EXPORT CONTROLS, ARMS SALES, AND REFORM: BALANCING U.S. INTERESTS, PART II

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CONTENTS

EXPORT CONTROLS, ARMS SALES, AND REFORM: BALANCING U.S. INTERESTS, PART II

TUESDAY, FEBRUARY 7, 2012

HOUSE OF REPRESENTATIVES,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

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

Chairman ROS-LEHTINEN [presiding]. The committee will come to order.

After recognizing myself and the ranking member, Mr. Berman, for 7 minutes each for our opening statements, I will recognize the chairman and ranking member of our Terrorism, Nonproliferation, and Trade Subcommittee for 3 minutes each for their statements. I will then recognize members who wish to speak for their 1-minute opening statements.

We will then hear from our witnesses, and I would ask that you summarize your prepared statements in 5 minutes each before we move to the question-and-answer segment with members under the 5-minute rule.

Without objection, the witnesses' prepared statements will be made a part of the record, and members may have 5 days to insert statements and questions for the record, subject to the length limitation in the rules.

The Chair now recognizes herself for 7 minutes.

Today our committee continues our examination of the Executive Branch's unilateral proposals to create a new framework for U.S. strategic export controls. Many of us on this committee want to help make commonsense improvements in our export control system that will enhance U.S. national security, protect critical technologies, and make our system easier to navigate for our American businesses.

In this regard, there are some constructive elements of the current reforms. One of the most notable is the development of a shared information technology platform across our export control agencies.

However, these initiatives have been peripheral to the main focus of the administration's efforts, which has essentially been a complete rewrite of the entire United States Munitions List (USML) and the transfer of a large number of defense articles to the Department of Commerce. This reform is supposed to lead to the creation of a single control list and a single licensing agency.

There are elements of the USML review that have merit. However, its many complexities also demand close congressional scrutiny.

First, a word about the process. Under Section 38(f) of the Arms Export Control Act, the President is required to give notice to the Congress of any item or items that are recommended for removal from the USML and to describe how they would be regulated under any other provision of law. However, because the administration has focused only on identifying what technologies are to remain on the USML, not what is to be removed, the administration has not identified nor informed Congress of the full range of items it seeks to transfer to Commerce.

The ranking member and I have repeatedly stated that we are ready to work with the Executive Branch to reach an agreement. However, we will not accept unilateral actions that substantially infringe on or ignore congressional oversight over these important national security matters.

I have proposed that the Executive Branch prioritize removal of the least sensitive parts and components, nuts, bolts, cable, and the like, which have been treated as defense articles only because they were modified for military end-use. One major defense contractor agrees with this approach, stating, "Focusing on the numerous low-level parts and components could yield significant near-term benefits to U.S. manufacturers."

I have also introduced legislation, H.R. 2122, the Export Administration Renewal Act, that would help accomplish this goal of removing the least sensitive items from the USML and provide immediate relief to some of our companies. Provided that manufacturing for such items will not be outsourced to China for later introduction into the U.S. military supply chain, Congress could reach a quick agreement to approve their removal from the USML.

The administration also proposes transferring to Commerce numerous military end-items, as well as thousands of other, more sensitive parts and components, including software source code and manufacturing know-how. These items would be regulated under the new Commerce Munitions List within the larger Commerce Control List (CCL).

This proposed arrangement raises a number of questions, including the lack of a statutory basis for the proposed CML, the relationship of the CML to U.S. security assistance authorities, and the elimination of congressional notification and reporting requirements for the export or retransfer of such defense articles.

While CML-controlled items would require a license for export and would be denied to countries subject to a U.S. arms embargo, they would also be eligible for a broad new license exemption to 36 countries deemed as friendly. To be effective, however, country exemptions for the export of defense articles must incorporate critical safeguards, including agreement on which foreign parties can have access to controlled items and on foreign cooperation in enforcement. These appear to be missing from the process set out by the administration.

History has shown that, without such safeguards, country exemptions for defense articles are vulnerable to exploitation by gray market brokers, by foreign intelligence entities, by front companies,

and even terrorists. China and Iran pose especially grave concerns. Both countries are actively seeking to acquire a wide range of U.S. technology through a myriad of illegal schemes that span the globe.

Iran, in particular, is dependent on the illicit acquisition of a vast range of military spare parts for its inventory of U.S.-origin military equipment. These include fighter aircraft, tactical airlift, helicopters, corvettes, patrol ships, tanks, artillery, and trucks. With few exceptions, these spare parts and components will be eligible for the proposed new license exemption—with increased risk of diversion.

More broadly, as the U.S. Congress assesses U.S. control on commercial satellites, it is crucial to recall that the European Union and China have launched an expansive space technology partnership, one that appears to include the illegal transfer of U.S.-controlled parts and components.

We must also heed the lessons of the Loral-China case to avoid another situation where we have armed our enemies. Indeed, the reports this morning of a launch of an Iranian satellite using a missile launcher reminds us of the sophistication of their illegal procurement networks and the perils of loose controls on sensitive dual-use and military technologies.

Lastly, we also await further details on a number of critical licensing issues, including the preparedness of the Executive Branch to implement and enforce such regulations and plans for outreach to industry. The committee shares concerns with industry regarding the length and the complexity of the process.

We look forward to the expert testimony this morning of our distinguished witnesses, as we seek to develop legislative action to reform our export control mechanisms to balance security and trade interests.

I now recognize the ranking member for his opening statement, Mr. Berman.

Mr. BERMAN. Thank you very much, Madam Chairman, for calling this hearing.

The reform of U.S. export controls on defense and defense-related items is long overdue. Our current system of export controls was born amid the tensions of the Cold War when the United States was the dominant provider of defense-related technology. The Cold War is now a subject for the history books. Yet, the U.S. maintains the same fundamental export control system, one that inefficiently responds, if it responds at all, to changes in the international environment and the breakneck pace of technological innovation and diversification. Our out-of-date export controls are more unilateral and, therefore, less effective than they were in the past and are fast becoming a burden on our defense industrial base, our scientific leadership, and our national security.

Three years ago, the National Research Council published a report which concluded that America's national security is highly dependent on maintaining our scientific and technological leadership. In stark terms, this report stated, "The current system of export controls now harms our national and homeland security, as well as our ability to compete economically. The United States now runs the risk of becoming less competitive and less prosperous. We run the risk of actually weakening our national security."

The Obama administration's Export Control Reform Initiative has taken on the Herculean, some would say Sisyphean, task of being the reform of the U.S. export control system. After 3 years of work, the administration is now beginning to publish the draft changes it seeks to make in the U.S. Munitions List. These changes, once enacted, will mean that literally tens, if not hundreds, of thousands of defense items that the administration deems to be less militarily sensitive would be moved to a new sublist of the Department of Commerce's Commerce Control List.

There is much that Congress can do to help this effort. The first would be to pass a new Export Administration Act to replace the lapsed EAA of 1979. Because Congress has failed over the course of two decades to enact a new statute, the EAA exists only as a result of the President's invocation of the International Emergency Economic Powers Act. It is a Cold War relic and on potentially shaky legal grounds for enforcement since it doesn't really exist.

Last May I introduced H.R. 2004, the Technology Security and Antiboycott Act, to succeed the EAA. In contrast to the old EAA's focus on economic warfare against long-gone adversaries, my bill focuses on the current threats to U.S. security. It provides the President with the authority to regulate the transfer from the United States of goods, services, software, and technological information that could pose a threat to U.S. national security if obtained by hostile governments, terrorist groups, or threatening persons.

Unlike the old EAA, my bill defines national security to include strengthening scientific and technological leadership, high-technology manufacturing, and the U.S. defense industrial base. In today's world, sustaining our cutting-edge universities, research establishments, high-tech companies, and skilled workforce is as essential to our security as is military superiority. Export controls must be calibrated to serve academic and technological excellence and support U.S. high-tech jobs.

The second thing Congress can do to restore the President's authority is to move less sensitive satellites, related components, and technology from the U.S. Munitions List. In 1998, in response to unlicensed technical assistance to China's Space Launch Program by two U.S. companies, Congress mandated that all U.S. satellites and components were to be moved from the Commerce Control List and become subject to licensing as weapons under the State Department's United States Munitions List, regardless of whether the proposed export was to China or a NATO ally. This well-intended restriction is now causing unintended consequences.

European satellite manufacturers believe that U.S. Munitions List restrictions are too onerous to include U.S. components. Consequently, U.S. manufacturers are currently in danger of having their products designed out of foreign satellite systems. That has serious implications for the health of our space and defense industrial base. If smaller satellite component manufacturers lose market share and perhaps go out of business, then the Department of Defense will not be able to buy their products to meet our national security needs.

Along with my colleagues Don Manzullo and Gerry Connolly, I introduced H.R. 3288, the Safeguarding United States Satellite

Leadership and Security Act, last November. This bipartisan legislation would help restore America's global competitiveness in high-tech satellite technology and protect vital U.S. national security interests. It would also prohibit outright any such exports to China, the original concern that caused Congress to legislatively transfer all satellites to the Munitions List, and to Iran, North Korea, Syria, Sudan, or Cuba, the countries that pose the biggest risks to our national security. The bill would also prohibit any foreign satellite with a U.S. component from being launched on a Chinese rocket. This latter provision is actually tougher than current law, including the Tiananmen Square sanctions, which allow such exports.

In closing, let me say that I think the administration's export control reform efforts are moving in the right direction. My only concern is that there may not be enough time to complete the review of all 21 categories on the U.S. Munitions List, publish the draft changes for comment, receive and reflect upon those comments, publish final changes, and, as the chairman mentioned, ensure that our committee and the Senate Foreign Relations Committee, the committees of jurisdiction, are able to conduct the necessary oversight of these changes.

My preference would be for the administration to set priorities to make sure that two of the most important categories, aerospace and space systems, which now comprise Categories 8 and 15 of the U.S. Munitions List, could be completed in this Congress. I would like the witnesses' thoughts on this point.

Thank you, Madam Chairman, for holding this hearing, and I yield back my—no time.

Chairman ROS-LEHTINEN. Thank you, Mr. Berman, and I appreciate it.

Before I recognize the members for their opening statement, I would like to welcome to our committee a 2-week intern, Susan Ruby Paxton, who is the offspring of two former Members of Congress, Bill Paxton and Susan Molinari. She will be working under the direction of Eugene Patrone, who is the foreign policy expert of Congressman Turner. So, we welcome her. She used to be Suby, but now she is 15 and all grown up and goes by Susan Ruby.

Thank you. Welcome. We will keep an eye on you. Behave. [Laughter.]

And it is pleasure to recognize Chairman Royce, the chairman of the Subcommittee on Terrorism, Nonproliferation, and Trade, for his opening statement.

Mr. ROYCE. Thank you very much, Madam Chairman.

The Terrorism, Nonproliferation, and Trade Subcommittee has examined export control reforms over the years, and it is very important, of course, to our economic well-being and, also, to our national security. As you noted, Madam Chair, this process now has been running for some time. We have had reforms under the Bush administration. Those have continued under the Obama administration. And I think there is a bipartisan consensus that the system certainly is not efficient, that it is a legacy of a different era, and that our economy and national security is suffering as a result of this.

We are waiting for specifics of the current administration's ambitious reform efforts, but, Madam Chairman, you raised some concerns in your statement that I share. Let me try to articulate those.

The goal here in simple terms is to focus on the truly dangerous items. We have enemies determined to hurt us with our own technology. The challenge is establishing that focus, making a more workable system, bringing some measure of efficiency to this system. And we are operating in an ever more competitive and fast-paced world economy that, frankly, is leaving our bureaucracy far behind. So, I share our witnesses' sense of urgency about reform.

Whether satellites are treated as a military or commercial export is an important issue that I have raised. The committee had hoped that the Defense Department's final report on the security implications of satellite exports would have been released by now. We are still awaiting that release.

Finally, I would like to second one witness' point that printed circuit boards be treated as ITAR-controlled, whatever the reform process brings. This is a very important point. The bureaucracy has not understood how the central nervous system for all electronics is a unique part of critical defense systems here in the United States. To have such PCBs loosely controlled is to move this industry overseas and needlessly compromise our national security.

So, I would like to close with that point, Madam Chairman, and I thank you very much. I yield back the balance of my time.

Chairman ROS-LEHTINEN. Thank you, sir.

Mr. Sherman, the ranking member on that subcommittee, is recognized for his opening statement.

Mr. SHERMAN. Thank you, Madam Chairwoman.

During the 110th and 111th Congress, the Terrorism, Nonproliferation, and Trade Subcommittee held five hearings concerning export controls, beginning in July 2007, where we focused primarily on the massive backlog the State Department's licensing agency, the DDTC, was laboring under. In late 2006, the State Department had more than 10,000 pending license decisions on backlog.

We found that the State Department had too few licensing officers. Licensing decisions that should have been resolved in weeks dragged on for months, and the number of licensing decisions made per individual officer was averaging several thousand. We found a system where massive defense firms paid the same $1,200 registration fee as tiny parts manufacturers that may not even have applied for a single license.

I introduced, with Don Manzullo, the Defense Trade Controls Improvement Act of 2009, which called for a top-to-bottom review, a mandate that the DDTC hire licensing officers to ensure that there was one officer for every 1200 applications, and a mandate that the agency collect larger fees from those that submit more licenses.

I also introduced other legislation, the Export Control Improvement Act, also cosponsored by Don Manzullo, which both of those have basically been adopted administratively. The system has been improved.

In early 2010, the President announced that he would tackle the substantive issues involved in export control. I have urged the administration to be very diligent in examining the ramifications for

our industrial base. We need to be certain that when we move something from the USML to the CCL, for example, we don't make it easier for multinationals to offshore the production.

When we deny a license, we preserve secrecy. When we grant a license to export finished goods, we create jobs, we build the infrastructure here in the United States, and we prevent that purchase from building infrastructure in another country. But if, instead, we export technology, tools, dies, and blueprints, then we lose the secrecy; we lose the jobs; we don't build an infrastructure in this country, and we do build an infrastructure in another country which, even if it is a friend of ours, may disagree on who, then, they should sell those weapons to.

That is why I ask unanimous consent to insert into the record here a letter showing the concerns of the International Association of Machinists. Without objection, I would hope so. Okay.

We have to design a system where licenses necessary to export equipment are treated differently than licenses for the export of technology, tools, dies, blueprints, and manufacturing permission. The former should be processed quickly; the latter should be processed slowly, if at all, because there is a difference between exporting products and offshoring jobs.

I yield back.

Chairman ROS-LEHTINEN. Thank you so much.

And now we will recognize members for their 1-minute opening statement.

Mr. Marino of Pennsylvania. Thank you.

Mr. Turner of New York.

Mr. TURNER. Thank you, Madam Chair.

Ms. Paxton, pay attention, please.

Like the rest of my colleagues, I recognize the need to reform our export control system. Arms and the defense industry as well as associated industries account for billions of dollars in exports and comprise one of the largest parts of our industrial base and thousands of jobs.

Our system is designed for the Cold War, and we all recognize it needs to be changed. But we must ensure the exports remain in line with our national security and strategy, and we must be flexible and fast. We must be able to respond to world events. The capture of a drone, the loss of a stealth helicopter has maybe many impacts that are just not accounted for. By the time we get around to it, it is far too late.

I am interested in hearing what our expert witnesses have to say, and I yield back. Thank you.

Chairman ROS-LEHTINEN. Thank you so much.

Ms. Bass of California, Speaker Bass.

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

I want to offer my appreciation today for the panel and their upcoming remarks. I hope that the hearing will help clarify current efforts by the administration to strengthen policies regarding the United States Munitions and Commerce Munitions List and further spotlight the interest of these industries in these reforms.

The Export Control Reform Initiative should take the time it needs to ensure that our national security is not compromised dur-

ing the process and that we have future policies that improve upon what currently exists.

I will be particularly interested in hearing the perspective of today's panel, how these reforms will create new opportunities for business, and where challenges still might exist.

Thank you very much.

Chairman ROS-LEHTINEN. Thank you.

My deepest apologies to Mr. Mujaha Dana Rohrabacher. How could I miss you, of all people? So, thank you. You are recognized.

Mr. ROHRABACHER. I submit my opening statement for the record and ask unanimous consent.

Chairman ROS-LEHTINEN. Without objection.

Mr. ROHRABACHER. Just to go along with Mr. Royce, we are talking about dangerous items going to dangerous countries. We have to remember that there are some countries that should be treated differently, and that has been one of the biggest hang-ups that we have had, because a lot of American business is making huge money with China and various human rights abusers who may well be an enemy of the United States in the future. They want to make money from those countries with the same rules as they make money and deal with friendly countries and democratic countries. We should not be treating dictatorial potential enemies like China in the same way we treat Belgium or Brazil, for Pete's sakes. That has been one of the biggest stumbling blocks.

Let me note we also need to be concerned about selling munitions and deadly pieces of equipment to even friendly countries. So that, for example, Mr. Maliki over in Iraq, who supposedly is a friendly country now, those weapons are not being used against the Kurds, as the weapons that we have already given them were used to murder people at Camp Ashraf who were unarmed. So, we have two levels of reasons for control here.

Thank you very much.

Chairman ROS-LEHTINEN. Thank you. And I apologize again.

Mr. Cicilline of Rhode Island.

Mr. CICILLINE. Thank you, Madam Chair and Ranking Member Berman.

And thank you to our panelists for being here to discuss this very important issue today. I look forward to hearing your testimony and really learning how we can continue to improve this process, and particularly how we can help to streamline the notification process. This is especially important to my District in Rhode Island where several of the companies that are in my District are adversely affected by this very long and sometimes cumbersome process. I am deeply concerned about the economic consequences that this long and drawn-out process has on businesses in my District in Rhode Island.

I think, like many of my colleagues here, I am, of course, interested in working to find a solution that expedites this process while also allowing Congress to exercise appropriate oversight in order to protect our national security.

I want to apologize in advance that I am not going to be able to stay for the entire hearing, but I look forward to continuing to work with my colleagues and with all of you as we address this very important issue. And thank you again for being here today.

Chairman ROS-LEHTINEN. Thank you, sir.

Mr. Duncan.

Judge Poe.

Mr. POE. Thank you, Madam Chair.

For nearly 50 years, Houston, Texas was the center of the world space exploration. The first word on the moon was "Houston." But our export regime has made it harder and harder for the space industry to compete with companies around the world. They have too much to process. There is too much paperwork to process. The wait is too long to get approval of legitimate business. And this puts them at an unfair disadvantage with their competitors. Now we are also threatened with losing our space superiority. It is clear the system is broken and something needs to be done to fix it.

At the same time, we don't want our enemies to get sensitive technology. They love to steal American technology, especially what I call the Chinese Government's organized crime syndicate. They copy it and then they pretend they did it all by themselves. That hurts our companies who are trying to compete. It hurts our national security.

Our goal when it comes to export control should be simple: Make sure our competitors/our enemies don't get our technology and help our businesses compete in a global way.

I yield back.

Chairman ROS-LEHTINEN. Thank you, sir.

Mr. Faleomavaega.

Mr. FALEOMAVAEGA. Thank you, Madam Chair and Ranking Member, Mr. Berman.

I want to associate myself with the opening statement and sentiments expressed by our ranking member, Mr. Berman, concerning the issue that we are discussing this morning.

In the 23-years-plus that I have served as a member of this committee, I know no one, in my humble opinion, who understands more the implications of the seriousness of these issues of export controls, arms controls than Mr. Berman. I certainly am very happy that he is here to express that and those concerns.

There is no question, Madam Chair, of the implications, just as we are confronted with whether or not we should be selling $6 billion worth of arms to Taiwan. One of the contradictions and some of the ironies that I observe, and I will ask certainly our panel of witnesses, it seems that we are either the No. 1 or the No. 2 largest seller of arms to other countries. The dangers and the implications of that issue, I am certainly looking forward to asking our witnesses for answers.

Thank you, Madam Chair, and I yield back.

Chairman ROS-LEHTINEN. Thank you so much, sir.

Mr. Kelly.

Mr. KELLY. Thank you, Madam Chair.

I am glad we are having this hearing because I know back in my District quite a few of the companies that are involved in this are also wondering about how difficult it is and how more difficult it is going to become for them to compete in the future. So, as we look into these things, it is great to have oversight on this. It is great to have the knowledge of it. But it is also important to understand

how difficult we have made it for our people to compete in the global market.

So, I thank you for having this and look forward to the testimony.

Chairman ROS-LEHTINEN. Thank you, sir.

Mr. Keating.

Mr. KEATING. Thank you, Madam Chairman. I would like to thank you for holding this hearing and advocating for the measures to streamline the notification process. The topic is extremely important, not simply for the well-being of the industry and for preserving their competitiveness in the international arena, but for our national security as a whole.

I know in Massachusetts that nearly 45,000 people rely on the aerospace and aviation industries for their employment. So, I am not just speaking for myself when I say that I thank you all for your attendance today and for the significant impact you will have on the Aerospace Industries Association.

So, with that, I yield back.

Chairman ROS-LEHTINEN. Thank you very much.

The Chair is pleased to welcome our witnesses. First, we will hear from Marion Blakey, who is the president and chief executive officer of the Aerospace Industries Association. AIA is the leading voice of the aerospace and defense industry, representing more than 150 leading manufacturers along with a supplier base of nearly 200 associate members.

Ms. Blakey became the eighth full-time chief executive of the Association in 2007. Before that, she served a 5-year term as Administrator of the Federal Aviation Administration.

We are honored to have you here.

Next, we would like to welcome Mr. Mikel Williams, who has served as president and chief executive officer of the DDi Corp. since November 2005. Mr. Williams served as senior vice president and chief financial officer of the company from November 2004 to October 2005. Before joining, Mr. Williams served as the sole member of Constellation Management Group, providing strategic, operational, and financial capital advisory consulting services to companies in the telecom, software, and high-tech industries.

Welcome, Mr. Williams.

And finally, we would like to welcome Patricia Cooper, who joined the Satellite Industry Association as its president in November 2007 and has more than 17 years in the satellite industry and in government.

Patricia joined SIA following a 5-year tenure in the Federal Communications Commission, where she managed the FCC's bilateral relationships with regulatory agencies across the world. She served as the lead author of the FCC's inaugural competition report to Congress on the communications satellite industry, and was Senior Satellite Competitor Advisor in the International Bureau.

A high-level set of witnesses.

We would like to remind our witnesses, as high level as they are, to keep their testimony to no more than 5 minutes.

Without objection, your entire written testimony will be made a part of the record and will be inserted therein.

Ms. Blakey, we start with you. Thank you.

STATEMENT OF MS. MARION C. BLAKEY, PRESIDENT & CHIEF EXECUTIVE OFFICER, AEROSPACE INDUSTRIES ASSOCIATION

Ms. BLAKEY. Thank you, Madam Chairman. I must say that I am delighted, also, Ranking Member Berman, and members of the House Committee on Foreign Affairs, to be here. The Aerospace Industries Association of America Appreciates the opportunity to testify today.

Our industry consistently generates America's largest manufacturing trade surplus, projected to be more than $57.4 billion in 2011, but continuing this track record of success cannot be taken for granted. Aerospace and its exports create and sustain high-skill, high-wage manufacturing jobs. These exports also preserve and increase the capacity of cutting-edge innovation and a robust industrial base that enables the U.S. military to be capable and valiant on the battlefield.

With such uncertainty now surrounding the U.S. Federal budget, exports can be an important part of how we maintain our Nation's critical defense and aerospace industrial base. I would, therefore, like to particularly emphasize that the reauthorization of the U.S. Export-Import Bank prior to May 31st is of paramount importance for exporters to complete on a level playing field in the commercial market, where current and future competitors continue to enjoy support from their country's export credit agencies.

I would particularly like to thank you, Madam Chairman and Ranking Member Berman, for your leadership over the years trying to modernize our export control system.

Another example of bipartisan leadership is H.R. 3288, a bill being championed by a number of members, including Ranking Member Berman and Congressmen Connolly and Manzullo. H.R. 3288 aims to initiate practical, commonsense legislative reforms to address the issues that are outlined in AIA's new report, which I have before me, "Competing for Space: Satellite Export Policy and U.S. National Security." With your permission, I would like to also submit that with my written testimony today.

Chairman ROS-LEHTINEN. Without objection.

Ms. BLAKEY. The report surveys manufacturers of U.S. satellite systems and components about the challenges the space industrial base faces as a result of U.S. export policies; in particular, the legislative mandate to treat commercial satellites and related components as military technology, even though the rest of the world does not.

We calculate a cumulative loss of $20.8 billion in U.S. satellite manufacturing revenue from 1999, the year COMSATs were moved to the U.S. Munitions List, to the year 2009. The direct job loss totals 8,710 jobs annually and 19,183 jobs in indirect and induced job losses. That is a total of 27,893 jobs lost annually because, in part, we have our current regime of export control policies.

We urge the timely completion of the U.S. Munitions and Commerce List control reviews, including returning the authority to determine the jurisdiction of COMSATs back to the administration. The process should not change currently denied exports to approved exports. Instead, transactions that would be approved in the current system would be processed faster by deciding in advance that less sensitive items do not require ITAR-level scrutiny.

Export licensing would also be cheaper since companies that manufacture USML technologies must pay an annual $2,250-a-year registration fee, plus $250 charge per export license. And this is really something. On that latter point, 68 percent of companies that have to register with the State Department because they make a product that is captured on the USML never export. I suspect many of them make the kinds of parts and components that we can all agree should be moved to Commerce control. Those parts and components manufacturers that do export have to incorporate that license charge of $250 per export license into their pricing. For small and medium-sized companies, there would be significant benefits in helping them minimize these regulatory burdens of the existing system.

And finally, I must say this should be the first of many steps for reform, not the last. Previous reform efforts have met with varying degrees of success, as previously noted. Experience suggests that critical factors at enabling meaningful reform include sustained oversight by senior administration officials as well as effective consultation with Congress and the private sector.

We stand ready to work with you and the administration to ensure that we continue to make meaningful progress toward a predictable, efficient, and transparent export control regime.

Thank you.

[The prepared statement of Ms. Blakey follows:]

STATEMENT FOR THE RECORD
MARION C. BLAKEY

PRESIDENT AND CHIEF EXECUTIVE OFFICER
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Export Controls, Arms Sales, and Reforms: Balancing U.S. Interests, Part II

House Committee on Foreign Affairs

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Introduction

Madame Chairman, Ranking Member Berman, and members of the House Committee on Foreign Affairs: the Aerospace Industries Association of America (AIA) appreciates the opportunity to testify at today's hearing on "Export Controls, Arms Sales, and Reforms: Balancing U.S. Interests." AIA represents nearly 350 manufacturers and suppliers in an industry employing more than one million workers. We operate as the largest professional organization in the United States across three lines of business: space systems, national defense, and civil aviation. Our industry consistently generates America's largest manufacturing trade surplus – projected to be more than $57.4 billion in 2011 - but continuing this track record of success cannot be taken for granted. Today I will address the importance of aerospace and defense exports to our industry and our nation as a whole and comment on our industry's priorities for export control reform.

Why Do Aerospace and Defense Exports Matter?

More than a third of the $218 billion in U.S. aerospace sales of civil, space, and defense products last year went to overseas customers. As other U.S. manufacturing sectors have declined, it is important to point out that aerospace and defense exports continue to create and sustain high-skill, high-wage manufacturing jobs. These exports also preserve and increase the capacity for cutting-edge innovation which enables critical U.S. military capability on the battlefield. With uncertainty surrounding the U.S. federal budget, exports can be an important part of how we maintain our nation's critical defense and aerospace industrial base. We must continue to compete effectively in the international marketplace to expedite our economic recovery and set a trajectory for even greater future economic growth.

Our companies rely on exports to provide the United States and our allies with the best technology at the best price for the U.S. taxpayer. Exports support systems and components used by the U.S. military, our intelligence services, and those protecting our nation and patrolling our borders. Overseas sales keep critical production lines open and available to meet the threats we face now and will face in the future while spreading fixed costs over a wider business base enabling a more affordable and capable defense of our nation. Exports also support technology exchange with our trusted partners, allowing our

industry to leverage foreign innovation and investment to make our own world-class products even better.

Aerospace and defense exports serve as a foundation for building key relationships with important international allies and partners and a shared future with shared responsibilities. American aviation products and services are at the forefront of providing to the world safe, reliable, and environmentally responsible air travel. Our space industry connects the globe, helping us communicate, navigate, and explore together with other nations. As the U.S. asks its allies to take on greater burden sharing to protect international security and stability, it is imperative that the United States implements export control reforms so these key partners can be more easily equipped with and trained on the appropriate systems and technologies to ensure engagement and interoperability with U.S. and other coalition forces.

Government and Congressional Activity Affecting Aerospace and Defense Exports

The value of aerospace and defense exports is certainly not lost on the members of this Committee, or on other leaders on Capitol Hill and in the Administration. Across all segments of our industry, the biggest asset we have in competing internationally is the advocacy and support provided by our government on behalf of our companies, large and small. The consistent and sustained efforts of senior leadership in Congress, the White House, State, Commerce, Defense, Transportation (including FAA), NASA, Treasury, the Office of the U.S. Trade Representative – the list goes on and on – is crucial to opening up markets for U.S. products and winning those sales opportunities. I would like to particularly emphasize the reauthorization of the U.S. Export Import Bank is critical to the ability of many exporters to compete on a level playing field in a commercial market where current and future competitors continue to enjoy support from their countries' export credit agencies. The U.S. government must provide the coordinated, cross-government advocacy and assured availability of export financing provided to our foreign competitors by their governments. "Selling American" – in particular the value of our products and partnership – to other countries is worth it, and there is no such thing as too much support or advocacy.

I would like to thank you, Madame Chairman and Ranking Member Berman, for your leadership over the years in trying to modernize our export control system. Your efforts with Congressman Manzullo to rationalize export control treatment of civil aircraft parts and components have been invaluable to our industry. We also appreciate your willingness to consider adjusting thresholds for and streamlining the preconsultation and formal Congressional Notification process, as well as adjusting export control treatment of non-sensitive parts and components. We look forward to working with you to find common-sense solutions for these critical challenges.

I am pleased that the historical record of this Committee shows an ever increasing awareness and vocalization that the status quo is not acceptable – that it is in our national security interests both to prevent our adversaries from accessing our technology AND to facilitate technology trade with our closest allies and trading partners.

Given the attention paid to this issue by both the Bush Administration and the Obama Administration, as well as by Democrats and Republicans in Congress, it is clear export control reform is a bipartisan issue. A perfect example of that bipartisanship is H.R. 3288, a bill signed by members such as Ranking Member Berman, Congressman Ruppersberger, Congressman Manzullo, and Congressman Connolly. H.R. 3288 aims to initiate practical, common sense legislative reforms to address the issues outlined in AIA's new report: *Competing for Space: Satellite Export Policy and U.S. National Security.* With your permission, I would like to include this report as part of my written testimony today.

The report surveys U.S. satellite systems and components manufacturers about the challenges the space industrial base faces as a result of U.S. export policies, in particular the legislative mandate to treat commercial satellites and related components as military technology even though the rest of the world does not. I am pleased that our partner, the Satellite Industries Association, is represented here today by Patricia Cooper, and I know she will go into much greater depth on this issue. Let me simply summarize for you the key findings of this AIA report.

- Fully 100 percent of respondents said that current export control restrictions have at least some adverse impact on their businesses. Respondents noted that current policies have created the unintended consequence of fueling foreign competition for U.S.-dominated market share. The result has been a dampening of sales opportunities to boost U.S. space technology innovation.

- More than 90 percent of respondents indicated a connection between export controls and eroding space industrial base capabilities. Respondents reported that U.S. export controls stand as barriers to domestic companies and create an advantage for foreign competitors.

- More than 70 percent of respondents blamed the International Traffic in Arms Regulations (ITAR) for lost sales, with many small businesses characterizing losses as "significant." Commercial space system suppliers – who also often build critical components essential to our national security – face some of the most daunting challenges. Two firms that specialize in satellite components reported to AIA combined annual losses of up to $7 million because of these impediments.

Another area addressed in the new AIA report is methods for the U.S. to boost the competitiveness of our domestic satellite industry. We also describe a positive model that has occurred recently in the U.S. with the effort by the Department of Defense to partner with our allies to finance the Wideband Global SATCOM (WGS) satellite. In 2007 Australia announced it would spend $822.7 million in an agreement with the U.S. to augment the WGS constellation. More recently, in January it was announced that Canada, Denmark, Luxembourg, the Netherlands, and New Zealand would invest a combined $620 million in a ninth WGS satellite. This is the perfect kind of international

space cooperation that helps bolster our industrial base, strengthen our alliances, and improve our military satellite constellations.

I would encourage members of this Committee to read this portion of the AIA report where we provide some innovative recommendations that – in addition to satellite export control reform – would help promote U.S. exports and strengthen our industry's global competitiveness.

Export Control Reform

I think we can all agree about the need for export control reform. We have now reached the point in the discussion of "how should we reform" and, as the title of this hearing suggests, strike a balance that is right for our nation.

AIA stands behind the ultimate goal of enhancing and advancing U.S. national security interests while also ensuring the continued economic competitiveness of U.S. industry. To this end, a more efficient and transparent U.S. regulatory system will drive increased economic activity strengthening U.S. national security and the U.S. aerospace and industry while creating jobs. This Committee has heard from AIA in the past about our ultimate goal for meaningful reform – a more predictable, efficient, and transparent system for both foreign military sales and direct commercial sales – but permit me to clarify again what we mean.

By efficient, the government must make decisions on export authorizations in a timely manner, eliminating unnecessary administrative or transit delays. By predictable, we mean that the authorization process must be consistent with applicable laws, regulations, and policies and consistent in that comparable export applications under the same conditions should receive the same or similar approvals in the same or similar time frames. Transparent means that the rules governing the licensing process must be interpreted and used consistently, and that industry and foreign partners have quick, easy access to information on the status of their applications.

Clarifying AIA's Priorities on Export Control Reform

It is imperative to complete the reform review now on-going – we believe in the principle of the right size walls around everything. We urge the completion over the next month of the U.S. Munitions/Commerce Control List Reviews. This effort is a clear and dramatic signal of the U.S. Government's intent to reduce regulatory burden for U.S. exporters.

It is also critical to bring clarity to proposed regulations and to harmonize definitions across regulatory agencies. This goal is particularly important for small and medium size enterprises within the aerospace and defense industry. The weight of the interpretive burden of often confusing and overlapping regulations has long been recognized. Now is our chance to fix this issue.

We would urge the continued collaboration of Congress with the Administration in finding a way forward on these areas of mutual interest.

Our industry has been a staunch supporter of the Administration's efforts to make the U.S. export control system more predictable, efficient, and transparent. Let me be clear about four things our industry is NOT looking for out of the reform process.

The aerospace and defense industry is NOT seeking reforms that would compromise in any way the oversight of high technology exports. All of us – Congress, the Administration, and Industry - have a vested interest in maintaining the security of American technology. We appreciate Congress's active engagement and efforts to better understand the proposed reforms before offering your support. We are encouraged by the Administration's focus on replacing broad "catch-all" regulatory language with explicit itemization (that currently does not exist) of what technologies should be controlled by the State Department. We also applaud the collaborative interagency approach taken to date in developing new, more stringent Commerce Department export control mechanisms - an AIA recommendation - and identifying technologies that could be appropriately administered for export going forward by the Commerce Department. As we understand it, the end result will be that the same government and intelligence agencies currently administering high-technology exports will continue to weigh in and concur on export licenses with a more effective and efficient risk management process that frees up resources for better oversight and enforcement. This will be especially critical for innovations involving new markets, like space tourism and civil applications for unmanned aerial systems, which need appropriate management if they are not to be stifled by inappropriate export control.

The aerospace and defense industry is NOT seeking reforms that would diminish the aggressive enforcement of the export control system. There are always going to be bad actors as well as mistakes made by good actors in the export arena. These facts should not be mistaken as arguments to maintain the status quo system, which places excessive burdens on all exporters. In any new system, bad actors should continue to be punished and good actors who make mistakes should receive appropriate treatment by enforcement agencies. Our companies are committed to compliance, and clarity on the technologies that are subject to the ITAR will be a big help. Efforts to reform enforcement of U.S. export controls should target illicit activities and not unnecessarily burden U.S. companies that are committed to protecting U.S. national security interests and doing the right thing. Reforms that add new burdensome reporting, registration, and compliance requirements will not result in a more streamlined export control system that focuses on the bad actors and achieves our mutual objectives.

The aerospace and defense industry is NOT seeking changes in restrictions on the export of sensitive technology to countries of concern to the United States. Export control reform will not change "denied" export licenses to "approved" licenses. Industry is instead seeking reforms that would make export transactions approved as consistent with U.S. national security and foreign policy interests faster (by deciding in advance that less sensitive items do not require ITAR-level scrutiny and can be controlled by the

Commerce Department for export to our close allies and partners) and cheaper (by lowering the costs of "interpreting" compliance requirements and moving appropriate technologies off the U.S. Munitions List and its $2250 a year registration fee plus $250 charge per export license requirement).

On that latter point, 68% of companies that have to register with the State Department because they make a product that is captured on the USML never export. I suspect many of them make the kinds of parts and components we can all agree should be moved to Commerce control. Those parts and components manufacturers that do export have to incorporate the $250 per export license charge into their pricing. For small and medium sized companies, there would be significant benefits in helping them minimize these regulatory burdens of the existing system.

Our entire industry would benefit by the removal of these time and cost "frictions" between transactions throughout the industrial base. Moreover, a system that is more transparent and predictable will help U.S. companies compete and win business abroad. The United States should not have an export control system that is used by our foreign competitors as a tool to win business. This does not require a lower standard of review; a "level playing field" for U.S. companies should not be – and need not be – a race to the bottom. Instead, we need a system that implements the original intent of export control reform: to scrutinize those transactions and technologies of greatest concern prior to export.

Finally, the aerospace and defense industry is NOT advocating a single reform to relieve the burden on U.S. exporters. Our industry, particularly small and medium sized parts and components manufacturers, are very supportive of the much needed "scrubbing" of the U.S. Munitions List of low/no risk technologies. But this should be the first of many critical steps for reform, not the last. We need to move beyond rationalizing the lists of controlled technologies, and put in place new management models for licensing – in particular, workable frameworks for managing licensing and for sharing controlled technologies more effectively in the context of the U.S. Government's own programs. For example, there are caseload management reforms that the Administration should pursue that do not require legislation, such as full implementation of the UK and Australian Defense Trade Cooperation Treaties, license exemptions for spare parts for our key allies and partners, license exemptions for exports in support of the U.S. government, and program licenses for export transactions necessary for the development, production, and sustainment of critical U.S. military, intelligence, space, cyber, and homeland security projects. These, along with USML reform, are among the types of systematic and comprehensive reforms we envisioned when the Administration's export control reform initiative was first announced. As Congress and the Administration work together to implement these changes in a timely and effective manner, these are other reforms that can be enacted concurrently.

This is a lot to ask of Congressional and Administration leadership – the truth is there is a lot to fix, and time is of the essence. The global security environment and severe budget constraints are driving the U.S. towards more security cooperation with our friends and

allies around the world, not less. The global marketplace is growing more competitive, not less, as budgets around the world for high technology products are shrinking. We have inadvertently hamstrung our aerospace and defense industry at a time when we have significant employment challenges and the rest of the world is gaining ground on us. The U.S. aerospace and defense industry has competitive, effective solutions to offer if we can overcome our outdated and unnecessary regulatory burdens while still protecting U.S. technology.

Conclusion

The U.S. aerospace and defense industry is currently second to none, but we cannot take our leadership for granted. Aerospace and defense exports fuel the growth and sustain the health of our companies and the competitiveness of our aerospace systems. Our nation reaps the benefits of aerospace exports in the form of enhanced national security, sustaining America's lead in cutting-edge technological R&D, reduced defense system costs, economic growth, and the creation of high-skill, high-wage jobs here in the United States. The government-industry partnership supporting aerospace and defense exports is crucial as we work together to make the export control system both secure and more flexible.

Previous reform efforts have met with varying degrees of success. Experience suggests that critical factors in enabling meaningful reform include sustained oversight by senior Administration officials, as well as effective consultation with Congress and the private sector. We stand ready to work with you and the Administration to ensure that we continue to make meaningful progress towards a predictable, efficient, and transparent export control regime.

Chairman ROS-LEHTINEN. Thank you very much.

Mr. Williams.

She did it even in 5 minutes with a southern drawl. That's pretty good. [Laughter.]

If you could punch the button there?

STATEMENT OF MR. MIKEL WILLIAMS, CHIEF EXECUTIVE OFFICER, DDI CORP.

Mr. WILLIAMS. Okay. Thank you. Members of the committee, I thank you for inviting me here today to testify.

As introduced, I am Mikel Williams, CEO of DDi Corporation, a printed circuit board manufacturer headquartered in Anaheim, California, and founded more than 30 years ago. We have over 1600 employees in six U.S. factories and one in Canada. Although the majority of our printed circuit boards go into commercial products, we are a trusted supplier to the U.S. Government.

I am also on the Board of Directors and chairman of the Government Relations Committee for the IPC—Association Connecting Electronics Industries. IPC is a U.S.-headquartered global trade organization, representing all facets of the electronics industry, including companies that design, manufacture, and assemble printed circuit boards. The IPC has over 3,000 member companies, 1900 of which are here in the United States.

I am here today on behalf of IPC to underscore the critical importance of establishing clear and proper U.S. export controls on printed circuit board designs for our military defense systems and equipment. But, first, it may be helpful to the committee if I briefly describe a circuit board and its role in the electronic system or end-product.

The printed circuit board is the foundation of all electronic products. It mechanically holds and electrically-connects a variety of components, semiconductors and transistors, for example, allowing that device to serve its intended function. In wireless applications, as an example, the printed circuit board for a radio-frequency and microwave designs contain printed components such as an antenna. And thus, the printed circuit board actually becomes part of the working product itself.

Now using this catalog, if I can show this here, I can buy virtually any piece of electronic item except for one, and that is a printed circuit board. You won't find printed circuit boards in this catalog. Each and every printed circuit board needs to be custom designed and manufactured to meet the specific requirements of the end-item. Moreover, you can't design and manufacture a printed circuit board without access to sensitive information about the workings of the end-product. I cannot overstate this point.

For example, improvised explosive devices, also known as IEDs or roadside bombs, have caused most of the American casualties in Iraq and Afghanistan. The design of U.S. military IED jammers and detectors, if they fall into enemy hands, would allow our enemies to shield their IEDs from our detection or jamming systems. This underlying technical data is not the kind of information we want our adversaries to have. Yet, current regulations fail to clearly control printed circuit board design and manufacturing. The

complexity of the rules leads to interpretations that are far more liberal than the spirit and letter of the law.

My company takes great pains and great expense to fully comply with U.S. export control laws. However, it is understood by many in the industry that foreign-made electronics, including printed circuit boards, are making their way into U.S. military applications.

A recent IPC study reported that one-third, approximately one-third, of the printed circuit boards purchased by the Defense Department were made outside of the U.S. This threatens U.S. national security.

First, there is the potential for intentional or unintentional sabotage of printed circuit boards and, thus, our defense systems.

Second, it raises the possibility that the printed circuit boards for critical and classified defense systems can be reverse-engineered. It also enables the theft of our country's intellectual property, and this regularly occurs in the commercial markets.

We are working with the State Department's DDTC, or the Directorate of Defense Trade Controls, to educate the manufacturing community about the existing controls on printed circuit boards, but more needs to be done. Given the confusion about these controls and the importance of printed circuit boards to military electronics, printed circuit boards should be explicitly addressed in a revised USML. If a defense article merits inclusion on the USML, so, too, should the printed circuit board designs. The draft revisions released by the DDTC appear to reflect this position, but not explicitly.

Absent explicit regulations or guidance, confusion about export controls on printed circuit boards is likely to continue. The rulemaking for Category XI, which is the electronics category, offers DDTC the opportunity to clarify proper controls on printed circuit boards, and we urge the DDTC to seize this opportunity to bolster national security.

IPC recognizes the health of our defense industrial base generally does not factor into export controls. However, I would be remiss if I did not emphasize the vital importance of the printed circuit board industry to the Nation's defense. In the last 5 years, the number of manufacturers in North America has fallen by close to 40 percent, even as worldwide production increased by 28 percent. The center of gravity for the global printed circuit board industry has shifted from the U.S. to China over the past decade. Further, industry pressures from low-cost regions mitigate the ability to invest in research and development for future technologies required for our Nation's defense.

Without greater attention to the defense industrial base, our military in the years ahead may be forced to rely to a great degree on overseas manufacturing for sensitive electronics. There is no question that such a development would pose considerable risk to our national security.

In closing, I would like to reaffirm IPC's support for reforming export control regulations. The current system neither adequately protects our national security nor facilitates export opportunities. We need to grow our economy. Reform is long overdue, but reform must safeguard our national security.

On this issue, national security is the IPC's highest priority. It is the reason I am here today and the reason that the IPC has called on the U.S. Government to put in place clear and appropriate restrictions on the export of printed circuit board designs and manufacturing.

I thank you for your time and look forward to answering any questions.

[The prepared statement of Mr. Williams follows:]

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Before the Committee on Foreign Affairs
U.S. House of Representatives

Hearing on
"Export Controls, Arms Sales, and Reform:
Balancing U.S. Interests, Part II"

Statement of
Mikel Williams
Chairman, Government Relations Committee
IPC – Association Connecting Electronics Industries

February 7, 2012

Chairman Ros-Lehtinen, Ranking Member Berman, and Members of the Committee, I am pleased to be here today to discuss export control reform and to underscore the importance of clear and appropriate U.S. export controls on printed circuit board designs for sensitive military technologies.

I am Mikel Williams, President and CEO of DDi Corporation, a printed circuit board manufacturer headquartered in Anaheim, CA. Founded more than thirty years ago, my company has over 1,600 employees *and* six manufacturing facilities in the U.S. and one in Canada. Although the majority of DDi's printed boards go into commercial products, we are a trusted partner of the U.S. government, helping to equip the Defense Department and intelligence agencies with the 21st century capabilities needed to protect our country.

I am also on the Board of Directors and Chairman of the Government Relations Committee of IPC —Association Connecting Electronics Industries, and it is in this capacity that I appear before you today. The IPC is a U.S. headquartered global trade association, representing all facets of the electronic industry, including but not limited to companies that design, manufacture and assemble printed circuit boards. IPC has more than 3,000 member companies of which 1,900 are located in the U.S. Contrary to common perception of electronics manufacturing, over 90% of IPC's U.S. printed circuit manufacturers are small businesses. As a member-driven organization and the leading source for industry standards, training, market research and public policy advocacy, IPC supports programs to meet the needs of an estimated $1.7 trillion global electronics industry.

On behalf of IPC's members, I would like to express our support for modernizing and streamlining export control regulations. The current export control system neither adequately protects our national security, nor facilitates the export opportunities we need to grow our economy. Reform is long overdue.

Most importantly, IPC believes that the administration must use the opportunity provided by the reform of our nation's export control laws to clarify the frequently misunderstood regulatory treatment of printed circuit boards that underpin our critical defense technology. In addition to clarifying the rules, IPC seeks to ensure that the proper controls are put in place to ensure that U.S. national security is not compromised through the export of technical information related to printed boards and the military equipment for which they are designed. This is also an issue of strengthening our U.S. manufacturing base generally. Outsourcing printed boards used for sensitive defense applications threatens not only our national defense, but the industries that support our national security capabilities today and for the future.

Printed boards are essential to many defense systems. Specifically and uniquely designed for each and every one of those systems, printed boards are used to mechanically support and electrically connect electronic components. Printed board designs reveal critical information about the board as well as about the devices for which they are designed. Accordingly, clear and appropriate protection of printed board designs for USML items is needed to safeguard from U.S. adversaries inherently sensitive information about U.S. weaponry and military equipment.

My testimony details our concerns and offers suggestions for clarifying export controls to clearly regulate printed boards and printed board designs in controlled items.

I. Description of Printed Boards and Electronics Assemblies

Specialized printed board and printed board assemblies are custom-made and uniquely designed for the specific function of the electronic items in which they are incorporated. Each printed board is exclusively designed to hold and connect specific additional components and therefore contains a roadmap of the operation of the United States Munitions List (USML) item for which it is custom-designed. The design and placement of the parts that constitute a printed board are dictated precisely by the nature and type of electronic components to be mounted on the board, which are in turn dictated by the specifications of the product into which the printed board assembly is to be incorporated. Further, as technology has evolved, the actual board material and circuitry pattern contained therein has been integrated into the systems performance, such as with radio-frequency and microwave products that are utilized in our modern warfare systems. In fact, knowing these items provides keen insight into the operating characteristics, including frequencies, of our most secure weapon systems. Manufacture of the printed board requires access to and use of all of the board's design information. This access exposes a significant portion of the intellectual property for both the printed board and the item for which it is uniquely designed.

The following are just a few examples of printed board designs that convey technical data regarding the defense items for which the printed board was designed:

- Fly-by-wire flight controls: The design of the printed boards that are incorporated into flight controls can reveal the data buses used in the controls. Data buses are the communications channel between the flight computer and the aircraft control surfaces. Understanding the data bus types can suggest potential weaknesses of the aircraft that may be exploited, including how sensitive the aircraft is to electronic disruption.

- Electronic Warfare Systems: Design instructions necessary for manufacturing the printed boards that are incorporated into phased-array systems and tactical radar and jamming systems outline the dimensions and placement of conductive and insulating patterns. Data of this type reveal specific frequency information about the systems themselves. Further, access to the printed board design imparts knowledge about the general system design, such as which components must be separately packaged and how the system may be countered or disrupted by external means.

- Unmanned Air and Ground Vehicles (UAV and UGV) – An increasingly important part of U.S. arsenal, UAV and UGVs save lives and improve national defense capabilities by relying on control system architectures, advanced sensor systems, and research services to achieve autonomous mobility. Electronics is vital to advanced system sensors and telemetry of the vehicles, and electronics depend on printed boards. The design features of the printed circuit boards for these items can reveal means of electronic disruption of the operation of unmanned vehicles.

In sum, printed boards—the central nervous systems for all electronics—hold valuable and specific information about the workings of the underlying defense articles themselves. Companies with access to the designs of printed boards for defense articles thereby also have access to sensitive information about controlled technologies. This exposes these technologies to malicious intrusion by U.S. adversaries that may destroy the reliability of U.S. weaponry and other critical defense equipment. Failure to properly secure the information embedded in printed boards that are custom-designed for defense articles could result in a breach of national security, theft of critical defense-related intellectual property and allow for reverse engineering of our critical defense systems.

I. Complexity of Current Rules

Printed boards designed for defense articles are regulated by the USML's controls on "components" that are specifically designed or modified for defense articles. Companies with strict International Treaty on Arms Reductions (ITAR) compliance practices know the regulations to be unequivocal: a board is controlled by ITAR if it is designed for an ITAR controlled article. However, because printed boards are not listed explicitly in ITAR, a careful analysis of the complex ITAR rules is required in order to properly understand the control of printed boards and their designs. As a result, the applicable controls may be overlooked, leading to the unlicensed sourcing of ITAR-controlled printed boards from foreign facilities. While IPC does not have data regarding the extent of such souring, IPC estimates that roughly one-third of printed boards manufactured for military use are made outside the United States.

IPC has proactively launched an initiative to educate its membership and their customers about the treatment of printed boards under ITAR, and seeks to work with the defense industry in this effort. We have also engaged the U.S. Department of State's Directorate of Defense Trade Controls (DDTC) to communicate our concerns and to ask for their cooperation in explaining and clarifying the current rules on printed boards to the manufacturing community.

I. Export Control Reform: An Opportunity to Clarify Controls

The five USML category revisions recently proposed by the DDTC would all adopt the same basic approach to the regulation of printed boards, but at this point, the nature of that new regulatory regime is a work in progress and remains a matter of interpretation. IPC understands that the proposed rules generally transfer to the new Commerce Control List (CCL) components specifically designed for military items, with the exception of certain listed components. However, the proposed rules retain on the USML all "technical data … directly related to the defense articles" in these categories. IPC believes that printed boards constitute "technical data" in physical form.

While IPC understands that printed boards may be migrated to the CCL, we feel strongly that printed board designs for USML items must remain on the USML because they unquestionably convey technical data regarding the USML items into which they are specifically designed. Control of printed circuit board digital data and related designs, in short, should follow the categorization of the end item itself. Accordingly, if an end item is not on the USML, then the design data for any of its printed circuit boards would not be under USML control. However, if the end item is on the USML, the design data for its printed circuit boards should remain under ITAR control as USML technical data.

In its submitted comments, IPC has recommended that DDTC clarify the status of printed board designs in its final rules by confirming that the design and digital instructions for printed circuit boards specifically designed for USML items constitute "technical data" also covered by ITAR. IPC has also urged DDTC to address specifically and unambiguously the treatment of printed boards in its rulemaking for Category XI (Electronics), for which a proposed rule has not yet been published. Revisions to Category XI offer DDTC the best opportunity to eliminate existing and future confusion regarding the treatment of printed board designs under ITAR.

V. Safeguarding the U.S. Defense Industrial Base

IPC recognizes that the health of our defense industrial base generally does not factor into export controls. However, I would be remiss if I did not emphasize the vital importance of the printed board industry to the defense industrial base. The U.S. electronic interconnect industry is a chief reason that the U.S. leads the world in high-tech innovation. Improvement in our industry has a cascading impact, enabling a tremendous level of new innovation to expand capabilities, reduce cost, reduce weight and minimize the number of components. In the military sector, these innovations enable advancements in military navigation, guidance and control, electronic warfare, missiles, and surveillance and communication equipment.

In 2005, the National Research Council completed a study on the printed board industry, entitled *Linkages: Manufacturing Trends in Electronics Interconnection Technology*. The Linkages report predicted a continuing contraction of the North American printed board industry and a weakening of its ability to support the Defense Department. It concluded the industry must be sustained to ensure our country's ability to maintain our military capability for the foreseeable future. It made a number of recommendations designed to support this domestic industry—

recommendations that have largely been ignored despite Congressional direction to the Defense Department to implement them.

Just as the Linkages report predicted, few U.S. companies remain today that are able to produce highly sophisticated and reliable printed boards for defense needs. In the five years following release of the Linkages report, the number of printed board manufacturers in North America fell by 36 percent, even as worldwide production grew by 28 percent. Without a robust printed board industry, the U.S. defense supply chain is at risk, leaving the Department of Defense susceptible to counterfeit parts, unreliable components and lack of technological expertise to meet its requirements. Without greater federal attention to our defense industrial base, the Department of Defense in the years ahead may be forced to rely to a great degree on overseas manufacturing for sensitive high-technology military electronics. There is no question in my mind that such a development would pose an unacceptable risk to our national security.

V. Conclusion

In conclusion, on behalf of IPC's 3,000 members, I urge that printed circuit boards be explicitly and clearly addressed in a reformed ITAR regime in order to safeguard U.S. national security. I thank you for inviting me to testify and I look forward to answering any questions you may have.

Chairman ROS-LEHTINEN. Thank you so much, sir. We appreciate it.

Ms. Cooper is recognized.

STATEMENT OF MS. PATRICIA A. COOPER, PRESIDENT, SATELLITE INDUSTRY ASSOCIATION

Ms. COOPER. Madam Chairwoman, Ranking Member Berman, distinguished members of the committee, thank you for inviting the Satellite Industry Association to testify today on U.S. export control reform. I commend the committee for your continued focus on improving the Nation's export control regime.

As the president of SIA, I represent here the unified voice of the Nation's diverse satellite industry. Our members build and launch spacecraft for both the commercial and U.S. Government sectors, operate hundreds of commercial satellites ringing the globe, and provide voice, video, and data services for the U.S. military, public safety, media, and enterprise sectors. The industry represents about 60 percent of the overall space sector and operates one-third of all satellites currently on orbit. Our last statistics from 2010, our industry posted $168 billion in global revenue with an average annual growth rate of around 11 percent over the last 5 years.

SIA speaks when our industry holds a common view on issues of importance to the satellite sector. Our members agree that the time is ripe for Congress to revisit and reform the U.S. export control laws governing satellites.

I will address three themes here in my testimony. First, the existing satellite export control regime mandates overregulation by requiring that all satellites and related items be treated uniformly as munitions without regard to their technological sensitivity.

Second, our export control regime harms the national security goals it was designed to fulfill by undercutting the satellite industry's competitiveness and injuring the underlying space industrial base.

Finally, the time is ripe for Congress to restore to the Executive Branch the full authority to regulate satellites that they exercise for every other technology area.

Satellites are the only category of products where Congress has mandated blanket inclusion under the U.S. Munitions List. Since 1998, every item in the satellite category has been legally required to be regulated as a munition. There is no mechanism to differentiate between items of the highest national security interest and those that are benign or widely available. It is this required overregulation that SIA asks Congress to correct.

Appropriate restrictions, however, should be sustained for satellite exports to countries of concern, including China. SIA and its members do not seek any erosion of the substantial safeguards that have effectively prohibited satellite technology exports for sale to or launch by China. Violations should be vigorously enforced. Sensible satellite export control reform is fully consistent with the Nation's goal of protecting our most advanced technologies.

There are persistent signs of warning of the unintended harmful consequences of the current satellite export control policies. While statistical smoking guns remain difficult to pinpoint, trends in market share show a troubling loss of U.S. dominance. The U.S.

share of the global market for satellites dropped from around three-quarters before the 1998 rules to around one-half today. International buyers of spacecraft parts and components see ITAR regulations and licensing requirements as adding unnecessary time, cost, and risk.

In fact, ITAR has become a market differentiator for our competitors. Since 2008, European manufacturers have sold 20 satellites marketed as ITAR-free, up from just six when I testified in 2009. While I understand that questions have arisen about whether these ITAR-free satellites are truly without U.S. content, their marketplace success, often despite prices higher than our U.S. equivalents, underscores the powerful impact of the mandated ITAR treatment on our ability to compete internationally.

I would also reiterate the concerns voiced by Ms. Blakey and the Aerospace Industries Association's recent study about the harms of overregulation to the U.S. space industrial base that supplies both the commercial satellite sector and the government space community. ITAR has deterred investment and innovation in critical space manufacturing capabilities, and the intelligence and national security space communities are voicing increasing alarm.

Finally, SIA is concerned about the chilling effect that expansive ITAR rules have had on our universities' willingness to teach space-related subjects and on our research labs' ability to conduct cutting-edge space research. The U.S. age in space technology will surely erode if indiscriminate ITAR treatment forces the next generation of space engineers to learn, research, and experiment abroad.

SIA has been gratified to see bipartisan support for satellite legislative reform. We applaud Ranking Member Berman's introduction last year of H.R. 3288, which SIA supports like AIA. We note that 12 additional Members, both Republicans and Democrats, have cosponsored this bill, including many members of this committee.

SIA acknowledges that Congress still awaits this administration's expert guidance on the national security risks of moving satellites off the USML, as requested in Section 1248 of the 2010 NDAA. Although an interim report has already identified six categories of satellite items that could safely be moved off the USML, SIA members eagerly await the full analysis that a final report would provide from our national security intelligence and export control experts. SIA urges the administration to deliver the final Section 1248 report to Congress expeditiously in order to pave the way for critical reforms.

Our industry will not reap the benefits of export control reform without satellite-specific legislation. The 1998 congressional mandate has regulated too broadly and eliminated discretion. It has harmed the satellite industry's international standing, dampened investment and innovation in our Nation's space manufacturing, and deterred training and advanced research. It is time to regulate satellites as we do for every other high-tech industry, and we look to this committee to act on needed satellite reform legislation.

Thank you, Madam Chairwoman, Ranking Member Berman. This concludes my testimony. On behalf of the members of the Sat-

ellite Industry Association, thank you again, and I look forward to your questions.

[The prepared statement of Ms. Cooper follows:]

Written Testimony for Patricia A. Cooper

President, Satellite Industry Association (SIA)

Before the House Foreign Affairs Committee

Hearing on Export Controls, Arms Sales, and Reform: Balancing U.S. Interests (Part II)

February 7, 2012

Introduction

Madam Chairwoman, Ranking Member Berman, distinguished members of the Committee, thank you for inviting the Satellite Industry Association (SIA) to testify today on the critical issue of U.S. export control reform. I commend Chairwoman Ros-Lehtinen and Ranking Member Berman for holding this hearing on the Export Control Reform (ECR) process and thank the members of the Committee for your continued focus on improving the nation's export control policies.

As the President of SIA[1], I represent here the unified voice of the nation's satellite industry. Our members build and launch spacecraft for both the commercial and U.S. government sectors, operate hundreds of commercial satellites that support voice, video, and data transmissions around the globe, and provide essential communications services and ground equipment to the U.S. military, public safety, natural resource, media, retail and banking sectors. The satellite industry earns about 60 percent of all U.S. space revenues and operates a third of all satellites currently on orbit. In 2010, our industry posted $168 billion in global revenues, with an average annual growth rate of around 11 percent over the past five years.

SIA speaks when the satellite industry holds a common view on policy, regulatory, and legislative issues that affect our sector. Our members agree that the time is ripe for Congress to revisit and reform the U.S. export control laws governing satellites and space-related products.

SIA and its members ask Congress to remove its long-standing mandate requiring that all satellites and related items be regulated uniformly as munitions, without regard to their technological sensitivity. While the current one-size-fits-all satellite export control laws were originally intended to enhance national security, a decade of experience shows that this

[1] SIA Executive Members include: Artel, Inc.; The Boeing Company; The DIRECTV Group; EchoStar Satellite Services L.L.C.; Harris CapRock Communications; Hughes Network Systems, LLC; Integral Systems, Inc.; Intelsat, S.A.; Iridium Communications Inc.; LightSquared; Lockheed Martin Corporation.; Loral Space & Communications, Inc.; Northrop Grumman Corporation; Rockwell Collins Government Systems; and SES S.A. SIA Associate Members include: ATK Inc.; Cisco; Cobham SATCOM Land Systems; Comtech EF Data Corp.; DRS Technologies, Inc.; Eutelsat, Inc.; GE Satellite; Globecomm Systems, Inc.; Glowlink Communications Technology, Inc.; iDirect Government Technologies; Inmarsat, Inc.; Marshall Communications Corporation.; Orbital Sciences Corporation; Panasonic Avionics Corporation; Segovia, Inc.; Spacecom, Ltd.; Spacenet Inc.; Stratos Global Corporation; TeleCommunication Systems, Inc.; Telesat Canada; Trace Systems, Inc.; Ultisat, Inc.; ViaSat, Inc. and XTAR, LLC. Additional information about SIA can be found at http://www.sia.org.

requirement to over-regulate has undermined the nation's security and the satellite industry's international competitiveness. SIA asks that Congress restore the Executive Branch's authority to regulate satellites, as they do every other U.S. technology – by making careful and expert differentiations between commonly-available items and the most sensitive technologies, the latter of which are then safeguarded with our strictest export controls.

Both Congress and the Administration have sought to reduce regulatory excesses that unduly hinder economic growth and impair our national security. Satellite export control policy is an area ripe for reform. Right-sizing satellite export control policy would allow the U.S. satellite industry to compete internationally, continue to invest and innovate, and support critical government and industry communications.

The Need To Reform Satellite Export Controls

Satellites are the only category of products mandated by Congress for blanket treatment as munitions under the U.S. Munitions List (USML). Every item in USML Category XV – "Spacecraft Systems and Associated Equipment" – is legally required to be regulated as a munition, no matter how outmoded or how widely-traded the item. The most mundane bolts are regulated with the same controls as the most sensitive imaging technology.

SIA asks that Congress remove this blanket requirement and restore Executive Branch authority over the regulation of satellite export controls. The satellite industry will not reap the benefits of export control reform unless Congress passes satellite-specific legislation. In fact, without specific legislative action to "normalize" satellite export control policy, the United States would need to retain a satellite-specific export control system and another for all other items and technologies, the very redundancy and confusion that reform seeks to avoid.

SIA and its members believe that there are compelling reasons for Congress to restore to the Executive Branch the authority for satellite export control policy.

The current satellite framework arose from concerns in the late 1990s that U.S. technology was not protected after two failures of Chinese launches of U.S.-made satellites. Although these original concerns were specific to an individual country and those particular launch investigations, Congress reacted by passing legislation that captured virtually all satellite trade with all countries. The current law captures communications satellites, their parts, components, technical and marketing data, and ground support and test equipment. The regulations govern everything from the marketing discussions related to selling a satellite TV spacecraft to a Canadian communications company to the information required by British insurers to insure a spacecraft owned by a U.S. satellite operator. They affect the ground control stations and systems that monitor and communicate with the spacecraft and every bolt, screw, and piece of insulation incorporated on a communications satellite.

This outmoded law offers no mechanism to differentiate between items that are sensitive for national security reasons and items that are benign or widely available, nor any way to update treatment of technology as it transitions from leading-edge to commonly-available. If the same situation were applied to computers, exports of 1950s-era computers with vacuum tubes would be treated the same as today's cutting edge microchips. It is this over-regulation that SIA asks Congress to correct.

Vigilance against the transfer of sensitive technology to countries of concern should remain a top priority. The satellite industry is committed to U.S. export policies that ensure that the nation's most advanced technologies do not fall into the hands of our adversaries. We also support the vigorous enforcement of existing rules. SIA supports satellite export control reform legislation that provides for appropriate restrictions on exports of satellites and satellite technology to countries of concern, including China. Further, SIA and its members do not seek any legislative erosion of the safeguards already in place that have effectively prohibited satellite technology exports to China. We strongly believe that achieving satellite export control reform is consistent with our goal protecting advanced technologies.

The Unintended Consequences of Current Satellite Export Control Policies

I wish that I could provide the Committee with the net value of the satellite business lost since the 1998 ITAR legislation was passed. One U.S. government study reported that the value of contracts lost due to ITAR between 2003 and 2006 was $2.35 billion.[2] While the satellite industry has been subjected to over-regulation for more than a decade, statistical smoking guns remain difficult to locate and the direct impact difficult to quantify. Companies exiting the satellite manufacturing or R&D fields do not issue press releases, nor do international satellite operators describe their internal decision-making processes when they select non-U.S. suppliers.

However, SIA can point to several indicators to help demonstrate the unintended harmful consequences of the current export policy for satellites:

1) *U.S. Share of the International Market.*

First, we can look at the U.S. share of the international marketplace for satellite manufacturing. Generally, U.S. share of the global market for purchases of completed satellites has dropped from around three quarters before the establishment of the 1998 ITAR rules to below one half of the global market. According to data SIA has collected annually for the past 15 years, in 1995, U.S. satellite manufacturers enjoyed a 75 percent share of the global market; ten years later, this had dropped to 41 percent, and has hovered between 35 and 50 percent since then.

[2] U.S. Department of Defense, "Defense Industrial Base Assessment: U.S. Space Industry," August 31, 2007, http://www.bis.doc.gov/defenseindustrialbaseprograms/osies/defmarketresearchrpts/exportcontrolfinalreport08-31-07master 3---bis-net-link-version---101707-receipt-from-afrl.pdf, p. 34.

Alone, this data does not tell a complete story about the loss of U.S. competitiveness due to overly broad export restrictions on satellites. The revenues cited only capture those for completed satellites, not the exports of satellite inputs – components, parts and sub-assemblies – which numerous studies demonstrate have been heavily affected by ITAR regulations. However, market share data does reflect the general downward trend in U.S. dominance of the global marketplace and aggressive international competition.

2) *Perception in the Marketplace and the "ITAR-Free Satellite."*

Second, we can look at the effect that blanket ITAR regulation has had on different types of U.S. satellite companies – prime manufacturers of completed spacecraft, parts and components manufacturers, and operators of satellites.

The international customers of U.S. prime manufacturers of spacecraft see ITAR regulations and the processes they require as adding time, cost and risk to U.S.-made products – regardless of whether these effects are real or significant. Under current rules, ITAR licenses are required to engage in discussions and exchange the technical data needed to actually sell a commercial spacecraft to a prospective operator and to discuss spacecraft or ground system design with non-U.S. component suppliers and site operators. U.S. companies must argue that ITAR regulations do not increase the risks of price increases or schedule delays, and overcome marketing arguments made to the contrary by their foreign competitors; in fact, U.S. manufacturers must argue that U.S.-manufactured satellites offer significantly better value to offset the impact of the ITAR process.

It is clear that ITAR has become a market differentiator for our competitors. Since I last testified before Congress in April 2009, the number of European "ITAR-free" satellites launched has jumped from six to thirteen, and another seven have been sold or are under construction. Whether or not the claims that these satellites are ITAR-free prove to be correct or not, the commercial success of twenty "ITAR-free" spacecraft sold – and often at prices higher than their U.S. equivalents – underscores the competitive impact of the ITAR designation. Again, that designation comes as the result of a general legislative mandate, not out of a determination of technological sensitivity.

For U.S. satellite parts and component manufacturers, the lack of *de minimis* rules under ITAR regulations act as a deterrent for foreign satellite builders to buy American. If even the smallest U.S. component is incorporated into a foreign-made satellite, the entire spacecraft must be treated as an ITAR item. This over-regulation acts as a powerful dis-incentive for foreign satellite manufacturers to include U.S. content in their spacecraft because they can freely buy parts and components off-the-shelf from other non-U.S. suppliers.

For satellite operators, the current rules limit their ability to meet the customer service expectations of their international telecom and television customers. If there is a spacecraft malfunction while on orbit, the U.S. operator is constrained from discussing with its international

customers what went wrong or how to restore functionality without an ITAR license. Although companies can obtain a technical assistance agreement to prepare for malfunctions, there is no way of knowing in advance if the agreement will apply to any specific anomaly experienced by the spacecraft in question.

3) *Broader Impact on Space Industrial Base*.

Third, we can look at the impact of over-regulation on the overall health of the U.S. space industrial base, a well-documented national security concern. A January 2012 Aerospace Industries Association (AIA) study provides a fresh depiction of the adverse impact of ITAR on our sector's competitiveness and investment decisions. The AIA conclusions reinforce conclusions of numerous studies by government agencies and private entities dating back to 2005 that link satellite export control policies to erosion of the U.S. industrial base, and particularly the third, fourth and fifth tiers of the industry. These suppliers of input materials, parts, and components are relied upon by manufacturers of commercial, military, civil space, and intelligence spacecraft alike, and their health has been of increasing concern to the U.S. national security community.

Former Deputy Secretary of Defense William J. Lynn III put things rather bluntly in a speech in November 2010: "*Our current export policy puts us in a double bind. We are hurting our own space suppliers in the international market. But we are not really hindering states of concern from acquiring sensitive space technologies.*"[3] In March 2011, Deputy Assistant Secretary of Defense for Space Policy Gregory L. Schulte described the Department's perspective in his testimony before your colleagues on the House Armed Services Committee:

> "*The United States seeks to foster a space industrial base that is robust, competitive, flexible, healthy, and delivers reliable space capabilities on time and on budget. International advances in space technology have put increased importance on reforming U.S. export controls to ensure the competitiveness of the U.S. space industrial base while addressing technology security. Secretary Gates has actively called for an overhaul of our export control system. Reforming export controls will facilitate U.S. firms' ability to compete in the international marketplace for capabilities that are, or will soon become, widely available globally, while strengthening our ability to protect the most significant U.S. technology advantages. The National Security Space Strategy reaffirms the necessity of these reforms and echoes the National Space Policy's call for giving favorable consideration for export of those items and technologies that are*

[3] William J. Lynn III, "Remarks on Space Policy at U.S. Strategic Command Space Symposium," November 3, 2010, http://www.defense.gov/speeches/speech.aspx?speechid=1515.

generally available on the global market, consistent with U.S. national security interests."[4]

Most recently, a 2011 study conducted for the Office of the Undersecretary of Defense for Acquisition, Technology and Logistics identified five new satellite technology areas at high risk (those with one or no U.S. suppliers) and an additional nine with the potential to create bottlenecks or cost increases for government space programs.

4) *The Future of U.S. Space Leadership.*

Finally, SIA can point to the chilling effect that the over-regulation of satellites and related items has had on our universities' willingness to teach space-related subjects and on our research labs' ability to conduct cutting-edge space research. Because of the expansiveness of the current ITAR regulations, space-related research projects, university courses on satellite technology, and agreements involving international students or faculty all require an ITAR license. According to Professor Bob Twiggs of Stanford University's Space Systems Development Lab, "*ITAR is driving research out of the United States, isolating the United States, and causing markets to be developed outside of the United States.*"[5] According to the Universities Space Research Association (USRA), if ITAR forces the next generation of space engineers to learn, research and experiment abroad, the U.S. edge in space technology will eventually erode.

Next Steps Towards Reform

Given the number and severity of concerns arising out of the existing satellite export control regime, it is no surprise that several Members of Congress have proposed reforms in recent years. SIA applauds Ranking Member Berman's introduction last year of H.R. 3288, the "Safeguarding United States Satellite Leadership and Security Act of 2011," legislation which would correct the historical over-regulation of satellite exports while retaining protections on critical technologies. SIA supports this Bill and we note with appreciation that twelve additional Members, both Republicans and Democrats, have co-sponsored H. R. 3288, including several Members of this Committee, Representatives Manzullo, Connolly, and Keating.

SIA appreciates that before considering H.R. 3288, Congress awaits the Administration's expert guidance on the national security risks of moving satellites off the USML, as requested in Section 1248 of the National Defense Authorization Act for Fiscal Year 2010 (Final Section 1248 Report). Although the Interim Section 1248 Report delivered in May 2011 already

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[4] Ambassador Gregory L. Schulte, "Statement Before the House Committee on Armed Services, Subcommittee on Strategic Forces," March 15, 2011, http://armedservices.house.gov/index.cfm/files/serve?File_id=efb3bac7-cf58-4fd8-8dad-9aa2ee404d6f

[5] Richard Kusiolek, "ITAR: Balancing the Global Playing Field," *Via Satellite*, August 1, 2008, http://www.satellitetoday.com/via/features/ITAR-Balancing-the-Global-Playing-Field_23882.html.

identified six broad types of satellite items that could safely be moved off the USML if it had the authority to do so, SIA and our members eagerly await the more complete analysis and recommendations that a Final Report would provide from our national security, intelligence and export control experts. SIA understands that the Final Section 1248 Report will reflect a thorough technical review of the satellites and related items contained in Category XV. SIA urges the Administration to deliver the Final Section 1248 Report to Congress expeditiously, to pave the way for critical legislative reform.

Conclusion

In conclusion, SIA encourages both the Administration and Congress to continue efforts to implement export control reform. We stand ready to support that effort. However, our industry will not reap the benefits of export control reform without satellite-specific legislation.

For the satellite sector specifically, SIA urges this Committee to prioritize the reform of satellite export controls as soon as the Administration delivers its Final Section 1248 Report and move to act on H.R. 3288. The 1998 Congressional requirement to treat all satellite items uniformly as munitions regulated too broadly and eliminated discretion. We believe that the Congressional requirement that satellites be treated as munitions has harmed the industry's international competitiveness, fueled the growth of international satellite manufacturing companies, dampened investment and innovation in the sector, and deterred training and advanced research in satellite and space technologies.

We urge Congress to right-size the long-standing one-size-fits-all export policy for satellites, and allow the satellite sector to be regulated as other sectors are. This reform is critical to the health of the U.S. satellite industry and, in turn, the overall U.S. space sector. As a high-tech growth industry that provides critical support for our nation's defense industry and drives innovation and investment, we urge Congress to reform U.S. export controls for satellites and related items to secure the United States' future as a leading space-faring nation. It is time to regulate satellites as we do every other high-tech industry, and we look to this Committee to act on needed satellite reform legislation.

Madam Chairwoman, Ranking Member Berman, distinguished members of the Committee, this concludes my testimony. On behalf of the members of the Satellite Industry Association, thank you again for the opportunity to testify, and I look forward to your questions.

Chairman ROS-LEHTINEN. Thank you so much. Excellent testimony from our three witnesses.

I will start the question-and-answer period where members are recognized for 5 minutes.

As I mentioned in my opening statement, I am concerned about the wisdom and enforceability of a proposed new exemption for the export of U.S. defense articles to our European allies and other friends abroad, because we must take into consideration: The refusal of the Government of France and a French company to cooperate with the U.S. in investigating illegal retransfer of U.S.-controlled space parts and components to the People's Republic of China; also, the fact that our European friends have been the most important source of high technology needed for China's military modernization program, and that Europeans have been providing technology to China that it cannot obtain from the U.S. or Japan; and, also, the findings of the unclassified 2011 report of the Defense Security Service which states that Europe and Eurasia are moving increasingly toward the pursuit of illegal or unauthorized access to U.S. defense technologies. To the extent that the region is a major arms exporter, third-party transfer of U.S. technology will likely be a concern. And I wanted your views on these issues.

Related to that, the intersection of military and civilian interests in China's space program is well-known. What is also well-known is the extensive space relationship between the European Union that they share with China, including the sharing of considerable European technical expertise. So, I ask, how can the commercial satellites and related parts and components be transferred to the Commerce Control List without the risk that such technology would be retransferred by our friends to Beijing?

So, anyone who wants to answer those questions?

Ms. COOPER. I will be happy to respond, Madam Chairwoman.

The Satellite Industry Association, our members do not seek any change in the considerable prohibitions that already exist to govern especially trade of satellites with China, both sale to Chinese customers and also transfer of satellites to China for launch by their launch vehicle. Although not a prohibition, the collective effect of these rules since 1998 has been an effective prohibition. No U.S. satellites have been launched from China since those days.

We don't ask for any changes in those rules. We expect that any change in the export control reform structure overall, as well as satellite-specific legislation, would uphold those rules for China specifically.

The question you raise of European manufacturers with third-party transfer from my perspective is an enforcement and prosecution question. If there are violations of laws, they should be vigorously enforced. It is our expectation that such third-party transfers of satellite items to China would remain illegal under a revised export control reform system and following any subsequent satellite legislation.

Chairman ROS-LEHTINEN. Ms. Blakey.

Ms. BLAKEY. I would certainly echo Ms. Cooper's comments about that. I agree something that is illegal is illegal, and it should not be changed under the guise of reform. We don't see evidence that that would be the case at all.

What we are looking for, of course, is a system that is more efficient and transparent and will ultimately, then, enable us to put more resources, both in terms of scrutiny initially and enforcement, behind the illegal activities and the bad actors out there.

The kind of concern that you are voicing is certainly something that can happen under the current regime. I think we need more focus on the real risk that export control reform will give us.

Chairman ROS-LEHTINEN. Thank you.

I don't have enough time for my next question, but let me just bring it up. That includes the close coordination, or lack thereof, between the Department of State and Commerce. The success of the proposed Export Control Reform Initiative is so dependent on significantly improved management measures for implementation, including close coordination between these two Departments. Some of us are concerned that, without this coordination, the anticipated benefits of the Export Control Reform Initiative may not outweigh the risk of unintended consequences and business disruption. We will leave that for another round.

I am so pleased to recognize Mr. Berman for his questions and answers.

Mr. BERMAN. Thank you, Madam Chairman.

Ms. Blakey, the AIA report "Competing for Space" and your organization quotes a report by the National Reconnaissance Office, which operates our national intelligence satellites. That government agency says that "second- and third-tier satellite vendors have an insufficiently diverse business and that this limited supplier base may compromise long-term availability of some critical components for national security needs."

It goes on to say that, "Since many second- and third-tier vendors are responsible for highly specialized components, low-volume government satellites do not provide sufficient market stability, especially when government acquisition plans fluctuate from year to year."

From that, basically, what I gather it is saying is, if our commercial satellites industry is not viable, the critical components we need for our military satellites become less and less available, both the raw materials and the component parts. Does the current process make this situation worse?

Ms. BLAKEY. We surveyed our members and we found that they are representing 70 percent of the industry. Approximately 70 percent said that, yes, they were losing significant sales opportunities because of the current requirements and the current USML control.

The fact is that, with the defense budgets going down, with national security funds diminishing, this situation is going to get worse because small companies who have only one possible customer, and that customer can buy less and less, will not be able to stay in business unless we do give them some relief. Our technology is such that it can compete, if we allow for it.

Mr. BERMAN. Isn't the logical conclusion, if the National Reconnaissance report is right, that we are going to end up having to import raw materials and components for our military satellites if we lose the commercial satellite manufacturing markets?

Ms. BLAKEY. That certainly is a possibility, and one we should guard against.

Mr. BERMAN. Part of your testimony says that we shouldn't stop just at the reforming of the U.S. Munitions List and the Commodity Control List, but there should be new management models for licensing. What does that mean? What specific kinds of changes would you like to see?

This process of going through these lists and changing them is a laborious, as we have seen, process. Should the management licensing reforms be done first?

Ms. BLAKEY. I think both are important. Certainly, this review of these lists, you're right, it has been very labor-intensive and I think will ultimately produce a good end-product.

But the kind of changes that are also possible that could really make a major difference for some of our programs and weapons systems were attempted as far back as the Clinton administration, and this committee and others tried to help with licensing of programs and making a decision at one point that would then hold for repeated transactions. This is known as program licensing, and somehow the paperwork aspects of that got ahead of the good intentions. So, unfortunately, this has not been effective yet.

But we do need to look at where you are going to be over and over again. The joint strike fighter, there is a great example of exporting that by intent. You don't want to have to license on a transaction-by-transaction, one-at-a-time basis. That is a sensible reform that we really could put into place.

Mr. BERMAN. Well, why didn't it take hold?

Ms. BLAKEY. You know, sometimes the bureaucracy stands in front of itself, and what was the intent in this did not get translated——

Mr. BERMAN. Not in our Government.

Ms. BLAKEY. I think it is one of those things that implementation can be hard. Sometimes people lay on a lot of paperwork requirements when you could make it really simple.

Mr. BERMAN. Thank you very much, Madam Chair.

Chairman ROS-LEHTINEN. Thank you so much, Mr. Berman.

Mr. Royce, the chair of the subcommittee, is recognized.

Mr. ROYCE. Thank you. Thank you, Madam Chairman.

Mr. Williams, as I said in my opening statement, I concur with your recommendation that printed circuit boards be treated as ITAR-controlled. I wanted to focus a little bit on the 2005 National Research Council study on your industry. Could you explain the conclusion of that study?

Just push that button.

Mr. WILLIAMS. Yes, thank you.

Mr. ROYCE. Thank you.

Mr. WILLIAMS. Thank you for the question, Congressman Royce.

For anybody else, I have a copy of the executive summary here.

It is interesting. When I came into the industry, having previously worked in the telecommunications sector, and having lived and worked in Europe and been in China quite a bit, I had the benefit of having a recently completed study that was put together by a broad group of participants, including members from the DoD, from academia, from industry. It was a study entitled, "Manufac-

turing Trends in Electronics Interconnect Technology," which specifically focused on the interconnect technology embedded in circuit boards.

The conclusions there were simply that, given the state of the industry and the migration of the commercial markets to Southeast Asia, China in particular. Back in 1984, as a matter of fact, 42 percent of the global market was serviced out of U.S. factories. Today over 40 percent of the market is serviced by Chinese factories, and our market share here is about 6 percent.

So, we have seen a massive migration, the impact of which has been fairly devastating to the industry. There are several critical concerns that they cite: (1) the ability to continue to fund research and development, both today as well as in the future; and (2) the ability to continue to meet the requirements of the defense industry to build their products, both today and in the future.

It put forth a few recommendations. Unfortunately, I have to report that it has had little, if any, attention since then. The study was completed in 2004 and published in 2005.

So, it highlighted the critical concern that, again, we may need to go into foreign countries to source important elements of our supply chain, like cited here. But certainly the circuit boards are not components per se; they are commonly referred to as components, but every circuit board is unique. It has the electrical blueprints, if you will, of the device and how it works. Not to have a defense industrial base to support our requirements is really what the report focused on and made several recommendations about how to go forward.

Mr. ROYCE. Well, I think in your testimony you said the health of the U.S. defense industrial base generally does not factor into export controls. My question is, should it? And how should it, if the answer is yes? What can we learn from your industry?

Mr. WILLIAMS. Well, specifically, let me reiterate that the IPC, and DDi as well, supports export control reform. We support opening the global markets more liberally to our manufacturers here in the states.

My understanding is the export control reform is focused on export reform controls, and other issues, such as sustaining a defense industrial base, might be effectively addressed through other initiatives, whether they are coming out of the Department of Defense or elsewhere.

It has sat for quite some time not part of the export control reform discussion. So, maybe there could be some linkages to connect the issues, but I understand that that is not the primary motivation behind export control reform. We do agree that the reforms need to be streamlined, made more efficient, enabling of our members at the IPC and my customers at DDi to be able to sell into the global markets in a manner that is appropriate.

Mr. ROYCE. But in the meantime, you have mentioned that the current export control rules are ambiguous regarding printed circuit boards. Of course, that ambiguity is a problem throughout the system.

But you have had meetings, I suspect, with export control officials to lay out the case of what is happening here. Do they fully understand your industry? What could we do here to try to make

certain that that industry doesn't dissolve here in the United States?

Mr. WILLIAMS. A good question. One of the problems with printed circuit boards is that they get mentally lumped in with other components—screws, nuts, bolts. In fact, we have met with the Department of Commerce. As we have talked to them, I have realized that, as an example, there are many in government who don't really understand what the circuit board is.

In fact, I will hold up an example here. This is a circuit board. They look fairly routine, not unlike anything you would find in your laptop or BlackBerry or anything else. But, really, this includes the schematic design of the electrical device or component or part. So, again, it is not a general component.

So, getting everybody to understand that has been a huge effort of ours. I don't think that we are finished yet, but that is part of why I am here, and we would continue to do that.

I think, as people in government at Commerce or the Department of Defense or elsewhere start to realize that this is really the schematic design of the device from which something can be easily copied, it is how we begin to lose our proprietary intellectual property, I think that it can start to be understood that it needs to be viewed differently than screws and nuts and bolts and things like that.

Chairman ROS-LEHTINEN. Thank you so much.

Thank you, Mr. Royce.

Mr. ROYCE. Thank you, Madam Chair.

Chairman ROS-LEHTINEN. Mr. Faleomavaega.

Mr. FALEOMAVAEGA. Thank you, Madam Chair.

I want to thank our witnesses for their presentations. I think they were very comprehensive and certainly welcomed.

Claiming no expertise whatsoever in the aerospace, in the global electronics industry, and even our satellite industries, but I am aware of the fact that we are talking about hundreds and thousands of our fellow Americans who are employed under these three major areas of industry that we are discussing this morning.

I guess I would like to generalize the whole picture by saying that in your involvement you are talking about economic benefits to our working people. We are also talking about national security implications and then our foreign policy as to whether or not the sales and the commercial basis, and even on national security issues, are in compliance with our foreign policy issues.

Mr. Williams, I noticed that you mention about the printed circuit boards. I have no idea what you mean by printed circuit boards. But when you mentioned IED, it kind of bothers me, the fact that for years our men and women are killed in this terrible war in Iraq. Somehow it seems to me, why did we never take immediate action to go into this problem of IED explosions, which the vast majority of our men and women in uniform were killed by? I wonder if, commercially, were your printed circuit boards ever involved in trying to resolve the issues? And I am very curious why the military has taken years to try to figure out how to counter these IEDs. It is just simple to itemize what it is. But what was the problem?

Mr. WILLIAMS. Well, I can't speak for the speed with which our military operates, but I can assure you that our company, as an example, is in the quick-turn business. So, two-thirds of our business is focused on the commercial markets, servicing companies that need of new boards in 2, 3, 4 days. So, we can respond quickly as an industry.

We do build products that go into the devices that are being used to jam the IEDs to protect our soldiers.

Mr. FALEOMAVAEGA. That is my point. Why has it taken us years to do this while our men and women are dying in the field for the last 7 years?

Mr. WILLIAMS. Yes, and I can't address the process that came to the point that DoD decided that that was a product they wanted to build. But when they want a circuit board or a built device, our industry can respond very, very quickly.

Mr. FALEOMAVAEGA. Does it just simply mean that we do not have the expertise in addressing the issues that are so basic? I don't think you have to be a rocket scientist to build an IED and just put it out in the dirt somewhere, and our soldiers get killed.

As you said, the vast majority of our soldiers are killed and harmed by these IEDs more so than in the field of combat. I don't think you have to be a space scientist to figure this out.

Mr. WILLIAMS. I share your concern. I would like to see our products get to their intended use more quickly.

Mr. FALEOMAVAEGA. And, Ms. Cooper, I enjoyed your comments.

Again, as a non-specialist in this area, you have commercial satellites and, then, we have military and spy satellites. You know, one of the satellites, a couple of years ago there was such a public outrage how it was possible for China, they had this satellite running around at 18,000 miles per hour, and trying to somehow figure out how to fire a missile to kill, or not to kill, but to dismantle the satellite. It was such an uproar in the public saying, how dare that China was doing this? And they said, well, they are just simply trying to catch up with the industry in terms of how the Russians and the Americans have far advanced in understanding the idea of getting rid of these space military and spy satellites.

My question, how many spy satellites do we have up there anyway? [Laughter.]

Ms. COOPER. I am probably not the best one to answer and probably wouldn't be permitted, if I knew. I will say that about a third of the satellites that are on orbit are commercial. Our point here is that the rules that govern the space orbit and the value of the commercial sector has a direct relationship on the health of the U.S. space industry and, also, has a linkage with our military, civil space, and intelligence space communities.

I think my colleague, Ms. Blakey, was underscoring that, when a commercial satellite is purchased for manufacture, it engages many of the same companies to build parts, components, and subassemblies, in some cases the final——

Mr. FALEOMAVAEGA. I have got 7 more seconds. I know the chairlady is very strict on this.

Ms. Blakey, I wanted to ask you a question, but, unfortunately, I appreciate the fact that we need to modernize our export/import rules on this.

Thank you, Madam Chair.

Chairman ROS-LEHTINEN. Thank you so much, Mr. Faleomavaega.

Mr. Rohrabacher is recognized.

Mr. ROHRABACHER. I apologize for missing the guts of the hearing here. I was at a markup at the Science Committee. But I will read your testimony and take it to heart.

I live in Southern California where we have so much to be grateful for to the aerospace industry. All of us know that the standard of living that ordinary people have in California can be tied directly to that industry. Without it, people wouldn't be able to have the value of homes that they have or the lifestyles that we have.

Building high technology builds the economy, but it really helps people, is what we need to understand. And we also understand that the satellite part of the aerospace industry is a vital component of that industry and one of the major parts of the industry in which we are competitive overseas. We have got to make sure that we don't lose that industry.

Let me just note that I know that some people suggest, well, we should be more open with technology transfers or the sale of those satellites. I believe that is true when it comes to democratic countries. That is not true when it comes to countries, especially like China that is a potential enemy and an adversary of our country.

People are dumbfounded when they see the growth rate and the actual progress that China is making economically and technologically. I am not astounded at all. They have gotten all of their fundamentals from us. We have educated their children and PhDs. They come to our universities and they go home and they create economic entities that put us out of work. What's going on there? We are giving them all of our secrets, even right through their PhD programs at our major universities.

Number 2, we are giving them our R&D. Our major corporations are going to China now, and some of them having received government grants from the American taxpayer to develop certain technologies. And what do they do? They start manufacturing plants in China. Well, of course, China is going to be able to progress if it is getting a subsidy for all of its R&D.

We have got to make sure that, number 1, our satellite industry is the best satellite industry in the world, and we have got to make sure that we are not laying the foundation for our competitors 10–20 years down the road. I am appalled to see that General Electric and other aerospace companies are making their way toward Communist China.

And so, Madam Chairman, we have with us a very perplexed issue because we do need to make sure that these companies are not weighted down and can actually compete in that two-thirds of the world where people are free and the countries they live in are not potential adversaries. But in that other third where you have got, whether they are North Korea or Iran or China, we have got to make sure that what the American taxpayer is paying for is not something that will come back and put our people out of work or come to threaten our national security.

Maybe you would have a comment on some of those comments.

Ms. BLAKEY. Well, certainly, the Aerospace Industries Association believes that we have a vital national security asset and an economic asset in the kind of companies and facilities that are right there in your District and around the country. But they do have to have opportunities to innovate, to advance technology, and to sell that technology. That is what our Export Control Reform Initiative that we share across the Executive Branch and with the Congress and industry really is all about. It is not about changing the rules of the road, the rules of the game, for countries that are not those that we should be sharing technology and providing high-tech resources to.

So, we certainly are not advocating a change in our posture toward China, as far as that goes. What we do need, though, is a more streamlined and efficient process for working with our allies and friends and creating a much more robust trade, especially as resources here at home are going down.

Mr. ROHRABACHER. Thank you very much.

Chairman ROS-LEHTINEN. Thank you, Mr. Rohrabacher.

Mr. Sherman, the ranking member on the Subcommittee on Trade.

Mr. SHERMAN. Thank you.

A lot of companies come before Congress and wrap their agenda in jobs or the national interest. And then, sometimes you find that the agenda they are fighting for is carefully tailored to maximize profits and that they fight tenaciously for provisions that maximize profits, even if they don't create jobs or otherwise serve the national interest. I am hoping very much that this panel is very different from that.

When we transfer manufacturing technology, we transfer our most valuable secrets, how to make the materials involved. We lose the jobs. We hollow out our own defense plants, and we build up defense plants in other countries.

Even if that country is a close ally, a few years down the road when we think Iran shouldn't get a particular weapons system, even one of our close allies might disagree or might think that they need the jobs involved in that manufacturing.

So, let me ask each witness, would you support or would you oppose a reform where, whatever licensing agency it is, it has two separate standards, an expedited standard, perhaps slightly more liberal, for the export of American-made equipment and a separate queue, a separate timeline, and a separate, more stringent standard for permission to offshore manufacturing and export the capacity to make these items?

Ms. Blakey?

Ms. BLAKEY. Well, certainly, as we have looked at the shift of items from the USML to the Commerce List, we have actually advocated that there will be greater scrutiny of more sensitive items that may have come off the USML. So, we do think it is possible within the same list to have differing scrutiny for that.

Mr. SHERMAN. Ms. Blakey, I am not sure you—I may not have phrased the question as well as I should have. Do you support a tougher standard where one of your members is not trying to export a product, but is trying to export blueprints, tools and dies,

manufacturing technology, so that they can set up a factory overseas to actually make the product?

Ms. BLAKEY. If they are militarily-sensitive items, we support the greatest scrutiny on that. If these are commercial items that are widely available, then that becomes a much more commercial consideration. The question of scrutiny, again, you can have greater scrutiny within both of those lists, gradations of scrutiny.

Mr. SHERMAN. Mr. Williams?

Mr. WILLIAMS. Yes, I would echo that. Frankly, for the commercial market, that is already gone. They are building the most sophisticated products offshore in China and elsewhere now. For the military, certainly we would recommend protecting our capability as well as the actual product itself.

Mr. SHERMAN. So, you would support a tougher standard for exporting manufacturing knowhow, as opposed to the manufactured product?

Mr. WILLIAMS. Yes. In fact, we are actually asking to have, with respect to circuit boards, again, the fundamental building block of all electronic devices, to be explicitly addressed in that regard.

Mr. SHERMAN. Ms. Cooper?

Ms. COOPER. Yes, it is a little hard for us to extrapolate how to draw the line when we don't have the right to draw the line in the satellite area. But I do think there are different gradations of technology.

Mr. SHERMAN. Yes. Just so I clarify my question, the issue isn't are there more important and less important technologies; that is obvious. And more military and less military technologies; that is obvious.

Do you support drawing a distinction between exporting manufacturing technology and tools and dies, on the one hand, and exporting finished products on the other?

Ms. COOPER. I don't know. I haven't checked with my members on whether they have any expectation to do that. I do think there is a difference in manufacturing capability from other technological data.

Mr. SHERMAN. Okay. Now that I have clarified the question, does anybody want to clarify their answer?

[No response.]

Seeing no further response, I yield back.

Chairman ROS-LEHTINEN. Thank you very much.

Judge Poe——

Mr. POE. Thank you, Madam Chairman.

Chairman ROS-LEHTINEN [continuing]. The vice chair of the Subcommittee on Oversight, is recognized.

Mr. POE. Thank you.

As I mentioned earlier, I am from Houston and we still consider it to be the space capital of the world. I am a little irritated that now for manned spacecraft we have to get a taxi from the Russians and pay them $60 million to $70 million to fly up in space. It seems to me we have yielded the space exploration over to the Chinese and the Russians, but that is a different issue—sort of.

I want to talk about the little tyrant from the desert, Ahmadinejad, and his regime. Back in the days of the Shah when the United States left after the overthrow of the Shah, and he hap-

pened to have about 79 F–14s, the good Americans who left were smart enough to take the spare parts with them back to the U.S. Apparently, since those days, those F–14s have still been used in the Iraq-Iran war. Twenty of those planes were cannibalized for spare parts. Now we are coming up on another still crisis with the Iranian Government.

My question is, do you believe that Iran could use items that end up on the Commerce Munitions List to get spare parts to repair not just the F–14s that they still have, but F–5s, C–130s, helicopters, and other military equipment or not? Is that a concern or not?

I will start with you, Ms. Blakey.

Ms. BLAKEY. What you would be talking about would be patently illegal, certainly something that while there undoubtedly are bad actors out there that from time to time pass equipment that should not be passed, at the same time at this point the Commerce Control List really would not be the place for the kind of equipment, for the most part, that you are talking about. Most of this is militarily-controlled and it is on the USML.

Mr. POE. I understand that it is, but is it a concern or not? Do you think this is not a concern that we should have? You know, it is Iran getting spare parts from other entities.

Ms. BLAKEY. Iran is an incredible bad actor. And with that said, I think we should be concerned about all sorts of problematic and dangerous activity that they may try to engage in. That is why I put a great deal of emphasis on effective enforcement and scrutiny in all of this, because I think that is critical.

Mr. POE. Mr. Williams, did you want to weigh-in on that?

Mr. WILLIAMS. Yes, I agree. I think we do need to be concerned about that. I think we need to be concerned about our military product designs being copied. I think we need to be concerned about them being available to offshore manufacturing, with China now being the center of gravity for the electronics industry.

And I think it is not just on the high-tech stuff, but also legacy programs that are kind of long in the tooth and old with respect to spare parts. A situation like you are describing is one that we should be concerned about, protecting our Nation's IP.

Mr. POE. Ms. Cooper?

Ms. COOPER. I will say that spare parts for repair are not as big of an issue for on-orbit spacecraft, but I would echo the importance of enforcement for violations of any rules, particularly for countries where we have a sense of their bad-faith action.

Mr. POE. Let me ask you one more question, and I will go in reverse order. Down the road, China; Mr. Rohrabacher made a lot of comments about the Chinese, how they are professional thieves. Where do you see them going in space technology in the future with all of the IP issues, technology, satellite technology? How do you see this playing out, unless we do something on this end, say, in 5 years?

Ms. COOPER. I would, first, start by saying that the Chinese space program has been starved of U.S. satellite technology by the regulations that have been in place specific to China since 1998. That having been said, the Government of China certainly has voiced strong interest in space exploration, in commercial satellite manufacturing, and they have a robust satellite launch program.

So, we would expect them to continue to be an aggressive player in the international marketplace.

Our interest is in the areas, where U.S. satellite technology is not of national sensitivity, to ask that U.S. companies can return to the U.S. market, to the international marketplace elsewhere, and compete, then, head-to-head with the Chinese companies.

Mr. POE. So, you would echo, once again, what Ranking Member Sherman said earlier, that you need two different standards for private and military technology?

Ms. COOPER. That is the foundation of our export control structure.

Mr. POE. I am out of time. I yield back.

Chairman ROS-LEHTINEN. Thank you so much. Thank you, Judge.

Mr. Connolly is recognized.

Mr. CONNOLLY. Thank you, Madam Chairman. And thank you to our panelists for being here today.

I guess the first thing, I would be interested in hearing your honest opinion, but as somebody who worked in the private sector subject to export controls, every year I had to take a course, as an officer of the company, to try to glean the meaning of the Export Control Act and what was and what wasn't subject and what the penalties were, and what you had to do if you suspected something might possibly fall within the penumbra of questionable export items, and so forth.

I will just say to my colleagues and this panel, I wish everybody had to take that course in Congress to better understand what a Byzantine world we have created with the best of intentions in terms of export controls.

It led me, and certainly being here in this committee over the last 3 years has led me, to ask the question about efficacy. With the best of intentions to protect national security, with the best of intentions to protect sensitive technology, are we doing that? Because I believe that the nature of today's technology and the pace of technological change, frankly, make it extremely difficult, except in some rare cases, to protect anything. Wish we could.

I think the United States, as we look at reforms to this regime, we have to ask ourselves the painful and honest question, is it efficacious, what we are proposing? Because if it isn't, then it is a feel-good measure that is not, in fact, performing the desired function and we are presenting, not willfully, but a false security to the American public.

So, that is a long-winded preference, but I would honestly be interested in your reactions to the whole question of the current regime's efficacy, protecting U.S. sensitive technology.

Ms. Blakey?

Ms. BLAKEY. Certainly I think it is fair to say that the current regime for the most sensitive technologies, the most dangerous if they fell into the wrong hands, has been effective. The problem is it is becoming increasingly less effective because there is the needle-in-the-haystack phenomena. You are trying to control so much that you cannot, as technology proliferates and innovates, continue to do it that way.

Meanwhile, I mean, it is interesting to hear your comments about having to take that kind of course. Because what we haven't talked as much about this morning is the burden on small and medium-sized businesses, which are the source of a great deal of innovation. But, frankly, they can't afford the kind of costs that go into learning all of that and, then, their real cost, which is 68 percent of the companies that have military product have to register with the DDTC. They pay $2,250 a year and then never export because the difficulties, the barriers, are so great. So, they are real cash-out-of-pocket, small-margin businesses.

And again, are we benefitting the system that is supposed to control the highest technology when you are also trying to keep in bounds all of that on the same list, the same scrutiny? I don't think so.

Mr. CONNOLLY. Thank you.

Mr. Williams?

Mr. WILLIAMS. Yes, if you are asking about kind of the effectiveness and the intent of the parties, I think everybody means well. I agree it is very confusing when you get below the program level and into the component level. And again, I hate to refer to a circuit board as a component, but think of it for the moment as such. It gets very confusing on whether or not that specific item needs to be sourced in compliance with ITAR requirements, for example.

As an association, we educate on ITAR requirements. We do that in our companies as well. It is with a cost and burden. It is part of doing business; fair enough. But we need to recognize our foreign competitors aren't so burdened. So, it is, in a sense, unfair on one plane, but on another I do think it is required. We want to be part of complying with the——

Mr. CONNOLLY. But, Mr. Williams, with due respect, that was not my question. My question was, is it efficacious? With all good intentions and the desire to be patriotic and to comply, what if we find ourselves unintentionally supporting a regime that, in fact, is not achieving its purposes? In fact, quite the opposite, it is filled with unintended consequences.

Mr. WILLIAMS. I'm sorry. Again, that is why we are here supporting export control reform. Because we see examples of the ineffectiveness of the way it is being administered today, and we do believe that it could be significantly improved and support that.

Mr. CONNOLLY. Would the chairman indulge this Democratic ranking member to allow Ms. Cooper to answer this?

Chairman ROS-LEHTINEN. Absolutely.

Mr. CONNOLLY. I thank the chair.

Chairman ROS-LEHTINEN. I will collect later. [Laughter.]

Ms. COOPER. I agree that the current system can be improved. I agree that it should not be focused on complexities that yield "gotcha's" for folks that are well-meaning and slip up because the rules are too complex.

But I would point to, at least in our sector, another area where I think the rules have allowed technology to slip beyond control. That is by encouraging our competitors to invest and build capabilities that they did not previously have in order to capture the ITAR-free market. We have placed, actually placed, a target on certain technologies where U.S. companies had led the global marketplace,

and now both European and other governments have incentives to develop competing technologies. That is not only an erosion of our international competitiveness, but it also means that that capability has proliferated, not been controlled.

Thank you.

Mr. CONNOLLY. I thank the chair for her graciousness.

Chairman ROS-LEHTINEN. I prefer dark chocolate. [Laughter.]

Mr. Duncan.

Mr. CONNOLLY. It is on its way, Madam Chairman.

Mr. DUNCAN. Thank you, Madam Chairman, and thanks for the timeliness of this oversight and the policies. As a freshman Member, it is definitely educational to me to understand what the U.S. is doing or not doing with regard to selling technology around the world that could be used by our enemies to harm the U.S. interest or thwart our efforts to defend ourselves.

So, the question I have is for Mr. Williams. Just this week, it was reported that the North Koreans were possibly using drones that were 1987 variants of MQM–107D Streakers, possibly using those to attach some sort of ordnance package and possibly use those in the South.

And so, I think about the sales of items such as this, and taken with your testimony about printed circuit boards in your written testimony—I am not sure how much in your verbal testimony you touched on that—but what I would like for you to do is expound on the possibilities of our potential foes getting access to items which could, indeed, be used against either U.S. allies, U.S. assets, or thwart our efforts to defend ourselves, and possibly taking a printed circuit board or anything and reverse-engineering it to figure out the weapons system, integration, and how they may come up with things that would thwart our efforts. I am trying to learn.

Mr. WILLIAMS. Well, it can be done. I mean, there are many cases of foreign competitors taking circuit boards and grinding them down layer-by-layer to expose the logic of the circuitry. There are so-called Gerber files, which are three-dimensional files that lay out all of the interconnect scheme. While it doesn't necessarily give somebody all the answers, it is certainly a head-start to how we build our systems and products.

In fact, when I met with the Commerce Department, I provided what I personally pulled off the internet for one of our weapons systems. With a circuit board, one could get a pretty good set of roadmaps on how to replicate the part and the product. So, it is very important that we control the designs as well as the end-boards themselves.

Mr. DUNCAN. Madam Chairman, there was a committee hearing in the Homeland Security Committee with Chairman King where we looked at U.S. vendors that were selling circuit boards and other computer hardware to the U.S. military, but also an ability, some of these old circuit boards would be sold outside of the military channels.

The questions asked during that committee hearing were, could China possibly take and lift information off of some of those computer components? I guess my concern is, would they have the ability to utilize that technology that is freely out there to somehow

figure out a way to implement or put a virus into U.S. military hardware? Is that a possibility?

Mr. WILLIAMS. Well, with respect to components, semiconductors and things like that, it is possible that they could put non-compliant parts in there that might have such devices.

For circuit boards per se, since they don't hold any software inside themselves, for example, the greater threat is that you could have a circuit board inserted into a weapons system that is specifically designed to not support the type of performance that it should have.

So, for example, if it is in a rugged mission and under stress, the board would fail. Okay? And so, potentially, one could design a board that would not be reliable.

When we build for DoD requirements, we are building to a standard that is going to last 20–30 years, right? And that is not what is typical in the consumer electronics field.

So, it could happen if counterfeits are inserted into the supply chain that don't even have an intended sabotage effect. It could be inadvertent, but it is certainly possible to render our weapons systems as not reliable, certainly not within the spec of how they have been designed.

Mr. DUNCAN. I appreciate the testimony.

Madam Chairman, as you think about the Iranians capturing a drone, you think about the assault on Bin Laden's compound and the fact that they held the tail rotor of that helicopter, you think about what China did when they held a U.S. spy plane for a long period of time to investigate it, and how they are taking that and integrating normal sales of these components, it is alarming to me. I think it is important that the United States and this Congress continue to look at this.

I will yield back the balance.

Chairman ROS-LEHTINEN. Yes, sir, I agree.

Mr. Kelly, the vice chair of the Subcommittee on Asia and the Pacific.

Mr. KELLY. Thank you, Madam Chair.

This is a difficult situation. We talk about the effects of reverse-engineering and people taking technology from the United States and using it against us and some of the advanced technology that we are able to produce, but, yet, maybe not want to export.

It goes back to the Oklahoma City bombing, where somebody can rent a Ryder truck, fill it with fertilizer and some other chemicals, and blow up a building and kill 169 people.

So, I know that we are all very concerned with what it is that we allow to go outside our country and technology that is allowed to go out. I guess, Ms. Blakey, it would come to you because this is a member of your group. It is Rod Smith who has the Acutec Precision Company up in my District, Meadville, Pennsylvania.

He wrote me. He said, "In general, the rules and regulations of the U.S. Government have made it far easier to import from China than to export to anywhere from the U.S. Even exporting to Canada is a mountain of paperwork. The only companies that can succeed at exporting in the aerospace industry are those large enough to have the staff to deal with the paperwork, and then you can imagine the extra cost they occur." He says, "Our export controls

are based on assumptions of manufacturing and technology and the political framework of the fifties."

Now you mentioned small businesses, and I think this is where the difficulty comes in. Because when we enact these rules and we place this legislation into effect, we really don't understand the unintended consequences for those who actually do this.

Mr. Smith's example, he makes shims. He told me he has to be so careful of where he sends these shims because it comes back to him. It is his responsibility to make sure that at some point in the supply chain or the link that it doesn't fall into somebody's hands who could use it against us.

If you could just expand a little bit more on the costs involved in this? Looking at your figures, I mean, maybe again talk about the advantage we have in exporting, the billions of dollars advantage that we have now, but we may not have in the future, if we continue to make it more difficult for us to operate in a global market. So, if you could just expand on that a little bit and the cost, I would appreciate that.

Ms. BLAKEY. I would be happy to, because Mr. Smith's experience, you can multiply his experience thousands and thousands and thousands of times, and the cost is enormous. The fact of the matter is that a lot of small businesses simply do not attempt to export at all because they are so afraid of the paperwork and inadvertently making a mistake which has real consequences. There are teeth in this enforcement program.

People say all the time, why is our Government putting up barriers to having U.S. products compete? Shims are available worldwide. This is not something that is a unique product that could not be obtained elsewhere. So, why make it difficult for the American quality and technology to get out there when others can supply it?

And yet, we see this over and over again. It is the cost of the actual licensing. It is the cost of the registration fee. It is the cost of the lawyers. Because, remember, smaller companies simply don't have people on staff who can make all this determination.

It is interesting because, when you go to the State Department and you ask, is my item controlled or not, they won't give you a straightforward interpretation. They refer you to the regs, which have catchall clauses in them. Those, then, require either going out on a limb with your interpretation or submitting a request for them to give you a determination, a CJ on this. And the paperwork can be 4 or 5 inches high, most of it documents that lawyers generate. Now tell me what is right about that system.

Mr. KELLY. And I understand that. I think that is where the disconnect is. As we continue to bring forward legislation and we continue to regulate businesses at every level, it is the overall cost of being able to compete that is now taking us out of the game. We have raised the cover charge so much that nobody wants to come into our place anymore to do business.

Why don't we say we are going to develop a global strategy so that we compete, knowing that 95 percent of what we can achieve is outside our own borders and that is what we are going after? Then, on the other hand, we over regulate and make it so difficult that only a certain few can compete.

So, I appreciate your testimony. Does anybody else want to weigh-in on that, because I know how difficult it is? Yes, Ms. Cooper.

Ms. COOPER. I would like to make two points. One is that the satellite industry, the customers for completed spacecraft is an incredibly international community. It is not just about China. There are customers all around the world. Our ability to sell U.S.-made products, U.S.-made spacecraft to them is certainly affected by our ITAR designation, the ITAR designation that makes no differentiation between a satellite that delivers satellite TV and one that carries UAV traffic.

I would also point to a study that the Department of Defense, Acquisition, Technology and Logistics, commissioned just this year. They identified five new satellite technology areas at high risk, those that have only one or no U.S. suppliers, and an additional nine areas with the potential to create bottlenecks or cost increases for government space programs. Companies are leaving the marketplace, and that leaves our military, civil space, and intelligence space programs at a disadvantage when they try to source domestically.

Mr. KELLY. So, would it be fair to say, then, that we are going to start relying on people outside our own borders to supply us with technology that we need?

Ms. COOPER. It is already happening.

Mr. KELLY. Thank you.

Chairman ROS-LEHTINEN. Thank you so much, Mr. Kelly.

Mr. Manzullo, the chairman of the Subcommittee on Asia and the Pacific, is recognized.

Mr. MANZULLO. Thank you, Madam Chair.

I would like to echo, unfortunately, the story of what happened on the U.S. world share of machine tools, and it is also happening in satellites. Rockford, Illinois, the largest city in the District I represent, at one time was known as the machine tool center of the world. Unfortunately, with the Commodity Control List controlling any machine tool that has an excess of four axis to Tier 3 countries, we have gone to a market share now that is in the single digits.

Sometimes you wonder what the export control people do when they even take a look at a machine with a mandrel and consider that to be an axis if it turns or moves in any degrees.

What is particularly bothersome is the Tier 3 countries are China, Israel, India, Pakistan, et cetera. It is not that difficult to build a five-axis machine. The guys that are left in the United States—you have got Haas, you have got locally Bourn & Koch, and a handful of others—are always facing this situation where you don't have to worry about a license if you buy it from us.

A German company that can establish a U.S. manufacturing facility can still manufacture five-axis machines and sell them anywhere, but a U.S. company cannot build a facility in Germany and sell because it is still bound by the Commodity Control List. This is insanity.

What has happened is that the superiority that our Nation has had in machine tools is gone. We have to rely upon the Japanese, the Swiss, and the Italians, for those precision machines.

The question I have of Ms. Cooper is twofold. If you think that is the same analogy that is going to happen to the satellite industry? And the second question would be, what happened to the satellite report that continues to be delayed?

Ms. COOPER. I have heard references to the satellite industry's cautionary tale for overregulation. By regulating and requiring regulation that doesn't differentiate between the most sensitive and the most mundane, our industry has been hamstrung significantly in international marketplaces. It has drawn a target on technologies that had been U.S. lead items for our international competitors.

I understand that there are some 50 studies that have been done on the space industrial base. I don't know of a single one that hasn't shown some level of alarm. The statistics that the AIA study underscores show lost jobs and lost revenues. The question is, at what point do you consider the harm is self-evident and act to allow differentiation?

I am enormously proud of the innovation and investment that U.S. companies bring to the satellite sector. I believe that their work with the U.S. military, civil space, and intelligence community certainly has allowed them a technological sophistication that their competitors may not enjoy.

I would also say that the commercial satellite industry has required quite a lot of innovation in order to be able to bring consumer services and services to enterprises that require sophisticated spacecraft as well.

I don't see U.S. companies, the U.S. sector, leaving the global marketplace, but I do see harms if we don't allow them to compete where their items are widely available.

Mr. MANZULLO. It is a similar question to Ms. Blakey. You will recall about 3 years ago I think I worked for 2 years on two sentences on Section 17(c)of the Export Administration Act. It was really absurd because we finally got that regulation changed, and that resulted in billions of dollars of additional exports of U.S.-made aircraft parts.

Can you take that example, just one example, and show that as the need to reform these outdated export control laws?

Ms. BLAKEY. Well, I think there is no question about the change that you all successfully made in Section 17(c) has made a significant difference. It is the sort of thing that was a commonsense, logical shift that, if the FAA is certifying these parts, that this indicates that they really do and should be considered under the commercial rubric. That has made a big difference.

It would be a shame, however, to have to tackle on a onesy-twosy basis reform in this system. What we need is a systemic reform. We need the kind of across-the-board changes that the three of us really are here advocating today.

And it is critical from the standpoint of preserving our industrial base and U.S. capabilities. It is also critical for national security because we are not focusing adequately right now on the most sensitive technologies because the system is creaking under the weight of old regulation that really is forcing it to try to do too much. That does not make sense, certainly not anymore.

Mr. MANZULLO. Indeed.

Ms. BLAKEY. Thank you.

Mr. MANZULLO. Could I have 10 seconds?

Chairman ROS-LEHTINEN. Yes.

Mr. MANZULLO. And the bill on which Mr. Berman and I are co-sponsors to return the satellite industry back to the United States, that could only occur with a change in the regulations, is that correct?

Ms. COOPER. That is correct.

Mr. MANZULLO. Thank you.

Chairman ROS-LEHTINEN. Thank you, Mr. Manzullo.

Mr. Rivera, my Florida colleague.

Mr. RIVERA. Thank you, Madam Chair. My questions have been addressed. So, I will yield back my time.

Chairman ROS-LEHTINEN. Thank you so much.

And I want to thank excellent witnesses for their testimony. Thank you to the audience for participating and our members as well.

The committee is now adjourned.

[Whereupon, at 11:57 a.m., the committee was adjourned.]

APPENDIX

Material Submitted for the Hearing Record

FULL COMMITTEE HEARING NOTICE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515-0128

Ileana Ros-Lehtinen (R-FL), Chairman

February 03, 2012

You are respectfully requested to attend an OPEN hearing of the Committee on Foreign Affairs, to be held in Room 2172 of the Rayburn House Office Building **(and available live, via the WEBCAST link on the Committee website at http://www.hcfa.house.gov)**:

DATE: February 07, 2012

TIME: 10:00 a.m.

SUBJECT: Export Controls, Arms Sales, and Reform: Balancing U.S. Interests, Part II

WITNESSES: Ms. Marion C. Blakey
President & Chief Executive Officer
Aerospace Industries Association

Mr. Mikel Williams
Chief Executive Officer
DDi Corp.

Ms. Patricia A. Cooper
President
Satellite Industry Association

By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF FULL COMMITTEE HEARING

Day *Tuesday* Date *02/07/12* Room *2172 RHOB*

Starting Time *10:00 a.m.* Ending Time *11:57 a.m.*

Recesses [ ] (to) (to) (to) (to) (to) (to)

Presiding Member(s)

Rep. Ileana Ros-Lehtinen

Check all of the following that apply:

Open Session [✓]
Executive (closed) Session [ ]
Televised [✓]

Electronically Recorded (taped) [✓]
Stenographic Record [✓]

TITLE OF HEARING:

Export Controls, Arms Sales, and Reform: Balancing U.S. Interests, Part II

COMMITTEE MEMBERS PRESENT:

Attendance sheet attached.

NON-COMMITTEE MEMBERS PRESENT:

HEARING WITNESSES: Same as meeting notice attached? Yes [✓] **No** [ ]
(If "no", please list below and include title, agency, department, or organization.)

STATEMENTS FOR THE RECORD: *(List any statements submitted for the record.)*

Rep. Ros-Lehtinen (2) SFR
Rep. Rohrabacher SFR
Rep. Berman & Ms. Blakey SFR
Rep. Sherman
Rep. Connolly

TIME SCHEDULED TO RECONVENE _____
or
TIME ADJOURNED *11:57 a.m.*

Jean Carroll, Director of Committee Operations

Hearing/Briefing Title: Export Controls, Arms Sales, and Reform: Balancing U.S. Interests, Part II

Date: 02/07/12

Present	Member
X	Ileana Ros-Lehtinen, FL
X	Christopher Smith, NJ
	Dan Burton, IN
	Elton Gallegly, CA
X	Dana Rohrabacher, CA
X	Donald Manzullo, IL
X	Edward R. Royce, CA
X	Steve Chabot, OH
	Ron Paul, TX
	Mike Pence, IN
	Joe Wilson, SC
X	Connie Mack, FL
	Jeff Fortenberry, NE
	Michael McCaul, TX
X	Ted Poe, TX
X	Gus M. Bilirakis, FL
	Jean Schmidt, OH
	Bill Johnson, OH
	David Rivera, FL
	Mike Kelly, PA
	Tim Griffin, AK
X	Tom Marino, PA
X	Jeff Duncan, SC
	Ann Marie Buerkle, NY
	Renee Ellmers, NC
X	Robert Turner, NY

Present	Member
X	Howard L. Berman, CA
	Gary L. Ackerman, NY
X	Eni F.H. Faleomavaega, AS
	Donald M. Payne, NJ
X	Brad Sherman, CA
	Eliot Engel, NY
	Gregory Meeks, NY
	Russ Carnahan, MO
	Albio Sires, NJ
X	Gerry Connolly, VA
	Ted Deutch, FL
	Dennis Cardoza, CA
	Ben Chandler, KY
	Brian Higgins, NY
	Allyson Schwartz, PA
X	Chris Murphy, CT
	Frederica Wilson, FL
X	Karen Bass, CA
X	William Keating, MA
X	David Cicilline, RI

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE ILEANA ROS-LEHTINEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA, AND CHAIRMAN, COMMITTEE ON FOREIGN AFFAIRS

One Hundred Twelfth Congress
U.S. House of Representatives
Committee on Foreign Affairs
2170 Rayburn House Office Building
Washington, DC 20515
www.hcfa.house.gov

December 6, 2011

The Honorable Hillary Rodham Clinton
Secretary of State
U.S. Department of State
2201 C Street, N.W.
Washington, DC 20520

Dear Madam Secretary:

I am writing in regard to a presentation made by Assistant Secretary Andrew J. Shapiro on November 8th regarding proposed changes in the process for notifying Congress of major defense sales and the removal of defense articles from the United States Munitions List (USML), as required by the Arms Export Control Act (AECA). In that vein, I am requesting: (1) formal comments to both H.R. 2122, legislation I introduced on this issue, and to the proposals put forward by Ranking Member Howard L. Berman; (2) a formal, written legal analysis of the extent to which an entire USML category may be encompassed within the scope of a single 38(f) notification; and (3) a formal legislative request from the Executive Branch for authorization to create a single control list, and single licensing and enforcement agencies.

Madam Secretary, while I am open to working with the Administration to identify mutually acceptable process improvements in the consultation and notification process for arms sales, the framework proposed at the November 8th meeting raises concerns and is counterproductive.

Likewise, neither the plain meaning of section 38(f) of the Arms Export Control Act nor any applicable precedent justify the Department's apparent intention to submit an entire USML category within a single such notification. This view is shared on a bipartisan and bicameral basis.

The Administration should work with the Committees of jurisdiction to find a credible means to reconcile the unprecedented scope of the Administration's USML review with the statutory requirements of the AECA and related Congressional oversight

With the exception of one regrettable episode in 2006, every Administration and every Congress since enactment of the Arms Export Control Act has respected the protocols governing the notification of arms sales. These protocols provide a basis by which important national security and foreign policy questions can be addressed informally, before a notification is submitted. This process provides an effective means by which Congress can express its interest in U.S. sales of arms to foreign governments, and receive adequate notice before the commencement of the 30-day period provided for in the statute for deciding whether to prohibit a sale by enacting a resolution of

disapproval. The protocols thereby help to ensure that the Legislative and Executive Branches present a common position before the world on these sensitive matters.

The process proposed by the Department, however, would essentially eliminate these informal discussions. By endeavoring to curtail Executive-Legislative branch consultations on major arms sales, the Administration would make it more likely, not less, that conflict with Congress could erupt publicly over national security and foreign policy issues associated with major arms sales. Clearly, this unhelpful result would not be in the foreign policy nor national security interests of the United States.

In addition, the Administration's proposal appears to have been put forward without reference to legislation I have introduced on this issue or to proposals included in a letter from the Ranking Member of this Committee.

As you know, the comprehensive nature of the Administration's USML review presents extraordinary challenges with respect to the requirement for consultation with Congress. Because of the many complex technical and policy judgments that will be required, particularly with respect to major end-items, I have introduced legislation (H.R. 2122, the "Export Administration Renewal Act of 2011") that would prioritize the movement of low level parts and components currently controlled on the USML to the Commerce Control List.

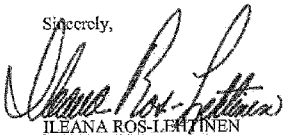
In this context, I request that you provide formal comments to both H.R. 2122 and the proposals noted above put forward by the Ranking Member. Likewise, I request that you provide a formal, written legal analysis of the extent to which an entire USML category may be encompassed within the scope of a single 38(f) notification.

Finally, Congress has not yet received a formal legislative request from the Executive Branch for authorization to create a single control list, and single licensing and enforcement agencies. I request that you provide the Committee with an update on this matter and forward such legislation for our consideration.

The Committee is prepared to work constructively with the Department on these matters but is not willing to acquiesce to unilateral process changes that would significantly diminish Congressional oversight over either major arms sales or the proposed removal of defense articles from the U.S. Munitions List.

Thank you for your attention to these matters.

Sincerely,



ILEANA ROS-LEHTINEN
Chairman

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE ILEANA ROS-LEHTINEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA, AND CHAIRMAN, COMMITTEE ON FOREIGN AFFAIRS, AND THE HONORABLE HOWARD L. BERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

One Hundred Twelfth Congress
U.S. House of Representatives
Committee on Foreign Affairs
2170 Rayburn House Office Building
Washington, DC 20515
www.hcfa.house.gov

December 22, 2011

General Martin E. Dempsey
Chairman of the Joint Chiefs of Staff
The Pentagon
9999 Joint Staff Pentagon
Washington, DC 20318-9999

Dear General Dempsey:

We write in regard to your letter to the Vice-President of December 9, 2011, in which you express concern over the process whereby arms sales are presented to Congress for review. Specifically, you expressed concern over two separate mechanisms: the informal manner in which significant and sensitive arms sales are previewed by Congress (which occur through the Committees on Foreign Affairs of the House and Foreign Relations of the Senate), and the consultation process by which items that the Administration proposes to remove from the USML are previewed with these same Committees.

We are concerned, however, that your letter does not convey an accurate representation of the rationale for and the conduct of these informal processes whereby our Committees exercise vital oversight over the arms sales process, to the general benefit of U.S. national security. Both are intended and have proven to provide a necessary final check on the assumptions, reasons and conditions for such sales, which are required by law to support U.S. foreign policy and national security objectives.

It has frequently been the case that Congressional examination of these proposed sales and USML removals, prior to formal notification, have revealed that successive Administrations have not, in fact, considered all necessary impacts on U.S. foreign policy and national security; have not taken sufficient precautions to prevent diversion and compromise of the defense items or technology in question; and have resulted in reconsideration and additional measures by Administrations that have ameliorated these oversights.

By so doing, these sales and removals have not generally become the subject of controversy and of Congressional joint resolutions of disapproval that might otherwise have occurred. Whether or not such joint resolutions could be enacted over a Presidential veto is immaterial: the attendant public, political controversy over an arms sale, for example, could have

have significant negative consequences for the bilateral relationship between the United States and the proposed recipient country.

Your letter criticized the informal process of previewing arms sales with our Committees (colloquially known as the "prenotification" process) as "untimely", causing "unintended delays [which] harm our reliability as a supplier, impede interoperability and partnership capacity objectives with our allies and partners....[and as] a result....impedes our ability to protect, supply, and otherwise support our warfighters, allies, and partners."

We would be interested in your informing us as to the specific instances to which you refer. We assume you do not mean the delay in approving the notification of the Armored Personnel Carriers to Libya proposed in 2010, which the Administration decided to withdraw from our consideration early this year with the arrival of the Arab Spring and Colonel Qaddaffi's repression of his own people; or the proposed sale of Global Hawk UAV's to South Korea proposed in the Spring of this year, before the interagency had, in fact, made fundamental decisions about the composition of the model to be exported, which came to light upon Committee questioning. As a result, the proposed sale has been postponed until those questions are settled. We also assume you are not referring to the sale of F-16's to Pakistan until certain security measures were instituted to prevent unauthorized access to U.S. technology; or any number of other instances we would be happy to discuss further with you.

There has been significant misrepresentation within the Administration over the time it takes for the Committee to review proposed arms sales. One senior official charged in a letter to us that the Committee took an average of 63 days in 2010 to consider proposed commercial arms sales. While our independent computation put the average at 57 days, it is important to realize that this calculation is inappropriate: averages are easily skewed by a few outlier cases, such as the Libyan sale referred to above. Our calculation of the median revealed that it took only a median of 21 to 22 days to review such sales, which hardly seems to us as an outrageous length of time to begin and conclude our review, especially given the months of time typically spent by the interagency to consider these same sales.

We would also be happy to discuss with you legislation (H.R. 2122, the "Export Administration Renewal Act of 2011") designed to prioritize the removal of numerous low-level items from the Munitions List, as well as Mr. Berman's proposal to bring greater transparency, predictability, and accountability to the informal arms sale prenotification process, which is attached to this letter. Both the bill and Mr. Berman's initiative were sent to the Department of State in June for consideration; to date, we have yet to receive any reply or reaction to either.

Regarding the process to remove defense items from the USML, you wrote that, in order to implement needed changes to the United States Munitions List and the Commerce Control List, "more timely, predictable, and transparent notification processes" were needed. We have found that it has often taken some time to satisfactorily conclude informal consultations on such removals because Committee questions have not been satisfactorily answered, or have revealed issues which have not been adequately considered by the interagency.

We are well aware that the Administration's Export Control Reform Initiative could result in the removal of literally thousands of defense items from the USML to a new sub-category of the CCL, the licensing policies for which have not yet been finalized. Consequently, we have been asking the Administration for over two years to engage with us on a constructive process that would satisfy the legal and practical requirements for our Committees to conduct appropriate and comprehensive oversight on what items are to be removed and transferred. Thus far, the one proposal put forth by the Administration just last month does neither, but we remain hopeful that a solution that also comports with the Arms Export Control Act can be found.

We remain committed to the expeditious consideration of proposed arms sales and reforms of the U.S. Munitions List and CCL, consistent with our fundamental and unwavering dedication to the promotion and protection of U.S. foreign policy and national security. We hope that we may have an opportunity to discuss these matters with you in the very near future.

Sincerely,

ILEANA ROS-LEHTINEN
Chairman

HOWARD L. BERMAN
Ranking Member

cc: The Honorable Joseph R. Biden, Jr., The Vice-President of the United States
The Honorable Hillary Clinton, Secretary of State, U.S. Department of State
The Honorable Thomas Donilon, National Security Advisor

Proposal by Rep. Berman on Arms Sales Prenotification Period

1) Regular Prenotification Review Period Limit. There would be a general time limit of 15 business days prenotification period for each proposed sale. If State has not received clearance from the staffer to formally submit the proposed sale after 15 business days – with the exceptions noted below – then State is free to formally notify the sale. Each staffer is free to clear at any point within the 15-day limit.

2) Operation of Day Clocks/Questions. Majority and Minority staffers in each Committee would have an independent 15-day "clock" kept, and would run independently from each other. Business days are Monday through Friday, excluding holidays.

A staffer's arms sales clock would suspend when the staffer asks a question about the proposed sale. If the question is sent to State prior to noon, that particular day will not count; if it is sent after noon, that day would be counted in full. The staffer's clock would resume when State provides the answer to the question. If the answer is received before noon, then that day would count against the staffer's clock (unless the staffer asks a subsequent question before noon of that day); after noon, then that day would not be counted against the 15-day total.

While the questioner's 15-day clock would suspend, the clocks for the other staffers would continue counting the days, unless that staffer joins the question that has been asked through an email sent to State stating such. If a staffer joins in the question, then that staffer's clock would also suspend, according to the parameters of the previous paragraph.

There would be no limit on the number of rounds of questions. If State feels that additional questions are not substantive or are being offered simply to delay the sale, State may appeal to the respective Chief of Staff to overrule the questions and resume the counting of the staffer's clock.

3) Extension of Prenotification Period. There will be two methods by which the prenotification period can be extended (before the 15-day period expires):

a) Upon a request by a staffer that State chooses to grant; or

b) If the Chairman or Ranking Member of the Committee, respectively, notifies State through the Chief of Staff before the 15-day period expires that he/she has concerns with the sale; details the nature of those concerns; and requests State to engage with him/her to resolve these concerns, then State will not formally notify the sale to Congress, regardless of the expiration of the 15-day period for that Member. State will not formally notify the sale to Congress until such engagement with the Member has occurred. State will not formally notify the sale to Congress until State and the Member agree the concerns have been resolved, or until State notifies the Member directly that State has determined that his/her concerns either cannot or will not be addressed.

CHAIRMAN DANA ROHRABACHER, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS: OPENING STATEMENT: BALUCHISTAN HEARING (FEB. 8, 2012)

Today's hearing is about a part of the world and a people most Americans know nothing about: Baluchistan, the area inhabited by the Baluch people who trace their history back for centuries.

Baluchistan deserves our attention because it is a turbulent land marked by human rights violations committed by regimes that are hostile to American interests and values. It also holds a very strategic location in an area of intense international rivalries.

Baluchistan comprises about 800 miles of coast at the head of the Arabian Sea between Iran and India, and runs inland to southern Afghanistan. The Baluch are a fiercely independent, warrior peoples who have made their land perilous to invade– until the discovery of natural gas and other mineral wealth.

During the 17th Century the tribes were united in a loose confederation until the British incorporated the area into their Indian Empire in the 19th century. The British, however, ruled the area with a light touch, leaving the tribal chiefs in control of day-to-day affairs.

At the time of the Partition of the British Raj into contemporary Pakistan and India in 1947, Baluch leaders voiced a desire for independence, but the Pakistan army took control of the area and forced the Baluch tribal chiefs to submit to rule from Islamabad. The Partition was based on religion, rather than ethnic identity. The Baluch are Sunni Muslims. Pakistan, which was founded as an Islamic State, sees itself as the rightful ruler of all the Muslims of the subcontinent.

Pakistani ideology holds Islam as the first identity, but other people identify themselves and their interests in other ways. In practice, Pakistan does not treat all Muslims equally. The Baluchi have seen little benefit from the development of the natural gas, coal, gold, uranium and copper that is produced in their province. Instead the wealth is taken for the benefit of the dominant Punjabi elite that runs the country from Islamabad.

Baluchistan remains the poorest province in Pakistan, even though it is the richest in natural resources.

Attacks against natural gas installations and pipelines by Baluchi insurgents are steadily increasing, and there have been assassinations of Chinese engineers who are helping their Pakistani allies develop resources that will be shipped out of the province to benefit Islamabad and Beijing.

The province's major port of Gwadar has also been developed with the help of China, and may become a naval base as well as a trade and energy transit center. Pakistan, however, is using this development to attract Punjabis into the province with the aim of outnumbering the native Baluch.

There was a major uprising in Baluchistan that ran from 1973 to 1977. The Baluchi nationalists were inspired by the independence of Bangladesh, won in 1971. The Baluchi insurgency was, however, ruthlessly crushed by Pakistani forces.

After two decades of relative calm, insurgency broke out again in 2005. Islamabad has refused to concede any legitimacy to Baluch nationalism or to engage the Baluch leadership in serious political negotiations. Its response has been based on brute force, including extrajudicial killings. The State Dept. and Amnesty International have condemned Pakistan for its murderous acts in Baluchistan.

Across the border in Iran there is the province of Sistan-Baluchestan, which is dominated by ethnic Baluchi. The mullah regime has denied them basic human rights and, as in Pakistan, the Baluchi are denied proper education and economic opportunities. As in Pakistan, the resources of Sistan-Baluchestan are used to support the elite in the distant national capital, leaving the Baluch the most impoverished ethnic group in both countries.

The governor of Sistan-Baluchistan is appointed by the mullah regime in Tehran. The governor of Pakistan Baluchistan in is determined by a complicated process which is in theory democratic, but the nationalist parties boycotted the 2008 elections. I hope our witnesses can shed some light on how free and fair the political process is in the Baluchi province.

A low level insurgency is in progress in Iran as in Pakistan, with both regimes reacting in the same brutal manner to stamp out resistance. The Baluch in Iran are even more oppressed than in Pakistan because Tehran is run by Shia theocrats who consider Sunni Muslims to be worse than heretics. Sunni Baluch clerics have been killed as part of the Iranian counterinsurgency campaign.

South Asia cannot be understood purely in religious terms; as Muslim versus non-Muslim, Sunni versus Shia. Group identities are rooted in deeper allegiances with cultural attributes and historical experiences that go back centuries. This hearing will explore these legacies and loyalties and what they mean to the geopolitics of the region; the security of Pakistan, Iran and their neighbors; the legitimacy of existing borders and the aspiration of self-determination--- all from the perspective of American interests and values.

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE BRAD SHERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

International Association of Machinists and Aerospace Workers

9000 Machinists Place
Upper Marlboro, Maryland 20772-2687

Area Code 301
967-4500

OFFICE OF THE INTERNATIONAL PRESIDENT

January 29, 2010

The President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear Mr. President:

I am writing on behalf of several hundred thousand active and retired members of the International Association of Machinists and Aerospace Workers (IAM) in response to reports that proposals are being formulated to modify our Nation's current export control policies.

In view of the increasing job crisis facing U.S. workers (over 7 million workers have lost their jobs since December 2007, many in manufacturing) our entire export strategy must be refocused to ensure the creation and maintenance of good jobs here at home. Any modification of export control policy must include a comprehensive review of how those modifications will impact U.S. employment now and in the future.

The failure to consider how modifications of export controls could impact domestic employment could lead to decisions that have a negative effect on U.S. workers. If an export involves the transfer of technology or production, it could negatively impact U.S. workers immediately as U.S. jobs are transferred to another country. The transfer of technology and production can also have long-term consequences as other countries use the transferred technology and production to develop their own industries. Claims made by some that weakening export controls will lead to job creation should be met with healthy skepticism. Many of those who make this claim represent corporations that have developed (or that would like to develop) industrial capacity in the very same countries that would benefit from weakened export controls.

While current export controls are in need of reform, we must be mindful that policies that encourage or facilitate further outsourcing of technology (especially

technology funded by U.S. taxpayers) and production can and do have a detrimental impact on U.S. workers and will impede our Nation's recovery. As you proceed in your review of export controls, we urge you to adopt policies that will, in fact, result in greater job opportunities for our domestic workforce now and well into the future.

Respectfully,

R. Thomas Buffenbarger

R. Thomas Buffenbarger
INTERNATIONAL PRESIDENT

RTB:ccp

The Honorable Gerald E. Connolly (VA-11)

Export Controls, Arm Sales, and Reform: Balancing U.S. Interests (Part II)
Tuesday, February 7, 2012
10am

After reviewing the history of the Export Administration Act and its effects on the dual-use export control industry, my assessment is that our defense industry is suffering unintended consequences of regulation. It is against our long-term national security and economic interests to weaken this industry. To think that our export control regime goes so far as to restrict otherwise innocuous items such as nuts, bolts, and widgets because these items were once part of an outdated list is difficult to comprehend. In trying to protect sensitive technologies, we have gone overboard, and have stifled innovation and America's competitive edge in certain industries—most notably the commercial satellite industry.

In the case of commercial satellites, the technology was so restricted that other nations were able to grow their industrial base in this sector. The result is that countries like France now have a significant share of the world satellite market, while U.S. companies have lost market share. To add insult to injury, China still managed to get access to satellite technology while our industry was mired in arcane regulations.

I have repeatedly expressed concern about the unintended harm that our export control system has done to our defense industrial base. The manufacturing sector of the defense industry, for example, has made a cogent point with regard to the Export Administration Act—if we restrict access to technology, companies in other nations can begin to fill American companies' market niche. This leads to two unintended consequences: a weak U.S industry and the unintended spread of technology to potentially hostile nations. In a report released last month by the Aerospace Industries Association (AIA), more than 90 percent of respondents to an AIA survey "indicated a connection between export controls and eroding pace industrial base capabilities."[1] Though we ought to be mindful of national security, we ought not to stifle our defense industry in the process.

I commend the Administration's efforts to review and reform our export control regime into a more streamlined set of regulations. The first phase, which consisted of evaluating the various criteria to control various items and technology, is complete. The second phase, which consists of evaluating the control lists, is under way. In fact, several of these lists are currently in the comment period. The goal in the current phase is to separate items into three tiers. The final phase will be to present legislation. On a related note, I have cosponsored the Ranking Member's bill, the Safeguarding United States Satellite Leadership and Security Act of 2011 (H.R. 3288). The bill would authorize the President to remove commercial satellites from the U.S. Munitions List to the Commerce Control List. The House has passed amendments to that end during Floor consideration of defense bills.

[1] "Competition for Space: Satellite Export Policy and U.S. National Security," *Aerospace Industries Association*, January 2012, vi.

The Honorable Gerald E. Connolly (VA-11)

There are concerns that export control reform will result in more sensitive items going to countries whose security interests run counter to the U.S.'s interests. But the goal of reform is to more thoroughly control the sensitive items while recognizing that not every minor, everyday component ought to be controlled. The idea to move 74 percent of items from the U.S. Munitions List (USML) to the Commerce Control list provides the U.S. with greater flexibility for certain items, while items that are "specially designed" for a military application will have the same export restrictions to certain destinations, such as China.

The universality of technology means everyone has access. It is a fool's errand to restrict the most common technologies in the hopes that such an errand will be efficacious. I look forward to hearing from today's witnesses on how we can work together to streamline export control regulations. Thank you, Madam Chairman.

[NOTE: The AIA Report, "Competing for Space," dated January 2012, submitted for the record by Ms. Marion C. Blakey, president & chief executive officer, Aerospace Industries Association, and the Honorable Howard L. Berman, a Representative in Congress from the State of California, is not reprinted here but is available in committee records.]