,000 by the average 3.2 family members supported by those jobs, and you can begin to get an idea of the devastation not only to individual families but also to entire communities.

We know that China has a systematic plan in place to radically expand its forest product industry with government funding and policy intervention. Manipulation of currency valuations, protectionism and failure to honor commitments made for membership into the WTO all make for an uneven playing field in the global economy. This isn't free trade and this isn't fair trade, and if adjustments aren't made to offset the unfair practices implemented by the Chinese government, our employers cannot hope to compete in the global economy for the long haul.

As an advocate for my industry and my union, I can testify that the constant story of job losses here in the U.S. In just the six-month period from July through December 2003 my industry announced some 8,150 jobs would be eliminated.

Now, let me make it clear, all these job losses were not due to a single cause, such as trade with China, but let me also make it clear that it's extremely hard to attract investment capital for our industry when it is common knowledge throughout the industry and Wall Street that China is coming online with a forest product manufacturing base that will be hard to deal with in the very near future. And when we have to account for the added pressures placed on America's manufacturing with annual double-digit inflation for healthcare costs, unstable and rising energy prices, fiber costs are escalating, and an unfavorable tax system that discourages investment in long-term business ventures such as timber production.

While we can only do so much in changing how China conducts itself, we can change how we conduct ourselves, and without meeting the challenge that exists concerning trade with China head on, we face the clear and present danger of going out of business.

Now, I'd like to offer some commonsense ideas that are just the ideas of a working stiff from heartland America. We need aggressive enforcement of our trade laws. We need to work to curb illegal logging and other environmentally unsound practices that create unfair trade advantages and severely damage the countries where they take place. We need enlightened and targeted tax policies, giving credit for investment and domestic manufacturing, and take away the tax advantages for employers that locate or relocate overseas. We need a systematic review of all existing trade agreements in order to ensure they be enforced in a way that raises standards for all instead of promoting a race to the bottom. We need for future trade agreements to treat labor, social and environmental issues as fundamental to the terms of trade and not as afterthoughts.

And I am afraid that if we do not do at least these things the U.S. will be in danger of losing a great deal more of our manufacturing base, and as families lose their livelihoods, their homes and their purchasing power, our employers are in danger of losing their customer base, and I don't think we can afford to let this happen.

Thank you.

[The statement follows:]

**Prepared Statement of Charles Dale Lovett, Special Projects Coordinator
Pulp and Paperworkers Resource Council (PPRC)
Member and Representative, Paper, Allied-Industrial, Chemical and
Energy Workers International Union (PACE), Wickliffe, Kentucky**

Good afternoon. My name is Dale Lovett. I want to thank the Commission for giving me the opportunity to testify today, and for carrying out this series of hearings. It is my hope your work will lead to better trade policies for the United States and a better approach to trade with China.

I work in a paper mill owned by the MeadWestvaco Corporation in Wickliffe, Kentucky. I have lived there all my life and worked at the mill for the last 20 years.

In addition I am a long-term member, and former union officer of Local 5-680 of the Paper, Allied-Industrial, Chemical and Energy Workers International Union, or PACE. For many years I have been an advocate for my fellow workers, both on the shop floor and in the world at large by serving as a Special Projects Coordinator for the Pulp and Paperworkers Resource Council. I'm an advocate for the jobs of our members, and have been active in particular on issues concerning the regulations under which our pulp and paper mills operate in the United States, and on issues of international trade that affect our members.

Even though I have been active on the issues, I don't consider myself to be any kind of technical expert on these subjects. Instead I am a worker who tries to preserve my community and the jobs of my fellow workers. I can tell you a lot about how to maintain and operate a paper machine, and I can tell you a lot about the human cost of trade policies that in my opinion steal the market share of American manufacturers and the living wage jobs American workers need to support their families.

As you know my primary mission today is to tell you what I know about the effects of unfair trade with China on the paper industry in the Northwest and throughout the country.

Trade with China is a complex issue. But what makes it so difficult for those of us in the forest product industry, is China's emerging economy and market should represent a shining place for the U.S. to decrease our trade deficit with China but it doesn't.

You see, China doesn't have the forests to support their domestic demand for fiber based products. Their manufacturing facilities were small and inefficient and not able to meet environmental standards. Paper and wood products manufacturing are capital intensive—not labor intensive—so China shouldn't possess a natural advantage in the paper and wood sectors. But believe it or not, China is backing a domestic expansion of its' forest products industry like never witnessed in history.

According to a report commissioned by the American Forest and Paper Association, China is subsidizing a massive expansion of its pulp, paper and wood processing manufacturing capacity. Government monies were granted to the tune of \$1.67 billion (USD) for renovation of 21 state owned paper mills across China from 1998–2002.

China is also using its trade policy to bolster its forest product industry. In 1999, the government eliminated tariffs on raw materials to supplement their manufacturers need due to the insufficient domestic fiber supply. Evidence even exists that logs and chips are being smuggled into the Mainland. So, we are now exporting 28 percent of our supply of recycled paper with over half of those exports going to China and other nations in the Far East. China is the largest importer of logs in the world and the second largest producer of plywood. Maintaining tariffs on the importation of finished goods and eliminating them on raw materials is a simple way to import the jobs that manufacturing supports.

U.S. exports to China of paper and paperboard reached \$414 million in 2003, up from \$311 million in 2001, in contrast, U.S. paper and paperboard imports from China jumped from \$636.4 million in 2001 to over \$1 billion last year.

The Chinese government also provided tariff exemptions on the import of high-grade paper machinery to support its industry. Meanwhile, China has maintained the tariffs on imported value-added wood and paper products. I'll say this much, China seems to have this game figured out. If they can continue to play the trade game their way long enough, they'll put all other global producers out of business and have the entire market to themselves.

The equipment is going to China, the raw material is going to China and the living wage jobs that support our communities, our families and our nation are vanishing into thin air. Since the year 2000 over 40,000 of my union's jobs in the paper industry have been lost. I have brothers and sisters from all over the United States who are out of a job, and whose families have been badly hurt by the loss of their livelihood. Multiply 40,000 by the 3.2 average family members supported by these jobs and you can begin to get an idea of the devastation, not only to individual families, but to entire communities.

The State of Washington alone has lost over 20 percent of its manufacturing jobs between 2001 and 2004 and half of those were due to unfair trade, according to statistics compiled by the AFL–CIO. At least 3,000 of those job losses in this state were in the sectors with which I am most familiar, namely wood and paper.

Even though trade is not the only reason the paper industry in the Northwest has declined since the late 1980's it is one of the largest. From the sawmills that were shut down so companies could export raw logs to Asia, to the aging paper mills that can no longer keep pace with state-of-the-art equipment being installed in Asia, where workers are paid less than 50 cents per hour, where companies are massively subsidized by their respective governments, and where much of the raw material for the mills is secured by illegal and environmentally unsound logging practices. Even if our employers here at home could be persuaded to modernize our mills and plants, it is not clear how we could compete successfully against such unfair conditions.

We know that China has a systematic plan in place to radically expand its forest product industry with government funding and policy intervention. Manipulation of currency valuations, protectionism and failure to honor commitments made for membership into the World Trade Organization all make for an uneven playing field in the global economy. This isn't free trade or fair trade, and if adjustments aren't made to offset or adjust for the unfair practices implemented by the Chinese government our employers cannot hope to compete in the global economy for the long haul.

Now, I have not been to China, so I cannot testify personally to the abuses that go on there. But, what I do know is this year my union and several PACE employers working together won an anti-dumping order against China for selling tissue and crepe paper in the United States below the cost of manufacture and shipping. And I also know that in the last 5–6 years China has used anti-dumping investigations to protect its producers. The most current investigation concerns unbleached Kraft linerboard. That's the paper that boxes are made of. Because if it's one thing a manufacturing nation needs it's boxes. Boxes to package its products in, to ship them abroad.

As an advocate for my industry, I can testify to the constant story of job loss here in the United States. (See attached map.)

The following list represents most of the job losses in the pulp and paper industry in just a 6 month period from July through December 2003. A period referred to as Black 2003 when my industry announced some 8,150 jobs would be eliminated.

MeadWestvaco / Corporation Wide / 1,000 jobs (3.3% of it's workforce)
 Abitibi-Consolidated / Lufkin & Sheldon, TX / 1,220 jobs
 Carustar / Austell, GA / 50 jobs
 Weyerhaeuser / Lonview, WA / 119 jobs
 SAPPI / Westbrook, ME / 170 jobs
 Georgia Pacific / Camas, WA / 60 jobs
 Sonoco / Atlanta, GA / 83 jobs
 Smurfit-Stone / Jacksonville, FL and Thunder Bay, ONT / 1,400 jobs
 International Paper / Corporation Wide / 3,000 jobs
 Glatfelter / Neenah, WI / 200 jobs
 Stora Enso / North American Workforce / 700 jobs
 And the list goes on

Now let me make it clear, these job losses were not due to a single cause such as trade with China. But let me also make it clear that it is extremely hard to attract investment capital for our domestic pulp and paper facilities when it is common knowledge throughout our industry and Wall Street that China is coming on-line with a forest product manufacturing base that will be hard to deal with in the very near future. Especially when we have to account for the added pressures placed on Americas manufacturers with the annual double-digit inflation for health care costs, unstable and rising energy prices as we pay more for natural gas than any other nation in the world. Fiber costs are escalating as 80% of the fiber once secured from public lands has been made unavailable and an unfavorable tax system discourages investment into long term business ventures such as timber production. And last but not least the noncompetitive cost of meeting compliance to the array of Federal and state guidelines concerning the water and air permitting process.

It is important that we understand, America makes its products under the highest environmental standards in the entire world. No nation commits the resources to overseeing and enforcing the environmental standards our producers meet as a part of doing business. But, high environmental standards come at a price and this is not the case in China or any other developing nation that enters the forest product business. Now let me say, as a working stiff, I want, no I demand clean air, clean water and healthy forests but unless we as a nation begin to work together at the national, state and local levels to achieve maximum benefit in these areas without driving up the cost regardless of the benefit, then we are only playing into competing nations hands. While we can only do so much in changing how China conducts itself, we can change how we conduct ourselves and without meeting the challenge that exists concerning trade with China head on, we face the clear and present danger of going out of business.

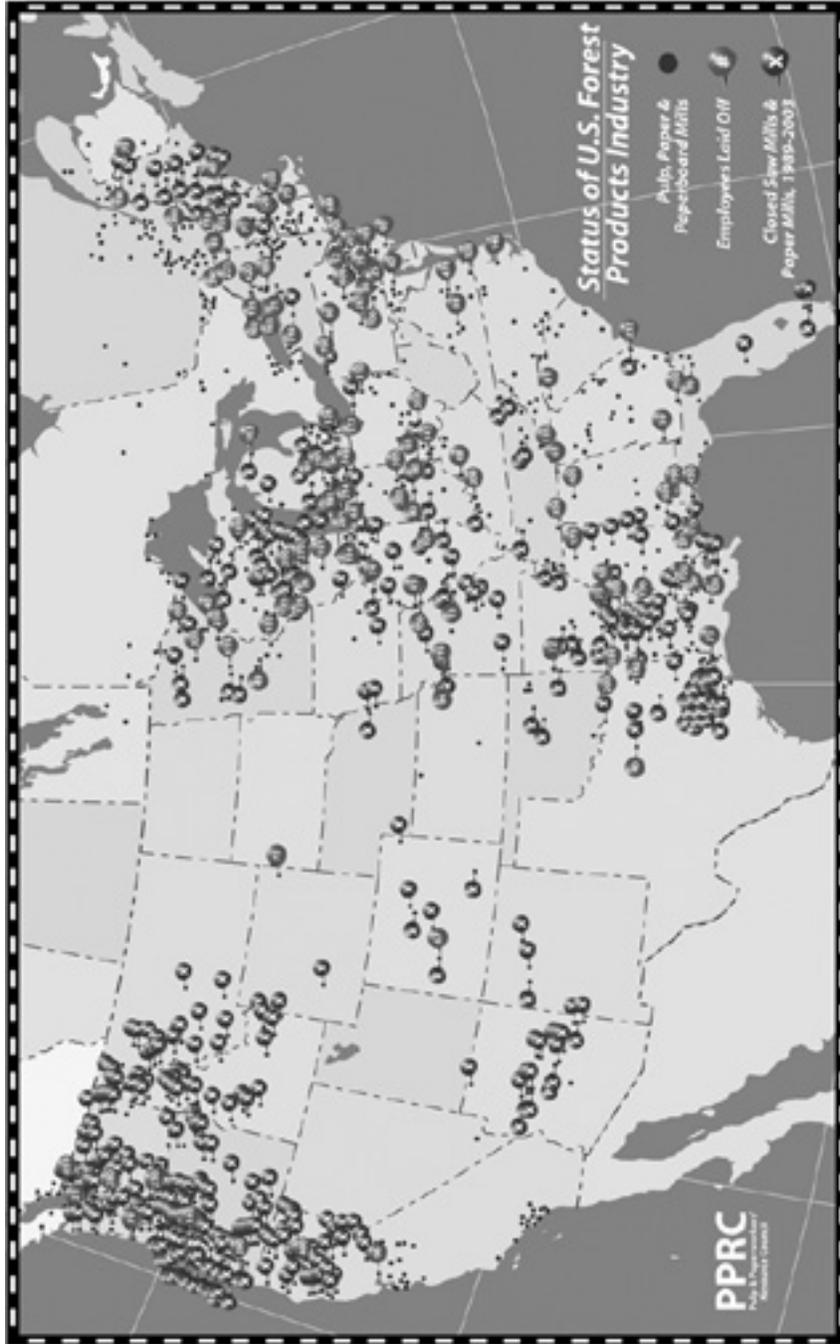
Now I would like to offer some commonsense ideas that are just the ideas of a working person from heartland America. We need aggressive enforcement of our trade laws. We need to work to curb illegal logging and other environmentally unsound practices that create an unfair trade advantage and severely damage the countries where they take place. We need enlightened and targeted tax policies giving credit for investment in domestic manufacturing, and taking away tax advantages for employers that locate or relocate overseas. We need a systematic review of all existing trade agreements in order to ensure they be enforced in a way that raises standards for all instead of promoting a race to the bottom. We need for future trade agreements to treat labor, social and environmental issues as fundamental to the terms of trade, and not as afterthoughts.

I am afraid if we do not do at least these things, the United States will be in danger of losing a great deal more of our manufacturing base, and as families lose their livelihoods, their homes and their purchasing power our employers are in danger of losing their customer base. I don't believe we can afford to let this happen.

Let me close by sharing with you a story about a friend of mine in the mill where I work. I think it should summarize everything I've mentioned here today.

Back in the summer, my friend and co-worker, Max Webb went to Germany to receive maintenance training from a supplier who was fabricating a new calendar stack for the paper machine at our mill. While he was there, he noticed several other state-of-the-art machines being prepared for shipment. When Max asked the supplier where the new equipment would be installed, he was told every one being prepared at the facility, with the exception of ours, was headed to China.

Thank you.



Cochair BECKER. Dr. Ivan Eastin.

**STATEMENT OF IVAN EASTIN, PROFESSOR AND ACTING DIRECTOR
CENTER FOR INTERNATIONAL TRADE
IN FOREST PRODUCTS (CINTRAFOR)
COLLEGE OF FOREST RESOURCES
UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON**

Dr. EASTIN. Well, it's just me between you and dinner and a nice glass of wine, so I'll try and be brief. I'd like to thank this Commission for inviting me to present my views on China's impact on the forest products industry in the Pacific Northwest. My name is Dr. Ivan Eastin. I'm the Acting Director of CINTRA FOR and the College of Forest Resources at the University of Washington.

By the way, the forest product industry is an important component of the regional economy in the Pacific Northwest, providing more than 100,000 family wage jobs in 2003, many of which were located in rural timber-dependent communities, while exports of forest products from the state of Washington exceeded 1.3 billion, ranking No. 4 in the state.

I'd like to focus my comments on just a few important factors that, taken together, represent a significant competitive threat to the forest products exporters in the Pacific Northwest. The first factor relates to Chinese imports of illegally harvested and illegally sourced timber. Our own research and a recent report commissioned by the American Forest and Paper Association has estimated that illegal log and lumber imports into China exceeded 8 million and 1.4 million cubic meters, respectively. Chinese imports of illegally harvested logs and illegally sourced timber contribute to widespread environmental devastation in supply countries, and this is ironic given China's experience with environmental devastation caused by over harvesting and their subsequent ban on timber harvesting in China. It undermines global efforts to promote sustainable forest management practices, it undermines the credibility of the international trade of legally sourced timber, and if consumers are concerned about the legitimacy of wood products they may well move to less environmentally sensitive substitute materials.

Imports of illegal timber represents a huge indirect subsidy to Chinese wood processors and exporters, displaces higher-cost legally sourced wood products from the market, causes an estimated five percent reduction in wood prices within China, and the lost exports to U.S. industry in 2005 are estimated to be 182 million, and over 10 years are estimated to be about \$4.6 billion. Reducing or eliminating the importation of illegally harvested or sourced logs and lumber in China would have a strong positive impact on U.S. exports of wood products to China. For example, it's estimated that the volume of illegally harvested logs imported from Russia alone totaled almost 5 million cubic meters in 2003.

My second topic of discussion is building code restrictions. While the U.S. has been successful in working with China to gain approval of U.S. design values and grading rules in the newly released Chinese design code and construction code for wood-frame construction, neither code requires structural wood product quality conformance, such as grade stamps for dimension lumber and structural panels. This disadvantages U.S. wood structural products and jeopardizes the structural performance of wood-frame

homes in China. For example, we're looking at earthquake resistance and longevity of wooden homes.

Incidentally, we just recently had a group of Chinese builders come through the state of Washington, and they were extremely surprised to see that wood-frame housing can last in very good condition for 80, 90 and a hundred years. This is very contrary to their experience in China.

Given the high cost and relatively restricted market for single-family detached homes in China at this stage of their economic development, successfully gaining regulatory approval for wood-frame construction in the much larger multifamily multistory segment of the residential construction market as well as the commercial building sector would greatly expand opportunities for U.S. wood products.

The third topic is counterfeit grade stamps. Counterfeiting of U.S. lumber and structural panel grade stamps represents a potential problem for public safety and could undermine efforts to expand the use of wood-frame construction technology in China. Counterfeiting of U.S. grade stamps on structural lumber and panel products used in China has been observed by industry association representatives. In addition, domestic Chinese timber species are being mislabeled and substituted for U.S. species.

Getting back to the example you saw earlier with the gauge with the CE mark on it, when counterfeit grade stamps were found on products exported from China into Europe, the explanation presented by the Chinese was that this was not a grade stamp, CE simply means Chinese export.

Failure of structures built using wood-frame construction technologies due to use of counterfeit materials will undermine the entire U.S. effort to promote wood-frame construction technology in China, especially given that it's a new technology in China and China does not have a history of building with wood.

Finally, let me address the topic of direct and indirect subsidies to Chinese wood product manufacturers. Subsidization of loans essentially builds excess capacity in sectors where the Chinese might not have an existing competitive advantage. Particular sectors' specific concerns include below-market interest rates, loan interest subsidies, and unusually long payback periods. The PNW forest products industry is concerned that subsidies will lead to the development of excess production capacity in the wood door, molding and millwork and plywood sectors. This expansion will eventually threaten the strength of U.S. firms in these sectors, both in the traditional U.S. market as well as the export market.

For example, Home Depot is currently sourcing pre-hung doors out of Dalian for import into the U.S. market. There is a particular concern with plywood production where capital requirements are substantial and the return on investment from servicing the domestic Chinese market may not currently justify the initial investment. The plywood industry relies on imported raw materials many of which are illegally harvested and illegally sourced. This below-price material, in conjunction with public sector subsidies and an undervalued currency, provides Chinese exporters with an overwhelming price advantage in export markets, displacing U.S. product.

A similar phenomenon of rapidly expanding plywood exports was observed in Japan during the '60s and South Korea during the '70s. The plywood export booms from both countries were fueled by imports of low-price logs rather than any inherent competitive advantage. Subsequent cutbacks on log supply led to immediate and sharp decline from plywood exports, but not before substantial damage had been done to the U.S. plywood industry.

Today the same sequence of events is occurring in China. We saw plywood exports jump from 500,000 cubic meters in 1999 to 2.2 million cubic meters last year.

In conclusion, while forest products manufacturers in the Pacific Northwest recognize the strong potential for market development in China, they're very concerned about the issues I have discussed and the potential impact on the competitiveness of U.S. forest products both at home and in the Chinese market. Resolving these issues will go a long way towards leveling the playing field and restoring the competitive position of U.S. and PNW wood products and global trade.

Thank you very much.
[The statement follows:]

**Prepared Statement of Ivan Eastin, Professor and Acting Director
Center for International Trade in Forest Products (CINTRAFOR)
College of Forest Resources, University of Washington, Seattle, Washington**

China's Impact on the Forest Products Industry in the Pacific Northwest

My name is Dr. Ivan Eastin and I am a professor of forest products marketing and the Acting Director of the Center for International Trade in Forest Products (CINTRAFOR) in the College of Forest Resources at the University of Washington. I very much appreciate this opportunity to present my views of the impact of China (as both a market and a competitor) on the forest products industry in the Pacific Northwest.

The forest products industry is an important component of the regional economy in the Pacific Northwest (comprised of Washington, Oregon, Idaho and Montana), providing more than 100,000 jobs in 2003, many of which are located in rural, timber dependent communities. Forest products are a major component of the export mix in the Pacific Northwest. For example, exports of forest products from the state of Washington exceeded \$1.3 billion in 2002 and were the third largest export commodity behind aircraft and industrial machinery. While regional exports of forest products to China represent just 6.6% of total PNW forest products exports, they have been growing faster than the overall average (increasing by 12.8% over the first three quarters of 2004).

Over the past five years, exports of wood products from the PNW to China have increased substantially, making China our third largest export market in 2003. Wood products exports from the PNW to China exceeded \$80 million in 2003. Over half of PNW wood exports to China were lumber (two-thirds of which was hardwood lumber) with the remainder being primarily logs and veneer. Taken together, these three products comprised almost 90% of wood product exports to China in 2003. A summary of U.S. and PNW trade of forest products with China is provided in Tables 1-5.

Clearly the Chinese market is of growing importance to the forest products industry in the Pacific Northwest. However, forest products exporters in the PNW, already adversely impacted by a wide variety of factors and constraints in China that erode the competitiveness of their products in China, must now contend with rapidly increasing Chinese exports of wood products (many of which receive direct and/or indirect subsidies) in the domestic U.S. market. It is this dual impact of the Chinese trade relationship that fuels charges of unfair trade practices against the Chinese. The factors that have had the greatest competitive impact on the PNW forest products industry include: the undervalued yuan, the importation of illegally harvested and illegally sourced logs and timber into China, the unequal application of the value-added tax and import tariffs, building code restrictions, counterfeiting of U.S. lumber and plywood structural grade stamps, the requirement of in-country testing

for product standard conformity, and public sector subsidies to Chinese forest products manufacturers. Taken together, these factors impose a significant competitive burden on forest products exporters in the PNW. Please allow me to briefly outline each of these factors.

1. An Undervalued Yuan

There is wide recognition and agreement within the international financial community that the Chinese yuan, which is officially pegged to the U.S. dollar, is highly undervalued, with some estimates suggesting that the yuan is undervalued by as much as 40%. The undervalued yuan provides a tremendous competitive advantage for Chinese goods exported to the U.S. market where Chinese firms reap the dual benefits of lower labor and manufacturing costs and an undervalued currency, the combination of which puts extreme downward pressure on product prices in the U.S. While this may provide a short-term benefit to U.S. consumers, the longer-term negative impact results in a loss of domestic manufacturing capacity and jobs. In either case, the undervalued yuan represents an indirect subsidy to Chinese manufacturers and exporters, providing them with an unfair competitive advantage over U.S. firms and products. It is imperative that the U.S. work with the Chinese government to achieve a revaluation of the yuan, either by maintaining the current linkage to the U.S. dollar and expanding the range within which the yuan fluctuates relative to the U.S. dollar or by transitioning towards a linkage to a currency basket system. However, there should be no misunderstanding of the fact that the undervalued yuan represents a massive competitive threat, especially when combined with significantly lower labor costs and a relaxed regulatory environment. For example, in 1999 China was a net importer of approximately 1.6 million cubic meters of plywood while in 2003 it had become a net exporter of approximately 1.7 million cubic meters, displacing U.S. plywood exports from South Korea, Japan and the UK.

2. Imports of Illegally Harvested and Illegally Sourced Timber

Chinese imports of illegally harvested logs and illegally sourced timber undermine global efforts to promote sustainable forest management and public acceptance of the international trade of legally harvested and traded wood while representing a huge indirect subsidy to domestic Chinese wood products manufacturers. Not only do these raw materials have significantly lower prices than legally sourced products, but they also often evade Chinese value-added tax and import tariffs levied against legally sourced materials. The magnitude of this problem is substantial since China is dependent on imported wood fiber from Russia and Southeast Asia to fuel the exploding capacity of its wood products manufacturing industries. (For example, China is now the largest plywood manufacturer in the world). Some environmental groups are estimating that illegal logging is responsible for approximately 40% of the timber harvest in Russia and as much as 80% of the timber harvest in Indonesia. In addition, flows of illegally harvested logs and timber often pass through intermediate countries before reaching China. Recent research by CINTRAFOR has clearly demonstrated large disparities in the bi-national trade statistics between the value of logs and lumber imported by China from Malaysia, Indonesia and Russia (Table 3); an indication that there are significant irregularities in the timber trade between these countries. In addition, Chinese imports of logs and timber from west and central Africa, where illegal logging is a huge problem, have increased rapidly over the past several years. Our own research and a recent report commissioned by the American Forest and Paper Association has estimated that illegal log and lumber imports into China exceeded 8 million and 1.4 million cubic meters, respectively. The current influx of illegal materials is estimated to depress domestic timber prices in China by approximately 5%. In addition, lost exports to U.S. industry in 2005 have been estimated to be \$182 million (logs: \$82 million, lumber: \$24 million, and plywood: \$76 million). Reducing or eliminating the importation of illegally harvested or sourced logs and lumber into China would have a strong positive impact on U.S. exports of wood products to China.

3. Inconsistent Application of the Value-Added Tax (VAT) and Import Tariffs

The inconsistent application of import tariffs and the valued-added tax represents another competitive burden to forest products exporters in the PNW. In many cases, U.S. exporters have had their products misclassified under the harmonized system resulting in the imposition of abnormally high import tariffs. In addition, there have been numerous reports of reduced levels of VAT being applied to logs and timber imported from Russia. In many cases, either no VAT is being applied or, as is more often the case, only half of the official VAT (which is 17% for processed timber and 13% for logs) is applied. Clearly this practice severely disadvantages U.S. logs and lumber and limits our competitiveness in the Chinese market.

4. Building Code Restrictions

Another factor affecting the market for U.S. wood products is related to building code restrictions that exclude the use of wood frame construction (WFC) for multi-family, multi-floor residential housing as well as commercial buildings. Past experience in gaining building code approval for WFC in single family residences clearly shows that the Chinese are willing to cooperate with U.S. industry and trade associations in this arena. While efforts continue in gaining building code approval for WFC in multi-family, multi-story as well as commercial construction, it is important that this topic remain a high priority for both U.S. trade negotiators and the U.S. forest products industry. Given the high cost and relatively restricted market for single family detached homes in China at this stage of their economic development, successfully gaining regulatory approval for wood frame construction in the much larger multi-family, multi-story segment of the residential construction market as well as the commercial building sector would provide tremendous opportunities for U.S. wooden building materials in the near term.

While the U.S. has been successful in working with China to gain approval of U.S. design values and grading rules into the newly released GB50005–2003 (design code) and GB50206–2002 (construction code), neither code requires materials quality conformance, such as grade-stamps for dimension lumber and structural panels. This disadvantages U.S. structural wood products and jeopardizes the structural performance of WF homes. This deficiency could potentially result in performance problems in wood frame buildings (e.g., earthquake performance and longevity). For example, in some cases, Chinese builders are using non-structural plywood in structural end-use applications (such as exterior wall sheathing, sub-flooring or sub-roofing). While some progress has been made in this area, more work is needed to ensure Chinese builders, architects, inspectors and consumers can readily determine that the quality of structural building materials being used matches that specified by architects and engineers.

5. Counterfeit Grade Stamps

Counterfeiting of U.S. lumber and structural panel grade stamps represents a huge potential problem both from a public safety perspective as well as from its potential to undermine U.S. efforts to expand the use of wood frame construction technology and U.S. structural building materials within the residential and commercial construction industries in China. Recent visits to China by representatives of U.S. lumber and panel grading agencies have clearly demonstrated the counterfeiting of U.S. grade stamps on structural lumber and panel products used in China. While structural wood materials bearing counterfeit U.S. grade stamps have not been found outside of China, plywood products manufactured in China and bearing counterfeit European CE grade stamps have been reported in Europe. In addition, it has been reported that lower value domestic Chinese wood species are being mislabeled and substituted for higher value U.S. wood species. Failure of WFC due to use of counterfeit materials could undermine the entire U.S. effort to promote WFC technology in China, especially since this is a new building technology in China and Chinese builders do not have a history of building with wood.

6. Mutual Recognition of Performance Standards

Another issue is related to the topics of standard conformity assessment, labeling for structural wood products as well as the issue of mutual recognition of product test results from internationally accredited laboratory facilities in the U.S. Currently the lack of Chinese structural wood product labeling standards has effectively restricted U.S. structural plywood entry into the Chinese market. For example, U.S. structural plywood and OSB can currently meet the structural performance requirements of the Chinese standard for light frame construction but there is no Chinese labeling program available for identifying this conformity. Ideally the U.S. industry would prefer to label the product in conformity with Chinese standards at the time of manufacture. Unfortunately, mutual recognition agreements do not exist recognizing U.S. and Chinese accredited testing facilities. As a result, test results generated in the U.S. cannot be utilized for product approval and labeling of material bound for China.

Current practices in China require that structural products receive approval at the municipal level, meaning that testing of imported products for conformity to Chinese product standards must be performed in China and new testing must be undertaken in each municipality where the product is used. This is both time consuming and expensive for both the U.S. manufacturer as well as the Chinese customer, further reducing the competitiveness of U.S. structural wood products in China.

7. Direct and Indirect Subsidies to Wood Products Manufacturers

Subsidization of loans essentially builds capacity in sectors where the Chinese might not have an existing competitive advantage. Types of subsidization which have been noted in the wood sector include below-market interest rates, loan interest subsidies, and unusually long payback periods. The PNW industry is concerned that these subsidies will lead to the development of excess production capacity in the wooden door, moulding and millwork and plywood sectors which will eventually threaten the strength of PNW firms in these sectors (both in their traditional U.S. markets and in export markets).

Overexpansion of production capacity is a concern with the domestic plywood industry where capital requirements are substantial and the return on investment from servicing the domestic market may not currently justify the initial investment. The vast majority of the plywood industry relies on imported raw materials, much of which appears to be illegally harvested or illegally sourced. This below market price material, in conjunction with public sector subsidies and an undervalued currency, provides exporters with an overwhelming price advantage in export markets. This same phenomenon of rapidly expanding plywood exports was observed with Japan during the 1960s and Korea during the 1970s (Figure 1). In both cases the plywood export booms that resulted were fueled by imports of low priced logs rather than by any inherent competitive advantage within the plywood industry. In fact, cutbacks in log exports to both Japan and Korea led to immediate and sharp declines in plywood exports, but not before substantial damage had been wreaked upon the U.S. plywood manufacturing industry. Today we can observe the same sequence of events occurring in China where plywood exports are not the result of any inherent competitive advantage, but rather an artificial advantage resulting from low cost raw material supplies, public subsidies and an undervalued currency. As a result, Chinese plywood exports are experiencing rapid growth (increasing from 500,000 m³ in 1999 to 2.2 million m³ in 2003) and are displacing U.S. plywood exports from their traditional markets.

There is also concern that China's value-added wood products industry is in the process of adding production capacity and upgrading its quality capabilities. While concern currently is focused on the wooden door manufacturing sector, similar developments in the wood flooring and moulding and millwork sectors could eventually threaten PNW strength in this area. While Chinese wooden door production is primarily for domestic consumption, Japanese JAS approved factories in Dalian are improving their quality control and increasing their production capacity. Eventually this will impact U.S. wood door manufacturers; already Home Depot is sourcing prehung doors out of Dalian. Exports of wooden doors from China have increased very quickly (Table 4) and it is expected that, in the absence of constraining action, jobs within the PNW wooden door industry (including Buffelen, Simpson, Nord, Jeld-Wen, and others), traditionally our strength, could well be displaced.

In conclusion, while forest products manufacturers in the PNW recognize the strong potential for market development in China, they are very concerned about the issues I have discussed and their potential impact on the competitiveness of U.S. forest products both at home and in the Chinese market. Resolving these issues will go a long way to leveling the playing field and restoring the competitive position of U.S. and PNW wood products in global trade.

Thank you very much and I appreciate the opportunity to share my views with the Commission.

Table 1. PNW Forest Products Exports, 1999–2003 (\$US1,000).

	1999	2000	2001	2002	2003
Japan	1,217,930	1,168,443	849,839	673,325	636,453
Canada	222,984	244,987	208,214	210,578	240,761
Korea	92,968	93,740	67,557	84,524	88,110
China	24,172	38,802	60,292	81,935	80,707
Italy	44,635	45,733	35,085	28,222	29,065
Hong Kong	23,009	21,883	16,948	22,083	22,540
Taiwan	28,607	33,476	25,953	24,440	22,325

Table 2. PNW Exports of Wood Products to China, 1999–2003 (\$US1,000).

	1999	2000	2001	2002	2003
Logs	2,946	8,301	18,677	18,433	8,333
Lumber	13,391	22,619	34,244	45,194	50,897
Moulding/Millwork	0	0	10	1,250	4,771
Builders Joinery	821	463	566	1,560	2,022
Plywood	230	574	627	190	912
Particleboard	1,043	979	1,374	3,049	2,101
Fiberboard	973	671	515	843	1,288
Veneer	2,124	3,414	3,610	8,294	5,985
Total	24,172	38,802	60,292	81,935	80,707

Table 3. PNW Imports of Wood Products from China, 1999–2003 (\$US1,000).

	1999	2000	2001	2002	2003
Logs	38	62	1 51	1 28	46
Lumber	20	52	221	298	580
Moulding/Millwork	7,493	6,111	9,150	18,212	28,712
Builders Joinery	201	1,969	2,003	1,942	3,242
Plywood	3,153	3,922	6,258	14,699	21,624
Particleboard	0	0	2	197	27
Fiberboard	0	0	11	49	452
Veneer	1,687	2,859	2,522	3,085	5,298
Total	12,592	14,975	20,218	38,510	59,981

Table 4. Chinese Imports of Selected Wood Products from the U.S., 1999–2003 (\$US1,000).

Product	1999	2000	2001	2002	2003	Change 03–04*
Logs	8,747	19,124	43,181	62,992	62,613	+89.3%
SW Lumber	1,213	2,332	14,137	21,091	20,119	+47.4%
HW Lumber	29,898	53,991	59,675	84,475	109,270	+40.6%
Plywood	568	846	879	425	2,081	+97.4%
Mouldings	980	262	122	3,935	10,956	–72.7%
Doors	194	259	260	818	1,881	+10.9%
Windows	352	124	51	97	741	+222.5%
Builders Joinery	1,726	1,318	1,299	157	76	+3,781.2%

*Percentage increase in imports over the first 9 months of 2004 compared to the same period in 2003.

Table 5. Chinese Exports of Selected Wood Products to the U.S., 1999–2003 (\$US1,000).

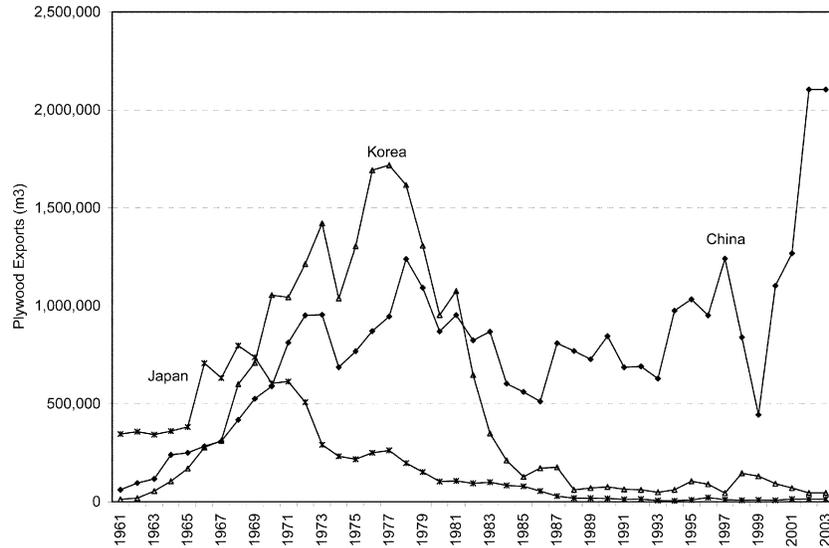
Product	1999	2000	2001	2002	2003	Change 03–04*
HW Plywood	22,479	26,952	40,772	97,234	155,206	+161.3%
SW Plywood	32	94	1,676	1,270	2,785	+254.2%
HW Lumber	2,264	2,590	718	1,193	1,981	+78.8%
HW Mouldings	17,017	37,788	45,956	63,501	104,840	+87.7%
SW Mouldings	10,479	1,740	4,642	9,198	16,428	+59.6%
Doors	1,065	1,616	3,013	7,617	12,989	+127.7%
Builders Joinery	15,106	25,121	28,599	36,901	48,395	+94.5%

*Percentage increase in imports over the first 9 months of 2004 compared to the same period in 2003.

Table 6. Disparities in Trade Statistics for Logs, 2001–2003 (\$US).

	2001	2002	2003
Indonesia			
<i>Exports reported by Indonesia</i>	21,514,398	4,469,826	162,472
<i>Imports reported by China</i>	170,981,909	36,750,818	15,541,395
Malaysia			
<i>Exports reported by Malaysia</i>	81,059,233	96,338,003	110,637,028
<i>Imports reported by China</i>	152,653,245	243,088,657	396,059,595
Russia			
<i>Exports reported by Russia</i>	541,642,703	735,941,000	718,868,188
<i>Imports reported by China</i>	551,826,115	975,270,140	969,024,232

Figure 1. Volume of Plywood Exports From Japan, Korea and China, 1961-2003.



Panel VI: Discussion, Questions and Answers

Cochair BECKER. Thank you for your testimony, both of you.
Commissioner Wessel?

Commissioner WESSEL. Thank you both for being here.

These are startling facts, and that presentation of what has happened to the industry is of tremendous concern.

I did note in the paper earlier this week—and Mr. Becker is the former president of the steel workers union—that your union and the steel workers are about to engage potentially in a strategic alliance. I think that that could maybe enhance the ability to win some of these trade cases, because you're up against quite a bit. So I hope that moves forward and is a positive enterprise.

Let me understand something about the industry and what's going on, and two facts, if you can just comment on them. You may have sat through the last panel and heard me talk about going to the port yesterday. We were told that one of the major exports from this port, and I understand from other ports, is waste paper. Why?

Couldn't that be a product that if we were using again recycling and building it and producing in value-enhanced products, that we would want to export the value-enhanced product rather than the waste paper? How is it being used by the Chinese? Where does it fit in the whole transaction?

Either witness.

Mr. LOVETT. Well, it's my understanding that the Chinese are desperate for fiber to run their revamped machines, and that's why they import the raw materials. I think it would be great if we could use those raw materials here in America. That if we did create, say, newsprint, for example, out of the old newsprint or making liner board to create boxes with—that's what a lot of your waste

paper is used for in China, because a country that's manufacturing lots of products has to have even more boxes, because everything's got to be shipped in a box. So they're using that as a cheap source of fiber to supplement their materials and their liner board making and what have you.

And I don't know how many of you have ever bought something that come from China, like Christmas decorations or something. They come in such a low-quality box that the box is probably folded up on the corner where there's been some weight on it, and that's what you're seeing that raw material go to.

Commissioner WESSEL. There is, as I understand it, a WTO prohibition on taxing exports of raw materials, which is one of the problems we have. Yet as I understand it, China is doing just that with coking coal, if I remember, and we decided to ask some questions of them rather than try and bring them up. Do you know anything about that?

Dr. EASTIN. I don't.

Mr. LOVETT. I've read that a lot of countries have an export tax, and it's a disincentive to export their raw materials. They understand the relationship—you need raw materials to have jobs, turn those jobs into value-added products, then our people are working and we create a profit. They understand that very much, and so they're very protective. I don't have a problem with people in China having jobs. Everybody needs jobs and that country is very poor, but they're using every trick in the book to outplay us in the game. They're not trustworthy. The things that they've committed to in entering into the WTO, they're not doing the things they said they were, and that's what's been so difficult.

As I said earlier, China should represent a tremendous market for paper products, paperboard, linerboard, and things like that, but they're very protective. And we have got to do something in America to help our producers remain competitive until this battle is over or we're just going to go out of business.

Commissioner WESSEL. The study that was done last year that you assisted in for the industry association seemed to paint a pretty broad picture of trade violations. Do you know what the industry association is planning on doing with that? Are they talking to the USTR about bringing trade cases or are they involved in the let's engage and let's talk about this mode? Do you know where that stands?

Dr. EASTIN. American Forest and Paper Association works closely FAS and Mike Hicks at FAS, who is their trade negotiator or part of the negotiating team, and so, yes, they are engaging in dialog. I don't believe they're moving forward with any type of a WTO action. I think they're moving more to engage the Chinese in dialog at this point.

Commissioner WESSEL. Final question. I was told recently that the one product that you would never ship is tissue paper or toilet paper, because it's not worth it. But we're actually starting to import tissue paper and toilet paper from China. That to me indicates that the value of the subsidy has to be so huge that they've got nowhere else to ship this, they may as well send it here. Have you heard that yet?

Mr. LOVETT. No, I haven't.

You are accurate, because of the lightweight product itself, it won't pay you to ship it across the seas. Your shipping fee will eat up all your profits.

Commissioner WESSEL. But if you're subsidizing it all the way, maybe you can still make a couple bucks.

Mr. LOVETT. Unless you're a Chinese paper manufacturer.

Commissioner WESSEL. Thank you.

Dr. EASTIN. I think when you look at this, there's a series of subsidies, there's not a single subsidy. It's subsidy after subsidy after subsidy that when added together make it possible to do things that defy common sense.

Commissioner WESSEL. Thank you.

Cochair BECKER. Commissioner Dreyer.

Commissioner TEUFEL DREYER. I'm just curious. I specialize in Chinese politics, and every year I read how upset the government is because the area of forest has decreased still further in China. Deforestation increases the erosion problems within China, and the land becomes increasingly less arable as the population continues to grow. I assume that a lot of these forest products are coming in illegally from other countries. Do you have any indication that any of this is slowing down? Is there going to be a crunch within China, when and if they're unable to get these materials, and will have to start importing legal fee?

Dr. EASTIN. No, actually, it's accelerating. There are Chinese crews working in the Russian Far East who are actually doing the logging, bringing the logs to the border, and then they have to be moved from the trains on the Russian side onto trains on the Chinese side because the tracks don't line up. But you've also got illegal flow of logs coming from Myanmar across the border, illegal logs and lumber coming from Indonesia into China, and also a huge volume of illegal logs going across the border in Kalimantan into Sabah and Sarawak in Malaysia, where they come out ostensibly as Malaysian exports because the timber species are fairly similar, so actually the whole problem is accelerating, and that's why we've been putting so much effort into China to assess the degree of the problem.

Commissioner TEUFEL DREYER. And is the reason these things are able to come in over the border illegally, even though in the case of Russia you have actually different gauge railroad tracks to worry about, which slows things down. Is it because of corruption, that the border guards are corrupt?

Dr. EASTIN. The vast majority of it can be attributed to corruption and bribes, and the huge need for the raw material in China.

Commissioner TEUFEL DREYER. Thank you.

Mr. LOVETT. I think China is the world's largest importer of logs, and that's one thing that maybe gets lost in all the trade negotiations. This industry, the forest product industry in America, makes our products under the highest environmental standards in the world. And I'm telling you, that includes the whole world. No nation spends the resources to making sure that the companies comply with environmental rules that this nation does, and that's something we're very proud of. I consider myself an environmentalist. I want clean air and I want clean water and I want to make darn sure we got plenty of forests left our children. And we

have as many forests in this nation today as we had a hundred years ago, at a time when our population has tripled and the demand for our products has literally went through the roof. But these developing nations don't have the compliance that we do, and every time we import these products—whether it be from China, Indonesia, Malaysia, we know that they pretty much rape the land and dump whatever sewage or treatment products into the rivers. So we're actually causing a worse problem when we import mass quantities of these products than if we make them here under the highest environmental standards in the world, and that needs to be recognized when people negotiate these agreements.

Commissioner TEUFEL DREYER. Thank you.

Dr. EASTIN. I was a Peace Corps volunteer in Liberia. Liberia is a country the size of Indiana, so you know how small it is. Liberia the last two years has been the number eight supplier of logs to China. So how can a country that size export that volume of logs? What we have is conflict logs. And so we see that all the way down the line. If you take a look at the list of suppliers of logs to China, it's a who's who of bad forest management.

Cochair BECKER. All right?

Commissioner D'Amato.

Chairman D'AMATO. I just have a follow-up question to what you're saying. I find the whole thing very disturbing. Is anyone out there, any international environmental group or anybody, doing an assessment of what this tremendous pilferage of the world's forests is having on the world's environment? Do you know of anybody doing that?

Dr. EASTIN. There are a large number of groups that are working on it, including groups in the U.S. Probably one of the lead groups working on this is the International Tropical Timber Organization, headquartered in Yokohama, Japan, they're a quasi-UN organization, and they've funded case studies in nine or 10 different countries. The whole illegal logging issue has really come to a head in the last two or three years. It was essentially ignored up to that point. The last few years it's really gotten a lot of attention, and there's a lot of environmental groups, from Greenpeace to ITTO to USAID, all becoming interested in illegal logging, including traditional groups that you wouldn't think of, like World Bank and IMF.

Chairman D'AMATO. I think that would be very interesting for us to take a look at those assessments.

Thank you, Mr. Chairman.

Cochair BECKER. Commissioner Wortzel.

Commissioner WORTZEL. Thank you very much. I appreciate the time and your patience in hanging with us here, both of you.

Mr. Lovett, what struck me is the parallel between what you're going through in your industry and what people in wood products and furniture up around North Carolina and that area are going through. Now, I don't think that sector is as heavily unionized as your industry, but from the standpoint of workers, from the standpoint of an industry, I wonder if you all are talking and working together on these issues, either with U.S. trade representative or the Congress.

Mr. LOVETT. There's—

Let me back up. I'm part of a group called the Pulp and Paper Workers Resource Council, which is made up primarily of union members that are hourly employees throughout the forest product industry, and we work on environmental and forestry issues that affects our jobs, and when we approach a nonunion facility about participating in our—when we go to Washington to talk to our Senators and Congressmen about these issues and how they're affecting our jobs and our communities, the nonunion managers say, "Hell, no, you're not coming in here. You're wanting to organize the workers." That's kind of the response we have.

But we have had a couple of nonunion facilities to participate, and they realize what's happening too, but I don't think they want to risk the chance that they might become unionized and participate with us.

Commissioner WORTZEL. Well, thank you for that.

Dr. EASTIN, I wonder if you would consider a slight addition or revision to the testimony you submitted. I think it would help when it gets published. You've got two tables, Table 2 and Table 4 that I think could use complements. You've got Pacific Northwest exports of wood products to China, and then Chinese exports of selected to the United States. If you can somehow let us compare apples to apples and oranges to oranges, and also do Pacific Northwest imports of wood products from China, just so we get that sort of comparison, and then the same parallel in Table 4. It would be total wood products imported—or total selected imported and total wood products exported. I think it would allow kind of a more balanced analysis.

Dr. EASTIN. I can do that fairly easily.

Commissioner WORTZEL. I appreciate it. Thank you. I figured you'd have the statistics.

Cochair BECKER. Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you, Mr. Chairman, and thank you, panelists. I'm always sympathetic to people who spend much of their day listening to everybody else, so we really appreciate your fortitude and your willingness to talk to us.

Mr. Lovett, I find this map that you have on the PowerPoint just stunning. I have not seen so many closed sawmills and paper mills. In some ways it just makes me speechless. This is over the course of 14 years, is that what you're saying?

Mr. LOVETT. Yes, ma'am, that's correct.

Commissioner BARTHOLOMEW. And a total of how many people of lost their jobs as a result of this?

Mr. LOVETT. We don't have an exact count, because in a lot of press releases some companies prefer not to say how many jobs were lost. They just say that we're going to close this facility, and that's all they'll tell you, because if they tell you how many jobs is lost, it sort of paints them with an ugly brush.

Commissioner BARTHOLOMEW. Right. It's a constant problem.

What kind of jobs are those who lost their jobs at these closed mills finding?

Mr. LOVETT. Well, let me begin by saying that the forest product industry and the primary pulp and paper mills such as I work in are some of the highest paid jobs in the world. We have real good benefits, we have pensions, we have good healthcare, and the folks

that—like myself, who are high school graduates, who went to work in the mill, they're not going to find a job comparable. If you find a job making half as much in your local community you're a lucky person.

But let me expand on this map a little bit. Not all these jobs or closures are due to trade. There's a tremendous amount of pressure out there on any type of resource-extracted industry right now. But trade is one of the issues that we're dealing with, and we're definitely feeling the effects of trade with China, and it can be everything from the excessive environmental regulation to trade to whatever costs in that region is changed, it can be from a limited fiber supply where the Federal Government has eliminated 80 percent of the timber harvest on their national forest and decided to let them burn down. There are just a lot of reasons that these mill closures have come about.

But our industry is fragile right now. We think we do a good job of taking care of the environment. We replant the trees, we plant over two billion trees a year, you know, and the reason we have more forests today than we did a hundred years ago is not due to some type of phenomenon; it's due because we do a good job. But there's just a lot of pressure on us, and we just need some relief in every area we can get.

Commissioner BARTHOLOMEW. And then for Dr. Eastin, switching actually to environmental issues, and also consequences of China's consumption of resources, the illegal harvesting, illegal lumbering that you're talking about. How much of it is China getting from Burma?

Dr. EASTIN. I don't have that figure at my fingertips. I could get that for you fairly quickly once I get to my office. If you wanted to give me an e-mail address, I can get that for you pretty easy, but I don't have that with me right now.

Commissioner BARTHOLOMEW. It would be interesting to know also if there's any sort of economic estimate. Obviously with sanctions on the Burmese government, is the lumber that is being taken out of Burma and sent to China having consequences for propping up the government? What is going on? I'd appreciate hearing your thoughts on this.

Then the second country is Brazil. China's got an increasing relationship with Brazil. I know that there are a number of concerns in the environmental community about the consequences for the rain forests because of that. I don't know if there's any specific information yet. Can you pass on any insight?

Dr. EASTIN. I do have information on that, as well. I can't give you the number but it's pretty substantial, and Brazil is high up on the list of supply countries to China. It's pretty substantial.

Commissioner BARTHOLOMEW. Thank you.

Cochair BECKER. I have a couple questions. Our timber is not an inexhaustible resource. I think everybody would agree with that. But what can we harvest each year and replace to make sure that there will be continuity for what we use? How much can we harvest each year? Is there any kind of a figure on that?

Dr. EASTIN. We can harvest enough to keep our paper mills and sawmills running at full tilt, depending on our access to the resource. The industry operates almost exclusively on a sustainable

basis now. Most of the major private companies have adopted the SFI certification program for managing their forests. SFI is the Sustainable Forest Initiative, which is a certification system for ensuring that they manage their forests in a sustainable manner. And we have the raw material that will allow us to operate at a hundred percent capacity.

Cochair BECKER. We could have had the company Weyerhaeuser answer some of those questions if they were here, but our invitation to them was turned down also on the grounds that that there would be some conflicts of interest, is the way they had put it.

I have a question here because this has been kicked around a little bit and maybe you will know this. You said that friend of yours, Mr. Lovett, was in Germany, learning how to operate a new high-tech-type paper mill.

Mr. LOVETT. Yes.

Cochair BECKER. I had someone explain to me from your union that the difference between the United States and China, for each man, woman and child, per capita, in the United States, we use between 650 and 700 pounds of paper a year. In China they use less than 100 pounds of paper per year, which reflects on society, school books, newspapers, notices, everything that's made out of paper in some way, as you become more advanced in society you have a greater demand for that, and China has a greater demand for that now. I was told that China plans to construct 800 new paper mills, and that would bring them up to the level that we are here in the United States.

Again, I was told, and I would like to have some comment on this, that it will take an additional one billion trees to service those paper mills in China. To me that sounds like an awful lot of trees. They're going to get them from someplace. They're not going to deplete their resources. That's not the way they've been operating. They may get them from Burma, they may get them from the United States, they may get them from Canada. Is that a lot of trees, one billion trees a year?

Can we take one billion trees out of our resource base in addition to what we use here and still keep ahead of the game?

Mr. LOVETT. I don't know if we could do that. Again, let me restate that I'm just a mill worker. But, you know, the Chinese invented the art of making paper, and I think they've looked back on their heritage and decided that they're going to do even more than that.

There is a Web site that I look at daily, it's called paperloop.com, and it tells you everything that's going on in the forest product industry, and almost every day there's an announcement in China where they have bought equipment or they're going to install equipment or the government is going to help rebuild a mill. It's a serious threat to our ability to compete in a global economy.

Cochair BECKER. We don't have a limit on what can be harvested, do we? Does our government set a limit on Weyerhaeuser and other companies as to how much can be logged?

Dr. EASTIN. Not on private lands, no, but there are constraints on Federal and state lands.

But to get back to your point, the Chinese have subsidized to the tune of almost \$2 billion investments in plantations. These are

fast-growth plantations, hybrids, species like poplar, bamboo, specifically designed to provide fiber—these are not going to be big trees, these are small trees, grown on a rotational crop basis, they mature in a very small number of years, three, four, five years, they're going to be harvested like corn and fed into these paper manufacturing centers. And so they've subsidized the establishment of these plantations to the tune of almost \$2 billion. That's not to count the amount of money that's going to be subsidized into the production facilities themselves. That's where this resource is going to come from.

Cochair BECKER. Ask your President, Mr. Lovett, about that question.

Mr. LOVETT. Okay.

Cochair BECKER. Because that's where I got the information.

I want to thank both of you very much for your attendance here, and for being very, very patient with us. And we've held you back one turn. I hope you have a good dinner tonight or good flight back, one of the two.

Commissioner TEUFEL DREYER. That was paperloop.com?

Mr. LOVETT. Yes, ma'am. P-a-p-e-r-l-o-o-p.com.

Commissioner TEUFEL DREYER. We'll look at it too. Thank you.

Mr. LOVETT. Thank you.

Dr. EASTIN. You're welcome, and thank you very much.

Cochair BECKER. This concludes the hearing.

[Whereupon, at 5:47 p.m., the hearing was concluded.]

U.S. Apple Association
Vienna, Virginia 22182
January 14, 2005

The Honorable C. Richard D'Amato
Chairman
U.S.-China Economic and Security Review Commission
444 North Capitol Street, N.W., Suite 602
Hall of the States
Washington, D.C. 20001

Re: U.S. Apple Association Testimony for the Hearing on the Impact of U.S.-China Trade and Investment on Pacific Northwest Industries, January 13, 2005, Seattle, Washington

Dear Mr. Chairman:

The U.S. Apple Association (USApple) is the national trade association representing all segments of the apple industry. Members include 40 state apple associations representing 7,500 apple growers throughout the country, as well as over 400 individual firms involved in the apple business.

U.S.-China trade issues are critically important to apple growers, fresh apple packers and apple processors in the Pacific Northwest and across the country. While China may be a promising market for fresh apple exports, imports from China have caused harm to apple growers and the prospect for further harm is a great concern to the U.S. apple industry.

Between 1990 and 2002, world apple production increased 112 percent, while U.S. apple production declined 11 percent. These unprecedented world increases in apple production have been fueled by massive growth in China, where apple production surged 391 percent between 1990 and 2004. China produced nearly as many apples as the United States in 1990, when their production was 4.3 million metric tons. China's 2004 apple crop is forecast to reach 21.1 million metric tons, which is approximately 45 percent of total world production and four times greater than U.S. apple production.

In 1994, the United States imported only 1 percent of its apple juice concentrate supplies from China. By 1998, China's share of total U.S. apple juice concentrate imports had grown to 19 percent of total imports. Imports of low-priced Chinese apple juice concentrate caused grower prices for juice apples to decrease, resulting in less revenue for apple growers.

In June 1999, the apple industry initiated an anti-dumping case against Chinese concentrate producers to offset the impact of low apple juice concentrate prices. While, the Commerce Department initially assessed dumping duties ranging from 10 to 52 percent, several Chinese firms appealed the decision, and in 2003, the Commerce Department determined that several large exporters were not dumping. Meanwhile, Chinese imports of apple juice concentrate have grown to 42 percent of total apple juice concentrate imports, and U.S. apple growers continue to receive lower prices for juice apples, which generate less revenue for growers.

While the U.S. apple industry's dumping case provided some temporary relief to domestic apple juice concentrate producers and apple growers, the apple industry presently derives little or no relief from current trade remedies.

In the case of apple juice concentrate, apple juice processors have flexibility to purchase U.S. juice apples or imported apple juice concentrate to make apple juice for retail distribution. Competitive market forces have caused the majority of apple processors to make most of their retail apple juice from imported concentrate and much less from raw U.S. juice apples. Growers are harmed when processors switch to imported concentrate because the demand for U.S. juice apples declines along with domestic juice apple prices.

USApple is concerned that cheap imports of processed apple products will force U.S. processors to discontinue their processing activities in favor of marketing imported processed apple products, or move their processing facilities to low cost countries like China. While processing companies have the flexibility to market imported processed products or move their processing facilities, domestic apple growers cannot. The U.S. apple industry would sustain massive dislocation and economic harm if processed apple imports such as applesauce, dried apples, apple slices and apple juice concentrate continue to grow or if processors decide to relocate their processing facilities.

Additionally, current trade law allows Chinese exporters to gain market share by offering low prices that disrupt U.S. markets and harm processors or growers before a trade remedy can be implemented. USApple is concerned that current trade laws

allow too much industry disruption before a trade remedy can be justified and implemented.

USApple is also concerned that current trade remedies may not be accessible because they may be unaffordable. The cost of filing trade remedy petitions and fully participating in the process over a sustained period of time is considerable. This factor may impair the ability of companies and industries to utilize trade remedies even though the industry may have a strong case for a complaint.

USApple appreciates this opportunity to share our experience regarding U.S-China trade. Please contact me by telephone at (800) 781-4443 or via e-mail at jcranney@usapple.org if you have questions or need additional information.

Sincerely yours,

James R. Cranney, Jr.
Vice President

cc: USApple Board of Trustees

**STATUTORY MANDATE OF THE U.S.-CHINA ECONOMIC AND SECURITY
REVIEW COMMISSION**

Pursuant to Public Law 108-7, Division P, enacted February 20, 2003

RESPONSIBILITIES OF THE COMMISSION.—The United States-China Commission shall focus, in lieu of any other areas of work or study, on the following:

PROLIFERATION PRACTICES.—The Commission shall analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.

ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.—The Commission shall analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing, and R&D facilities; the impact of these transfers on United States national security, including political influence by the Chinese Government over American firms, dependence of the United States national security industrial base on Chinese imports, the adequacy of United States export control laws, and the effect of these transfers on United States economic security, employment, and the standard of living of the American people; analyze China's national budget and assess China's fiscal strength to address internal instability problems and assess the likelihood of externalization of such problems.

ENERGY.—The Commission shall evaluate and assess how China's large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D efforts and technological assistance, in influencing China's energy policy.

UNITED STATES CAPITAL MARKETS.—The Commission shall evaluate the extent of Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests.

CORPORATE REPORTING.—The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States investments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China.

REGIONAL ECONOMIC AND SECURITY IMPACTS.—The Commission shall assess the extent of China’s “hollowing-out” of Asian manufacturing economies, and the impact on United States economic and security interests in the region; review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing’s military modernization and force deployments aimed at Taipei, and the adequacy of United States executive branch coordination and consultation with Congress on United States arms sales and defense relationship with Taipei.

UNITED STATES-CHINA BILATERAL PROGRAMS.—The Commission shall assess science and technology programs to evaluate if the United States is developing an adequate coordinating mechanism with appropriate review by the intelligence community with Congress; assess the degree of non-compliance by China and [with] United States-China agreements on prison labor imports and intellectual property rights; evaluate United States enforcement policies; and recommend what new measures the United States Government might take to strengthen our laws and enforcement activities and to encourage compliance by the Chinese.

WORLD TRADE ORGANIZATION COMPLIANCE.—The Commission shall review China’s record of compliance to date with its accession agreement to the WTO, and explore what incentives and policy initiatives should be pursued to promote further compliance by China.

MEDIA CONTROL.—The Commission shall evaluate Chinese government efforts to influence and control perceptions of the United States and its policies through the internet, the Chinese print and electronic media, and Chinese internal propaganda.

LIST OF WITNESSES, COMMUNICATIONS, AND PREPARED STATEMENTS

	Page
Becker, George, Hearing Cochair	
Opening remarks of	14
Prepared statement	15
Bender, Rick, President, Washington State Labor Council, AFL-CIO, Seattle, Washington	24
Prepared statement	27
Blackburn, David A., President and CEO, Thomas G. Faria Corporation, Uncasville, Connecticut, Representing the National Marine Manufacturers Association	164
Prepared statement	167
Blondin, Mark, President and Directing Business Representative, Inter- national Association of Machinists and Aerospace Workers (IAM), District 751, Seattle, Washington	69
Borich, Joseph J., Executive Director, Washington State China Relations Council, Seattle, Washington	16
Prepared statement	18
Christensen, Rod, Manager, Far West Spearmint Oil Administrative Com- mittee, Kennewick, Washington	137
Prepared statement	139
Courtney, Marcus, President, Washington Alliance of Technology Workers (WashTech), Communications Workers of America (CWA) Local 37083, Se- attle, Washington	90
Prepared statement	92
D'Amato, Chairman C. Richard	
Opening remarks of	1
Prepared statement	2
Dinsmore, M.R., Chief Executive Officer, Port of Seattle, Seattle, Washington	151
Prepared statement	154
Eastin, Ivan, Professor and Acting Director, Center for International Trade in Forest Products (CINTRAFOR), College of Forest Resources, University of Washington, Seattle, Washington	188
Prepared statement	190
Feder, Jesse M., Director and Counsel for International Trade and Intel- lectual Property, Business Software Alliance (BSA), Washington, D.C.	104
Prepared statement	106
Herrnstadt, Owen E., Director, Trade and Globalization Department, Inter- national Association of Machinists and Aerospace Workers (IAM), Upper Marlboro, Maryland	60
Prepared statement	62
Hira, Ronil, Ph.D., P.E., Vice President, Career Activities, Institute of Elec- trical and Electronics Engineers-United States of America, Assistant Pro- fessor of Public Policy, Rochester Institute of Technology, Rochester, New York	95
Prepared statement	97
Lovett, Charles Dale, Special Projects Coordinator, Pulp and Paperworkers Resource Council (PPRC), Member and Representative, Paper, Allied-Indus- trial, Chemical and Energy Workers International Union (PACE), Wickliffe, Kentucky	182
Prepared statement	184
McDermott, Jim, a U.S. Congressman from the State of Washington	3
Prepared statement	8
Ruda, Nathaniel "Sam," Marine Director, Port of Portland, Portland, Oregon	158
Prepared statement	161

II

	Page
Schlect, Christian, President, Northwest Horticultural Council (NHC), Yakima, Washington	135
Prepared statement	136
Schneider, Richard, Aerospace Coordinator, International Association of Ma- chinists and Aerospace Workers (IAM), Upper Marlboro, Maryland	70
Scott, Robert E., Director of International Programs, Economic Policy Insti- tute, Washington, D.C.	29
Prepared statement	31
Wahl, Thomas I., Director, IMPACT Center and Professor, School of Economic Sciences, Washington State University, Pullman, Washington	126
Prepared statement	128
Walsh, John F., President, Walsh Aviation, Annapolis, Maryland	52
Prepared statement	55
Wood, Heidi, Aerospace/Defense Analyst, Morgan Stanley, New York, New York	72