

# SAVING THE DEFENSE INDUSTRIAL BASE

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## HEARING

BEFORE THE

### COMMITTEE ON SMALL BUSINESS HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

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WASHINGTON, DC, JULY 9, 2003

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**Serial No. 108-23**

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Printed for the use of the Committee on Small Business



Available via the World Wide Web: <http://www.access.gpo.gov/congress/house>

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U.S. GOVERNMENT PRINTING OFFICE

92-630 PDF

WASHINGTON : 2003

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## SAVING THE DEFENSE INDUSTRIAL BASE

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WEDNESDAY, JULY 9, 2003

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SMALL BUSINESS,  
*Washington, D.C.*

The Committee met, pursuant to call, at 2:24 p.m. in Room 2360, Rayburn House Office Building, Hon. Donald A. Manzullo [chairman of the Committee] presiding.

Present: Representatives Manzullo, Bartlett, Schrock, Akin, Shuster, Musgrave, Gerlach, Beauprez, Velazquez, Ballance, Christensen, Napolitano, Bordallo, Majette, Sanchez.

Chairman MANZULLO. Good afternoon and welcome to this hearing of the Committee on Small Business. A special welcome to those who have come some distance to participate and to attend this hearing.

Our domestic manufacturing base is being hollowed out right before our very eyes. We are becoming a nation of service industry employees and assemblers. A new round of globalization is sending upscale jobs overseas that include chip design, engineering, basic research, even financial analysis.

Can America lose these jobs and still prosper?

It is time to wake up. If we keep losing our manufacturing jobs, we will not have much of a service sector to worry about.

Just this past week, the Department of Labor released its June employment report. For the thirty-fifth consecutive month, 56,000 people employed in manufacturing have lost their jobs. Even more shocking is that for the first time since statistics have been kept, our country now has fewer than 10 percent of its labor force employed in manufacturing jobs. Two years ago, it was 16 percent. Fewer than 14.7 million of our nation's 147 million workers are involved in manufacturing.

The Defense Authorization Bill as passed by the House of Representatives provides important measures to preserve our defense industrial base dominated by small businesses. I commend my good friend Chairman Duncan Hunter for recognizing the present manufacturing crisis and taking steps to prevent further erosion of the defense industrial base.

Last May, the Office of Management and Budget released its Statement of the Administration's policy, raising concerns about various sections of the House version of the defense bill. Specifically, the administration objected strongly to industrial based provisions of the defense bill because they are "burdensome, counter-productive and have the potential to degrade U.S. military capabilities."

In addition, the statement readily admits that the U.S. is no longer on the leading edge of some critical technologies crucial to our defense needs by claiming that the Buy American provisions of H.R. 1588, which increases American content from 50 percent to 65 percent, will “unnecessarily restrict the Department of Defense’s ability to access non-U.S. state-of-the-art technologies and industrial capabilities.”

I wish the administration had read their own statement because they have just admitted that the United States does not possess state-of-the-art technologies and industrial capabilities. The person who wrote that probably does not know the difference between Brylcreem and machine oil.

The purpose of the hearing is to provide a forum so that the administration can explain in more detail the rationale for their position on the Buy American provisions in H.R. 1588. That is what this hearing is about.

We need to discuss what can be done to recover America’s lost edge in certain high technology products, many of which are produced by small businesses, and what steps are being taken to prevent even more loss of manufacturing critical to our defense industrial base to overseas firms.

We just lost another factory, another 800 workers to China, automotive parts, in a county of 18,000 people. The yuan remains fixed, as it has been, against the U.S. dollar since 1994. The only person doing anything about it is Treasury Secretary Snow. That is the same as a 40 percent tariff on all U.S. goods going to China and nobody is doing anything about it. Nobody.

There are several remedies that are out there. There is Section 50 of the WTO, Section 4 of the International Monetary Fund, other sections of the trade agreement. When the foreign countries continue to manipulate the currency for the purpose of making their exports to us a lot cheaper and setting up these trade barriers to us, this is another one of our series of trying to salvage what is left of the industrial base in this country.

[Mr. Manzullo’s statement may be found in the appendix.]

Chairman MANZULLO. I look forward to the statement from our ranking minority member, Mrs. Velazquez.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

In the upcoming weeks, House and Senate conferees are expected to move to resolve differences regarding the 2004 Defense Authorization Bill. Of the many issues that will be discussed are the House provisions to enhance the requirements for the Department of Defense to purchase from domestic sources.

A strong industrial base has always been a critical part of our nation’s economy and military security. Two important tools in maintaining our manufacturing sector are the Buy American Act and the Berry Amendment. These provisions are as important today as the day they were enacted because of the dire straits facing our manufacturing industry.

As of December 2002, the manufacturing sector has lost jobs for 29 consecutive months, the longest stretch of monthly job losses since the great depression. In June alone, the economy lost an additional 56,000 manufacturing jobs. Clearly, something needs to be

done to bolster this industry and one way is through the fair marketplace.

This Committee has long known that when it comes to procurement policy the Department of Defense actions leave a lot to be desired. This agency has a history of looking for loopholes to avoid doing business with small businesses. What is new is that we are now discovering that the Department of Defense does not just have a problem doing business with small firms, they also do not want to buy from American businesses in general.

The most recent proof of this is the Department of Defense legislative package for the 2004 DOD reauthorization. Contained in this package is a proposal to weaken the protections covered under the Buy American Act and the Berry Amendment. While this would raise concern at any time, it is especially worrisome now when our manufacturing base is in the midst of such turmoil.

Today's hearing will give us an opportunity to evaluate why the administration believes such actions are justified. In addition, it will provide another opportunity to review the procurement practices of the Department of Defense as well as legislative initiatives that might be contributing to the growing U.S. manufacturing crisis.

It is obvious we need to make sure that the Department of Defense has the flexibility in its procurement policy to accomplish its mission. However, I believe that the administration's proposal uses the excuse of the need for readiness to skirt its responsibilities to our domestic industry and this is just plain wrong.

While I believe that the provisions contained in the House bill strengthen the Berry Amendment and the Buy American Act are reasonable, I also think that to a certain extent they are at best a patchwork solution helping some industries. This will result in providing little or no assistance to many sectors of light manufacturing and small business. This picking of winner or loser, whether intentional or not, is poor public policy.

It is also important to note that with the adoption of these provisions in the final Department of Defense reauthorization they will not have a demonstrated effect on our manufacturing base. This sector is not in trouble because of bad procurement practices, but because of poor trade, tax and monetary policies by the current administration. This has made domestic products too expensive and driven companies to relocate overseas.

Until these ill-fated policies are changed, we will continue to experience a decline in our domestic manufacturing base, which means our economy will remain in a down turn.

I want to thank the witnesses for coming today and I look forward to hearing their testimony.

Thank you, Mr. Chairman.

[Ms. Velazquez's statement may be found in the appendix.]

Chairman MANZULLO. Thank you.

Congressman Ryan, a former member of our Committee, if you could have a seat and introduce your constituent and then he will be pre-introduced by the time we get to him.

Mr. RYAN. Thank you very much, Mr. Chairman. I appreciate the opportunity.

I would like to introduce Tim Rupert from RMI Titanium in Niles, Ohio. We have been working on the Berry Amendment and numerous Buy America issues that we have been dealing with over the past—really a few months now. I was on this Committee for, I think, one day, one hour maybe, and Chairman Manzullo and I started talking about the Berry Amendment and I just wanted to take this opportunity to thank Mr. Rupert for all he has done and what Chairman Manzullo has done and what Chairman Duncan Hunter has done regarding the Berry Amendment and protecting the industrial base in this country.

With that I would yield back.

Chairman MANZULLO. Thank you very much for your participation.

The focus of the hearing today is with regard to the provisions that have been placed into the defense authorization bill as it has come from the House. I want to take just a minute to summarize those. The first is on domestic source limitations, it is similar to a defense type of Berry Amendment, but it puts in there—it adds additional products, including aircraft tires and ground vehicle tires, added because there is only one U.S. manufacturer left of rubber, of those types of tires. It also adds pan carbon fiber and other types of materials.

Another section that was added calls for notification whenever there is to be any type of a waiver of the Berry Amendment and the purpose of that simply is to give people a heads up that somebody is ready in the Pentagon to allow foreign materials to come in to displace certain provisions of the Berry Amendment.

This started with this Committee about two years ago when we held an extraordinary four and a half hour hearing as to why the Army was having the black berets for our men and women in uniform manufactured in Sri Lanka, India, South Africa, Romania and China, to the exclusion of the manufacturers in this country and in violation of the Berry Amendment which states very explicitly that anything involving clothing has to be made with American material and in the United States of America.

Another provision that was put in that will be amended provides that with regard to the machine tool industry, which is on its back, losing literally hundreds if not thousands of employees each day in this country, that if there is a new acquisition in excess of \$5 million and if the contractor has to buy a new piece of equipment, then that piece of equipment has to be at least 70 percent or more of its value made in the United States. That also applies to molds, so obviously does not force companies to buy huge expensive machines involved in manufacturing but in the event that they have to buy a new machine because of a new acquisition, then it says it has to be at least 70 percent American.

The bill also requires the Secretary of Defense to collect data to identify all contractors and subcontractors that use machine tools in contracts of \$5 million or more.

And then with regard to the Buy America Act, which is with regard to all government procurement, in this case, just with regard to Department of Defense, it increases the term substantially all, which is a regulatory definition of 50 percent, to a legislative definition of 65 percent.

The Pentagon served notice on it that it opposes each and all of these.

Ms. Patrick, unfortunately, OMB did not get us your testimony until this morning and I know that you and Mr. Borman got your testimony in plenty of time.

If anybody is here from OMB, the next time this happens, I personally subpoena the director of the OMB to come before this Committee with the testimony. It is not fair to minority staff, it is not fair to the majority staff, and the members of Congress to have that testimony that late and it is not your fault, it is OMB's fault. They sat on this thing for a long period of time. Yours was in plenty of time to have that done.

But the reason I bring that up, Ms. Patrick, is that the main portion of what we would like to hear from you comes at the very end and that is your statement that—you comment on H.R. 1588 and where you make the statement, and I want to see you defend this, you say, “I believe that the provisions,” that is the Buy America Act, et cetera, “are based on inaccurate presumptions that the U.S. defense industrial base needs to be revitalized and U.S. defense systems are vulnerable due to foreign dependencies.” That is where I would like you to focus on this. And if you do not have any more than what you have in here, I can understand that because it is not your fault. If I had had time, I could have talked to you earlier on. But we look forward to your testimony.

Ms. PATRICK. Thank you very much, Mr. Chairman.

Chairman MANZULLO. And obviously the complete statements will be put into the record.

**STATEMENT OF THE HON. SUZANNE D. PATRICK, DEPUTY UNDER SECRETARY FOR INDUSTRIAL POLICY, DEPARTMENT OF DEFENSE**

Ms. PATRICK. We had the great pleasure and privilege of having Mr. Crowther come over and talk to us about this hearing, I think it was last week, and so with your indulgence, especially since some of the members might not have had a chance to read the testimony, let me go ahead and go through my oral testimony, which in fact is a bit different than the written testimony because I did amend it, based on Mr. Crowther's comments, so if you would let me proceed.

I am delighted to be here to share with you my overall assessment of the health of the defense industrial base, as well as DOD's small business objectives regarding our defense industrial base transformation initiatives.

Despite the downturn in the U.S. economy, the defense industrial base is healthy, innovative and responsive. Aerospace defense firm operating margins are about 50 percent higher than they were in the 1980s. The return on invested capital is about 6.1 percent superior to the 4.4 percent return of the S&P 500. The PE ratio is about 15 times earnings, well above the historical average of about 9. And, finally, debt service capacity is about 6-to-1, as compared to the 4-to-1 S&P 500 average.

All of these measures are positive indicators of healthy defense companies. Indeed, in a faltering economic setting, defense is a significant contributor to economic growth and innovative defense

companies of all sizes will continue to benefit from robust defense spending trends over the balance of this decade.

The tripling of JDAM production, doubling NGBU production and countless examples of expedited equipment deliveries in support of Operation Enduring and Iraqi Freedom speak volumes about this industry's responsiveness. The department firmly believes that our strong domestic industrial and technology base is one of the cornerstones of our national security and that the current U.S. industrial base remains the strongest and most capable in the world, one that continues to be fully capable of meeting the demands placed on it by DOD.

However, the department is not content to rest on past industry successes. The Secretary of Defense has been the department's greatest coach for forward progress. In speaking about department wide reforms to give DOD the needed flexibility and agility, he said that, and I quote, "In an age when terrorists move information at the speed of an e-mail, money at the speed of a wire transfer and people at the speed of a commercial jet liner, the Defense Department is bogged down in the bureaucratic processes of the industrial age."

His viewpoint holds equally for some pockets of the defense industrial base. It is a byproduct, we believe, of progress that in the current transformation of the department the old must sometimes yield to the new.

The history of the U.S. industrial base has many such examples. For example, the first semiconductors were developed over 40 years ago with research funding support from DOD. The first production order for integrated circuits was for the Minuteman missile program in about 1959.

In 1963, over two-thirds of the devices made by the semiconductor industry were used in DOD weapon systems. Today, much less expensive integrated circuits are widely used in consumer, industrial, automotive and communications products. More than 50 years later, DOD and the defense industry can now choose from a broad array of semiconductor products that do not depend on DOD financial support to develop. In fact, by 2000, total government consumption including DOD fell to below five-tenths of one percent and semiconductors are now a free market commodity.

Our access to this vibrant commercial product market for semiconductors serves as well, with few exceptions such as application specific integrated circuits.

Titanium is an example where the U.S. Government developed the material and dominated initial purchases, but currently has a significant but small portion of the market. Titanium was a laboratory curiosity until the 1930s and the 1940s, when a production process was invented by W.J. Crawl under U.S. Bureau of Mines funding.

In 1948, DuPont started production in the world's first titanium sponge production facility with the government taking almost all production, mostly for defense aerospace applications. Even in the 1980s, defense sectors consumed approximately three-quarters of titanium production. However, significant growth occurred in broad civil sectors such as sporting goods, chemical plants and automobiles. By 2003, defense applications of titanium shrunk to ap-

proximately one-third of the total titanium produced, another commodity successfully transitioned to the commercial marketplace.

And, finally, even the machine tool industry is in many cases evolving from the single purpose machines of the 1950s to the highly efficient and flexible low cost, multi-function machine center so popular across worldwide commercial and defense production today.

In order to draw the next generation of new companies and solutions into the defense industrial base, the department has launched industrial base transformation initiatives, along with what we believe will be significant improvement in small business participation in DOD programs.

In February of this year, my office published a report titled "Transforming the Defense Industrial Base: A Road Map" that sketched a road map for legacy and emerging defense suppliers, as well as for senior leadership in the department. As a product of its time, our report was informed by the lessons learned during Operation Enduring Freedom about fielding systems quickly and combining them in new and different ways. It also heeded the secretary's transformation mandate, attempting to make the defense enterprise more transparent so that all companies, current and prospective, small and large, could better find their place in the defense enterprise and its decision making process.

Our study was built on case studies of 24 emerging defense suppliers, most of whom are small businesses who could grow to be tomorrow's giants. All have some business with the Department of Defense, but unlike today's giants, their annual revenues are often less than \$10 million and they are made up of dozens, not thousands, of employees.

The compendium of over 400 emerging defense suppliers that accompanies this report are in 47 states and represent this generation's inventors and innovators. None of these companies want to remain small, but all of them, as the chairman said, had difficulties finding their place in the defense enterprise and had experienced growing pains transitioning technologies they viewed as important to the department and to transformation.

It was our conviction of the importance of the ideas and products of these emerging defense suppliers that motivated our study. We are sure that the defense industrial landscape of 2020 will be significantly different from today's because of the pace of change and the kind of companies that make the new products so critical to transformational warfare.

Our challenge is to match innovative capabilities and companies with the defense strategy and provide beachheads and bridges, not barriers, to nurture them and draw them into defense.

But even as our report was going to print, some of the small companies we got to know through the report began gaining significant positions in the defense industrial base. Let me tell you the stories of just four of them.

California's Foam Matrix, a company of 18 employees, started as a surfboard supplier and now is a builder of composite wings for the unmanned combat aerial vehicle. It was founded——.

Chairman MANZULLO. How are you doing on time there?

Ms. PATRICK. I am doing just fine on time, thank you.

Chairman MANZULLO. We are not.

Ms. PATRICK. Thank you.

Chairman MANZULLO. Do you want to sum up there?

Ms. PATRICK. I will be happy to sum up. I would like to give you some of the examples of the small companies, though. I think they would be interest to you.

Chairman MANZULLO. I understand, but you have talked about small companies and publicly traded companies, and you are not talking about existing companies that are being hit. That is missing from your testimony.

Ms. PATRICK. How much more time would you like to give me?

Chairman MANZULLO. I would like to give you an hour, really, but I just do not have the time here. If you can finish in a minute, that would be fine, because I have got to get everybody in here before the next series of votes goes on.

Ms. PATRICK. Okay. Well, let me move on, then.

I think that the examples of the small companies indeed are in the written testimony and I think that most of the initiatives that we work on with regard to small businesses and the inroads that we have provided them to the department also are covered in the written testimony, which I think you have.

The only thing I would ask you to do, Mr. Chairman, if I can submit the entirety of my oral testimony for the record.

Chairman MANZULLO. It will be made part of the record. Thank you.

Ms. PATRICK. Just so that you have an opportunity to read it.

Let me then turn to House Resolution 1588.

Chairman MANZULLO. That is what I wanted seven minutes ago, but go head. Let us get it out. Please.

Ms. PATRICK. You have asked that I comment on the provisions of House Resolution 1588 and I will do so now.

First, you have already alluded to what the Office of the President of the United States thinks about this. The provisions are indeed based on inaccurate presumptions that, first, the defense industrial base needs to be revitalized and, two, that U.S. defense systems are vulnerable due to foreign dependencies.

I think that I talked in my formal remarks about how impressed we have been with the responsiveness of the defense industrial base in operational environments and I have also given you some of the examples of the financial performance parameters of the defense industrial base to convince you of the fact that it is not on the ropes.

But let me talk about one of the most impressive feats, talking to the nimbleness and flexibility of the defense industrial base.

Chairman MANZULLO. I have got to move on with these other witnesses. We can come back to you in terms of—

Ms. PATRICK. Let me then cede my time and I will answer your questions.

[Ms. Patrick's statement may be found in the appendix.]

Chairman MANZULLO. We will do that when we finish questioning the other people on the panel.

I know you have a lot of information, it will come out in the questioning, and I forgot to introduce you in the midst of all this

as Suzanne Patrick, Deputy Under Secretary of Defense for Industrial Policy. I thank you for your testimony.

Our next witness is Matthew S. Borman, Deputy Assistant Secretary for Export Administration, Bureau of Industry and Security. That is the old BXE, as I knew it, Department of Commerce.

I think you know where we are heading with the testimony. What we would like you to do—I think I have gotten my point across here and we look forward to your testimony.

Thank you.

**STATEMENT OF THE HON. MATHEW S. BORMAN, DEPUTY ASSISTANT SECRETARY FOR EXPORT ADMINISTRATION, DEPARTMENT OF COMMERCE**

Mr. BORMAN. Thank you, Mr. Chairman. It is a pleasure to be here and testify before you and members of the Committee. As you noted, when either I or my colleagues normally come up to speak with you, it is on export controls, a subject with which you are very familiar, but we are happy to be here to talk about the defense industrial base.

I also have a full statement which I understand will be put in the record and I will further truncate my oral statement in light of the time considerations.

The points I wanted to make really in the oral statement are the Department of Commerce really has two roles related to the defense industrial base and then I will comment briefly on H.R. 1588.

We do a number of functions related to the defense industrial base. I think the ones that are most germane to this hearing are our assessments of specific industry sectors and we have actually five of those going on right now, one that deals with the biotechnology industry, one that deals with the textile and apparel industry, which was directed by the Congress to do, one that deals with the parachute industry, one that deals with the battery industry, both of which were requested by the Army, and one that deals with the shipbuilding subcontractor base, which was requested by the Department of Navy.

We have those that are ongoing. Over the last 15 or so years, we have done roughly 30 of these industry subsector-specific assessments, as I said, virtually all of them at the request of one of the services. Typically, what happens when we finish one of these studies is there is a series of recommendations that address whatever weaknesses there may be in that particular industry subsector. So that is one set of functions we carry out related to the defense industrial base.

Another set relates to defense trade advocacy. We, along with other agencies, once a U.S. sale of a major weapons system to a foreign buyer is approved, advocate on behalf of the U.S. company. And obviously when a defense sale is made to a foreign government, that has a significant positive impact on the defense industrial base because it provides a lot of jobs, not only for the prime but for the subs.

The third thing I wanted to mention that the Department of Commerce is doing, this is primarily with the International Trade Administration and Under Secretary Aldonis, is carrying out the President's manufacturing initiative, which is not limited to the de-

fense industrial base, but focuses on the manufacturing sector at large and the object of this initiative is to really hear from the manufacturing industry the things the government could do to address some of the issues the chairman has raised.

As you know, we have had a series of roundtables with industry. One was in Rockford recently, there is one in Schaumburg, or Naperville, I think, in a couple of days. And that report will come out early in '04.

So that is in summary the issues that we deal with both specific to the industrial and also more generally the manufacturing sector.

On H.R. 1588, as you have heard briefly and will hear more, I am sure, and see in the testimony, the administration believes that a lot of those provisions would make it more difficult for the Defense Department to procure what they need to procure on a timely and cost effective basis and certainly some of the provisions like the machine tool provision have the risk of actually helping some, potentially helping some parts of the defense industrial base but also hurting others, particularly if there are companies that end up having to spend a significant amount of money replacing machine tools that have foreign content with those that only have U.S. content. So clearly care has to be taken in crafting restrictions and requirements to that you are not potentially damaging one part of the industrial base but hurting or adversely affecting another part of the industrial base.

And with that, I will conclude my statement and be happy to answer questions.

[Mr. Borman's statement may be found in the appendix.]

Chairman MANZULLO. Thank you very much.

Our next witness, if you have not figured it out by now, green is okay, yellow is thin ice and red is—yes, the hatch opens. Right.

You have already been introduced by your very able member of Congress and we look forward to your testimony.

**STATEMENT OF TIMOTHY G. RUPERT, PRESIDENT & CHIEF EXECUTIVE OFFICER, RTI INTERNATIONAL METALS, INC., NILES, OHIO**

Mr. RUPERT. Thank you. Mr. Chairman, we thank you for the opportunity to testify here today on a matter of critical importance to my company as well as to my industry. My name is Timothy G. Rupert. I am the President and CEO of RTI International Metals, Inc. I am also the President of the International Titanium Association.

Titanium due to its unique strength-to-weight ratio is critical to the production of jet aircraft. In fact, the industry was born out of the military's need for high performance metal from which to build key components of new jet fighters, as Ms. Patrick has already testified.

It is for this reason that in 1973 Congress placed titanium, along with other specialty metals, under the protection of the specialty metals clause of the Berry Amendment, requiring that specialty metals be produced domestically. You cannot build military aircraft without titanium.

Approximately 90 percent of primary titanium production in this country comes from just three companies. Generally three-fourths

of the industry's product goes into the production of aircraft, both commercial and military. These are small companies relative to their customers and following 9/11 they comprise a financially fragile industry.

Earnings have steadily declined over the past five years, with the industry losing \$163 million last year alone. To put that number in perspective, it represents about one-fourth of our combined market value. Obviously, this trend cannot continue much longer.

The only other significant supplier in the world qualified for critical aerospace applications is a Russian producer, VSMPO, whose capacity is larger than the three U.S. producers combined. Yet while the domestic industry continues to shrink, VSMPO's shipments and earnings have steadily grown, in large part due to favorable treatment by the U.S. Government at the expense of domestic producers.

That favorable treatment takes two forms: a trade policy that favors the Russian producer and increasing circumvention of the Specialty Metals Clause.

The trade issue is not our focus here today, but I think it is important for the Committee to be aware of it, so I will cover it briefly.

The basic raw material for our melting process is titanium sponge, so called due to its appearance. The U.S. industry can produce only a fraction of its sponge needs and must import the bulk of its requirements, paying a U.S. tariff of 15 percent.

On the other hand, while our country has ample melting and finishing capacity to meet its needs, Russian finished melt products have been extended the benefits of the GSP trade program, which waives the 15 percent duty. So while U.S. producers are paying a 15 percent duty to get needed raw material, Russian mill product is permitted to enter our market in unlimited quantities duty free. The net effect is that VSMPO, in addition to any help that they get from their government, has been granted a cost advantage by our government.

An even bigger threat to the U.S. titanium industry is the current attack on the Berry Amendment. Increased military spending, particularly aircraft, is one of the few bright spots in our marketplace. However, attempts to abolish or undermine the specialty metals clause in what I will refer to as midnight waivers of its requirements threaten to take away that lifeline.

After operating as intended for 25 years, suddenly the specialty metals clause has fallen victim to increasing misinterpretation, its requirements violated and its intent ignored all together.

A number of us have been subpoenaed to supply information in an investigation that began in the spring of 2000 by the Defense Criminal Investigative Services Unit of the Office of the Inspector General into violations of the Specialty Metals Clause. We encourage the Committee to inquire as to the status of this investigation and learn the extent of these violations from a disinterested party.

Mr. Chairman, my written testimony details several of these questionable waivers of the Berry Amendment. I know that you are aware of them, so in the interests of time I am going to skip over them now.

The effect of these waivers has been to seriously weaken the U.S. titanium industry and, in our opinion, if this trend continues, we believe that it will have a direct and negative impact on national security.

Make no mistake: most of the titanium industry's business comes from aerospace, so we have a vested interest in its success. However, a strategy that sacrifices the industrial underpinnings of the industry in an effort to sell airplanes will ultimately fail. After all, the whole point of this national wanting to sell planes is because they embody U.S. materials and labor. There is no victory in selling an airplane with a U.S. name on the side if it is made of foreign materials and labor. It hurts our economy and it makes us dependent on foreign producers.

One might ask if these are not the reasons for this assault on the specialty metals clause, then what is the motivation?

It has been suggested that Russian product is cheaper. We doubt that that is the case in titanium, particularly when you consider the trade advantage mentioned earlier. Consider that the cost of the titanium in a 767 tanker, for example, represents less than one-half of 1 percent of its total cost.

Chairman MANZULLO. You have got a red light there flashing in front of you. Can you summarize in 30 seconds?

Mr. RUPERT. In 30 seconds? It would be difficult. Let me just give you my summation, Mr. Chairman, which is that if it is still the intent of Congress that small industries such as ours be preserved, we need your help in making it clear that regulations like the Specialty Metals Clause are a directive, not a nuisance.

Chairman MANZULLO. I appreciate that. Thank you.

Our next witness is Matthew Coffey. He is the President of National Tooling and Machining Association.

Again, I would like to counsel our witnesses that there is a narrow focus of this hearing today and that is the impact upon your industry, whether or not you think the Pentagon has missed the fact that you believe your industry is in peril. The purpose is educational. If you could use that as the theme, you could start out with saying how bad business is and how important your industry is, and what is left in the United States. Okay?

I guess on that basis, you can start with your testimony, Mr. Coffey.

**STATEMENT OF MATTHEW B. COFFEY, PRESIDENT, NATIONAL TOOLING AND MACHINING ASSOCIATION, FORT WASHINGTON, MARYLAND**

Mr. COFFEY. Thank you for making my opening remarks, Mr. Chairman.

Basically, what I think we are dealing with here is a conflict of objectives between transnational companies and privately held small manufacturing companies. The transnationals or multinationals which the Defense Department just reported on with glowing numbers are doing just fine right now, but they are driven by numbers that they have to report each quarter. This forces them to seek the lowest cost source, wherever in the world they can find it, and with the Internet and inexpensive transportation, that system works for them.

Not since Theodore Roosevelt was President have we seen such concentration in economic power as we see now in the transnational companies. Many of these companies' net worth exceeds the GDP of major developed countries. These transnational companies are highly efficient at moving quickly.

When a large number of them move at once, that can create major economic effects before governments even know what is going on. And that is what I think we are involved with here. The privately held entrepreneur has no such economic leverage. They are geographically limited and resource limited. Teddy Roosevelt busted the trusts and maybe Congress needs now to regulate the transnationals going forward.

U.S. government procurement represents a potential refuge for small manufacturing companies, 30 percent of which have disappeared in just the last three years. At this point in the aircraft business, the only real development work is being done on military aircraft and weapons. If the primes are allowed to out source this work under MOUs, then the devastation that has occurred in the last three years will continue.

We need relief in the forms I have outlined in my testimony. What America has been losing these last three years is jobs, millions of jobs in manufacturing, mostly in small and medium sized companies, jobs that have a multiplier effect in the economy.

You have seen it in your congressional districts. There are more big box stores selling foreign made products using loss leader pricing. That system works until enough people lose their jobs and we are getting very near to that point. The next election in your districts and in the country will be about jobs. It will not be about tax cuts because all the tax cuts in the world will not bring back jobs if the transnationals continue to ship the jobs offshore.

On behalf of the 2000 companies of the National Tooling and Machining Association, I thank you for exploring how the defense industrial base can be improved so we maintain our tax base in the United States.

I will be happy to answer your questions.

[Mr. Coffey's statement may be found in the appendix.]

Chairman MANZULLO. You have two minutes left. Could you give a definition of what machine tools are?

Mr. COFFEY. Machine tools fall into two categories. There are commodity machine tools, which are large tools used by toolmakers for the purpose of designing tooling, tooling being used to make products in a manufacturing environment.

I speak for the tooling and machining industry in the United States, which includes the toolmakers, the die makers, the precision machine companies that are all small, average size about 30 employees. There are probably about 7000 of them left in the country and our association has 2000 of them as members. At one point, we had 3800 members, but that was when the industry was much larger.

We are seeing the industry disappear in the United States, we are seeing it being moved to Asia, and we feel that that is—since these jobs are so high tech, these jobs require so much training, that we are in fact doing ourselves in and you will see in my writ-

ten testimony I am raising questions about what in the world we are doing to ourselves as a country.

Machine tools, the commodity machine tool is a highly sophisticated machine that is used by a large range of industries and can be quite expensive. Tooling can be anything from \$30,000 up to \$400,000. Machine tools can run into the millions of dollars. So that is a basic definition and still within time.

Chairman MANZULLO. Thank you.

Our next witness is Chip Storie, Vice President, Aerospace Sales of Cincinnati Machine, speaking on behalf of Cincinnati Machine. You are now in Kentucky, I understand?

Mr. STORIE. We are in the process of moving. Yes.

Chairman MANZULLO. Speaking on behalf of your company and on behalf of the Association for Manufacturing Technology. We look forward to your testimony.

**STATEMENT OF CHIP STORIE, VICE PRESIDENT FOR AEROSPACE SALES, CINCINNATI MACHINE, CINCINNATI, OHIO, AND MEMBER, GOVERNMENT RELATIONS COMMITTEE, THE ASSOCIATION FOR MANUFACTURING TECHNOLOGY**

Mr. STORIE. Thank you for inviting me to participate today. My company, Cincinnati Machine, a division of UNOVA—

Chairman MANZULLO. Could you move the microphone?

Mr. STORIE [continuing]. Is a manufacturer of machine tools. As you know, Mr. Chairman, machine tools cut and shave metal to make parts that go into almost everything that is manufactured, ranging from pumps to automobiles to aircraft. Without machine tools, none of these items can be effectively produced.

As you also know, Mr. Chairman, the machine tool industry in the United States today is in a crisis. Consumption of machine tools in the United States has decreased by approximately 60 percent over the past five years. There is a direct correlation between the amount of manufacturing done in the United States and machine tool consumption here in our home market. As a result, the once strong U.S. machine tool industry has seen many of its best, most innovative companies go out of business in the last four years. Ingersoll International of Rockford, Illinois is just one of the most recent examples of this.

As an aside, Mr. Chairman, I would like to thank you for your strong leadership, along with Congressman Richard Neal of Massachusetts, of the House Machine Tool Caucus, which has provided invaluable support and encouragement for our industry during these difficult times.

Mr. Chairman, the machine tool industry in the United States has served the needs of the U.S. defense industrial base for well over a century. The machine tool industry, made up primarily of small businesses, has a well documented history of supporting our nation's defense needs with the high technology production equipment that is at the heart of the weapons systems that have established the United States as the preeminent military power in the world. This tradition continues today.

One of the best examples of the criticality of our industry can be demonstrated by the government contracting experience of another AMT member, the Moore Tool Company, headquartered in Bridge-

port, Connecticut. To illustrate, let me give you an overview of the past 18 months.

During that period, Moore Tool has completed the following projects with the U.S. Government: They have worked for Lawrence Livermore Laboratory, building an optical flycutter, two four-axis diamond turning lathes, for Los Alamos labs, they built two spherical measuring machines for nuclear components, one parting lathe for the disassembly of nuclear components and one special L-based lathe for nuclear components.

For Sandia National Labs, they have built diamond turning lathes and for the Y-12 Oak Ridge facility, they built one special grinder for nuclear components and one five-axis jig more.

For our part, Cincinnati Machine is supplying equipment to support programs such as the Joint Strike Fighter, C-17, F-22, V-22, as well as a number of others that cannot be disclosed due to their sensitive nature. It is our view that this Committee's concern about being overly reliant upon foreign sources for critical technologies is quite valid.

Examples of the technologies currently being consumed from the machine tool industry are in high speed machining as well as five-axis and composites processing machines. If we focus on composites technology, this is a great example of industry and defense working together to develop a technology that has proven to be invaluable. Cincinnati Machine's composite processing equipment produce aircraft components from composite materials to provide aircraft such as the B-2 with its stealth capability. Cincinnati worked closely with Boeing in the early stages of the B-2 program to develop this technology into one that could be counted on in a production environment.

Today, only a handful of companies can produce this type of equipment and depending on how one defines composite capability, there are only two or three companies in the United States, one in Spain and one in France. I do not believe that we want our defense capabilities being controlled by the prevailing political whims of foreign governments, no matter how close an ally they are to be considered. This is why America's defense industrial base needs a strong and healthy machine tool industry.

The Defense Production Act allows the U.S. Government to prioritize production for any company within its jurisdiction, but, of course, it cannot dictate to a company in a foreign country as to what it must manufacture or move up the priority of the manufacture of any particular product. There are inherent limits to U.S. Government authority, no matter how urgent its production is the defense of the United States. That surge capacity can only be found within the confines and the jurisdiction of the United States.

If the Congress decides to create a mandate to buy American built machine tools for defense contracts, other factors aside from technology merit discussion. First, can the U.S. Government procure the technology at a competitive price? Secondly, subject import there enough capacity in the United States to satisfy the demand?

Both factors boil down to basic business principles. Every industry faces pricing pressures from overseas competitors. We deal with this on a daily basis. We are succeeding in all corners of the globe by offering a superior product at competitive prices. As long as the

dollar-to-euro exchange rate ratio remains in a reasonable range, U.S. industry can and does compete on price. An increase in defense orders will allow us to better utilize our assets which will in turn assist us in keeping our costs in line with our foreign competition.

Without a doubt U.S. suppliers are capable of delivering a cost effective product, especially in the area of high tech products.

As for capacity, again, the industry has historically ebbed and flowed with demand. There is nothing fundamentally different today that would prevent us from increasing capacity in a rapid fashion when called upon. We have met the demand in the past and we are prepared to do so again.

To summarize, the U.S. machine tool industry is prepared to supply the highest technology at a competitive price and is capable of delivering at the appropriate quantities. A Buy America will keep our manufacturing base in this country strong. A strong manufacturing base is key to the United States' continued dominance in the defense field.

With our nation's defense establishment and the defense industrial base working together, the United States will continue to be in a position where it can control its own destiny.

Mr. Chairman, thank you for providing the forum for the discussion of the nation's defense industrial base. I will take questions at the appropriate time.

Chairman MANZULLO. Thank you for your testimony.

[Mr. Storie's statement may be found in the appendix.]

Chairman MANZULLO. Our last witness is Olav Bradley. He is the President of P.M. Mold Company, speaking on behalf of himself and as Government Affairs Liaison for the American Mold Builders Association.

We look forward to your testimony.

**STATEMENT OF OLAV BRADLEY, CHAIRMAN AND GOVERNMENT AFFAIRS LIAISON, AMERICAN MOLD BUILDERS ASSOCIATION, PRESIDENT, P.M. MOLD COMPANY**

Mr. BRADLEY. Thank you, Chairman.

I represent the American Mold Builders Association and it is a group of precision mold builders throughout the United States. We are talking about how manufacturing is being hurt. At one point, we had 448 members. Average size shop was like 27. In the last three years, 32 of those members have gone out of business, bankrupt, whatever. Another 65 have closed their doors for one reason or another, they sold out, just retired, it was not worth it. We, as an industry, are getting killed. We have lost about 25 percent of our mold shops.

Now, we are talking about molds, that is industrial molds, and it goes with tool and die makers. Everything in manufacturing starts with either tool and die or industrial molds. It has to start there. We are a trade. It takes about five years apprenticeship to learn the trade. We are losing 25 percent. They are gone. These skilled workers will never come back. It is just gone.

During the '50s, I believe 48 percent of the gross national product was in manufacturing. The last number I heard, it is well under 14 percent now. There has to be some kind of—what would

you call it—help or aid given to this industry because if we go down, manufacturing as we know it in the United States is going to go down also. And it has gone down fast.

In the last three years, just over two and a half million jobs have been lost. Interesting, on the 4th of July I read the headlines, I got the paper here, and it said that again unemployment has hit a 9-year high. What is interesting is that statement came out on the 4th.

Chairman MANZULLO. Mr. Bradley, in 2 minutes and 13 seconds, tell us what a mold is and how critical that is to manufacturing.

Mr. BRADLEY. Well, anything made of plastic comes out of a mold. They are precision made. Anywhere from your glasses, drinking glasses, to interior parts. A water pitcher. Yes. We do a lot of interior parts for automobiles, for cars. Radio buttons.

Chairman MANZULLO. In defense?

Mr. BRADLEY. Defense, we have made a lot of the water coolers. We did the molds for the water coolers that are sent over, to contain water for our troops. Also in the past, we have made—our company has made the forearm piece for the M-16 carbine. We have also made for Colt Manufacturing the foreign on one of the small assault rifles.

Chairman MANZULLO. And that is just your company?

Mr. BRADLEY. That is just our company. The companies that we represent with the AMBA, they cover everything, just about everything that could possibly be made of plastic or die cast dies.

Chairman MANZULLO. And that is military weaponry and parts of tanks, airplanes, et cetera?

Mr. BRADLEY. Yes, sir.

Chairman MANZULLO. Okay.

Mr. BRADLEY. All the equipment, everything.

Chairman MANZULLO. Okay. That answers the question. That is part of your testimony. Thank you.

Mr. BRADLEY. I would be glad to answer any questions. Thank you.

Chairman MANZULLO. Thank you.

[Mr. Bradley's statement may be found in the appendix.]

Chairman MANZULLO. Everybody has lots of questions and let me—I am concerned about the criteria that are used, Ms. Patrick, for determining the health and viability of our strategic base.

Do you ever monitor in the Pentagon whenever a contract is awarded to a foreign firm the impact that that has on the domestic industry?

Ms. PATRICK. You know, we actually are quite vigilant with regard to the entire health of the defense industrial base. We frequently do studies about various sectors of the defense industrial base, but perhaps the study that is most interesting to your question is a study that we did in 2001 where we looked at the foreign content of eight major defense systems and it was a rather involved study, it went down to the level of \$100,000 equipment in those eight major defense systems, down to the third tier of suppliers, 3500 companies were queried. It took a team of dozens experts on the order of half a year to do this study. And what we found was that only less than 2 percent of the content of those eight major weapons systems was foreign.

Chairman MANZULLO. Then why—.

Ms. PATRICK. We indeed are repeating a similar study for the most consumable and most important items used in Operation Iraqi Freedom, but in no case have we found—.

Chairman MANZULLO. I am reclaiming my time.

Your study showed that only 2 percent of military equipment has foreign parts?

Ms. PATRICK. Two percent of the content of those eight military systems was foreign.

Chairman MANZULLO. Okay. Then why are you concerned about increasing the Buy American Act from 50 to 65 percent?

Ms. PATRICK. We are concerned about it because it eliminates the flexibility of our primes whom we must hold accountable for the timely and appropriate delivery of our weapons systems.

Chairman MANZULLO. So you are saying that the American manufacturers cannot give you timely delivery?

Ms. PATRICK. There are times when American manufacturers are not either cost or technology competitive to our primes. That is absolutely right.

Chairman MANZULLO. In regard to the cost, let me get very specific. For example, you may not know, do you know what a cold forming machine is?

Ms. PATRICK. I have seen many cold forming machines on our production lines. Yes, sir.

Chairman MANZULLO. Okay. There is one cold forming machine left in the United States. It is in Tiffin, Ohio. Do you know what that machine makes? It makes bullets.

Ms. PATRICK. Right.

Chairman MANZULLO. Okay. Otherwise, you have to machine each bullet during several different processes. This takes the cold product and turns it into bullets. That company almost went under and we would have had no company left in the United States that could manufacture bullets.

Were you aware that this company, that there is only one company left that does that?

Ms. PATRICK. Sir, I do not know what the timeframe is you are speaking of.

Chairman MANZULLO. I am talking about within the last six months. But, see, I think that is the problem, is you are looking at publicly held corporations. When you talk about—.

Ms. PATRICK. No, the examples actually that I was providing of the small companies and the 400 emerging defense suppliers that we have taken a lot of interest in because they are small companies—

Chairman MANZULLO. But those are emerging.

Ms. PATRICK [continuing]. None of them are public companies. They are small.

Chairman MANZULLO. But those are emerging. What about—I mean, you heard about Ingersoll, okay? Now, do you know what—.

Ms. PATRICK. Ingersoll also is not a small company, sir.

Chairman MANZULLO. Well, it was 3500, it went down to 300 before it bankrupted. And do you know why that happened?

Ms. PATRICK. I know that there are a number of viewpoints on why that happened.

Chairman MANZULLO. Let me give you the factual reason why it happened. The F-35 is the Joint Strike Force fighter. Lockheed Martin is the major contractor, British Aerospace and Northrop Grumman are the subs.

Ms. PATRICK. We know the program well, sir.

Chairman MANZULLO. Well, let me tell you—then I will ask you some questions on it, then. When a contract was given to the Spaniards for high precision drilling machines, as opposed to Ingersoll, did anybody do an analysis as to the impact that would have on Ingersoll at the time?

Ms. PATRICK. Well, we actually did an analysis, because we knew that you were particularly interested in Ingersoll—.

Chairman MANZULLO. No, no, no. I am talking about prior to the contract being let.

Ms. PATRICK. We have often in cases of large pieces—.

Chairman MANZULLO. Ms. Patrick, on this particular contract.

Ms. PATRICK. No, it is not the purview of the Office of the Department of the Secretary of Defense to in advance involve ourselves with our contracting process.

Chairman MANZULLO. So you do not monitor the impact that a foreign contract would have on a domestic industry.

Ms. PATRICK. We do not interfere with the contracting processes—.

Chairman MANZULLO. This is taxpayer money. It is not talking about interference, ma'am, we are talking about a company that went bankrupt and was almost bought by a Chinese company in bankruptcy.

Ms. PATRICK. Sir, if you would like to talk about that specific issue, you know, it is a contract that we have looked into. It was very clear that the offerings of Ingersoll were not technically capable.

Chairman MANZULLO. Oh, let me—.

Ms. PATRICK. The Ingersoll bid was not even close—.

Chairman MANZULLO. Let me stop you right there.

Ms. PATRICK [continuing]. And it was—and we cannot tell what the differential of the bid was of Ingersoll relative to the other manufacturers—.

Chairman MANZULLO. Are you aware of the fact that the very machine for which Northrop Grumman was to contract for with Ingersoll, that Lockheed Martin, the prime contractor, already had contracted with Ingersoll to build three of the same machines for them? Were you aware of that?

Ms. PATRICK. Yes. We know that there is a Joint Strike Fighter contract by Lockheed Martin to Ingersoll. Yes, we are aware of that.

Chairman MANZULLO. But it is the same machine. Ingersoll is building the same machine for Lockheed Martin that they were going to build for Northrop Grumman and you are telling us they were not technically capable.

Ms. PATRICK. I am not positive it was the same machine. I think they were different machines.

Chairman MANZULLO. Ma'am, I'm telling you—I am telling you, it was the same machine.

Ms. PATRICK. I will take that question for the record, sir.

Chairman MANZULLO. No, this is the problem. I do not think you have sufficient information. For example, with Cincinnati—it used to be Millicron, the plastics have been split off. Do you know the companies in the United States that have the ability to build machines to tape stealth material on wings and fuselages of aircraft? How many companies would you say there are in the United States?

Ms. PATRICK. Sir, I am sure you will be happy to tell me.

Chairman MANZULLO. Well, but you should know that or at least have an indication. There is one left, that is Cincinnati. Now, we are down to one company. Now, would you agree that it is strategic to have in the United States a company in existence that can make those machines for taping stealth material for wings and fuselages? Do you not agree that is extremely technical, very important to our national strategic base?

Ms. PATRICK. We actually do have provisions in Title 3 where when we find that there is an industrial base capability that we do not have in this country that is strategic and that we are in danger of losing our edge if we do not have that capability, we can fund that capability and we do so when we see fit to do that.

Chairman MANZULLO. Well, all they wanted was a contract. See, that is the point. In fact, I talked to the admiral who is in charge of the contracts overseeing the F-35 and I said, "Admiral, do you monitor the contracts that the primes and the subs give to the companies to make sure that our defense industrial base is maintained?"

And he said, "No."

I said, "Well, don't you think that's important?"

Ms. PATRICK. Well, the problem with that is if we begin monitoring the contracts of our prime contractors, there is no accountability for the products that they actually deliver to us in terms of content, in terms of timeliness.

Chairman MANZULLO. What do you mean, no accountability? We are talking about national defense. This is strategic industry.

Ms. PATRICK. Because the contractors then can come back to us and say, well, you forced us to use XYZ company or you forced us to procure this piece of GFE or this was the piece of GFE that did not work, this was the machine tool that was a problem, and to blur the line of accountability in that way jeopardizes the entire process by which we procure weapons systems.

Chairman MANZULLO. Blurring of the line—.

Ms. PATRICK. Somebody has to be in charge.

Chairman MANZULLO. The Congress is in charge. That is why we passed the Barry Amendment. That is why the Secretary of the Air Force just randomly waived the Barry Amendment on aircraft. I mean, it is just—we cannot seem to get across to you, number one, that the industrial base is in deep, deep trouble. You do not believe that—.

Ms. PATRICK. I do not.

Chairman MANZULLO. You have no way of believing that and there is nothing I can do to convince you of that, except that you

have to agree with the statement that a company that makes the machines that wrap the material for stealth technology, that is obviously important to our industrial base. Is that not correct?

Ms. PATRICK. Yes, sir, but let us talk to you a little bit about the impact on our industrial base of the tooling provisions. I did not have a chance to do so, but I will do now.

If you take a look at just the big five defense contractors alone, if we were to try to replace their foreign-made tooling with U.S. tooling, it would be——

Chairman MANZULLO. That issue is moot.

Ms. PATRICK [continuing]. Eight to ten billion dollars——.

Chairman MANZULLO. That issue is moot.

Ms. PATRICK. But the thing you have to remember is that we have one of the most flexible, innovative defense industrial bases and the most flexible production lines in the world. Many of our follow-on systems can be produced in existing production lines. Much of the wartime surge gets produced on existing production lines. And so if there were a tooling provision that would require us——.

Chairman MANZULLO. But that provision has been removed.

Ms. PATRICK. If there were a tooling provision that would require us to produce new systems on all American production lines——.

Chairman MANZULLO. For the fourth time—listen to me, please. The provision——.

Ms. PATRICK. What is the tooling provision, if it is not——.

Chairman MANZULLO. The tooling provision, as I explained at the beginning, is going to be replaced with new language.

Ms. PATRICK. And what will that language say?

Chairman MANZULLO. The new language says anytime there is a new order of \$5 million or more——.

Ms. PATRICK. Okay. So let us take——.

Chairman MANZULLO. No, please let me explain to you what it is, all right? And in the event that a manufacturing company has to buy a new tool in order to make that \$5 million—so they are going to be buying a new piece of machinery anyway, then in that case that new piece of machinery has to be only 70 percent American content. That is going to be the provision that Mr. Hunter is putting into the bill. So that means that the company is going to buy the machine tool anyway, just in this case, the machine tool will be coming from 70 percent U.S. content. That is the new provision.

Ms. Velazquez?

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Ms. Patrick, in the statement of administration policy issued as a result of the defense industrial base provision contained in H.R. 1588 is the statement that the provisions in question establish rigorous restriction against using non-U.S. sources that will unnecessarily restrict the Department of Defense's ability to access non-U.S. state-of-the-art technology and industrial capabilities.

Do you believe that state-of-the-art technologies are only available overseas?

Ms. PATRICK. I do not believe that state-of-the-art technologies are only available overseas, but let me give you one example.

The lift fan technology in the Joint Strike Fighter's Marine variant is produced by a British company. We would not be able to field—

Ms. VELAZQUEZ. Was that—

Ms. PATRICK [continuing]. The Marine Corps variant of the Joint Strike Fighter if we had to rely solely on U.S. content.

Ms. VELAZQUEZ. Was there a time when that technology was available in the United States?

Ms. PATRICK. No, it is innovative, new technology. It is not technology that has been available in the United States.

Ms. VELAZQUEZ. Ms. Patrick, to trade agreements play a role in the fact that some technologies have migrated overseas?

Ms. PATRICK. Trade agreements? You know, I would imagine the trade agreements do play a role in the fact that some technologies have migrated overseas, but, you know, it is not my purview to monitor trade agreements, so let me ask somebody else on the panel to answer that question.

Ms. VELAZQUEZ. Mr. Borman?

Mr. BORMAN. It is a hard question to answer because there are a couple of aspects to it. Obviously, the trade agreements are at a very general level. If you are talking about technology that we have subject to export controls, the export controls continue regardless of the trade agreements, so to consider the question just as you have said it, it seems to me my initial reaction is trade agreements really do not have an effect on certainly controlled technology going overseas and controlled technology is, I think, what we are talking about here for defense products.

Ms. VELAZQUEZ. Is it not true that purchases from certain qualifying countries like the United Kingdom are acceptable as part of the Barry Amendment?

Mr. BORMAN. I would have to take that question and give you answer later.

Ms. VELAZQUEZ. Ms. Patrick, Mr. Coffey mentioned in his testimony the concern raised by Armed Services Committee Chairman Hunter regarding Boeing's problem with the Swiss source of the guidance system for the JDAM bomb during the Iraq war. This resupplier refused to supply the system because of either Swiss laws or his belief that the war was unjust.

How do you justify not supporting domestic sub requirements for critical defense industries in light of this very recent occurrence?

Ms. PATRICK. You know, I have to tell you that Honeywell's performance during that particular episode was nothing short of epic in the history of Operation Iraqi Freedom. Honeywell in 48 hours established an alternate source for the Swiss JDAM crystals. By the time the confused Swiss company took seven days to understand their government's policy and delivered all of their items, already a second source had been established and that Swiss company is no longer part of our defense industrial base.

Ms. VELAZQUEZ. But that does not raise the issue of our national security in times of war?

Ms. PATRICK. Well, we became very interested in that issue when we had the 48-hour issue with regard to the JDAM crystal from the Swiss supplier and, indeed, by the accounts of the Joint Chiefs of Staff, the Defense Contracting Management Agency, there was not

a single instance in Operation Iraqi Freedom where any foreign supply caused us an operational impact. There was no instance where there was not a delivery of foreign supplies as scheduled.

As a matter of fact, there were other examples where French and German companies were extraordinarily helpful to our war fighters—

Ms. VELAZQUEZ. Thank you.

Ms. PATRICK [continuing]. In spite of their government's well-stated position—

Ms. VELAZQUEZ. Thank you, Ms. Patrick.

Ms. PATRICK [continuing]. On—

Ms. VELAZQUEZ. Ms. Patrick, this is my time.

Mr. Borman, we all know how much you are about promoting small businesses and providing every opportunity that we could in terms of the federal government, so in the reconstruction of Iraq, how much effort are you putting so that we make sure that small businesses participate in such an effort and not the Halliburtons of the world will be involved in the reconstruction of Iraq?

Mr. BORMAN. That is a question I will have to get back to you on. That is not directly in the purview of my responsibility at the Department of Commerce, but, as you probably know, there are contracts that the State Department has let and that is really the entity that is in charge of at least the initial phase of the reconstruction.

Ms. VELAZQUEZ. Ms. Patrick, in your statement you described the defense industrial base as healthy, innovative and responsive. The term healthy caught my attention and you mentioned several reasons why the industry was healthy. Would you agree that your statement suggests that the U.S. industry base is in an economically strong position?

Ms. PATRICK. The U.S. defense industrial base indeed is in an economically strong position. It is one of the very few engines of the overall—

Ms. VELAZQUEZ. Okay. You say yes.

Ms. PATRICK [continuing]. American economy—

Ms. VELAZQUEZ. That is enough. If the industry is healthy, could you please explain why 2.4 manufacturing workers have lost their jobs since January 2001?

Ms. PATRICK. I think we are comparing apples and oranges here.

Ms. VELAZQUEZ. Really?

Ms. PATRICK. Ma'am, you are talking about manufacturing workers, I am talking about the defense industrial base, which is a subset of the manufacturing workers. We have all kinds of aerospace workers, manufacturing workers, that work with us—

Ms. VELAZQUEZ. So all these people that are here testifying today, they are not part of that industrial base? And so those workers who are losing their jobs are not part of this industrial base?

Ms. PATRICK. At the same time, for instance, if you take a look at just one program that I know one of your members holds near and dear, the new aircraft carrier program—

Ms. VELAZQUEZ. Thank you, Ms. Patrick. I would like to hear from the other witnesses.

Ms. PATRICK [continuing]. Thirty-five thousand jobs—

Ms. VELAZQUEZ. Excuse me. I am the one asking questions here.

Ms. PATRICK. I am so sorry, I wanted to answer it.

Ms. VELAZQUEZ. I would like to hear comments from you regarding how healthy the industrial base is.

Mr. COFFEY. Well, I attempted to make that clear in my statement, that what we are seeing is we are losing a capability in the United States to manufacture product. Many of those capabilities are in defense-related products, as pointed out by the chairman, with cold forming. Once we export those skills and export the technology associated with those skills, which the prime contractors are more than willing to do in order to seek the lowest possible costs in the world, we have lost those abilities for a very long time and it takes a long time to rebuild them.

Ms. VELAZQUEZ. So, Mr. Coffey, you disagree with Ms. Patrick's assessment?

Mr. COFFEY. Most definitely.

Ms. VELAZQUEZ. Thank you.

Yes, Mr. Storie?

Mr. STORIE. I can relate that since the year 2000, Cincinnati Machine's employment has gone down from approximately 1500 to where we will be by the end of this year at 350 people. That is a significant drop in percentage.

Chairman Manzullo's comments that Ingersoll's employees dropped to that same level before they went bankrupt certainly gives me pause. We are doing everything we can to remain a viable corporation, but we are definitely in distress.

Ms. VELAZQUEZ. It seems to me that there is a disconnect between the administration and the phase and the state and the status of the U.S. industrial base.

Mr. STORIE. And the fact that a company like Cincinnati Machine, and I am sure there are many more examples besides just Cincinnati, that we can supply—we are the only supplier of key technology around the world, we supply fiber placement equipment, the composite equipment, that is being utilized on the Joint Strike Fighter program and outside of Ingersoll, there was no other company that was capable of supplying that type of equipment.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Chairman MANZULLO. Thank you.

Mr. Schrock?

Mr. SCHROCK. Thank you, Mr. Chairman.

My head is kind of spinning with what to say here because I am as passionate about this as the chairman is and I totally agree with him and I also believe it is the taxpayers' dollars and somebody should be watching out for that. In defense of Ms. Patrick, I believe they are because in every military project, whether they are building a plane or a ship or whatever or weapons system, there is a project officer who is supposed to be watching over that and he is usually a uniformed person, probably the admiral you talked to had been one at some point. So I really believe there is somebody looking out for that.

But I do not want to put words in Ms. Patrick's mouth, but what I think she was saying was we give a major manufacturer a contract, we expect them to get the product at the price they say they are going to get it at a certain date and they are going to use every practice they can to make sure they get the cheapest product, the

best product, to put into the plane. Correct me if I am wrong, and many times that probably means they feel they have to go overseas.

I am very bothered by that, I do not like that at all, but what is—.

Chairman MANZULLO. Would you yield a second?

Mr. SCHROCK. Yes, sir.

Chairman MANZULLO. Those are cost-plus contracts.

Mr. SCHROCK. No, I believe those are fixed fee.

Chairman MANZULLO. The F-35 is cost-plus.

Ms. PATRICK. In development, it is currently.

Mr. SCHROCK. The F-35 is, yes. But I worry, what causes that manufacture to feel they must go to another country? Why has not a situation been created in this country where they can produce it here? I do not understand that.

And I want to ask Mr. Rupert and Mr. Bradley what is causing that? How can we fix that? Is it labor contracts? Is it environmental type things that we have in our contracts that other countries do not? Something is causing this and we need to figure out what it is because I have a feeling in my own mind what it is, but I want to hear what is on your mind. And then I would like to hear what Ms. Patrick and Secretary Borman think about that.

Am I way off base here?

Mr. RUPERT. No, not at all. When the red light did me in I was about to say that the reason that I suspect that this is happening—and I am speaking strictly about titanium right now—is that the specialty metals industries are being offered up as an offset. The goal is to maximize the use of Russian titanium to garner favor with the Russians in selling aircraft. So I think these are marketing decisions, not procurement, not manufacturing decisions.

Mr. COFFEY. And, if I could, the second dimension to it is the active governmental intervention—.

Mr. SCHROCK. And there is nothing illegal about that, is there?

Mr. RUPERT. Yes. A number of the waivers that have been issued under the Barry Amendment I do not think were proper. And I know that having been subpoenaed to provide information to the criminal investigation that I mentioned that there are at least others who think that there were things done that were illegal.

Mr. SCHROCK. I am sorry, Mr. Coffey.

Mr. COFFEY. That is all right. I think the other dimension to it is governmental intervention into the free trading system. You have a variety of activities conducted by governments to support their domestic industries without the United States creating any kind of requirement on any kind of foreign product coming into the country.

The example attached to my testimony of the Turkish defense attache saying flat out what the percentage of Turkish content will be in anything they buy under a military program is a pretty clear example of a government distorting the free market. And when a government distorts the free market, as many governments do, including most of the Asian governments, you have this kind of dislocation of the marketplace and we cannot compete in that environment. So the Chinese peg their currency. They have pegged their

currency for years. That gives them a 40 percent price advantage before we even get to the table.

Mr. SCHROCK. Okay. Mr. Secretary Borman, based on what he just said, why is that the case? How can we correct that?

Mr. BORMAN. Well, I think this administration is trying hard to correct both what they have mentioned and some other issues. Our view is under the President's manufacturing agenda there are several things that need to be addressed: tax issues, intellectual property protection.

Mr. SCHROCK. Trying hard is one thing, and I understand that, but they have to do it. They have to do it.

Mr. BORMAN. I understand. And then obviously you need to be able to get the foreign governments to open their markets, stop the intervention and so on.

Mr. SCHROCK. All right. Mr. Storie?

Mr. STORIE. Well, I concur with my colleagues here. I definitely think that there are steps that must be taken to allow an even playing field. I mean, if it is offsets—offsets are driving work out to foreign shores. We are seeing that happen every day. The currency issue in China is major. I mean, it used to be that our manufacturers went to Mexico to get products made cheaply and now the work is leaving Mexico and going to places like China and going to places like Indonesia. And that has got to be a serious concern. We cannot be a service society.

Mr. SCHROCK. That is right.

Mr. STORIE. We have got to be a country that provides value.

Mr. SCHROCK. We were the ultimate manufacturing society, we do not even come close now.

My time is expired so you are off the hook, Mr. Bradley.

Thank you.

Chairman MANZULLO. Mr. Ballance?

Mr. BALLANCE. Thank you, Mr. Chairman.

Ms. Patrick, I am going to try this. I believe your title is Deputy Under Secretary. Is that right?

Ms. PATRICK. Yes, sir.

Mr. BALLANCE. Are you high enough in the ranking to have been involved in this statement of administration policy that was issued?

Ms. PATRICK. Yes, sir.

Mr. BALLANCE. I think you addressed this. You all were aware that the House had tightened up this idea of trying to get more U.S. content and you were aware of the reasons, as have been expressed here today. What, in your opinion, was it that would override the thinking of the Congress, of the Committee?

Ms. PATRICK. Sir, I do not understand your question. We were aware of the concerns. What was our reasoning for—

Mr. BALLANCE. Yes, for issuing your statement of administration policy, which attempted to override—I do not know if it does or not, the thinking of the House.

Ms. PATRICK. Our view really is that across several broad fronts the legislation would be devastating. First of all, the tooling provision even modified as the chairman has talked about would cost us an extraordinary number of jobs if it were forced upon us to buy U.S. machine tools when foreign machine tools could be bought with better technology and more cost effectively.

Mr. BALLANCE. When you say cost us, you are referring to? Us being?

Ms. PATRICK. It would cost us jobs because we would have to find the money for the premium that we would have to pay for those U.S. machine tools from elsewhere in the budget. That would cause the cost of the programs to increase on the order of 20 to 30 percent, which may not lose us jobs in the particular machine tool industry, but would be very costly in terms of jobs in aerospace and defense.

Similarly, were we to remove the foreign content of major programs, that would cost us jobs because we would have to find the money to pay for the additional increment of cost and schedule delay that would be incurred by removing that foreign content.

On the Joint Strike Fighter program alone, the fact that we would have to rebate back to our partner nations \$4 billion of their participation in the program—

Mr. BALLANCE. Well, can you—

Ms. PATRICK [continuing]. Would cost us on the order of 70,000 defense jobs were we to have to find that budgetary allocation elsewhere.

Mr. BALLANCE. We are all constrained by time, if you do not mind.

Ms. PATRICK. Trade retaliation. We have a positive export balance—

Mr. BALLANCE. We are constrained by time, if you do not mind. Can you give an example of what you are referring to when you said it would cost us jobs?

Ms. PATRICK. Absolutely. I mean, if you were to require that we remove foreign content, say, from the Joint Strike Fighter program, clearly the partners would pull out of that program. We would have to find \$4 billion that they were willing to provide to the development of that program, 70,000 jobs in the course of our trying to find that \$4 billion.

Mr. BALLANCE. Let me try one more thing here. When the DOD puts out a bid, I guess you do it that way, a request for a bid, do you not put in specifications?

Ms. PATRICK. Yes, there are specifications.

Mr. BALLANCE. And could you not at that point say that so much of the content has to be American?

Ms. PATRICK. Once again, we would not want to tie the hands of our prime contractors in that way and we are not—

Mr. BALLANCE. Where are you going to tell them this information if you do not tell them at the time that you put the project up for bid? How are they going to know?

Ms. PATRICK. We do not require certain norms of U.S. content.

Mr. BALLANCE. So you ignore the law? I mean—

Chairman MANZULLO. Would the gentleman yield?

Mr. BALLANCE. Yes, sir.

Chairman MANZULLO. Under the Buy American Act, you are required to buy at least 50 percent American.

Ms. PATRICK. Right.

Chairman MANZULLO. Are you aware of that?

Ms. PATRICK. Well, that is in the contracts as well, but it is not measured by each and every particular contracting action.

Mr. BALLANCE. So what you do, what you are concerned about is just getting the product at the cheapest price—.

Ms. PATRICK. The most innovative product on schedule—.

Mr. BALLANCE. You want a good product at the cheapest price, and whatever happens to the U.S. manufacturers is not really of your concern.

Ms. PATRICK. What happens to all of the manufacturing base is of our concern, you know, as good Americans, but we also expect that our defense industrial base will innovate, will remain competitive, and as many other members of that defense industrial base are capable of doing, will provide us innovative, state-of-the-art products in a timely fashion and at a reasonable price for our warfighters.

Mr. STORIE. Mr. Chairman?

Mr. BALLANCE. I will ask you a question, but if you want to answer—.

Mr. STORIE. I just wanted to comment. Ms. Patrick, maybe you can help me understand.

She said that it would cost 20 to 30 percent more to buy in the U.S. as opposed to foreign goods. I know that my company personally cannot sell anywhere and have a 20 to 30 percent pricing premium, so I have to be competitive worldwide and I doubt that many others are in the situation where they can command a 20 or 30 percent pricing premium, the people that are trying to compete on a global basis.

Mr. BALLANCE. Mr. Chairman, I yield back.

Chairman MANZULLO. Ms. Patrick?

Ms. PATRICK. Did you want me to answer his question or another one of your questions?

Chairman MANZULLO. Go ahead.

Mr. BALLANCE. The 20 to 30 percent premium that we would assess to a program like the Joint Strike Fighter were we to take out the foreign content has to do with the fact that we would have to re-compete all of those contracts. Many of them, the bidders, the next bidders were in the range of 15 to 20 percent higher. We would have to suffer the administrative lead time and the concomitant delay in the program that that restructuring of the program would entail and all of that would have to be paid for by limited defense resources. And so as you make the program more expensive and have to find the money from a finite pot of money, you will undoubtedly be in the position of limiting the number of quantities and that also costs American jobs.

Mr. BALLANCE. Mr. Chairman, can I just have one more half minute?

I am going to try to simplify this. I am from a small town in North Carolina. If you are going to order 100 fighter jets, first of all, would you not be—I am asking the same question I asked earlier, would you not be required to put the specifications on the table at the time you made the order? That is a yes or no.

Ms. PATRICK. You know, I will take that for the record because Lockheed actually places the orders to their subcontractors.

Mr. BALLANCE. And assuming that is true, then we did not have within those specifications the provisions about the U.S. content.

Assuming that's true, then whoever gives the lowest bid ought to already have factored that issue in. Would you not agree with that?

Ms. PATRICK. Whoever gives the lowest bid—let me take that for the record.

Chairman MANZULLO. If I could interrupt again, that is not the law. The law is not the lowest bid. The law is it still has to have at least 50 percent U.S. content, unless the Pentagon wants to have the Chinese build everything.

Ms. PATRICK. Let me take that for the record.

Chairman MANZULLO. What does that mean, take that for record? I have never heard that before.

Ms. PATRICK. Can we not take questions for the record from this hearing?

Chairman MANZULLO. What do you mean?

Ms. PATRICK. We will provide an answer in writing.

Chairman MANZULLO. You want to provide an answer—oh, okay. I am sorry. When do you want to do that? Is it going to go through OMB first? Would you do me a favor? As soon as you submit it to OMB, would you get a hold of Mr. Nelson, Mr. Crowther, and then I will give them hell for sitting on it?

Ms. PATRICK. Yes, sir.

Chairman MANZULLO. Okay. Mr. Beauprez?

Mr. BEAUPREZ. Thank you, Mr. Chairman.

I would like to direct this to the four gentlemen on this side.

Mr. Coffey, first of all, I have reviewed as I sat here your 11 recommendations in your written testimony and I would like to focus on the ninth one because as I have heard this, I think we have probably identified the problem and many of the frustrations, I am not sure we have identified a whole lot of solutions and I suppose we could go one of two avenues. One, we could adopt what I will characterize as a bit of a protectionist strategy, enact some kind of legislation to say this is how it is going to be and just mandate that something happen, or we could adopt a different strategy and kind of throw open the doors and let everybody compete fairly.

I was in an industry, farming, and even more specifically crops, but dairy, that I think has tried very hard to adopt a protectionist strategy, protect their market, and I think we are in grave danger of seeing that industry disappear from the face of the United States of America. So you can probably guess where my biases are.

Both of you gentlemen, Mr. Rupert and Mr. Coffey, I think touched on issues of trade. You just mentioned the Chinese fiscal policy, monetary policy of which I am a little bit familiar with. I think you all have—and Mr. Bradley and Mr. Storie, you have kind of hinted at some of the same—I think you have touched on it.

To summarize your ninth recommendation, Congress and the administration ought to address costs inflicted costs such as cost of insurance, regulation, taxes, capital, inaccessibility to contracts, that is back to the regulation and morass of stuff, and especially tariffs.

I am a free trader, I will confess, but it is free, equitable, fair. I maintain to my friends in farming that we would feed the world if it were truly accessible to us on a free and fair basis.

Is that the nut that we ought to be focusing on if we are going to fix it? I mean, I do not want to minimize the difficulty of the

problem, but cannot American workers and entrepreneurs compete anywhere if it is free and fair?

Mr. COFFEY. Particularly if it is fair. I absolutely agree with you.

Mr. BEAUPREZ. And I do not want to minimize the cost of tax, regulation, compliance.

Mr. COFFEY. I absolutely believe that every company in the United States that I am associated with does not want tariffs to protect their market. What they want is the reduction of tariffs in other countries. What they want is other governments getting out of the market in their country so that we can have a shot at it because productivity-wise, the American worker is the most productive worker in the world period. And, you know, I do not understand why given that environment we are constantly penalized on cost when none of these other countries impose the same cost structure on their companies that we do on ours.

Mr. BEAUPREZ. Mr. Bradley, I see you reaching for the mike.

Mr. BRADLEY. I think one of the keys here, though, is like you touched on: we need fairness. And we talk about free trade, fair trade. We need fair trade. And the American workers can compete with anybody in the world. If we ship a mold over to China, for example, they have—it is a 29 percent tariff for our tool going over there. When it comes from China to the United States, it is 3.4. That does not sound real fair.

They also do not have medical, they do not have OSHA, they do not have all of that. They do not even have insurance on their people. I pay more per hour for insurance for my secretary than the average worker in China makes in a day.

Mr. BEAUPREZ. That is where the fairness comes in. We certainly do not want to give up those kind of benefits in our working conditions, but it all needs to go as a package into our trade negotiations.

Mr. Rupert, quickly, if I could, because my light is going on.

Mr. RUPERT. I think you are right on the money on the trade issue. What the titanium industry is looking for is not protectionism. We are looking for a negative benefit to be taken away here. We are paying a 15 percent duty to get our raw materials in here and yet the Russians come in for no duty whatsoever.

Mr. BEAUPREZ. We have butter and cheese coming into this country that is subsidized and our dairy farmers are going broke.

Mr. RUPERT. Well, I am not even talking about subsidies from Russia. I am talking about what the U.S. Government does to us. I cannot sell titanium in Russia. They will not give us their jobs. And if I could, they have a statutory 15 percent import duty that they are not going to waive for me.

And the other thing I think is the issue that you have focused on here and that is what is the law. Is there protection for designated industries or not?

Mr. BEAUPREZ. Thank you, Mr. Chairman.

Chairman MANZULLO. Ms. Napolitano?

Ms. NAPOLITANO. Thank you, Mr. Chairman.

I have already handed you my note on Mr. Rupert's testimony on page 8 of his report. I would like to request if we might be able to find out from the Office of Inspector General whether that spring of 2000 report has been finished on the specialty metals

clause that was to delve into and investigate violations. I think that might be something that this Committee needs to understand. I am interested in what they have to say on it because it is affecting some of our industries. I have heard from some of my businesses.

The second thing is that, Ms. Patrick, I am sitting here and I cannot believe—I realize you have a story to tell, but this is but a small segment of what I encounter in my district over job loss due to the absence of contracting. My small vendors cannot even get their foot in the door sometimes with the Department of Defense, so they are not able to be able to be competitive because they cannot compete.

The second issue that we are talking about the Department of Defense being the world's largest market for our vendors in the U.S. and in the world practically, yet we are losing manufacturing jobs. We are losing companies that are going under because we are not able to—and you have listened, I am sure you know the story, whether it is the tariffs, whether it is the subsidies these countries give our competitors or whoever, we have a problem. We need to begin to understand that it is affecting our economy in the United States big time.

And we need to be able to find a way to work with the industry to make sure that they are effectively getting a piece of the American pie because we are giving it away. And I do not know how else to put it, other than when are we going to have the Department of Defense on our, U.S., side? On our marketer's side? On our Congress—it is law and yet it is not being followed. Somehow we are not holding the Department of Defense accountable for what has been in statute for a long time. And we are continuing to lose.

The subsidized businesses that come and compete for our American jobs, that has to stop. We have to take a look. And you say it is not in your purview, I understand it is not in your purview, but somewhere along the line it has to be part of our responsibility, joint responsibility, Congress and the Department of Defense.

Now, the third thing is nobody is talking about job training because, as you have heard, a lot of those jobs are going away. People are not being trained to be able to maintain the CMCs.

Now, we started something in my area three years ago which has been effectively producing trained personnel for the manufacturing industry, yet I do not see the Department of Defense or anybody else saying we need to begin to continue training personnel because are losing them, they are retiring, they are finding other jobs because theirs went away, and we have not addressed that particular issue.

Now, please, whatever you can, give me some information that is going to make at least some of us understand it better.

Ms. PATRICK. Well, let me offer two things. First of all, you know, we certainly would not have devoted the time and energy to creating a massive study on small companies that were innovative and that could enter the defense industrial base if we had not also been concerned about the ease of access and whether the entry barriers were appropriate.

Ms. NAPOLITANO. When did that massive concern come about and where is it?

Ms. PATRICK. The study was published in February of this year. We began working on it, as a matter of fact, last summer and it is referred in my testimony.

Ms. NAPOLITANO. Do we have a copy for the members?

Ms. PATRICK. I think that—.

Mr. Crowther, I think we gave you a copy of the road map study.

Ms. NAPOLITANO. May we have copies sent to every member of this Committee?

Ms. PATRICK. Sure. Sure.

Ms. NAPOLITANO. Thank you.

Ms. PATRICK. Again, it is an irony that we really do have so much common cause with small companies, emerging companies, and it really has not come out in this hearing.

The other thing that I want to emphasize is that aerospace and defense is an immensely positive function for the U.S. economy, especially in exports. U.S. aerospace and defense exports are 300,000 jobs in this country—300,000. One of the reasons we are so concerned about the provisions of H.R. 1588 is that we know that we will risk retaliation from people who currently buy that export surplus from us.

Ms. NAPOLITANO. Now, wait a minute. Excuse me. Retaliation by whom?

Ms. PATRICK. By the world that buys our aerospace and defense products.

Ms. NAPOLITANO. And we are afraid of retaliation?

Ms. PATRICK. Well, of course we are. We cut imports from France 40 percent in the aftermath of their stance on Operation Iraqi Freedom, within months.

Ms. NAPOLITANO. No, do not misunderstand me. I follow your—

Ms. PATRICK. Retaliation after Smoot-Hartley.

Ms. NAPOLITANO. Let me tell you one other thing. We have a trade imbalance with China that has been growing for the last decade and we are not even addressing going into China and getting that trade imbalance taken care of.

Ms. PATRICK. Ma'am, but we do not have a negative trade imbalance with China in aerospace and defense.

Ms. NAPOLITANO. But it is all one pie, though, it is not cut up. It is all one trade imbalance figure.

Chairman MANZULLO. Mrs. Musgrave?

Ms. MUSGRAVE. Thank you, Mr. Chairman. Some of the things that I have been hearing today bring about more questions than we have time to deal with and I certainly appreciated what Mr. Beauprez had to say.

I as a new member really need some more information. When we talk about circumvention of the specialty metals clause, that is very disturbing to me.

And I do not know if, Mr. Rupert, if you can comment on that with a little more detail for me today.

Mr. RUPERT. There is in my testimony a description of four waivers that we are aware of. In terms of any illegal circumvention of the Barry Amendment, I do not have that information. All I am suggesting is that there has been an investigation, it is publicly

known that that investigation is taking place. What the status is or where the results are, I do not know.

Ms. MUSGRAVE. Mr. Chairman, do you know how we can find out the status of that investigation that is going on?

Chairman MANZULLO. Well, under the rules, all you can do is send a letter to Justice and they can give you a status. If it is under investigation, they can just say it is under investigation.

Ms. MUSGRAVE. Okay. All right.

Mr. Bradley, you talked about exporting our skills in these particular areas and exporting technology, then I read in your testimony that you were talking about loss of intellectual property to the Chinese and I wonder if you could elaborate on that. I believe you mentioned publications that alluded to that.

Mr. BRADLEY. Well, some of the problems that we have, one of them basically is automotive and they are talking now about mandating that we send 20 percent of our tooling to China. They want it done overseas. It is not a hard fact yet, but it is coming. This is what they are talking about.

They want us to do all the design and development work here and then send all the production work over there. What we will be doing, if our industry is required to do that, we will be teaching them how we are competitive and we will be giving them all the ideas.

One thing is unique in America, and I do not feel that we can be touched by anybody else, is imagination and we do a lot of imagination design concepts. Well, they are talking about they want us to give that away. And it is not just automotive, we are getting that from other people, too.

One of the problems is if we send a mold over to Asia to be built, it does not come back. If they build a mold over there, chances are the mold will never come back to the United States because they are going to hang onto all the manufacturing also. So we are not only losing the tooling aspect of it, we are losing also our intelligence and all our future manufacturing we are going to lose. So in effect we are going to be giving up what our country has worked so hard for for a \$7.50 toaster. We are compromising our entire nation if we allow this to continue.

Ms. MUSGRAVE. Thank you, Mr. Chairman.

Chairman MANZULLO. Mrs. Bordallo?

Ms. BORDALLO. Thank you very much, Mr. Chairman. Before I ask my question, I would like to go on record as supporting our chairman and members here in the Committee. I truly, especially after hearing some of the witnesses today and some of the question and the answers, that I do fully support Buy American regulations, policies, laws, whatever they might be.

I would like to ask my question to Mr. Borman. I have here a report, a 2001 report from the Department of Commerce, the World Export Administration on U.S. shipbuilding and repair. And the reason for my question is I am a delegate from Guam. It recommends that the Navy shall work with shipyards to review legislation on domestic procurement. My question to you is has this review taken place since 2001? I am particularly concerned because the Navy seems to have thwarted the will of Congress by using foreign shipyards for repair work of vessels with no home port. And

I think our regulations read that ships home ported in the United States must be repaired in the United States. So putting a label on these ships as no home port allows them to go to foreign countries.

The report also states that Japan and Korea have 69 percent of the market and they do not abide by U.S. environment or labor standards. So I am very concerned about this. Last year, three dozen MSC vessels were repaired in foreign shipyards and this was scheduled maintenance, Mr. Borman, not emergency repair work.

So what are you doing about this report?

Mr. BORMAN. Give me a second.

[Pause.]

Mr. BORMAN. This is one, I think, Mr. Chairman, we would like to get back to you in writing on because we will have to double check with the Navy and see what the status is.

Ms. BORDALLO. I do want to point out, Mr. Chairman, they have gotten around the law or the regulation.

Chairman MANZULLO. How much time would you need, Mr. Borman to get back?

Mr. BORMAN. I would say probably a week.

Chairman MANZULLO. Okay.

Ms. BORDALLO. All right.

Thank you, Mr. Chairman.

I have one final question. This Buy America, who came up with the magic number of 50 percent? Why could it not have been 60 percent or 70 percent? Can anybody on the panel answer that?

Mr. BRADLEY. I think that 50 percent has been in law for many years and I do not know that I could answer that.

Ms. PATRICK. It is congressionally mandated.

Mr. BRADLEY. Yes.

Ms. BORDALLO. I know. I know it is a regulation, but I am just wondering—

Chairman MANZULLO. As far as regulation, at least 50 percent since 1935.

Ms. BORDALLO. Well, maybe we ought to look at that, Mr. Chairman.

Chairman MANZULLO. We did, we increased it to 65 percent and everybody is objecting.

Ms. BORDALLO. Thank you, Mr. Chairman.

And I will be waiting for the report, Mr. Borman.

Chairman MANZULLO. Thank you.

Mr. Bartlett?

Mr. BARTLETT. Thank you very much. I am sorry I could not have been here for your testimony.

I have been now for 11 years on the Armed Services Committee here and in another life I worked 18 years for the military. I was a small business person. And I am now 77 years old, so I have seen a lot of history. And I have been increasingly concerned as jobs have left this country and gone overseas.

Our trade deficit this year is going to be probably in excess of \$430 billion, well in excess of \$100 billion with China alone.

Just a moment on the Buy American, if we were to buy all of our things American, two consequences would follow. One is that our costs would go up considerably and, second, there would be a lot

of retaliation and what we need to do is to trade off how much of that industrial base must be in this country from a national security perspective so that it is here when we need it, with some spare parts made by some countries that were not available to us because they were opposed to our Iraq policy and that should be a lesson for us.

I do not know how you trade off those things but, you know, it would cost more if it were all American and there would be meaningful retaliation.

Now, why are we in this predicament?

You have mentioned the reasons. One is that we have regulations that other nations do not have, we have taxes that other nations do not have and so it just costs more. We have more than half of all the lawyers in the world and so that is why insurance premiums are so high. Mr. Bradley mentioned that he pays more for his secretary's insurance than a worker makes in another country.

So on the one hand we have government policies which increase the cost of doing business here. On the other hand, we have a very high standard of living here and it takes a number of dollars per hours, 16, 18 dollars per hour to maintain that standard of living and we are now competing with people who are making sometimes a tenth of that.

What would you expect different than what we have today when you recognize that we have policies in this country which increase the cost of doing business and we have a pay scale here which is maybe ten times more than the pay scale in other countries?

And it is not that other countries are not without capabilities. We have an incubator in one of our community colleges and I went through that incubator and in every factory I go to I look for American made equipment. The only piece of American made equipment that I found in that incubator was a forklift. Everything else in that incubator the equipment was made somewhere else in the world.

Why should the trend that we're now in just not continue indefinitely as long as these two things are a reality, that it is more difficult to do business in this country because of our regulations and taxes and our people here are paid many times more than they are elsewhere in the world? Why is this trend simply not going to continue?

Mr. COFFEY. I think that you have to take into account two things. First, the American worker is the most innovative worker in the world and if you are innovative you can displace substantial differences in cost of labor. Technology being applied to the manufacture of products drives down the per piece price and I think America is probably the most innovative society around the world in that regard.

Mr. BARTLETT. But how quickly do others catch up? We were first in programming, now India is clearly the premier country in the world for programming, they are doing a lot of our defense programming, by the way, in India. Sure, we are very creative, we are going to be out in front, but how long does it take them to catch up? Then what?

Mr. COFFEY. It takes less and less time because now the world is interconnected through the Internet and the time is shrinking.

There is no question about that. If a product lasts two years now in the marketplace, it is a huge success. So innovation and the pace of innovation continues. The reason that we have to do something in this regard is that if we do not then that standard of living that we are all so proud of is going to continue to decline to the point where we will be back.

I was struck that the Ford Motor Company chose to advertise for their hundredth anniversary the fact that they raised wages in the United States to \$5.00 a day. It seems to me with them sending 10 billion in auto parts to China they are trying to get back to \$5.00 a day after 100 years. And yet they have been the beneficiary of a country that has given all of this market to them for all these years.

So I think we have got to raise the consciousness of people about the dichotomy we find ourselves in. We have got to do everything we can to help companies be competitive. If we can do that, then I think the innovation will keep us out front and we will be able to continue to be manufacturing in the United States. But right now, governmental intervention by other countries in their domestic markets is keeping us out of those markets and is making us uncompetitive in our own market and that has got to stop.

Mr. BARTLETT. Thank you, Mr. Chairman.

Chairman MANZULLO. Mrs. Majette?

Ms. MAJETTE. Thank you, Mr. Chairman.

I thank the panelists for being here today and I share the concern of my colleagues about the number of manufacturing jobs that have been lost and I believe we will continue to have those losses unless we address these issues that we are discussing today. And I particularly have concern with respect to the defense industry. I represent Georgia's 4th Congressional District, which is just east of the city of Atlanta. We have very near my district the Lockheed Marietta plant which is involved in manufacturing defense-related aircraft, including the F-22, and I have a number of constituents who are employed at that plant, as well as some small business owners, minority and women business owners, who are subcontractors with Lockheed in the production of that aircraft. And so I am very concerned about the ability of my constituents and those businesses to be able to continue to compete.

Now, we have talked a little bit about the issue of China and my question at this point is directed to Mr. Borman.

I did not hear your oral testimony, so I do not know whether you touched on it, but in the written testimony that Mr. Storie provided, he refers to a Department of Commerce market cooperator development program to help pay for a service and training center in China.

Now, can you tell me a little bit about the program and what it is supposed to or what it does?

Mr. BORMAN. Unfortunately, I will not be able to. I will have to give you a written answer on that. And the reason is because that is done by a different part of the department than my bureau.

Ms. MAJETTE. All right. Well, perhaps you can address this other issue for me. A couple of weeks ago we held a hearing concerning the manipulation of currency valuation in China and the effect of

that on small businesses and the ability of American businesses to compete.

Can you address for me the effect from your point of view the effect of that manipulation of currency valuation in China on the decision that our government makes to do business with Chinese companies versus United States companies?

Mr. BORMAN. Again, that is one I will have to get back to you because, again, my bureau does not deal with those issues directly within Department of Commerce.

Ms. MAJETTE. Can you tell me who would? I understand you are going to get an answer, but—

Mr. BORMAN. I think it would be the International Trade Administration at Commerce, is the place I will go to to get that answer for you.

Ms. MAJETTE. All right. Well, then probably my other line of questioning you would give the same response to, so I will move on, but can you talk at all about the trade imbalance with China and how we can address that?

Mr. BORMAN. I can talk generally about it. Certainly there are my colleagues in Department of Commerce, other units, plus the United States Trade Representative, who continue to work very hard at addressing the structural issues that allow for this trade imbalance and I think there is some optimism that if China comes into the World Trade Organization they will have to deal with those. But, again, the folks that deal with that on a day-to-day basis can certainly give you a more detailed answer on that.

Ms. MAJETTE. All right. Well, then, I have got a couple of questions for Ms. Patrick.

Since you have talked about how—essentially, as I understand your testimony, the United States, our small businesses and companies here cannot compete equally with companies with which you are suggesting we have to do business with, what is it that we can do to bring our companies in line with being competitive so that we can retain this work here instead of sending it out?

Ms. PATRICK. I actually did not say that our small companies cannot compete to become suppliers to the defense industrial base. As a matter of fact, I was trying to give some of the examples of very small companies, as a matter of fact, that are already coming into our defense industrial base and doing stellar jobs with innovative technology, companies that have only dozens of employees and have found their way onto major programs such as the UCAV, played very important roles at ground zero as well as in Operation Enduring Freedom. Some of the products of iRobot, for instance. A company like Indigo that has found its way onto the Joint Strike Fighter program. And our report really has 24 case studies of wonderful small companies that we are delighted to have as part of our industry base and we actually did the study that we did in many ways as a primer so that other companies wanting to get in could learn more from the successes of these companies.

We also are aware of the fact that we have to become a little more transparent as an enterprise so that more companies come in. We want badly to broaden the defense industrial base. We want to include small and innovative companies. We have spent a lot of time and effort getting to know some of the most innovative of

those companies. So once again, we really share a common cause with that. It is not that all of our small companies are not innovative. Study after study shows that the major source of innovation in our defense industrial base does not come from the prime contractor, it comes from the second, third tier small companies.

Ms. MAJETTE. Well, then, let me interrupt you. So what is it that you say you can do or that you believe you can do to be more proactive to bring more of these innovative companies into the loop? Because what I hear from my constituents and what I have heard time and again here being on this Committee is that these small companies, minority companies, women-owned companies, cannot get the information they need in a timely fashion to be able to compete, to be able to show what they can do. They are perfectly capable of doing it, but they cannot get into the loop. Tell me what it is either you need from us or that you see you can do to get them into the loop.

Ms. PATRICK. Well, there are actually already a number of programs that the department has that help with small companies. We have the mentor-protégé program. We have the Small Business Investment Research Fund. DARPA is very actively engaging a lot of the smallest of our companies because they know they are so innovative. So our view is that what is most important is for the small companies to market to us. In the course of time that our study was being published, we had dozens of inquiries from small companies that we vectored into the office of the Defense Research and Engineering Group, which actually provides a lot of the funding for small companies, it does Title 3, so that we would have a much better viewpoint of what some of those small companies were and what their capabilities are.

Ms. MAJETTE. So you are saying that essentially the burden is on the company, the small, fledgling, struggling company, to seek you out and to market themselves to you as opposed to—and I am not using you personally, but for your department—rather than your department to go and seek them out or to make the information more available and more accessible to them, instead of going to foreign markets and engaging them?

Chairman MANZULLO. If you would yield?

Ms. MAJETTE. Yes, sir.

Chairman MANZULLO. This is about six miles outside of Ms. Patrick's expertise, but we have had in our congressional district, DOD came and put on a marvelous seminar, 250 people attended, on how small businesses can access procurement contracts and I would be glad to share that information with you.

Ms. MAJETTE. Thank you.

Chairman MANZULLO. It is just about six rings outside of her expertise on that.

Ms. MAJETTE. Thank you.

Chairman MANZULLO. I have just a couple of questions.

First, I want to thank you all for being here.

Ms. Patrick, you said that you had something to do with the statement of administrative policy?

Ms. PATRICK. As it affects the defense industrial base. Yes, sir.

Chairman MANZULLO. Okay. All right. A statement is made in here where it says "The administration strongly objects," this is the

provision in the defense bill, and it says "One of the reasons is that it will establish rigorous restrictions against using non-U.S. sources that will unnecessarily restrict the Department of Defense's ability to access non-U.S. state-of-the-art technologies and industrial capabilities."

Did you write that?

Ms. PATRICK. Well, yes, we did write that portion of it.

Chairman MANZULLO. Could you give me some examples of a foreign state-of-the-art technology that the U.S. does not have?

Ms. PATRICK. I gave you one. It was the Joint Strike Fighter tilt fan rotor technology that is being used for the Marine variant of the Joint Strike Fighter. That is probably the very best current example we have, but one of our other concerns with the legislation is that all of the commercial military synergies that we enjoy in the defense industrial base currently probably would be undone by the restrictions on foreign content.

One of the ancillary effects, for instance, would be all of the commercial derivative aircraft that we procure from Boeing, over 30 of them, where because they are originally produced for commercial markets and clearly would not be subject to this kind of restriction, we would not be able to use them. Those aircraft range from Air Force 1 to tanker assets—.

Chairman MANZULLO. I understand that but the Joint Strike Fighter is 90 percent U.S. money and about 5 percent British money. The guarantees of sales are 1700 to U.S., 150 to the Britons. No guarantees of any sales to the other countries. I think it is Italy, Australia, et cetera. And for every 1 billion they put up, they get a guaranteed 4 billion contracts.

Ms. PATRICK. No, they do not get any guaranteed contracts, sir. I mean, that is a very clear precept of that program, that there are no guarantees—.

Chairman MANZULLO. Well, those countries are not going pony up money unless they know they are going to get the contract.

Ms. PATRICK. It is 18 percent of the SDD phase.

Chairman MANZULLO. Well, what I would like to do—I am trying to figure out exactly who is on first here. Commerce comes in, there is a crisis in manufacturing. The Secretary of Commerce says that. Hearings are being held all over the place, Grant Aldonis comes to my district, I live and breathe this. My dad was a master machinist and then he became a master carpenter and then a master chef and he was also a master father at the same time. And I would like to invite you to come to my congressional district. I ant to show you what these machines are and I want to show you the shell and the hollowing out of America.

Now, you talked about aircraft was our biggest export, okay?

Ms. PATRICK. Aerospace and defense, sir.

Chairman MANZULLO. Do you know how much foreign parts are in U.S. airplanes that are exported?

Ms. PATRICK. How many foreign parts are in U.S. airplanes that are exported?

Chairman MANZULLO. If an airplane costs \$100 million and it is exported, it shows up \$100 million on the plus side of our trade merchandise balance.

Ms. PATRICK. Right. But the net positive trade balance in aerospace and defense is \$30 billion.

Chairman MANZULLO. Well, no. That is correct, but that is not the answer to my question. My question is—let me make it a statement. There is no indicator that shows the extent of foreign products and foreign engineering that go into an aircraft that is exported, so the \$100 million aircraft could actually have \$99 million worth of engineering and foreign parts in it, but still show up as \$100 million on the trade balance sheet.

Ms. PATRICK. Well, but that metric actually does not hold for defense products. As I tried to make the point, 98 percent of the labor content of the major—.

Chairman MANZULLO. Labor content or labor and parts?

Ms. PATRICK. Ninety-eight percent of the value content which you can measure in terms of the salary input per—.

Chairman MANZULLO. \$98 out of \$100 of the cost.

Ms. PATRICK. Right.

Chairman MANZULLO. Okay.

Ms. PATRICK. That is right. That is U.S. That is in defense systems. Now, I cannot speak to the vast remainder of the civil manufacturing economy, the commercial manufacturing economy, because that is neither my purview nor, frankly, do we have a lot of leverage over those particular segments of the economy, especially as they have become very commercially successful.

Chairman MANZULLO. I understand that. You are telling us that only 2 percent of the content of military equipment is foreign.

Ms. PATRICK. Of the eight major systems that we studied two years ago, less than 2 percent in value.

Chairman MANZULLO. Okay. Here is what I would like you to furnish for me. I want copies of the contracts on the F-35, the costs, all right? It is your job—here, let me show you what your mission is. Where is it?

I mean, I have certain ways of getting those, but I do not want to use that, because what I am trying to find out here is I do not even think that the Defense Department is complying with the Buy American Act in its present state of 50 percent. The mission here—this is the Department of Defense Directive from your home page. It says that you are to provide guidelines for DOD managers to use in determining whether specific industrial capability is required to meet DOD needs, whether it is truly unique and is truly endangered and, if so, what, if any, action DOD should take to ensure the continued availability of the capability.

Now, there is an obvious disagreement here that you do not think American manufacturing is under siege and you are satisfied with the status quo, everybody is healthy. We lost almost 3 million jobs, industrial jobs. We have gone from last year about 16 percent down to about 10 percent. There are more and more manufacturing jobs—the National Association of Manufacturers has said if we continue with the present rate of loss of jobs, the American people have to get used to a lower standard of living. That is NAM.

And I have talked to Grant Aldonis, Mike Fullerton is assigned to our Committee on it. I work almost full time on manufacturing issues. And I travel the country trying to find out what is going on.

What will it take to convince you, Ms. Patrick, that manufacturing is in crisis? What will take? How many more jobs will be lost before you are convinced that there is a problem in U.S. manufacturing?

Ms. PATRICK. I likewise spend a lot of my time traveling the defense industrial base and so, you know, my viewpoints are not based on some theoretical precepts. We measure the health of the defense industrial base both in terms of financial metrics, but as well and most importantly in the ability of our defense industrial base to deliver to our constituents, the warfighters. And at no point in my tenure—and it has been a pretty tough couple of years, we have fought two wars during my tenure—at no point during the time when we might have expected a slip or a faltering step, at no point did the defense industrial base do anything other than deliver surge capability, in some cases that we did not even ask for, did companies even establish second sources before being asked to do so. I gave you the Honeywell example with the JDAM crystals. The same is true—.

Chairman MANZULLO. Well, let me ask you, why did Honeywell not get the contract in the first place?

Ms. PATRICK. Why did Honeywell not get the crystals contract in the first place?

Chairman MANZULLO. Yes. Why did they not get that contract in the first place? Why did you have to go to the Swiss?

Ms. PATRICK. Well, they had initially examined the same California supplier that they ended up going to and the supplier was not cost competitive.

Chairman MANZULLO. So there it is. So if you could buy something cheaper overseas, that is the bottom line. This is U.S. taxpayers' dollars buying equipment to be used by men and women in uniform to carry out U.S. policy and now you are talking about if you can get it cheaper overseas go ahead and use it.

Ms. PATRICK. We have a limited amount of funding in our defense budget.

Chairman MANZULLO. Yes, \$400 billion this past time.

Ms. PATRICK. We have to steward our resources judiciously and we have to be good stewards of the taxpayer.

Chairman MANZULLO. You have to be good stewards also to protect the manufacturing base, which is your charge. My question again is what is it going to take to convince you that our manufacturing base—and obviously you disagree with the NAM, that is just a minor organization—that our manufacturing base is in trouble? What is it going to take?

Ms. PATRICK. Sir, I do not know.

Chairman MANZULLO. Well, that is the problem because you are not using the right measurement. You are using the measurements of costs, of profit, of profitability of the major companies. Those are the companies that are listed on—in fact, it is in your testimony, your written testimony, that the profit margins are up, that these companies are doing quite well, et cetera. Ingersoll was a privately held corporation. You would have no way of monitoring—you have no way of monitoring, no means to monitor the health of the industrial sector based upon P&E statements which you read in the Wall Street Journal. There is no other way.

What could we do to call your attention to these critical industries so that—I mean, my suggestion is that, yes, get involved in monitoring the contracts. That is taxpayers' dollars. What is so hard about that?

Ms. PATRICK. Well, we go back to the issue that there will always be a finite amount of defense spending available and if we were to implement some of the provisions of H.R. 1588, we indeed would be using those finite resources to monitor contracts—.

Chairman MANZULLO. I understand. I understand, but that is your, is oversight.

Ms. PATRICK. And, frankly, manufacturing jobs would have to cede way to administrative and oversight jobs. There is already too much of that in our defense industrial base.

Chairman MANZULLO. Too much of what?

Ms. PATRICK. That is why—.

Chairman MANZULLO. Too much of what?

Ms. PATRICK. Oversight.

Chairman MANZULLO. Oversight?

Ms. PATRICK. That is why we lose more companies.

Chairman MANZULLO. I will tell you what, I will do it personally. Let me make this very easy, all right? I want the contracts in my office from Lockheed Martin and Northrop Grumman dealing with the F-35, and you and I will sit down together and we will determine the foreign content so far on the F-35. Okay? That should not be that hard to do. The admiral said that on a scale of 1 to 100, we are only at number 3, 97 to go with regard to the building of that Joint Strike Force Fighter.

And I will tell you the reason why I am interested in it. It bankrupted. The policies of Northrop Grumman to follow the cheap parts on a cost-plus contract, condoned by the Pentagon, who said buy the cheapest plastics you could get, that bankrupted one of America's finest companies and has imperiled the industrial health of this country, so much so that your office is engaged right now in stopping the Chinese company from buying Ingersoll.

Now, when would you like to come to my office so we can go over those contracts? I can issue a subpoena duces tecum, okay? And I am willing to do that, when do you want to come?

Ms. PATRICK. I think we have to take this back to the department.

Chairman MANZULLO. No, no, no, no. I will give you a time to come in. You are not going to take it back, I want an answer. This is hardball for America's manufacturers. You know, when I was in back home, people did not talk about the war, they did not talk about the tax cuts, they came up to me with tears in their eyes. Rockford is at 11 percent unemployment—11 percent. Every day, hundreds of jobs are lost. And do you know what is left to level the playing field? It is procurement. That is all there is, \$250 billion worth to level the playing field to keep these—do you know what happens if the molders go out of business.

Tell them, Olav. What happens?

Mr. BRADLEY. We lose everything. We lose all manufacturing if we go down. We have no more defense. We will have no more manufacturing.

Chairman MANZULLO. Matthew, tell them what happens when the machine tool industry goes under, which it is right now. Paul Friedberg said the latest figures again show machine tool orders down 1.2 percent, just for this month, on a continuing decline. Down, what, 18 percent for the year.

Mr. COFFEY. It all comes down to a society's ability to generate wealth and if you do not have manufacturing capability you cannot generate the wealth. If you do not generate the wealth, you do not have the service jobs either.

Chairman MANZULLO. What is it going to take to bring together the Pentagon that refuses to recognize manufacturers in crisis, manufacturers who are going out of business. What is it going to take? I am willing to work on that, but I need to know what is going to take?

We cannot continue to have this division between government and our manufacturing sector because that is why we are in such a problem. What is it going to take?

Mr. COFFEY. It is going to take a recognition on the part of the Pentagon that prime contractors are not the entire defense industrial base of the United States. And until they understand that, I do not think we are going to make any progress.

Chairman MANZULLO. I will contact your office and set up a date and expect you to come in with those contracts, with somebody able to sit there—I am very, very serious. Because this appears to be we might as well give everything to the Chinese and let them build all of our airplanes. I mean, for God's sake, we want to have tires made in this country. Are you objecting to that section also? To have U.S. rubber used on airplanes and trucks that is in the defense bill?

Ms. PATRICK. Sir, we are objecting to all of the provisions in that particular title.

Chairman MANZULLO. Okay. There is one U.S. manufacture left of military grade tires. That is Goodyear. Okay?

Now, would you consider rubber tires to be critical to defense?

Ms. PATRICK. Rubber tires are critical to defense, but the other thing that we cannot lose sight of is a number of the other sources actually produce their tires in the U.S. They create jobs in the U.S.

Chairman MANZULLO. As long as they are manufactured in the United States, that applies in our bill.

Ms. PATRICK. There are two sources. Michelin produces tires in the United States and I think most of the tires produced for military aircraft are produced in the United States by Michelin. U.S. jobs, U.S. workers.

Chairman MANZULLO. In the bill—in the bill. You have to read the language because as long as the manufacturing is done in the United States, that is what that says. It could be a foreign company manufacturing here, just as an American company manufacturing here. But, see, you have objected strenuously—I mean, you guys are beating the drums, there was a retired general in the paper on the Hill yesterday going absolutely nuts over these provisions, but you have to understand it also applies to Michelin. I mean, Chrysler is owned by a German company and as long as the manufacturing is done here, that is all we are trying to do, is guarantee that it is done here. Do you not think that is a good idea?

Ms. PATRICK. Sir, I understand the intent, but I think that there is an attempt being made here today to solve all of manufacturing's problems using the defense procurement budget.

Chairman MANZULLO. That is because you are the biggest buyer.

Ms. PATRICK. Yes, but our leverage is modest. I talked about five-tenths of 1 percent in terms of semiconductors, less than a third in titanium. No matter what we were to do, we would not turn the tide on these industries because we do not have dominant leverage over them, nor should we. You know, we started these industries, they became vastly commercially successful, and we are delighted because in their success in the United States, in foreign markets, they were able to provide us products. They were increasingly more innovative, at lower prices and so we benefit from the fact that these are commercial and defense products.

Chairman MANZULLO. I understand that, but it is your mission to—.

Ms. PATRICK. We do not want to create—.

Chairman MANZULLO. Ms. Patrick, that is not your mission? Your job description, the Office of Deputy Under Secretary of Defense, Industrial Policy, ensures that an adequate defense industrial base exists and remains viable for defense production to meet current, future and emergency requirements.

Ms. PATRICK. And our defense industrial base has done all of those things admirably in the time of my tenure.

Chairman MANZULLO. But the only way that you do that is by looking at economic figures of the larger companies—.

Ms. PATRICK. No, I do not look at just economic figures of large companies.

Chairman MANZULLO. But you do not look at contracts to monitor the impact on U.S. companies whenever—.

Ms. PATRICK. I look at the responsiveness, I look at the nimbleness, I look at the corporate culture they have.

Chairman MANZULLO. But how do you—.

Ms. PATRICK. The things that allow them to replace things in 48 hours. I look at the fact that they are willing to surge production of spectra shield, shields for our soldiers in no time to begin to disadvantage their commercial markets when we ask them to. I think they have done an admirable job, and it is not just the top five, and I am also delighted in the successes of the smallest of the companies.

Chairman MANZULLO. I understand that. They are going to get parts from wherever and they are coming from overseas. That is what these guys are saying here. When the molding industry is in such distress, do you know what is going to happen when you can no longer make large molds? You want to have a turret made for a tank or something, there will not be anybody left in America because they are leaving so fast.

My request to you is so simple. These are U.S. taxpayers' dollars. You are building airplanes, building all kinds of military equipment. What is so hard to monitor a contract to see if it is given to somebody overseas? Because believe me at this point, Duncan Hunter is probably going to put it into law.

Ms. PATRICK. Well, let me—.

Chairman MANZULLO. What is so hard? What is so hard to look at a contract given to somebody overseas and ask the question which you are required to do here, what is the impact upon American industry? This is your mandate. I mean, it says "some examples of specific conditions which might result in a need to conduct industrial based studies include incremental changes or dislocations in defense industrial base."

Do you not think that testimony has been rampant here from these people today?

Ms. PATRICK. We do those studies when they are required. And let me just talk to you a little bit about the why of—.

Chairman MANZULLO. Have you done one on machine tools?

Ms. PATRICK. Let me answer your question, if I may. What I wanted to tell you during my oral testimony but did not get to is let me just talk to you about what is involved in the kind of studies that you have in mind. I told you about the study we did in 2001. We looked at only eight of our major weapons systems, but we looked at those eight weapons systems down to the third level of supply, not just the primes, not just the public companies, down to the third level of supply.

It took dozens of people seven months to complete that study and it involved queries to 3500 companies. And we only went down to the level of \$100,000 in terms of unit prices of those items. Just imagine the armada, an army, of oversight you would be creating if you wanted to replicate what was a very detailed study, came up with the answer, by the way, of less than 2 percent foreign content, if you wanted to replicate that kind of a study for the entire defense industrial base, sir, it would not be practical.

Chairman MANZULLO. I am just asking—.

Ms. PATRICK. And the answer that we have so far is less than 2 percent.

Chairman MANZULLO. Then you should not be fighting what Congress wants to do, to raise it from 50 to 65 percent. If you are at 98 percent, you should not even be wasting your time drawing these documents fighting this thing.

Ms. PATRICK. Less than 2 percent shows us that our defense industrial base manages the foreign content issue very conservatively, very prudently.

Chairman MANZULLO. And that was three years ago.

Ms. NAPOLITANO. Mr. Chairman, would you yield a second?

Chairman MANZULLO. I will yield.

Ms. NAPOLITANO. What was the criteria used in looking through and having all those people analyzed? What was the criteria used for American made?

Ms. PATRICK. The criteria was where the company was domiciled, as a matter of fact.

Ms. NAPOLITANO. Okay. Where it was domiciled can differ from the source is. A lot of companies are U.S.-based and they have—like maquillas, they are abroad.

Ms. PATRICK. Well, we might have actually included some European content that was actually manufactured in the United States. The bias would have been in the opposite direction.

Ms. NAPOLITANO. How so?

Ms. PATRICK. Well, because if we look at the domicile of the company and they actually have components that go into our defense systems that are produced in the United States, making domicile the standard that we use obviously might count some jobs that are U.S. jobs in the value and the content.

Ms. NAPOLITANO. Mr. Chair, did you capture that one? That it was where it was domiciled?

Chairman MANZULLO. Yes. It is where its manufactured, but reclaiming my time, in the executive summary on the study—I mean, you are unwilling to work with this Committee, Ms. Patrick, to provide us—it is my understanding—to provide us information as to the foreign content on the F-35. Is that what you are saying?

Ms. PATRICK. Sir, it is not my purview to be willing or unwilling to provide you data on the contract on the F-35. As your colleague, Mr. Schrock told all of us in absolutely correct detail, there is a program office in the department—.

Chairman MANZULLO. Well, the admiral does not know himself. Ms. PATRICK.—that is responsible for the F-35 program—.

Chairman MANZULLO. That is correct.

Ms. PATRICK.—and, you know, it is not my responsibility to oversee every single contract that is let in the Defense Department.

Chairman MANZULLO. Are you in contact with the contract officers to tell them what industries are critical?

Ms. PATRICK. A number of our studies will tell a greater audience of our reports, which industries we consider to be critical.

Chairman MANZULLO. What about machine tool industries?

Ms. PATRICK. Well, you know, one of the things about machine tooling is, I mean, you have probably been on at least as many of our production floors in defense as I have. You know, easily 35 percent of the machine tools in our defense production lines are not U.S. and they are not U.S. for good reason. First of all, because the capability in many cases has not existed in the United States to build those machine tools—.

Chairman MANZULLO. All right. Let us stop right there.

Mr. Coffey, do you want to respond to that?

Mr. COFFEY. Cincinnati Machine.

Chairman MANZULLO. Cincinnati Machine? She is saying that—.

Ms. PATRICK. That is one company.

Chairman MANZULLO.—there is a lot of foreign stuff—this is one of the premier companies. She is saying that there is foreign machines out there that pale the stuff that U.S. machines can do.

Mr. STORIE. My experiences would tell me that there is very few foreign sources of supply of machine tools that are producing equipment that cannot be produced right here in the United States. So to say that 35 percent of the machine tools are purchased because the capability does not exist is not—I cannot believe that that is accurate. The capability does exist.

I am sure there are certain maybe specialty pieces of equipment that must be only produced overseas and if there are no alternatives, then that is the place that we have to go to get those pieces of specialty equipment.

Chairman MANZULLO. And no one is arguing with that.

Mr. STORIE. But there are many machine tool companies in the United States and that variety of machine tool companies can probably supply 95 percent of all the capability required.

Chairman MANZULLO. Do you agree with that?

Ms. PATRICK. Well, it has been interesting listening to this, but I would like to ask a clarifying question.

On your own production lines, do you have a sense of what percentage of your tooling is not U.S.? Could you meet the 100 percent U.S. tooling standard in your own—

Chairman MANZULLO. This is not 100 percent. We want to go from 50 to 65 percent.

Ms. PATRICK. I can only respond to the legislation as I have seen it, but let us—

Chairman MANZULLO. Wait just a second. The legislation is not 100 percent. The present law is 50 percent.

Ms. PATRICK. I am talking about the machine tooling legislation, sir.

Chairman MANZULLO. No, that is 70 percent. It is only 70 percent.

Mr. STORIE. The answer to the question would be that in our production capabilities, I would say that 80 to 90 percent of the production capability that we have is U.S. manufactured, much of it was manufactured by our own company, we build machines and we use those machines to build our equipment. We have bought machines from Ingersoll in the past, we have bought from Giddings & Lewis. I mean, we buy U.S.-built machine tools to produce our products and I would say the number on our production floor is approaching 85 percent.

Mr. COFFEY. Mr. Chairman?

Chairman MANZULLO. Yes.

Mr. COFFEY. There is also an entire industry out there that builds special machines, one off machines for specialized purposes, but you do not find most of those companies ever getting a defense contract.

Chairman MANZULLO. The confusion is that the language as it came out of the House on the Buy American for machine tools did say 100 percent.

Ms. PATRICK. That is what I thought.

Chairman MANZULLO. That is correct. That is correct. And it is my fault. But the amendment that will be offered in conference by Mr. Hunter will bring that down to 70 percent, okay? For new buys. Only for new buys over \$5 million.

This has been a very interesting hearing.

Ms. Patrick, it would be the admiral in charge of the F-35 that would have that information. That is not your responsibility.

Ms. PATRICK. That is right.

Chairman MANZULLO. You folks have done an excellent job.

Ms. Patrick, you have done a superb job of holding your ground. I disagree with you immensely, but I am glad that you have met with our staff to give you the utmost opportunity to prepare for all of your answers and I am satisfied that you did an excellent job in preparing for this hearing.

The same with you Mr. Borman and the rest of the panelists.

One of the most frustrating things that can happen is a witness coming in and not knowing the facts. Disagreeing with the witness is one thing, that goes on all the time, but disagreement with the witness because they do not have the facts at least as they see them, that is really frustrating. You have not been frustrating, you have been very patient and we want to thank you all for coming to this hearing.

This hearing is adjourned.

[Whereupon, at 4:55 p.m., the Committee was adjourned.]

**House Committee on Small Business****"Saving the Defense Industrial Base "**

July 9, 2003

**Opening Statement of Committee Chairman Don Manzullo**

Good morning and welcome to this hearing of the Committee on Small Business. A special welcome to those who have come some distance to participate and to attend this hearing.

Our domestic manufacturing base is being hollowed out right before our very eyes. We are fast becoming a nation of service industry employees and assemblers. A new round of globalization is sending upscale jobs offshore. They include chip design, engineering, basic research – even financial analysis. Can America lose these jobs and still prosper?" Wake up, folks! If we keep losing our manufacturing jobs, we won't have much of a service sector to worry about.

Just last week the Department of Labor released its June employment report. For the 35th consecutive month the manufacturing sector incurred a net loss of jobs – 56,000 to be precise. Even more shocking is that for the first time since statistics have been kept our country now has fewer than 10 percent of its labor force employed in manufacturing jobs – fewer than 14.7 million of the Nation's 147 million workers. This is not the kind of history we want to make!

The Defense Authorization bill, as passed by the House of Representatives, provides important measures to preserve our defense industrial base – dominated by small businesses. I commend my good friend Chairman Duncan Hunter for recognizing the present manufacturing crisis and taking steps to prevent further erosion of the defense industrial base.

Last May, the Office of Management and Budget released its Statement of Administration Policy raising concerns about various sections of the House version of the Defense bill. Specifically, the Administration objected "strongly" to industrial base provisions of the Defense bill because they are "burdensome, counterproductive, and have the potential to degrade U.S. military capabilities."

In addition, the Statement readily admits that the U.S. is no longer on the leading edge of some critical technologies crucial to our defense needs by claiming that the Buy American provisions of HR 1588 "will unnecessarily restrict the Department of Defense's ability to access non-U.S. state-of-the-art technologies and industrial capabilities.

The purpose of the hearing is to provide a forum so that the Administration can explain in more detail the rationale for their position

on the Buy American provisions in HR 1588. We need to discuss what can be done to recover America's lost edge in certain high technology products, many of which are produced by small businesses, and what steps are being taken to prevent even more loss of manufacturing critical to our defense industrial base to overseas firms?

I now yield for an opening statement by my good friend and colleague, the Ranking Member, Ms. Velazquez of New York.

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**House Committee on Small Business****"Saving the Defense Industrial Base "**

July 9, 2003

**Opening Statement of Committee Ranking Member Nydia Velazquez**

Thank you, Mr. Chairman.

In the upcoming weeks, House and Senate conferees are expected to meet to resolve differences regarding the 2004 Defense Authorization Bill. One of the major issues that will be discussed are the House provisions to enhance the requirements for the Department of Defense to purchase from domestic sources.

A strong industrial base has always been a critical part of our nation's economic and military security. Two important tools in maintaining our manufacturing sector are the Buy American Act and the Berry Amendment.

These provisions are as important today as the day they were enacted because of the dire straits facing our manufacturing industry. As of December 2002, the manufacturing sector has lost jobs for 29 consecutive months – the longest stretch of monthly job losses since the Great Depression. In June alone, the economy lost an additional 56,000 manufacturing jobs. Clearly, something needs to be done to bolster these industries and one way is through the federal marketplace.

This Committee has long known that when it comes to procurement policy, the Department of Defense's actions leave a lot to be desired. This agency has a history of looking for loopholes to avoid doing business with small businesses.

What is new is that we are now discovering that the Department of Defense does not just have a problem doing business with small firms, they also don't want to buy from American businesses in general.

The most recent proof of this is the Department of Defense's legislative package for the 2004 DoD reauthorization. Contained in this package is a proposal to weaken the protections covered under the Buy American Act and the Berry Amendment. While this would raise concern at any time, it is especially worrisome now when our manufacturing base is in the midst of such turmoil.

Today's hearing will give us an opportunity to evaluate why the administration believes such actions are justified. In addition, it will provide another opportunity to review the procurement practices of the

Department of Defense as well as legislative initiatives that may be contributing to the growing U.S. manufacturing crisis.

It is obvious we need to make sure that the Department of Defense has the flexibility in its procurement policy to accomplish its mission. However, I believe that the administration's proposal uses the excuse of the need for readiness to skirt its responsibilities to our domestic industries – and this is just plain wrong.

While I believe that the provisions contained in the House bill to strengthen the Berry amendment and the Buy American Act are reasonable – I also think that, to a certain extent, they are at best a patchwork solution helping some industries. This will result in providing little or no assistance to many sectors of light manufacturing and small business. This picking of winner or loser, whether intentional or not, is poor public policy.

It is also important to note that with the adoption of these provisions in the final Department of Defense reauthorization, they will not have a demonstrative effect on our manufacturing base. This sector is not in trouble because of bad procurement practices but because of poor trade, tax and monetary policies by the current administration. This has made domestic products too expensive and driven companies to relocate overseas. Until these ill-fated policies are changed, we will continue to experience a decline in our domestic manufacturing base, which means our economy will remain in a downturn.

I want to thank the witnesses for coming today and I look forward to hearing their testimony. Thank you, Mr. Chairman.

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**House Committee on Small Business****"Saving the Defense Industrial Base"**

July 9, 2003

**Prepared Remarks of The Honorable Suzanne D. Patrick, Deputy Under Secretary for Industrial Policy, Department of Defense**

Good afternoon Mr. Chairman and members of the committee. I appreciate the opportunity to share with you my overall assessment of the health of the defense industrial base, as well as Department of Defense (DoD) small business objectives regarding our defense industrial base transformation initiatives.

**A Healthy and Responsive Defense Industrial Base**

Despite the downturn in the U.S. economy, the defense industrial base in general is healthy, innovative, and responsive. Aerospace/defense firm operating margins are about 50 percent higher than in the 1980s. The return on invested capital is about 6.1 percent, superior to the 4.4 percent return of the Standard & Poors (S&P) 500. The P/E ratio is about 15 times earnings, well above the historical average of about nine. And finally, debt service capacity is about 6:1 as compared to the 4:1 S&P 500 average. All of these measures are positive indications of healthy defense companies. Indeed, in a faltering economic setting, defense is a robust contributor to economic growth and innovative defense companies of all sizes will continue to benefit from robust defense spending trends over the balance of this decade.

The Department firmly believes that our strong domestic industrial and technology base is one of the cornerstones of our national security, and that the current U.S. industrial base remains the strongest and most capable in the world, one that continues to be fully capable of meeting the demands placed on it by DoD.

**Transforming for the Future**

However, the Department is not content to rest on past defense industry successes. The DoD has launched industrial base transformation initiatives, along with what we believe will be significant improvements in small business participation in DoD programs. In February of this year, my office published a report titled Transforming the Defense Industrial Base: A Roadmap that sketched a roadmap to a transformed industrial base for legacy and emerging defense suppliers, as well as for senior leadership in the Department. As a product of its time, our report was informed by the lessons learned of Operation Enduring Freedom about fielding systems quickly and combining them in new and different ways. It also heeded the Secretary's transformation

mandate, attempting to make the defense enterprise more transparent so that all companies – current and prospective, small and large – could better find their place in the defense enterprise and its decision-making processes.

Our study was built on case studies of 24 emerging defense suppliers, most of whom are small businesses, who could grow to be tomorrow's defense giants. All have some business with the Department of Defense, but unlike today's giants, their annual revenues are often less than \$10 million and they are made up of dozens – not thousands – of employees. None of these companies wants to remain small, but all the companies in our case studies had difficulties finding their place in the defense enterprise and had experienced growing pains transitioning technologies they viewed as important to the Department and to transformation.

It was our conviction that the ideas and products of emerging defense suppliers will be increasingly important for transformational warfare that motivated our study. We are sure that the defense industrial landscape of 2020 will be significantly different from today's because of the pace of change and the kinds of companies that make the new products. Our challenge is to match innovative capabilities and companies with the defense strategy, and provide beachheads and bridges – not barriers – to nurture them and draw them into defense.

But, even as our report was going to print, some of the small companies we got to know through the report began gaining significant positions in the defense industrial base. Let me tell you the stories of just four of them.

California's Foam Matrix, a company of 18 employees, started as a surfboard supplier and now is a builder of composite wings for the Unmanned Combat Air Vehicle (UCAV). Fiber Foam was founded in 1985 to develop new, better, and less expensive ways to build surfboards and sailboards. As a leading innovator in the sporting goods industry, Fiber Foam's capabilities were leveraged in reinventing itself as a defense supplier of composite structures to the aerospace industry and in 1995, founded Foam Matrix. In addition to providing a necessary segment of both the Joint Air Surface Standoff Missile (JASSM) and UCAV, Foam Matrix adds value by offering technology and innovation to bring down the overall cost of the program as well as to help the prime, in this case, Boeing, innovatively address problems. This creativity is a competitive advantage for the program team in meeting the contract requirements at the most attractive price. Concurrently, Boeing can provide support to Foam Matrix, allowing the company to overcome limited capital and infrastructure resources.

Insitu, a company of about a dozen employees in Washington, is pushing the envelope of long-endurance unmanned aircraft, also in partnership with Boeing. The Insitu Group, developer of the first UAV to

cross the Atlantic Ocean, designed and tested a highly-unique UAV for both commercial and military applications. The ScanEagle, the military version of the SeaScan, was developed to provide a unique, inexpensive, long-endurance UAV solution with the capacity for sensor interchangeability. With an expected list price of around \$60,000 and total weight of approximately 38 pounds, a ScanEagle or SeaScan will be capable of staying aloft for up to three days. Furthermore, Insitu's UAVs can be launched from land vehicles or from a land-based or ship-based catapult system, and can be recovered without damage. In addition to providing highly-creative solutions to the military, commercial applications include such non-traditional UAV markets as the fishing industry and environmental research.

Another example of an emerging defense supplier is a former toy manufacturer from Somerville, Massachusetts of less than 100 employees, iRobot, who now provides search and reconnaissance tracked ground vehicles to the Army. The PackBot, called by soldiers "the most rugged robot in existence," was developed by iRobot and used in the search for survivors after the World Trade Center bombings and as a reconnaissance tool when searching the caves in Afghanistan for Al-Qaeda. The PackBot project began as a research program for the Defense Advanced Research Projects Agency (DARPA). Since there were only three weeks between selection as a cave-searching tool and deployment, iRobot was forced to fast-track development and integration of technology from the Land Warrior program. However, the software was incomplete when the robots were shipped to Afghanistan, so iRobot finished coding in the United States, uploaded the software to a secure file transfer site, and downloaded it directly to the robots from a secure internet connection at the air base. As a result, iRobot was able to begin training soldiers and conducting missions on schedule.

I will close with another California company. In September 2000, Northrop Grumman and Indigo Systems Corporation, a 157-employee company founded in 1996, announced a strategic alliance to develop an advanced infrared (IR) detector fabrication capability supplier for the JSF radar. Indigo brings to the partnership an extensive mixed-signal read-out integrated circuit and detector expertise and an experienced staff and management. Northrop Grumman will provide the capital required to facilitate them. Indigo's IR detectors and imaging modules will be used in several other Northrop Grumman electronic products as well. Indigo, on the other hand, will also use these detectors and imaging modules in their existing line of commercial, high-performance, IR camera products. A great example of small company innovation and civil-military synergies.

In addition to precipitating more than 70,000 true downloads of the report from our web site – many, we hope, from small businesses - my office has been providing assistance to dozens of new small businesses seeking DoD entry. The Department has established a clearing house for these firms in the Office of the Director, Defense Research and

Engineering (DDR&E), the key funding source for research and engineering efforts at the Office of the Secretary of Defense level. Typically between 300 and 400 small companies are in contact with DDR&E annually, with our report contributing to that "entry path."

#### Conclusion

In closing, we believe that the 21st century presents new challenges for our industry. In DoD, our challenge is to leverage the sum total of our R&D and acquisition policies, budgets, and decisions to create an industrial environment that nurtures small, innovative firms – that shapes an industrial base that will supply 21st century war fighters as effectively as it has prior generations of American men and women in uniform. We must find ways to attract new inventors to the world of defense applications.

DoD must remain vigilant to ensure that low-cost, high performance subsystems from emerging defense suppliers can be incorporated effectively into its weapons systems. Defense entry barriers must be lowered by greater use of commercial practices and the intellectual property of small firms must be protected to continue fostering innovation. DoD recognizes the significant benefits and innovations often afforded by small businesses, and their potential contributions to the Department's war-fighting capabilities. Innovation and small firms have always had an important place in our defense industrial base.

We are proud to have helped shape the financial structure of the industry, the budget which will reinforce industry's capability to meet war-fighter needs, and major tenets of the Administration's view on the industrial base. Some of our government-industry team's finest moments were in the immediate aftermath of 9/11, when we responded with speed and agility to Operations Enduring Freedom and Iraqi Freedom. Over the long term, we are also confident that our work together will help inform the future acquisition and budgetary decisions which will determine tomorrow's defense industrial base.

Your Chairman asked that I comment on the provisions of H.R. 1588, and I would like to do so in closing. First, I believe that the provisions are based on inaccurate presumptions that: (1) the U.S. defense industrial base needs to be revitalized and (2) U.S. defense systems are vulnerable due to foreign dependencies. The provisions likely will have a debilitating impact on the Department's ability to meet its national security responsibilities. All DoD weapons programs, particularly cooperative programs, would have to be reexamined and restructured to eliminate foreign content; significantly increasing costs and delaying fielding dates, degrading military capabilities, reducing interoperability, and inviting trade retaliation from allies. U.S. defense contractors and subcontractors would be required to expend hundreds of millions of dollars to replace non-U.S. machine tools; significantly

increasing cost, schedule, and performance risks for current and future DoD applications. Burdensome and expensive reporting requirements would be placed on thousands – perhaps hundreds of thousands – of DoD contractors, subcontractors, and offerors to collect information, the primary purpose of which is to establish a baseline to eliminate non-U.S. suppliers and machine tools. These provisions also would have the unintended consequence of discouraging the emerging U.S. suppliers that we care so much about from participating in the defense business. As stated in the Secretary of Defense July 8th letter to the conferees, the senior advisors to the President would recommend that he veto the bill if it includes the House's Defense Industrial Base Provisions.

As we set our course together toward this industry shaped for New Age warfare, there is one time-honored principle which should inform the planning of our financial and industrial resources: the requirements of our men and women in uniform. They will be the first judges of our success.

Thank you.

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**House Committee on Small Business**

**"Saving the Defense Industrial Base"**

July 9, 2003

**Prepared Remarks of The Honorable Mathew S. Borman, Deputy  
Assistant Secretary for Export Administration, Department of  
Commerce**

Chairman Manzullo, Congresswoman Velázquez, and Members of the Committee:

Thank you for the opportunity to testify today before the committee on the state of the nation's defense industrial base and manufacturing capabilities. This is an important issue, as small businesses play a vital role in the nation's defense industrial base.

My testimony will cover the ongoing work of the Department of Commerce related to the state of the defense industrial base in particular and the U.S. manufacturing capabilities in general. I will then address issues raised by Subtitle B of Title VIII of H.R. 1588.

**The Department of Commerce's Work**

The Department of Commerce's mission is to create the conditions for economic growth and opportunity by promoting innovation, entrepreneurship, competitiveness, and stewardship. This mission encompasses responsibilities related to the subject of this hearing. In particular, the Department's Bureau of Industry and Security carries out several functions related to the defense industrial base. In addition, the Department's International Trade Administration works with prospective and current exporters which include businesses involved in manufacturing, aerospace, and other related industries.

**Defense Industrial Base**

The Department of Commerce conducts a range of activities related to the defense industrial base. Activities most germane to this hearing are:

\$ Assessing the state of defense-related industrial and technology sectors; and

\$ Promoting the approved export of U.S. defense systems.

**Industry Assessments**

Under Section 705 of the Defense Production Act and Executive Order 12656, the Department conducts assessments of specific sectors of the

U.S. defense industrial base. These studies are usually requested by one of the Armed Services but can also be requested by Congress or industry. The Department develops industry-specific surveys to obtain essential employment, financial, production, research and development, and other data directly from firms in the relevant industry sector. This information is unavailable from other sources.

Typically, one of the Armed Services contacts the Department with a request for an assessment of the health and competitiveness of a particular industry or sector. We enter into a formal agreement with the requestor, and collaborate with the requestor on the scope of the analysis. After gathering input from government, industry, and academic experts, we create a survey, compile and analyze the data, and prepare the final report.

While we gather proprietary data as the basis for our analyses, we carefully aggregate data in the final report so as not to disclose individual company information. We also take steps to make the survey process easier for small businesses, by limiting the amount of data that they are required to provide.

The goal of these industry assessments is to enable the private sector and government agencies to monitor trends, benchmark industry performance, and raise awareness of diminishing manufacturing capabilities. The final reports provide findings and recommendations for government policy-makers and industry leaders. Using these industrial base studies, the Departments of Commerce and Defense can, for example, measure industry capabilities in a specific area, such as high-performance explosives, or gauge industry dependence on foreign materials in manufacturing U.S. defense systems.

The Department has completed more than 30 such assessments since the mid-1980s, looking at a variety of defense-related sectors, including precision optics, ball and roller bearings, advanced ceramics, and ejection seats.

The Department has two major assessments currently underway. One covers biotechnology in U.S. industry and the other covers the U.S. textile and apparel industry.

The biotechnology study is the first comprehensive federal assessment of this critical industry. The Commerce Department recognized the importance of reliable data on the use of biotechnology in U.S. industry, and the growing importance of this industry to the nation's security. Commerce joined with the Biotechnology Industry Organization (BIO) and others to conduct this assessment. To obtain the data needed for the assessment, the Department surveyed and compiled data from more than 1,000 companies. Of note, 66 percent of all respondents were classified as small businesses, with 500 or less employees.

This is an extremely dynamic industry, with many new products poised to come to market. The companies surveyed reported more than 23 thousand current biotechnology-related patents, with more than 32 thousand patents pending. The value of U.S. biotechnology activity was at least \$34 billion in 2001; as a relatively new industry, this is a significant share of the \$10 trillion U.S. economy. About 11 percent of survey respondents have held defense contracts in the last five years; as a group, they invested about 10 percent more in biotechnology-related research and development in 2001 than respondents that have not had defense contracts.

These preliminary results were distributed at the recent Biotechnology Industry Organization annual conference here in Washington. The President spoke at the event, highlighting the importance of biotechnology to all aspects of our lives and our national and economic security.

The final report will be available in September.

More recently, at the request of the Congress, the Department initiated an assessment of the U.S. textile and apparel industry. Pursuant to the Conference Report on the Omnibus Appropriations Act of 2003, this assessment will include review of:

\$ the current health and competitiveness of the U.S. textile and apparel industry;

\$ the contribution of the textile and apparel industry to the U.S. economy;

\$ the contribution of the textile and apparel industry to the U.S. armed forces;

\$ whether the United States is increasing its dependency on foreign sources for critical textile-related materials;

\$ potential threats to internal security from increased foreign sourcing and dependency; and

\$ whether the Berry Amendment and other Buy-American restrictions are being effectively enforced by the Department of Defense.

We are in the process of collecting and compiling data from more than 1,500 firms. This report will be completed by September 10, 2003.

In addition, we have three focused assessments of defense industry sectors underway. We are currently assessing the state of the U.S. air delivery (parachute) industry and the munitions power sources (batteries) industry at the request of the Army, and the shipbuilding subcontractor base at the request of the Navy. When completed, these

assessments will provide the requesters with information needed to understand the status and viability of each sector.

Let me also describe one of our completed assessments to illustrate their utility to the industry and the government agencies involved. In 1995 and again in 2000, the Department worked with the Navy to assess the domestic manufacturing base for cartridge- and propellant-actuated devices (CAD/PADs). These devices are used to eject pilots from fighter jets and, on the commercial side, are used in automotive air bags. The Navy recognized a potential problem due to a declining number of U.S. suppliers and approached the Department to request a full assessment of the remaining firms in the industry and to develop recommendations for stabilizing the sector.

The 1995 report recommended that the Navy:

- \$ institute biannual meetings with the CAD/PAD producers in order to deal with challenges facing the industry and to get to know their suppliers.

- \$ improve its forecasting process, communicating its needs to the CAD/PAD producers in such a time frame that the sector could respond to the requirements.

- \$ in most cases, eliminate the requirement for firms to ship their product to the Navy for testing, allowing on-site testing instead.

- \$ send much of the rework of expired CAD/PADs back to the manufacturers, rather than conducting the rework at Navy facilities. This helps the firms maintain employment levels in times when demand for new product is low.

The Department also recommended that the Department of Transportation streamline its process for reviewing requests to ship CAD/PADs around the country and to overseas markets.

In addition, the Department addressed another of the assessment's recommendations B that jurisdiction over export licenses for air bag components be with the Department of Commerce while leaving the export licensing of defense-related ejection seat components licensing with the Department of State. This has greatly reduced the waiting period for licenses and allows commercial air bags to be exported more quickly, thus strengthening that industrial base sector.

Commerce reevaluated the status of the industry in 2000, and found that each of the recommendations from the earlier report had been implemented. The industry has stabilized at about thirty companies, large and small, down from more than 60 in the early 1990s. We have not been approached by the Navy regarding any production shortfalls.

#### Defense Trade Advocacy

The Department also successfully teams with other U.S. Government agencies to help U.S. defense companies compete and win in the highly competitive international defense market. We advocate on behalf of small and large U.S. companies for foreign defense contracts, in close coordination with the Departments of State and Defense, to engage foreign decision makers on the strategic, military, and economic issues associated with major defense procurements.

In FY 2002, working with interagency partners, my agency successfully assisted U.S. companies in obtaining four substantial contracts to supply foreign governments with defense articles worth approximately \$7.8 billion, specifically fighter aircraft and naval combat systems to South Korea, attack helicopters to Kuwait, and aircraft electro-optical equipment to Australia. Earlier this year, we successfully help conclude the sale of U.S. fighter aircraft to Poland in spite of strong ABuy EU@ pressures on Poland.

These major sales help maintain all segments of the U.S. defense industrial vendor base and preserve high-tech employment. A U.S. fighter aircraft is comprised of components manufactured by thousands of U.S. companies of all sizes.

We work closely with the Department of Commerce's global network of U.S. Commercial Service offices, including Export Assistance Centers across the country, to identify defense trade opportunities for U.S. industry, to support U.S. defense trade exhibitions overseas, and to provide export counseling to U.S. industry exploring new emerging market opportunities worldwide.

#### The Deepwater Program

The Department's ongoing collaboration with the U.S. Coast Guard to promote overseas the Integrated Deepwater System is an example of another way we work to help maintain and enhance the U.S. defense industrial base. The Integrated Deepwater System is the Coast Guard's multiyear effort to upgrade its Deepwater assets (ships, airplanes, helicopters, and their sensors, communications, and logistics systems). Our collaboration is an outgrowth of the Department's comprehensive assessment of the U.S. shipbuilding industry completed in 2001. In the assessment, the Department recommended that the U.S. shipbuilding industry refocus its attention on the world market and form partnerships with foreign firms.

The U.S. Coast Guard's Integrated Deepwater System provided an opportunity for the Department to assist the shipbuilding industry in focusing on the world market. We have been collaborating with the Coast Guard to promote its new Integrated Deepwater System worldwide. The Deepwater assets can be used by foreign governments

for a variety of missions, including search and rescue, fisheries protection, drug interdiction, and homeland security.

The Department works closely with the Coast Guard, its Deepwater industry partners, and government export financing institutions to promote sales of the Deepwater assets worldwide. Increased sales abroad will lead to lower per-unit production costs, which lowers the acquisition cost for the Coast Guard. U.S. industry and its workforce at the prime and subcontractor level benefit through increased demand for their products and services.

#### Manufacturing Initiative

Turning to more general work on U.S. manufacturing capabilities, the International Trade Administration of Commerce is leading a Department-wide effort to obtain manufacturing industry insight and feedback by holding approximately 30 roundtables across the country for a report that Secretary Evans requested. Specifically, industry is being asked to comment on:

\$ Current Status B competitiveness, industry trends, technology leadership, the domestic business environment, manufacturing practices, and outsourcing/off-shore procurement.

\$ The Future: 2020 B the manufacturing environment in 2020, what products will be produced in the United States, competitive advantages that U.S. manufacturers will carry forward, and human resource management issues.

\$ Suggestions for policy makers B government policies that enhance our manufacturing competitiveness, the government's role in developing technologies that industry will need to remain competitive, and the trade barriers that most affect industry competitiveness.

The report will describe the problems U.S. manufacturers are facing and, more importantly, make recommendations on actions the Administration should take to revitalize the manufacturing sector of the U.S. economy.

#### H.R. 1588

Mr. Chairman, you've asked that I comment on Subtitle B of Title VIII of H.R. 1588 - provisions that relate to the U.S. defense industrial base. Care must be taken so that in attempting to assist one part of the industrial base, another part is not hurt. For example, section 826 of H.R. 1588 effectively requires defense contractors to replace foreign-made machine tools with those manufactured in the United States. Machine tools are expensive and long-lasting assets. While this requirement may ultimately provide additional sales for U.S. companies, requiring that they be replaced, even for large defense contractors,

would entail expenditures of money that would be better spent on other areas, such as research and development, new plants, or job training programs, areas that would strengthen the defense industrial base.

My colleague from the Department of Defense has provided the Committee with specific additional concerns about H.R. 1588. The Department of Commerce will continue to work with the Defense Department to assess and monitor the health and competitiveness of sectors critical to the nation's security.

Thank you, Mr. Chairman. I would be pleased to answer any questions that you and the committee may have.

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**House Committee on Small Business****"Saving the Defense Industrial Base"**

July 9, 2003

**Prepared Remarks of Mr. Matthew B. Coffey, President, National Tooling and Machining Association, Ft. Washington, MD**

In considering the preservation of the nation's defense industrial base and the manufacturing capabilities to sustain it, one must understand how the lack of U. S. government policy on issues of countertrade and U. S. trade policy contributed to the present state of affairs.

Four practices followed by the prime defense contractors in cooperation with foreign governments and often memorialized in memorandums of understanding (MOU's) have been in existence for a long time. Those four practices are:

- 1) Barter – In which the U.S. prime agrees to take in exchange for a sale an amount of foreign goods equal in value to the purchase that they must then sell in the market.
- 2) Counterpurchase – In which the U.S. prime agrees to purchase raw material or product in an amount equal to the purchase price and then resell through a trading company.
- 3) Offsets – In which the U.S. prime bears the cost of direct offsets, that is exports, services or investment directly related to a sale and also pays for indirect offsets, which are general exports, services or investment not directly related to the sale of military hardware. (An example would be agreeing to source 50% of the parts for a weapon from the foreign country.)
- 4) Co-Production – In which the U.S. prime and the foreign country build a military co-production facility in the foreign country thereby transferring technology, not only to facilitate assembly but also to aid them in the manufacturing of the plane. (Source: Winning the Countertrade War, by Matt Schaffer, Copyright 1989, John Wiley & Sons)

Offsets and co-production have made so many other countries capable of manufacturing highly sophisticated defense products that even the Pentagon recently said that the continuation of buy American provisions in military authorization and appropriation bills would deny them access to state of the art technology only available in foreign countries. Members of the committee I can only ask? Why have we done this to ourselves?

Why is it when we as a government buy airplanes and helicopters from Europe we have no countertrade requirement. As you sit at the beach this summer and see the U.S. Coast Guard helicopters, made in Europe, patrolling our beaches, just think about the jobs we could have had in the U.S. with countertrade as U.S. purchasing policy, not just for defense products but all commercial foreign products.

The Office of Management and Budget prepared the official U.S. policy on offsets in 1985. It states:

"The U.S. Government generally views countertrade, including barter as contrary to an open, free trading system and, in the long run, not in the interest of the U.S. business community. However, as a matter of policy the U.S. Government will not oppose U.S. companies' participation in countertrade arrangements unless such action could have a negative impact on national security." (Office of Management and Budget; "Impact of Offsets in Defense-related Exports," December, 1985)

Now that we have followed that policy for eighteen years and not created our own countertrade laws we are paying the price. The Chairman of the Armed Services Committee of the U.S. House of Representatives cited the case of Boeings' problems with a Swiss source of the guidance system for the JDAM bomb during the Iraq war where the supplier refused to supply the system because of either Swiss law or his beliefs that the war was unjust. Members of the committee what are we doing to ourselves?

While countertrade and co-production agreements have been increasing over the past twenty years more and more high quality, high paying jobs have been shipped off shore.

The Pentagon because of the criticisms of the past for cost overruns has also adopted the philosophy of buying more commercial items and less specifically made items. This has lead to another shrinkage in the U.S. job market and manufacturing supply base. Much less innovative Research and Development is being done in the U.S. because the Pentagon is not funding it.

On the commercial product side of manufacturing there has been a dramatic trend to globalization. There has also been unrelenting pressure from the financial community to return quarterly profits to the shareholders. As a result, transnational companies, including all the U.S. primes, have been sending more and more manufacturing production offshore. As an example, General Motors, a defense subcontractor, recently announced that it would source 20 Billion dollars in parts from China, while Ford Motors announced it would source 10 billion from China.

It was recently estimated that 60% of all transnational companies have already moved large quantities of their manufacturing to Asia. The

result of this accelerating trend is the dilemma we find ourselves in today in the U.S. economy. A jobless recovery results when all of those manufacturing jobs do not come back. I believe it is fair to say we are in a jobless recovery.

Each of you in your own congressional districts can see what is happening. More big box stores and fewer small and medium sized manufacturers. In fact the remaining small and medium sized manufacturers are holding on, with less people, against long odds. Those big box stores are selling mainly products made in China, therefore manufactured in China.

When you lose the small and medium sized manufacturer you lose a lot in your local economies and in your congressional district. A manufacturing worker normally supports from two to four service jobs. Many of you have heard that we are going to be a service economy but when you do the math there is only one conclusion. If the manufacturing jobs leave the country the service jobs will be right behind them. Not only will the small and medium sized manufacturer become like the family farmer but also you will be sending your computer to be repaired in India. Without jobs the American standard of living will decline further, faster.

America is losing its manufacturing infrastructure and is losing it rapidly. Unless the Congress stands up and puts a halt to it we will eventually be at the mercy of any adversary who controls the manufacture of our weapons or critical components of our weapons. In the earlier example with the JDAM, Boeing was able to scramble and find a U.S. supplier who had the capability and know how to make the parts but with the deterioration going on now, particularly in the tool, die and precision machining industry, that will be less likely to happen in the future.

Unfortunately, the U.S. Department of Commerce only does the Census of Manufacturing every 5 years. So the latest data we have available on manufacturing in the United States is 1997, during the peak of the bubble economy. The 2002 data will not be available till 2004. So we are caught in a vacuum of information on the destruction that is ongoing. In our NAICS code categories it looks like the industry has shrunk about 30% in the last two years but we will not be certain until we get the official statistics. Anything the Committee could do to expedite the production of the numbers would be appreciated.

When considering actions to take:

First: Press forward with policy that either requires countertrade for all U.S. government transactions or bars countertrade for the sale of all military equipment.

Second: Put on the public record the information available to the Congress through the Defense Offset Disclosure Act of 1999 and the

OMB/DOC list of countertrade offset transactions, which they are supposed to maintain for all military equipment.

Third: Support the Hunter Amendments to the Defense Authorization bill for 2004 in Conference with the Senate and continue to increase the number of products covered by the Berry Amendment.

Fourth: Support small and medium sized manufacturers through dramatically growing the Manufacturing Extension Partnership in the Department of Commerce to turn it into a real extension service along the lines of the Agriculture Extension not a cost shared consulting service.

Fifth: Support small and medium sized manufacturers through making changes in the Department of Commerce to create an Undersecretary for small and medium sized manufacturing to provide real time data on the state of the small manufacturer and to develop policies to nurture these firms development. Change the focus of the department from being a trade assistance department for transnational companies that use the U.S. as a base for their global operations.

Sixth: Pay careful attention to trade agreements whether they are bilateral, multi-lateral or free trade zones to be sure the administration is not shipping high quality manufacturing jobs to less developed countries or to major competitor countries. You need to pay close attention to the U.S. Singapore FTA presently before you because Singapore is a hub for all Asian trading where we already have a lot of disadvantages.

Seventh: Insist on enforcement of the WTO regulations and make sure the Administration does not give up U.S. trade remedies during the ministerial meetings in Cancun this September. We recognize there is an inclination on the part of the Administration to use U.S. trade concessions and limited sanctions of the WTO rules to achieve geopolitical goals. These compromises decimate the small and medium sized employer in the U.S. and must stop.

Eighth: Understand that America cannot prosper as a service economy. Manufacturers' are big consumers of all services and if manufacturing leaves for China all the service providers to manufacturing will follow. Manufacturing generates wealth and without that function you cannot buy services in sufficient quantity to keep the economy going.

Ninth: Congress the Administration and the States must be more conscious of the costs they impose on operating a small and medium sized business in the United States. Whether it is the cost of insurance of all kinds, increased regulation, increased taxes at the state level, inaccessibility of capital, inaccessibility of defense and government contracts, tariffs on consumables needed in small and medium sized manufacturers or other trade barriers.

Tenth: Campaign to punish any trading nation that pegs its currency to the dollar thereby given pricing advantage to its domestic industries.

Eleventh: Call on the Administration to call a White House Conference focused on the plight of the small and medium sized manufacturer in the U.S. economy.

In summary the Administration and the Congress should stop giving away our competitive advantage. We support a fair trading system in commercial and military products. So address the countertrade issue in military and commercial products, stop supporting a strong dollar, stop letting less developed countries off the hook on the international trading rules, stop allowing the pegging of currency and stop imposing costs on the small and medium sized manufacturers through taxes and regulations.

Help with more creative finance programs or procurement set-asides and build a real extension service for small manufacturers that has the ability to finance them to be global competitors. Make the government agencies source in the U.S.

It is all about jobs. Will we have the jobs in the future to assure our ability to have the best weapons for our warriors? Will we be able to deliver those weapons on a sustained basis to be sure we remain the dominant economy and country in the world? We want to preserve American infrastructure so we can have high value added jobs in the U.S.

Addendum:

American Countertrade Association Term Definitions

American Countertrade Association Members List of Prime Contractors

Quotations from ACA Newsletter indicating two countries approaches to

Enforcing Countertrade on U.S. suppliers

New York Times article from July 7, 2003 indicating even the National Security Agency is outsourcing intelligence software to China.

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**House Committee on Small Business**

**"Saving the Defense Industrial Base"**

July 9, 2003

**Prepared Remarks of Mr. Chip Storie, V.P. for Aerospace Sales,  
Cincinnati Machine, Cincinnati, OH**

**I. INTRODUCTION**

Mr. Chairman, members of the committee, good afternoon and thank you for inviting me to participate in this hearing on America's defense industrial base. Today I will be speaking on behalf of AMT – The Association For Manufacturing Technology. I serve on the association's Government Relations Committee. AMT's 340 member companies manufacture production machinery such as machine tools, software, and engineered products and systems.

Pursuant to House Rule XI, clause 2(g)(4), I am obligated to report to you that AMT has received \$219,000 in fiscal years 1997-2000 and \$84,200 in fiscal year 2002 from the Commerce Department's Market Co-operator Development Program to help pay for a service and training center in China.

My company, Cincinnati Machine, a division of UNOVA, Inc., is a manufacturer of machine tools. As you know, Mr. Chairman, machine tools cut and shape metal to make the parts that go into almost everything that is manufactured, ranging from pumps to automobiles to aircraft. Without machine tools, none of these items can be effectively produced. Exports account for more than one-third of industry sales.

As you also know, Mr. Chairman, the machine tool industry in the United States today is in a crisis. Consumption of machine tools in the United States has decreased by approximately 60% over the past five years. There is a direct correlation between the amount of manufacturing

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done in the U.S. and machine tool consumption here in our home market. As a result, a once strong U.S. machine tool industry has seen many of its best, most innovative companies go out of business in the last four years. Ingersoll International, Inc., of Rockford, Illinois, is just the most recent of these bankruptcies.

As an aside, Mr. Chairman, I'd like to thank you for your strong leadership – along with Congressman Richard Neal of Massachusetts –

of the House Machine Tool Caucus, which has provided invaluable support and encouragement for our industry during these difficult times.

## II. THE DEFENSE INDUSTRIAL BASE

Mr. Chairman, the machine tool industry in the United States has served the needs of the U.S. defense industrial base for well over a century. The machine tool industry, made up primarily of small businesses, has a well-documented history of supporting our nation's defense needs with the high technology production equipment that is at the heart of the weapons systems that have established the United States as the pre-eminent military power in the world. This tradition continues today.

## III. MOORE TOOL COMPANY

One of the best examples of the criticality of our industry can be demonstrated by the government contracting experience of another AMT member, the Moore Tool Company, headquartered in Bridgeport, Connecticut. To illustrate, let me give you an overview of the past 18 months. During that period, the Moore Tool Company completed the following projects for United States Government agencies: for the Lawrence Livermore Laboratory, they built one optical flycutter and two Nanotech 350 4-axis diamond turning lathes; for the Los Alamos Laboratories, they built two spherical measuring machines for nuclear components, one parting lathe for the disassembly of nuclear components, and one special L-base lathe for nuclear components, plus one special L-base lathe for nuclear components and one Nanotech 350 diamond turning lathe for the same purpose; for the Sandia National Laboratories, they built one

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Nanotech 350 diamond turning lathe; for the Y-12 Oak Ridge facility they built one special grinder for nuclear components, and one 5-axis jig borer; and finally, for Hill Air Force Base, they undertook various rebuilding and re-controlling projects.

## IV. CINCINNATI MACHINE

For our part, Cincinnati Machine is supplying equipment to support programs such as the Joint Strike Fighter, C-17, F-22, V-22, as well as a number of others that cannot be disclosed due to their sensitive nature. It is our view that this committee's concern about being overly reliant upon foreign sources for critical technologies is quite valid.

Examples of the technologies currently being consumed from the machine tool industry are in high speed machining, as well as five-axis and composites processing machines. If we focus on composites technology, this is a great example of industry and defense working

together to develop a technology that has proven invaluable. Cincinnati Machine's composite processing equipment produce aircraft components from composites materials to provide aircraft such as the B-2 with its stealth capability. Cincinnati worked closely with Boeing in the early stages of the B-2 program to develop this technology into one that could be counted on in a production environment. Today, only a handful of companies can produce this type of equipment. Depending on how one defines composite capability, there are two or three companies in the United States, one in Spain, and one in France. I do not believe that we want our defense capabilities being controlled by the prevailing political whims of foreign governments, no matter how close an ally they are considered. This is why America's defense industrial base needs a strong and healthy machine tool industry. The Defense Production Act allows the U.S. Government to prioritize production for any company within its jurisdiction. But, of course, it cannot dictate to a company in a foreign country what it must manufacture, or move up the priority of the manufacture of any particular product (as it can in the United States

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under the authority of the Defense Production Act). There are inherent limits to U.S. Government authority, no matter how urgent its production is to the defense of the United States. That surge capacity can only be found within the confines and the jurisdiction of the United States.

If the Congress decides to create a mandate to "Buy American"-built machine tools for defense contracts, other factors, aside from technology, merit discussion. First, can the U.S. Government procure the technology at a competitive price, and secondly, is there enough capacity in the United States to satisfy the demand? Both factors boil down to basic business principles. Every industry faces pricing pressures from overseas competitors. We deal with this on a daily basis. We are succeeding in all corners of the globe by offering a superior product at a competitive price. As long as the dollar to euro exchange rate remains in a reasonable range, U.S. industry can, and does, compete on price. An increase in defense orders will allow us to better utilize our assets, which will, in turn, assist in keeping our costs in line with our foreign competition. Without a doubt, U.S. suppliers are capable of delivering a cost-effective product, especially in the area of high tech products.

As for capacity, again the industry has historically ebbed and flowed with demand. There is nothing fundamentally different today that would prevent us from increasing capacity in a rapid fashion when called upon. We have met the demand in the past, and we are prepared to do so again.

To summarize, the U.S. machine tool industry is prepared to supply the highest technology at a competitive price and it is capable of delivering

it at the appropriate quantities. A "Buy American" provision will keep our manufacturing base in this country strong. A strong manufacturing base is key to the United States continued dominance in the defense field, and with our nation's defense establishment and the companies of the defense industrial base

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working together, the United States will continue to be in a position where it can control its own destiny.

#### V. CONCLUSION

Mr. Chairman, thank you for providing this forum for the discussion of our nation's defense industrial base. I can think of no issue more important to both our nation's economic health and its security. I will be pleased to respond to your questions. Thank you.

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**House Committee on Small Business****"Saving the Defense Industrial Base"**

July 9, 2003

**Prepared Remarks of Mr. Ole Bradley, Tooling Division, PM Mold Company, Inc., Schaumburgh, IL**

The present state of the manufacturing base in the United States of America is strong decline, lost jobs and lost consumer purchasing power. As Chairman Rep. Manzullo so aptly points out in his letter to us requesting our participation in this hearing, most of the 2.6 million lost jobs since July 2000, were in small manufacturing businesses. This is truly distressing news, given that small businesses have long been responsible for much of the job creation and technology innovation over the past several decades. America's strength as a world leader is directly tied to its manufacturing and technology capabilities, which are quickly being siphoned off by foreign powers, specifically China whose aim – as quoted in a Business Week article – is to be the manufacturing floor of the world.

People in our government who do not – or cannot – make the connection between a strong economy and a strong manufacturing base are endangering not only the livelihoods of many American workers and small-business owners, but are putting the United States at risk by failing to support companies to manufacture military, aerospace and defense products – products critical to our national defense – at home.

It would have been inconceivable during the Cold War years to have a defense contractor sub-contract critical military and defense components to a Communist country. Yet, that is what is happening currently when government contractors sub-let contracts to companies in Red China owned and operated by the Communist government. That is a double slap in the face to all of us in manufacturing in the United States.

President Bush, in the Office of Management and Budget in its Statement of Administration Policy, raised concerns about various sections of the House version of the National Defense Authorization Act for fiscal year 2004 (HR 1588), that a "buy American" clause might have the potential to degrade U.S. military capabilities by failing to have access to some critical technologies crucial to our defense needs. It has long been known that the United States is the world's leader in innovative technology. The U.S. innovates; the rest of the world copies. That is China's modus operandi.

If the United States' own military, aerospace and defense industries

cannot count on its own manufacturing base to supply the latest in cutting-edge technologies, processes and equipment, then we are doomed as a world super-power anyway.

As large, U.S.-based manufacturers move more and more of their manufacturing to countries such as China it is not only our jobs that disappear from the American landscape, but our technology edge goes as well. The loss of intellectual property to Chinese-owned companies has been widely documented in many business and industry publications. Is this something with which our defense industry in this country needs to be concerned? I would answer a resounding "YES!"

Manufacturing in the United States needs the support of government in many ways. We are not asking for government handouts, but to have in place rules that produce a level playing field for us with other countries. It is becoming increasingly more difficult to compete against companies whose governments provide financial support to bolster their manufacturing economy. They do this because, unlike our government in the United States, they recognize that a strong manufacturing base equates to a strong economy. To ask that our government put in place policies that require purchases for the U.S. government's military, defense and aerospace industries to be made from U.S. manufacturers is a small request, but one that will have large, far-reaching and positive impact on small businesses and on the economy as a whole.

Because our manufacturing base has been so greatly depleted -- in man-power, skills, and capabilities -- my concern is that we be able to supply our defense and military requirements. I would hope that a bill that provides incentives for U.S. manufacturers to retain a strong presence in this country might bring renewed strength to U.S. manufacturing so that in the event of a national emergency we are not forced to be dependent on foreign countries to supply us with the needed parts, supplies and equipment to support our national defense.

As the owner of a small business that builds steel molds for producing, I would strongly encourage the passage of HR 1588, and encourage the full support of this Administration to bolster U.S. manufacturing so that America retains its status as a world leader.

Curriculum Vitae Statement:

I, Olav Bradley, as President of P.M. Mold Co., Schaumburg, IL, do hereby state that neither I nor my company has received any government contracts, subcontracts or grants at any time during the past two years.

Respectfully Submitted,

Olav Bradley, Chairman, Government Affairs Liaison  
American Mold Builders Association  
President, P.M. Mold Company

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