U.S. Department of Commerce

Bureau of Industry and Security

Annual Report to the Congress for Fiscal Year 2010

Bureau of Industry and Security Fiscal Year 2010 Annual Report

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This report summarizes the activities of the Department of Commerce's Bureau of Industry and Security (BIS) during Fiscal Year 2010, from October 1, 2009, through September 30, 2010.

Export control reform topped the BIS agenda in Fiscal Year 2010. BIS played an integral role as part of the Administration's task force charged by the President with implementing changes to the export control system needed to meet the national security challenges of the modern global marketplace.

"… [T]hese reforms will focus our resources on the threats that matter most, and help us work more effectively with our allies in the field. They'll bring transparency and coherence to a field of regulation which has long been lacking both. And by enhancing the competitiveness of our manufacturing and technology sectors, they'll help us not just increase exports and create jobs, but strengthen our national security as well.

-President Barack Obama

BIS Update Conference on Export Controls and Policy, August 31, 2010

President Obama announced on August 31, 2010 a major step forward in the Administration's export control reform effort when he outlined the foundation of the new system. His remarks to the BIS Annual Update Conference on Export Controls and Policy outlined fundamental changes in what items are controlled, how those items are controlled, how the controls will be enforced, and how the United States manages its exports. The new system is aimed at helping to strengthen U.S. national security by focusing efforts on controlling the most critical products and technologies and by enhancing the competitiveness of key U.S. manufacturing and technology sectors.

(Please see Appendix H, page 65, for additional export control reform resources.)

"Many current controls aimed at protecting U.S. national security, in fact weaken U.S. innovation and competitiveness in global markets. These are essential elements of our national security."

Secretary of Commerce Gary Locke

BIS Update Conference on Export Controls and Policy, August 31, 2010

Background on BIS

BIS advances U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system, and by promoting continued U.S. leadership in strategic technologies. BIS accomplishes this mission by maintaining and strengthening adaptable, efficient, and effective export control and treaty compliance systems.

"National security is paramount to our mission here at BIS - each of us comes to work every day with that in mind as we carry on with the critical task of administering and enforcing our nation's export control laws."

- *Under Secretary for Industry and Security Eric L. Hirschhorn*
BIS Update Conference on Export Controls and Policy, August 31, 2010

Items subject to BIS's regulatory jurisdiction have chiefly commercial uses, but also can be used in conventional arms or weapons of mass destruction applications, terrorist activities, or human rights abuses. These items are generally referred to as dual-use items. BIS has primary responsibility, in coordination with several other agencies, for implementing U.S. export control policy on dual-use commodities, software, and technology. To accomplish its objectives, BIS administers, and amends as necessary, the Export Administration Regulations (EAR). The EAR set forth license requirements and licensing policy for the exports of dual-use items.

The enforcement of the U.S. dual-use export control laws and regulations and the U.S. antiboycott regulations is a critical component of the BIS mission.

Enforcement efforts encourage compliance, prevent and deter violations, disrupt illicit activities, and bring violators to justice. BIS achieves these important objectives through a law enforcement program focused on parties engaged in exports of sensitive commodities, software, and technology to end uses, end users, and destinations of concern.

BIS plays a significant role on the four major multilateral export control regimes and three treaties which deal in different industry sectors: the Australia Group (chemical and biological nonproliferation), the Missile Technology Control Regime, the Nuclear Suppliers Group, the Wassenaar Arrangement (conventional arms and related dual-use goods, software, and technologies), the Chemical Weapons Convention (chemical weapons nonproliferation), the Additional Protocol to the U.S.-International Atomic Energy Agency Safeguards Agreement (nuclear weapons nonproliferation) and the Biological Weapons Convention (biological weapons nonproliferation).

BIS consults closely with industry on the development of regulatory policy through its

Technical Advisory Committees (TACs). The TACs provide valuable input regarding industry perspectives on trends in technology and the practicality and likely impact of export controls. BIS also conducts numerous outreach events through the United States and overseas to educate and update the public on export controls and policy.

Export Control Policy and Regulations

"The dual-use export control system is an important tool to protect the national security of the United States against the diverse threats our nation faces."

- *Assistant Secretary for Export Administration Kevin J. Wolf*
BIS Update Conference on Export Controls and Policy, August 31, 2010

Foreign Policy-Based Controls

Entity List-related Developments

In FY 2010, BIS, implemented the decisions of the End-User Review Committee (the interagency group that administers the Entity List) and published five Entity List-related rules. Within the five rules, 49 persons were added to the Entity List. Additionally, three persons were removed from the Entity List, two in response to their appeal of their status and the third as a result of the ERC's annual review of the Entity List. Finally, three amendments were made to existing entries on the List, two as a result of the annual review and one on an ad-hoc basis.

Iran

On July 1, 2010, the President signed into law the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (CISADA). CISADA Title III requires the President to designate countries as Destinations of Diversion Concern if they allow substantial diversion of certain goods, services, or technologies through the country to Iranian end users or Iranian intermediaries. No country has yet been designated a Destination of Diversion Concern under CISADA. As appropriate, BIS will make changes to the EAR to reflect license requirements for designated Destinations of Diversion Concern.

Regulation Developments

Encryption

On June 25, 2010, BIS implemented significant changes to U.S. export controls on encryption items to enhance national security by better focusing controls and by streamlining the collection of information on encryption products. This encryption export control reform is one of the first steps in the President's overall export control reform initiative.

For most items of lesser national security concern, BIS eliminated the 30-day technical review requirements and semi-annual reporting requirements under License Exception ENC and mass market. BIS also established a company-specific encryption registration requirement in place of individual product reviews for such items. Exporters and manufacturers thus may self-classify such items of lesser national security concern and export them without a license if they register online with BIS.

In addition, the encryption regulation made most encryption technology eligible for export and re-export under License Exception ENC, except to countries of highest concern. Lastly, the rule removed encryption controls on items with “ancillary cryptography” if the item’s primary function is not information security, computing, communications, storing information or networking.

Short Supply Controls

BIS implements short supply controls on Western Red Cedar, as required by section 7(i) of the EAA. Section 3(2) (c) of the EAA also authorizes the President to prohibit or curtail the export of goods “where necessary to protect the domestic economy from the excessive drain of scarce materials and to reduce the serious inflationary impact of foreign demand.” BIS does not currently maintain any export controls or monitor items under sections 7(a) or (b), which authorize the imposition of controls and monitoring, respectively, on any commodities in short supply. BIS administers export controls under the Energy Policy and Conservation Act, the Mineral Leasing Act, the Naval Petroleum Reserves Production Act, the Outer Continental Shelf Lands Act, and the Forest Resources Conservation and Shortage Relief Act, as amended.

Export Licensing

Export License Processing

In FY 2010, BIS processed 21,660 export license applications valued at approximately $66.2 billion. This marked an increase of six percent from the 20,351 applications processed in FY 2009. BIS approved 18,020 license applications (83 percent), returned 3,513 applications without action (16 percent), and denied 127 applications (less than one percent). In FY 2010, BIS’s average processing time to review a license application was 29 days.

The license applications with the highest value—$38.3 billion in total—were for the export of crude oil. The greatest number of license application approvals under one commodity classification was for chemical manufacturing facilities and equipment (Export Control Classification Number (ECCN) 2B350), with 2,284 approved applications for exports and reexports worth $251.0 million.

Licensing Impact

BIS obtains data from the Bureau of the Census (Census) on exports subject to BIS licensing requirements to evaluate the economic impact that export controls are having on U.S. interests. For calendar year 2009 (the most recent data available to BIS for this report), U.S. companies exported $2.8 billion of licensed items (of which 6.8 percent were exported under a special comprehensive license), and $12.8 billion of items under a license exception, representing 0.3 percent and 1.2 percent, respectively, of overall U.S. trade. Between 2007 and 2009, companies exported approximately 53.2 percent of the commodities that they were authorized to export under BIS licenses.

BIS continues to work with Census and the Department of Homeland Security’s U.S. Customs and Border Protection to improve the Automated Export System and increase exporter compliance with the EAR.

Cases Escalated for Dispute Resolution

Under Executive Order 12981, BIS's Operating Committee (OC)-with membership including the Departments of Commerce, Defense, Energy, and State-is tasked with resolving license applications where there is disagreement among the relevant U.S. Government agencies as to the appropriate licensing action. In FY 2010, 237 cases were escalated to the OC for dispute resolution. Of those 237 cases, 13 were further escalated to the Assistant Secretary-level Advisory Committee on Export Policy (ACEP) for resolution.

Commodity Classifications

In order to ascertain whether an export license is required from BIS, an exporter needs to classify the item to be exported by determining the Export Control Classification Number and may request an official classification from BIS. In FY 2010, BIS processed 7,360 classification request applications in an average of 42 days.

Technical Reviews and Licensing of Encryption Items

In the last quarter of FY 2010, BIS removed the technical review requirement for many less sensitive encryption items, including most mass market encryption items (see regulatory development section). Also in the last quarter of FY 2010, BIS implemented a new requirement for exporters of encryption items to submit a registration to BIS. In the last three months of FY 2010, BIS received approximately 300 encryption registrations.

BIS approved approximately 1,600 licenses for encryption items. BIS processed several "encryption licensing arrangements" (ELAs) for major exporters that provide broad authorization for unlimited exports and reexports of more sensitive encryption items that continue to require licenses for export to government end users in most countries. The increased use of ELAs resulted in close to a 10% decrease in license applications processed in FY 2010 from FY 2009.

Commodity Jurisdiction Determinations

A commodity jurisdiction (CJ) request is used to determine whether an item or service is subject to the export licensing authority of the Department of Commerce or the Department of State, Directorate of Defense Trade Controls (DDTC). Exporters may request a CJ determination by submitting the request to DDTC, which has final jurisdiction determination authority. In FY 2010, BIS provided recommendations to the State Department on 769 CJ requests in an average of 36 days.

Special Comprehensive Licenses, Internal Control Program Reviews, Export Compliance Programs, and the New Validated End-User (VEU) Program

In an effort to streamline licensing procedures while protecting U.S. national security, BIS administers special license and authorization programs.

In FY 2010, BIS conducted seven on-site reviews, and two desk audits of holders of Special Comprehensive Licenses (SCL), which are issued to qualified exporters and consignees in place of individual export licenses. BIS also conducted 18 Export Management and Compliance Program (EMCP) reviews of corporate written compliance programs and conducted two two-day and three one-day seminars on how to develop an EMCP in various U.S. cities.

BIS continued in FY 2010 to assess end-user validation requests in order to implement the VEU authorization created in FY 2007. Two additional companies were granted VEU status. Amendments were made to the existing authorization of one company in China, and the qualification of one facility of a company in India was revoked due to the sale of that facility to a company not participating in the program.

Federal Bureau of Investigation (FBI) Requests for License Determinations

BIS analyzes information received from the FBI and provides the FBI with licensing determinations (LDs), which contribute to criminal investigations of unlawful exports of sensitive items. In FY 2010, BIS completed approximately 101 LDs for the FBI.

Export Enforcement Licensing Determinations

License Determinations (LDs) are used to support Customs and BIS enforcement actions connected with potential violations of the EAR. In FY 2010, BIS completed 505 enforcement LDs in an average of 27 days.

Export Enforcement

"As always, we will aggressively bring to bear our wide-ranging enforcement powers, and utilize to its full advantage the flexible discretion these tools give us. We will especially focus our criminal investigatory authority, our regulatory powers and our administrative enforcement authority to target companies and individuals that aid rogue regimes and terrorist groups."

-Assistant Secretary for Export Enforcement David W. Mills

BIS Update Conference on Export Controls and Policy, September 1, 2010

On July 1, 2010, the President signed the Comprehensive Iran Sanctions, Accountability, and Divestment Act, Pub. Law 111-195, 124 Stat. 1312, which under Section 305 provides for the first time, permanent law enforcement authorities to Special Agents in BIS's Office of Export Enforcement. These permanent authorities enhance our ability to investigate and prosecute violators of the EAR.

Penalties

BIS investigations in FY 2010 resulted in the criminal conviction of 31 individuals and businesses for export violations, as compared to 33 convictions in FY 2009. The penalties for these convictions came to $12,298,900 in criminal fines, more than $2 million in forfeitures, and more than 522 months of imprisonment; compared to $455,409 in criminal fines, more than $1.5 million in forfeitures, and 886 months of imprisonment in FY 2009**.**

In FY 2010, BIS investigations resulted in the completion of 53 administrative cases against individuals and businesses and more than $25.4 million in administrative penalties, as compared to 54 cases and more than $14.5 million in administrative penalties in FY 2009. Of the 53 closed cases, 14 involved antiboycott violations that resulted in penalties of $380,975, as compared to three antiboycott cases that involved $124,475 in penalties in FY 2009.

Antiboycott Activities

During FY 2010, 14 companies agreed to pay civil penalties totaling $380,975 to settle allegations that they violated the antiboycott provisions of the EAR.

In FY 2010, BIS responded to 1,020 requests from companies for guidance on compliance with the antiboycott regulations. BIS continued to reach out to exporters, manufacturers, freight forwarders, bankers, and attorneys involved in international trade, and to provide extensive counseling to individual companies with specific boycott problems. The Office of Antiboycott Compliance (OAC) also provided export counseling to two U.S. firms seeking to remove boycott-related language from tenders originating in the UAE. OAC continued to work with the U.S. Embassy in Baghdad to assist U.S. firms seeking to register their trademarks in Iraq.

Officials from OAC conducted an antiboycott compliance assessment trip to the United Arab Emirates and Saudi Arabia in January-February 2010, where they briefed U.S. Embassy officials, including those from the U.S. and Foreign Commercial Service, on the EAR. OAC also met with host government officials on steps required to eliminate boycott-related terms and conditions from commercial documentation.

Preventive Enforcement

In FY 2010, BIS continued to emphasize its preventive and compliance enforcement activities. Export Enforcement officials participate in the export licensing process by making recommendations on license applications, detaining shipments believed to have been undertaken in violation of the EAR, and in some significant cases seeking the issuance of Temporary Denial Orders to prevent imminent export violations.

End-use checks continue to play a valuable preventive enforcement role in confirming the bona fides of end users, ensuring that items will be or have been properly used as authorized and that license conditions are adhered to. BIS end-use checks also have uncovered improper or unauthorized reexports or diversions of items subject to BIS jurisdiction.

In FY 2010, BIS completed 708 end-use checks in over 30 countries. Of these 708 checks, 67 were Pre-License Checks (PLCs) and 641 were Post-Shipment Verifications (PSVs). To conduct these checks, BIS maintains Export Control Officers (ECOs) in U.S. Embassies and Consulates in

Moscow, Beijing, Hong Kong, New Delhi, and Abu Dhabi. In addition, a new ECO was posted in Singapore in December 2010. Approximately 55 percent of the checks were conducted by BIS ECOs. The remaining checks were conducted by Office of Export Enforcement Special Agents deployed from the United States to conduct end-use checks in certain countries and by Foreign Commercial Service Officers and support personnel stationed at various U.S. Embassies. BIS used the results of the negative checks to prevent future exports to unsuitable end users and to take enforcement action where appropriate.

In situations where BIS cannot make a recommendation on an end-use check because the U.S. Government was unable to conduct the check or was otherwise unable to verify the existence or authenticity of the end user, the end user may be considered for inclusion on the Entity List or the Unverified List. The presence of an end-user on the Entity List provides notice to the public that certain exports, reexports, and transfers (in-country) to parties identified on the Entity List require a license from BIS and that availability of License Exceptions in such transactions is limited. Any transaction in which an end user listed on the Unverified List is a party will be deemed by BIS to raise a Red Flag with respect to such transaction within the meaning of the guidance set forth in Supplement No. 3 to 15 C.F.R. Part 732.

BIS completed a significant number of additional preventive enforcement actions in FY 2010, including the issuance of 215 warning letters; 88 detentions; 28 seizures; Temporary Denial Orders against three companies and three individuals; renewals of Temporary Denial Orders previously issued against seven companies; six denial orders under Section 11(h) of the EAA (which authorizes denial of export privileges of parties convicted under certain Federal statutes); and 823 outreach contacts with industry.

For additional information related to significant BIS enforcement activities, see Appendixes C and D.

Industry Outreach Activities

Seminars and Conferences

BIS export outreach and education constitutes the first line in the Bureau's contact with U.S. exporters and provides guidance and transparency to new and experienced exporters regarding the EAR, changes in export policy and licensing procedures. BIS counseling operations have been instrumental in assisting the exporting community to understand and comply with critical national security and foreign policy-based regulations. Each year, counselors in the BIS Office of Exporter Services (OExS)'s Outreach and Educational Services Division and Western Regional Office have provided regulatory, policy and process guidance to tens of thousands of exporters, forwarders, universities and other individuals, enabling them to meet their obligations under the Export Administration Regulations. One-on-one counseling assistance is provided on both coasts, for extended periods of operation each day. In addition, counselors conduct dozens of highly regarded and cost-effective seminars throughout the United States in the high technology communities most affected by these regulations. Over the past few years, OExS has developed additional capabilities to offer training online and via interactive webinars. These services have been particularly useful for small and medium-sized businesses that operate with more limited compliance resources.

In Fiscal Year 2010, BIS reached close to 2,700 people through 25 domestic export control outreach seminars conducted in 18 states. These seminars provided guidance to new and experienced exporters regarding the EAR, changes in export policy, and licensing procedures. More than 94 percent of attendees rated the seminars either “good” or “excellent” in FY 2010. BIS held its 22nd annual Update Conference on Export Controls and Policy between August 31 and September 2, 2010, in Washington, DC, which attracted close to 1,000 participants. An official announcement of export control reform policies was made by President Obama at Update through a video presentation. Slide presentations from the Update 2010 Conference on Export Controls and Policy are available online to the public. BIS also held a Reexport Control Seminar in Japan for an audience of 200 business representatives.

BIS offered eight webinars in FY 2010 including a series of webinars covering the content of its 2-day Complying with U.S. Export Controls program, a webinar on changes to encryption controls and a webinar offering an introduction to dual-use export controls in Spanish. These webinars are archived on BIS’s on-line training room for free viewing by the public. These webinars were viewed close to 5,000 times in the last quarter of FY 2010 with the accompanying webinar slides downloaded over 5,500 times in the last quarter of FY 2010. BIS also completed a series of four introductory videos as part of the "Export 101" training videos. The purpose of these videos is to help exporters understand the rules governing the export process and to promote awareness. The videos were initiated by the Census Bureau's Foreign Trade Division and the International Trade Administration (ITA). BIS also supports Iota’s Basic Guide to Exporting webinar series by presenting an hour-long webinar on EAR export controls several times a year as well as webinars in support of the interagency Trade Promotion Coordinating Committee (TPCC) Export Pavilion.

BIS also provides an introductory series of easy-to-use training modules, including six modules that mirror content provided in the Essentials of Export Controls seminar that BIS currently offers around the United States. This service offers exporters and reexporters—particularly small and medium-sized enterprises—a cost-saving mechanism to learn about U.S. export controls. The training modules were viewed over 56,000 times and the accompanying transcripts were viewed over 21,000 times in FY 2010.

In addition to BIS seminars, webinars, and annual conferences, BIS worked with a number of public- and private-sector organizations to introduce audiences in specific business and technology sectors to BIS’s mission and services. These partnerships also provide additional insight into technology and market developments in key sectors of the economy. BIS supported 30 such programs in eleven states, which reached more than 1,800 people through formal conference presentations.

BIS supports the interagency Trade Promotion Coordinating Committee (TPCC) as part of its U.S. Export Pavilion and Trade Officer Training Conference. In FY 2010, BIS participated in nine trade shows. BIS also supports the TPCC’s weeklong Trade Officer’s Training Conferences, held three times a year in Rosslyn, Virginia.

In addition, BIS continued to focus on the enforcement aspects of expanded outreach and deemed export compliance involving individuals and companies which had not previously submitted applications for actual or deemed export licenses. In FY 2010, BIS's OEE conducted over 437 of these enforcement outreaches to such individuals and companies. BIS also initiated 26 leads and cases involving allegations of deemed export licensing violations.

Project Guardian

BIS maintains a constructive and cooperative relationship with the business community through outreach programs sponsored by BIS's Export Enforcement arm. BIS's Project Guardian focuses on specific goods and technologies that illicit proliferation networks actively seek to acquire. BIS contacts U.S. manufacturers and exporters of these goods and technologies to apprise them of the acquisition threat and to solicit cooperation in identifying and responding to suspicious foreign purchase requests. In FY 2010, BIS conducted 36 Project Guardian outreach contacts.

Counseling

BIS regulatory specialists assisted approximately 55,000 business representatives in one-on-one counseling sessions through its telephone counseling program at BIS's Outreach and Educational Services Division in Washington, DC, and at the Western Regional Office in California. Through this program, BIS provides guidance on regulations, policies, and practices and helps to increase compliance with U.S. export control regulations.

International Cooperation

BIS conducted workshops in Washington, DC, and Mexico City, Mexico, as part of the Security and Prosperity Partnership of North America (SPP). The SPP, which was established in March 2005, aids Canada, Mexico, and the United States in aligning their export control systems and to otherwise secure trade in the region.

International Regimes and Treaty Compliance

BIS plays an important role in the U.S. Government's efforts to develop and refine the control lists and operational guidelines for the four major multilateral export control regimes: the Australia Group (chemical and biological weapons), the Missile Technology Control Regime, the Nuclear Suppliers Group, and the Wassenaar Arrangement (conventional arms and related dual-use items).

BIS also administers the industry compliance program for the Chemical Weapons Convention (CWC), is a lead agency for implementation of the Additional Protocol (AP), and participates in activities on the Biological Weapons Convention (BWC) issues. The CWC bans the development, production, stockpiling, and use of chemical weapons and provides for an extensive verification regime to ensure adherence to its terms. BIS works actively with other CWC States Parties and the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons to ensure that all 188 States Parties to the CWC are implementing the CWC's provisions in a rigorous, analytically sound, and equitable manner. In FY 2009, BIS began administering the compliance program for the AP with that portion of the private sector which is involved in nuclear fuel cycle activities, but not subject to the jurisdiction of the Nuclear Regulatory Commission. The AP is a bilateral treaty that supplements and amends verification arrangements under the existing "Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States" of November 18, 1977, which entered into force on December 9, 1980. Its objective is to promote U.S. nonproliferation goals by demonstrating that implementing the AP does not place Non-nuclear Weapons States Parties to the Nuclear Nonproliferation Treaty at a commercial disadvantage.

Australia Group

The Australia Group (AG), a multilateral export control regime, was formed in 1985 to help stem the proliferation of chemical and biological weapons through harmonized export controls. The AG now includes 40 countries and the European Union. In FY 2010, the AG participants reaffirmed the AG's commitment to assisting countries in meeting their United Nations Security Council Resolution (UNSCR) 1540 obligations to establish effective laws to prevent chemical, nuclear, and biological weapons (BW) proliferation.

On February 22, 2010, the Department of Commerce published a final rule in the Federal Register (75 FR 7548) amending the EAR to update the controls on certain select agents identified in Export Control Classification Number (ECCN) 1C360 on the Commerce Control List (CCL) (Supplement No. 1 to Part 774 of the EAR) and to make a correction to ECCN 1E998. The ECCN 1C360 updates are based on recent changes to the lists of select agents and toxins that are separately maintained by the Animal Plant and Health Inspection Service (APHIS), U.S. Department of Agriculture, and the Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. APHIS and CDC maintain controls on the "possession, use, and transfer within the United States" of certain select agents and toxins, while BIS controls "exports" of these select agents and toxins.

On March 23, 2010 The Department of Commerce published in the Federal Register a final rule (75 FR 13672) to implement the understandings reached at the September 2009 plenary meeting of the Australia Group (AG) and a decision that was adopted under the AG intersessional silent approval procedures in October 2009. Specifically, this final rule amends Export Control Classification Number (ECCN) 2B350 (Chemical manufacturing facilities and equipment) on the Commerce Control List (CCL) to clarify the use of the terms "nominal size" and "alloy" in connection with items controlled under this ECCN.

It also amends ECCN 1C351 (Human and zoonotic pathogens and "toxins") on the CCL to reflect the AG decision, adopted under the AG intersessional silent approval procedures, to remove "white pox" virus from its list of biological agents.

Missile Technology Control Regime

The United States is a member of the Missile Technology Control Regime (MTCR), a multilateral export control regime established in 1987. The MTCR currently includes 34 member countries that have agreed to coordinate their national export controls to prevent missile proliferation.

The MTCR held a Technical Experts meeting in conjunction with the Plenary meeting to discuss changes to the MTCR control list, including adding controls for copper infiltrated tungsten, silver infiltrated tungsten, and tungsten alloys in solid form (including dimensional aspects) when these items are for fabrication of missile components; clarifying controls on high energy density materials usable in missile systems, excluding certain widely used fuels and biofuels; and deleting turbo-compound engines from the control list, as this term is not used by the international community to refer to turbojet or turbofan engines. These changes were made effective in U.S. regulations on April 20, 2010, when the Department of Commerce published a final rule in the *Federal Register* (75 FR 20520) amending the EAR to reflect changes to the MTCR Annex that were accepted by MTCR partners at the November 2009 Plenary in Rio de Janeiro.

The MTCR held an intercessional Technical Experts Meeting (TEM) in London on June 9-11, 2010 to discuss changes to the MTCR control list, including adding controls for hybrid rocket motors, and clarifying controls on ferrocene derivatives and liquid propellant rocket engines.

Nuclear Suppliers Group (NSG)

The NSG is a multilateral export control regime that was formally established in 1992 and now includes 46 members. The regime seeks to impede the proliferation of nuclear weapons through the implementation of guidelines for the control of nuclear and nuclear-related exports. Members pursue the aims of the NSG through voluntary adherence to the NSG Guidelines, which are adopted by consensus, and through exchanges of information on developments of nuclear proliferation concern.

The 2010 NSG Plenary, Consultative Group (CG), Information Exchange (IEM) and Licensing and Enforcement Experts (LEEM) meetings were held in Christchurch, New Zealand, during the week of June 21-25, 2010. The Netherlands confirmed that they would host the next Plenary in 2011.

The Consultative Group adopted Terms of Reference for the Fundamental Review of the Trigger and Dual-Use Lists and established a Dedicated Meeting of Technical Experts (DMTE) to lead the Review. PGs delivered 14 presentations during the IEM, including the two provided by the United States. As in previous years, many of the presentations were focused on Iran's nuclear program. Fifteen presentations were delivered by PGs in the LEEM. The United States provided two presentations on the Intangible Transfer of Technology (ITT), and another on illicit procurement and transfers, together with Canada, during the Joint IEM-LEEM session.

Wassenaar Arrangement

The Wassenaar Arrangement (Wassenaar) is a multilateral arrangement addressing export controls on conventional arms and sensitive dual-use goods and technologies. Wassenaar was founded in 1996 to replace the East-West technology control program under the Coordinating Committee (COCOM) regime that ended in 1994. There are currently 40 countries participating in Wassenaar.

Members are required to report approvals, transfers, and denials of certain controlled dual-use goods and technologies. Reporting denials helps to bring to the attention of member countries attempts to obtain strategic items that may undermine the objectives of Wassenaar.

Wassenaar members, at the December 2010 Plenary, agreed to a substantial number of amendments to the control lists, including many in technically complex and challenging areas, such as Electronics, Information Security (encryption) and acoustic seabed survey equipment. Particular attention was also given to terrorism-related items, such as Improvised Explosive Devices Electronic Countermeasures. Members also actively worked to make the existing control text more easily understood and "user-friendly" for exporters and licensing officials.

The Wassenaar Plenary agreed that 2011 will be an Assessment year—a wide ranging exercise undertaken by Wassenaar members every four years to review and evaluate its overall functioning. Members established a framework for this exercise—to guide Wassenaar in weighing its response to existing and emerging challenges to the export control regime. The Wassenaar Plenary also established several task forces, one of which will be chaired by the United States, to assist in the review process.

The Wassenaar Plenary reiterated that Wassenaar is open to membership to all states who comply with the agreed criteria.

Treaty Compliance

Chemical Weapons Convention

The United States ratified the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and their Destruction (the Chemical Weapons Convention, or CWC) on April 25, 1997. There are 188 States Parties to the CWC.

The CWC requires certain commercial chemical facilities to submit data declarations that include information on chemical production, processing, consumption, and import/export activities. In the United States, BIS collects this information, compiles it, and forwards it to the Department of State for transmittal to the Organisation for the Prohibition of Chemical Weapons (OPCW) Technical Secretariat (TS), which is charged with carrying out verification functions under the CWC.

During FY 2010, BIS collected declarations and reports from 553 facilities and trading companies and submitted them to the OPCW in accordance with the CWC. BIS also provided advice and support to 21 chemical plant sites which were selected for inspection by the OPCW, hosted the inspections, and protected the sites' confidential business information, while demonstrating their compliance with the CWC. Most of these companies had never been inspected before and benefited from BIS's efforts to guide them through the process. BIS also responded to two requests from industry by providing Site Assistance Visits to companies with plant sites subject to inspection.

In 2010, BIS gathered the necessary data and prepared the Congressionally-mandated reports regarding the implementation of the Chemical Weapons Convention. These reports include: (1) an annual report on the cost of implementation to both industry and the government; and (2) an annual statement regarding the impact of the treaty on availability of Schedule 1 chemicals and toxins to industry.

BIS provided support for meetings of the Executive Council and the Conference of States Parties, as well as other meetings of the policy-making organs of the OPCW and provided an Alternate Permanent Representative on the U.S. Delegation to the OPCW.

U.S. Additional Protocol to the U.S.-International Atomic Energy Agency (IAEA) Safeguards Agreement

The Additional Protocol augments the U.S.-IAEA Safeguards Agreement by requiring the United States to provide the IAEA with information on certain civil nuclear and nuclear-related items, materials, and activities not currently covered by the Safeguards Agreement.

The Additional Protocol entered into force in the United States on January 6, 2009. Under Executive Order 13458, BIS was designated Lead Agency for all subject commercial activities and locations not licensed by the Nuclear Regulatory Commission (NRC) or an NRC Agreement State, and not located on certain other government locations. BIS published its final Additional Protocol Regulation (APR) on October 31, 2008.

BIS compiles the AP declaration on behalf of all U.S. Government agencies and prepared the initial declaration to the IAEA, which was submitted on May 15, 2010. This declaration contains 307 changes and/or new activities. During FY 2010, BIS also submitted four quarterly export reports for nuclear equipment; the first listed 48 exports, the second listed 47 exports, the third listed 42 exports, and the fourth listed 28 exports.
During FY 2010, BIS worked with the NRC to provide outreach and assistance to the industry affected by the Additional Protocol. The outreach vehicle was the 2009 American Nuclear Society Winter Meeting and Nuclear Technology Expo held November 15-19, 2009 in Washington, DC.

BIS participated in interagency preparations for anticipated Complementary Access Visits under the Additional Protocol, including a mock notification exercise.

Biological Weapons Convention

The Biological Weapons Convention (BWC) prohibits developing, producing, stockpiling, or otherwise acquiring or retaining biological agents or toxins for non-peaceful purposes. The BWC entered into force in 1975. In FY 2010, BIS continued to support U.S. efforts to reinvigorate the BWC as the central international forum dedicated to mitigating risks posed by the development and use of biological weapons, in accordance with the *National Strategy for Countering Biological Threats*.

U.S. Defense Industrial and Technological Base Programs and Advocacy Activities

BIS's mission includes supporting continued U.S. technology leadership in industries that are essential to U.S. national security. Activities in this regard include:

Administering the Defense Priorities and Allocations System

BIS's administration of the Defense Priorities and Allocations System (DPAS) continues to play an important role in supporting the deployment of U.S. and allied forces abroad, meeting critical national defense and homeland security requirements, and facilitating recovery from natural disasters.

In FY 2010, in cooperation with the Department of Defense, BIS expedited the delivery of critical items in support of operations in Afghanistan and Iraq. In cooperation with the Department of Homeland Security, BIS authorized the Department of Energy to expedite the delivery of equipment to support homeland security-related requirements. In addition, BIS provided DPAS guidance in support of interagency emergency preparedness activities.

The Defense Production Act (DPA), the statutory authority for the DPAS, was reauthorized on September 30, 2009 for five years. The legislation that reauthorized the DPA also broadened the scope of DPAS to include assistance to foreign critical infrastructure. The 2009 legislation also required that all delegate agencies develop rules for the use of their priorities and allocations authority. In FY 2010, BIS worked with the relevant agencies to take steps to implement this requirement.

Committee on Foreign Investment in the United States

BIS participates in the Committee on Foreign Investment in the United States (CFIUS) by evaluating foreign investments in U.S. industries for export control equities. In FY 2010, BIS worked closely with the Department of Commerce's International Trade Administration (ITA) and interagency CFIUS partners to review 74 CFIUS filings to determine the effects of those transactions on the national security of the United States. The filings are reviewed consistent with the Foreign Investment and National Security Act of 2007, and implementing regulations published by the Department of the Treasury on November 21, 2008.

Monitoring the Strength of the U.S. Defense Industrial and Technological Base

In FY 2010, BIS completed one assessment that was initiated in FY 2009:

- The Department of Defense Diminishing Manufacturing Sources and Material Shortages (DMSMS) Cost Metric Assessment: The purpose of this study was to update the Non-recurring Engineering (NRE) Cost Metrics utilized by industry and government officials responsible for obsolescence management. The NRE Cost Metrics Guide was established in the 1999 Defense Microelectronics Activity NRE resolution cost metrics for DMSMS Resolutions. The updated metrics have been included in the 2010 DMSMS Guidebook of Best Practices, published by the Defense Standardization Program Office.

BIS's Office of Technology Evaluation (OTE) surveyed over 140 defense-related companies and DOD service organizations, requesting data on 15 DMSMS resolution types, ranging from simple and inexpensive reclamation of parts, to costly complex redesigns. The collected surveys covered a wide-range of Defense Department platforms and systems, including six planes, four missile platforms, and three electronic countermeasure systems.

OTE data revealed a wide range of resolution types per incident. The highest concentration of DMSMS incidents was Desktop Existing Substitutes. Distribution of the Guidebook of Best Practices will provide relevant examples of cost-effective improvements for obsolescence managers, which will in turn, reduce demand on maintenance and repair budgets.

BIS also continued work on three assessments established in FY 2009:

- NASA Industrial Base: which will assess the health and competitiveness of NASA suppliers for Human Space Flight Missions and the impact of the Space

Shuttle and Constellation Programs' terminations.

- Healthcare and Public Health Sector: which will determine foreign sourcing and critical dependencies that could have a negative impact on the delivery of effective medical services in the United States during emergency situations.

- Telecommunications Sector: which will look at current and future projected use of foreign information and communication technology in this critical domestic sector.

BIS initiated the following three assessments in FY 2010:

- Dams Sector: which will determine foreign sourcing and critical dependencies that could limit the ability of this important sector to support U.S. power generation needs.

- Cartridge and Propellant Actuated Device Industry: which will assess the current and long-term health and economic competitiveness of the industry and develop recommendations for the Navy to ensure the continued ability of the industry to support defense missions and programs.

- High-Voltage Transformers Sector: which will determine foreign sourcing and critical dependencies that could limit the ability of this important sector to support U.S. economic and national security needs.

BIS also completed its fourteenth congressionally mandated report on the impact of offsets in defense trade. On December 23, 2009, BIS published a final rule to update its offset reporting requirement regulation in order to enhance the assessment of the economic effects of offsets. These changes will be incorporated beginning with the fifteenth report to Congress.

In FY 2010, BIS reviewed 73 proposed transfers of excess defense equipment to foreign governments through the Department of Defense's Excess Defense Articles program and provided the Department of Defense with determinations as to whether these transfers would interfere with the ongoing sales or marketing activities of U.S. industry. BIS also reviewed 110 proposed international armament cooperative agreements and provided the Department of Defense with comments on these agreements' commercial implications and potential effects on the international competitive position of the U.S. defense industrial and technological base.

During FY 2010, BIS continued to co-chair the interagency National Defense Stockpile Market Impact Committee (MIC) with the Department of State's Office of International Energy and Commodity Policy. The MIC advises the Defense National Stockpile Center on whether its proposed plans to sell portions of the remaining material held in the stockpile, no longer needed to support national defense purposes, would cause an undue disruption of the usual markets of producers, processors, and consumers of such materials.

Supporting the U.S. Defense Industry's International Competitiveness

As part of BIS's ongoing efforts to monitor policies of foreign partners affecting the U.S. defense industrial base, BIS participated in an interagency delegation to

Brussels in January 2010 that met with European Union and European Defense Agency (EDA) officials to discuss the European Union's defense procurement directive and the EDA's "Code of Conduct" on offsets. These discussions helped to increase understanding of the directive and the Code, assess their impact on the U.S. defense industrial base, and continue a dialogue with European Union and EDA officials critical to the development of the directive and the Code. BIS also hosted a meeting with interagency partners and EDA officials in Washington, DC in July 2010 to continue the dialogue on offset-related issues.

In FY 2010, BIS continued to administer the Department of Commerce's North Atlantic Treaty Organization (NATO) Security Investment Program (NSIP), a certification requirement for U.S. companies interested in competing to supply goods and services in NSIP-funded procurements.

During FY 2010, BIS vetted and approved 146 U.S. firms that were interested in participating in NATO procurement competitions.

Appendix A: Regulatory Changes in Fiscal Year 2010

BIS published 35 notices, rules or other items in the Federal Register during FY 2010, including the following:

Entity List

In FY 2010, BIS implemented the decisions of the End-User Review Committee (the interagency group that administers the Entity List) and published five Entity List-related rules. Within the five rules, 49 persons were added to the Entity List, all on the basis that were engaging in activities contrary to U.S. national security or foreign policy interests. Additionally, three persons were removed from the Entity List, two in response to their appeal of their status and the third as a result of the ERC's annual review of the Entity List. Finally, three amendments were made to existing entries on the List, two as a result of the annual review and one on an ad-hoc basis."

Encryption

On June 25, 2010, BIS published a rule revising controls on encryption items, including eligibility requirements for use of a license exception and requirements to qualify for mass market treatment.

Systematic Review of the Commerce Control List

BIS published the third in a series of three rules implementing changes as a result of a systematic review of the Commerce Control List. This rule, published on June 28, 2010, established more focused and rationalized controls in many entries and made conforming changes.

Country Policy

BIS published a rule on December 23, 2009, that revised license requirements for certain exports and reexports to Albania and Croatia based on their accession to formal membership in the North Atlantic Treaty Organization (NATO).

On July 30, 2010, BIS broadened the scope of countries for which a license is required to send certain direct products of U.S. technology.

Wassenaar Arrangement

On December 11, 2009, BIS published a rule amending the Commerce Control List to implement the agreement reached at the December 2008 plenary meeting of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual Use Goods and Technologies. This rule revised control list entries in most categories. On September 7, 2010, BIS published the rule resulting from the 2009 Wassenaar plenary.

Chemical and Biological Weapons

On March 23, 2010, BIS implemented changes to the Commerce Control List resulting from the 2009 Australia Group plenary meeting and an inter-sessional decision.

On November 10, 2009, BIS published a Notice of Inquiry seeking public comments on the impact that implementation of the Chemical Weapons Convention has had on commercial activities involving “Schedule 1” chemicals during calendar year 2009. The purpose of the notice was to collect information from industry to comply with Condition 9 of Senate Resolution 75, in which the Senate gave its advice and consent to the ratification of the Chemical Weapons Convention.

On February 22, 2010, BIS amended the list of select agents on the Commerce Control List.

Missile Technology

On November 9, 2009, BIS revised the Export Administration Regulations to reflect changes made in the 2008 plenary of the Missile Technology Control Regime. On April 20, 2010, BIS published revisions based on the 2009 MTCR plenary.

Intra-Governmental Efforts

On February 9, 2010, BIS, working with NASA and other agencies, published a rule offering greater flexibility for shipments of items destined to the International Space Station through expanded use of an existing license exception.

On March 25, 2010, BIS, working with the Department of Homeland Security and other agencies, published a rule adding controls on certain concealed object detection devices. The rule also imposed licensing policies that would allow exports to certain cooperating countries under certain conditions.

Crime Control

On July 15, 2010, BIS published a final rule revising the Commerce Control List to update and clarify crime control license requirements.

Electronic Documents

On April 5, 2010, BIS published a rule eliminating the paper versions of most export and similar documents.

Offset Report Regulation

On December 23, 2009, BIS published a rule updating its Offset Reporting Regulation (15 CFR 701), which lists the information required for companies reporting offset information. The amendments to the regulation clarify the information BIS is seeking to receive from industry and requires more precise information on the industry sectors in which offset activity occurs.

Appendix B: Bureau of Industry and Security Organizational Structure and Administrative Information

Performance Based Programs

For budget and performance integration, BIS has continued to develop performance-based budgets based on OMB guidance. BIS budget submissions continue to be directly tied to the Bureau's performance goals and measures, and BIS will continue to develop performance-based budgets that display the cost of achieving its performance goals. Budget requests are integrated with performance goals and describe the anticipated effects of resource requirements on performance.

In the area of Strategic Management the Bureau incorporated a balanced score card approach to management. This approach focuses on themes that reflect the priorities of the Department and BIS. BIS contributes to the Department's programmatic theme of Economic Growth and the three management themes of Customer Service, Organizational Excellence, and Workforce Excellence.

The major E-Gov initiative accomplishment for BIS in 2010 was continued success in its program to replace the legacy ex*port license* processing system, while simultaneously meeting new information technology (IT) security challenges, including particularly stringent requirements for export control data.

The Export Control Automated Support System Redesign (ECASS-R) program is the multi-year effort to replace the legacy BIS export license processing system. The Export Control Automated Support System Redesign project has completed the first two Stages as planned and deployed four major components to production:

1. Simplified Network Application Process Redesign (SNAP-R) which allows for the electronic submission of license applications and supporting documentation.

2. Investigative Management System Redesign (IMS-R) a case management system used by the Export Enforcement Agents, and

3. BIS Export Control Cyber Infrastructure (BECCI-2) a secure application platform which meets NIST and FISMA IT security requirements for FIPS 199 "high impact" data systems.

4. Commodity Classification with Encryption Review (ECR) a platform that allows the Licensing officer to review and classify actions for the Commodity Classification and Encryption Review process.

The third stage of the Export Control Automated Support System Redesign is in development and when fully deployed will enable BIS to retire the legacy BIS export license processing system. The fully deployed system will provide BIS business users a modernized export licensing system while protecting mission critical export control system applications and data from foreign intrusions. The project is on schedule to replace the Legacy ECASS system by the end of fiscal year 2012.

Highlights of Performance based accomplishments in FY 2010 include:

1. The deployment of improvements to the IMS-R to production in the third quarter of FY 2010.

2. The deployment of improvements to the SNAP-R to production in the thrid quarter of FY 2010,

3. The deployment of the Commodity Classification with Encryption Review platform.

4. Mainframe consolidation. The system migration from Springfield Virginia to an existing federal facility at the National Institute of health.

In addition, BIS supported the President's Open Government Initiative by submitting two high value datasets for publication through Data.gov which is one of the Administration's flagship initiatives designed to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government. BIS also continued to meet its enterprise architecture, IT security, and Web public data dissemination requirements.

Cooperation with Auditing Agencies and Responses to Requests from the Public and the Courts

BIS continues to work with the Government Accountability Office (GAO) and the Department of Commerce's Office of Inspector General (OIG) on their studies of BIS programs and control systems, as well as to address all audit findings and recommendations. During FY 2010, BIS submitted periodic reports to the office of the Chief Financial Officer and Assistant Secretary for Administration on the status of BIS corrective actions relating to all open GAO and OIG recommendations. BIS management also monitored the progress of corrective actions undertaken on the basis of these reports.

Five GAO studies addressing BIS programs and activities were completed in FY 2010: (1) Export Controls Comparative Analysis (job code 120791); (2) Reliability of Defense Weapon System Components (job code 120802); (3) Review of the U.S. Embargo Against Cuba (job code 320648); (4) Iran Sanctions (job code 320673); and (5) List of Sensitive Nuclear Facilities (job code 361100).

At the end of the fiscal year, four GAO studies addressing BIS programs and activities were pending final reports: (1) Nuclear Cooperation Agreements with Foreign Countries ("123 agreements") (job code 361111); (2) Current Deemed Exports Rule (job code 320704); (3) Export Control Reform (job code 120922); .and (4) National Security Collaboration (job code 450768).

During FY 2010, the OIG completed one review addressing the Federal Information Security Management Act (FISMA) 2010 - evaluating the "Investigative Management System Redesign (IMS-R)" (BIS022); and has two open reviews pending final report, (1) FY 2009 FISMA Assessment of BIS IT Infrastructure (BI) (BIS002) OSE-19574, and (2) FY 2009 FISMA Assessment of Bureau of Export Control Cyber Infrastructure, Version 2 (BECCI-2), OSE-19575.

The various reviews and evaluations conducted during FY 2010 identified opportunities for improvement. In response and as a result of GAO's and OIG's efforts, BIS continues to improve its policies and internal controls in licensing and enforcement programs.

Public Requests for Information and Court-Ordered Searches

BIS processed 83 Freedom of Information Act (FOIA) requests relating to export licensing and enforcement as well as other types of management information.

IT Security

BIS strives toward full compliance with federal and Department of Commerce information technology security requirements. One BIS system, Export Control Automated Support System Redesign (ECASS-R), was the subject of the Department of Commerce Office of the Inspector General (OIG) reviews. The various reviews and evaluations conducted during FY 2010 identified opportunities for improvement. In response and as a result of the OIG's efforts, BIS continues to improve its information technology security policies and internal controls.

Highlights for FY 2010 include: (1) Information technology security personnel successfully completed the Cyber Security Development Program (CSDP). This program was organized by the Department to improve the cyber-security work staff; (2) The BIS IT Security Program Policy is currently being updated to include new requirements from the Department of Commerce, findings from the OIG review and new NIST Special Publication 800-53, Revision 3 requirements; (3) Compliance with annual information technology security awareness training requirements; (4) BIS transitioned its data centers in FY 2010.; (5) BIS is a participant in the Department of Commerce Trusted Internet Connections (TIC) working group and has responded to all Department TIC data calls; and (6) BIS is on schedule to purchase Managed Internet Protocol Services (MTIPS) through the Networx contract.

Appendix C: Summaries and Tables of Closed Export Enforcement Cases and Criminal Cases

Table 1
Criminal Case Convictions Fiscal Year 2010

Sentencing Date	*Defendant*	*Criminal Charges*	*Criminal Sanctions*	*Case Details*
10/08/09	Ping Cheng	One count of conspiracy to violate the Export Administration Regulations in violation of 50 USC 1705	Two years probation	Export of carbon-fiber material to the People's Republic of China
10/08/09	Kok Tong Lim	One count of conspiracy to violate the Export Administration Regulations in violation of 50 USC 1705	One year prison (time served), and two years supervised release	Export of carbon-fiber material to the People's Republic of China
10/08/09	Jian Wei Ding	One count of conspiracy to violate the Export Administration Regulations in violation of 50 USC 1705	46 months prison, two years supervised release, and forfeiture of materials valued at $300,000	Export of carbon-fiber material to the People's Republic of China
10/19/09	Rex Wen-Wei Liang	One count of making material false statements in violation of 18 USC 1001	Three years probation, and a $12,000 criminal fine	Export of items classified as EAR99 to Iran via Taiwan
11/05/09	Laura Wang-Woodford	One count of conspiracy to violate export controls in violation of 18 USC 371	46 months prison, three years supervised release, a $12,500 criminal fine, and forfeiture of $500,000	Export of aircraft parts to Iran via Singapore and Malaysia
12/09/09	Policarpo Coronado Gamboa	One count of conspiracy to traffic in counterfeit goods in violation of 18 USC 371	Five years probation, 1,500 hours community service, and $13,500 in restitution	Export of electronic components to Venezuela, People's Republic of China and Mexico

Sentencing Date	***Defendant***	***Criminal Charges***	***Criminal Sanctions***	***Case Details***
12/14/09	Alex Dave	Three counts of violating the International Emergency Economic Powers Act in violation of 50 USC 1705; two counts of money laundering in violation of 18 USC 1956; three counts of smuggling goods from the U.S. in violation of 18 USC 554; two counts of unlawful exporting of defense articles; and four counts of conspiracy in violation of 18 USC 371	60 months prison, and three years supervised release	Export of gyro chip sensors to Iran
02/03/10	Yaming Qi Hanson	One count of making a material false statement in violation of 18 USC 1001	105 days prison (time served), one year supervised release, and a $250 criminal fine	Export of Unmanned Aerial Vehicle autopilots to the People's Republic of China
02/03/10	Harold Hanson	One count of making a material false statement in violation of 18 USC 1001	Two years probation, a $250 criminal fine, and 120 hours of community service	Export of Unmanned Aerial Vehicle autopilots to the People's Republic of China
02/09/10	Sirchie Acquisition Company, Inc.	Ten counts of aiding and abetting the violation of a denial order in violation of 50 USC 1705 and 18 USC 2 [1]	$10,100,000 criminal fine	Violation of a denial order
03/09/10	Uni Arab Engineering and Oil Field Services	One count of violations of the International Emergency Economic Powers Act in violation of 50 USC 1705	One year probation, and a $60,000 criminal fine	Export of oil field equipment to Libya

[1] Sirchie Acquisition Company, Inc. entered into a Deferred Prosecution Agreement with the Government and accepted responsibility for the charges noted.

Sentencing Date	*Defendant*	*Criminal Charges*	*Criminal Sanctions*	*Case Details*
03/18/10	Michael David Mitchell	Two counts of obstruction of justice in violation of 18 USC 1512; and one count of theft of trade secrets in violation of 18 USC 1832	18 months prison, three years supervised release, and $187,895 in restitution	Export of stolen Kevlar technology to Korea
03/22/10	David Velasco	One count of making false statements in violation of 18 USC 1001	Five years probation, three months home confinement, a $1,200 criminal fine, and 100 hours of community service	False statement to a federal agent related to re-routed shipment of car wax destined to Iran
04/05/10	Evan Zhang	One count of exporting national security controlled items without a license in violation of 50 USC 1705	Six months prison, six months home confinement, three years probation, a $20,000 criminal fine, and 1,500 hours of community service	Export of thermal imaging cameras to the People’s Republic of China
05/11/10	Balli Aviation Ltd.	One count of conspiracy to unlawfully export in violation of 50 USC 1705; and one count of willful violation of a denial order in violation of 50 USC 1705	$2,000,000 criminal fine, and five years probation	Export of Boeing 747 aircraft to Iran
05/17/10	Michael Ming Zhang	One count of exporting national security controlled items without a license in violation of 50 USC 1705; and one count of conspiracy to traffic counterfeit goods in violation of 18 USC 371	18 months prison, three years supervised release, and $31,523 in restitution	Export of items controlled under 3A001 to the People’s Republic of China

Sentencing Date	*Defendant*	*Criminal Charges*	*Criminal Sanctions*	*Case Details*
07/20/10	Baktash Fattahi	One count of conspiracy to violate the International Emergency Economic Powers Act, Iranian Transaction Regulations and the Arms Export Control Act in violation of 18 USC 371	35 months prison, and three years supervised release	Export of aircraft parts to Iran
07/22/10	Bo Li, a.k.a. Eric Lee	One count of making false statements in violation of 18 USC 1001	11 months prison (time served), three years supervised release, and a $1,000 criminal fine	Export of electronics equipment to the People's Republic of China via Hong Kong
07/29/10	Mark Komoroski	One count of conspiracy to export defense articles from the United States in violation of 18 USC 371	32 months prison, two years supervised release, and a $10,000 criminal fine	Export of riflescopes to Russia, Kuwait, Germany and Japan
08/27/10	Yi-Lan Chen	One count of conspiracy to violate the International Emergency Economic Powers Act in violation of 50 USC 1705; and two counts of attempted violations of the International Emergency Economic Powers Act in violation of 18 USC 1705	42 months prison, and two years supervised release	Export of detonators to Iran via Hong Kong and Taiwan
08/27/10	Landstar Tech Company Ltd.	One count of conspiracy to violate the International Emergency Economic Powers Act in violation of 50 USC 1705	One year probation	Export of detonators to Iran via Hong Kong and Taiwan

Table 2
Department of Commerce Export Enforcement Cases Fiscal Year 2010

Order Date	*Respondent*	*Charges*	*Sections Violated [number of charges]*	*Result*
10/01/09	Novamet Specialty Products Corporation	Exported nickel powder products to Taiwan, Singapore, India, Thailand, Dominican Republic, Mexico, and Israel without the required licenses and with knowledge that violations would occur.	764.2(a) [28] 764.2(e) [4]	Settlement Agreement - civil penalty of $700,000; perform audit of internal export control compliance program within 12 months
10/15/09	Utech Products, Inc.	Exported oscilloscopes to Pakistan without the required licenses.	764.2(a) [3]	Settlement Agreement - civil penalty of $125,000; perform audit of internal export control compliance program within 12 months
10/29/09	FSI International, Inc.	Exported valves and pumps to China, Israel, Malaysia and Singapore without the required licenses.	764.2(a) [66]	Settlement Agreement - civil penalty of $450,000, of which $400,000 is suspended
11/02/09	Orion Air, S.L. and Syrian Pearl Airlines	TDO issued based on showing of imminent violation in matter involving the reexport and attempted reexport to Syria of BAE 146-300 aircraft containing U.S.-origin engines and other U.S.-origin parts, without the U.S. Government authorization required by General Order No. 2.		TDO denying export privileges renewed for 180 days

11/20/09	Corezing International, Kow Seng Lim, Zhenyong Zhou, Jie Luo, Insight Electronics Pte Ltd., Action Global Co., Limited	TDO issued based on showing of imminent violation in matter involving the procurement of U.S.-origin semiconductor power amplifiers, digital signal processors, and related components for export from the United States to the People's Republic of China, via transshipment through Singapore and Hong Kong, without the licenses required under the Regulations.		TDO denying export privileges issued for 180 days
12/09/09	Keithley Instruments International Corp.	Took actions to evade the Regulations.	764.2(h) [1]	Settlement Agreement - civil penalty of $125,000
12/09/09	Tara Technologies Corporation	Exported edge-welded metal bellows to the People's Republic of China without the required licenses.	764.2(a) [3]	Settlement Agreement - civil penalty of $27,000
12/22/09	Thralow, Inc.	Exported rifle scopes to Angola, Armenia, Austria, Croatia, Finland, Hong Kong, Indonesia, Ireland, Israel, the Republic of Korea, Kuwait, Kyrgyzstan, Lebanon, Macau, Mauritius, Monaco, Mongolia, Namibia, Oman, Pakistan, the Philippines, Qatar, Russia, Singapore, South Africa, Sweden, Switzerland, the Republic of Taiwan, Tanzania, Ukraine, and the U.A.E., as well as Argentina, Brazil, Canada, Chile, Mexico, and Trinidad & Tobago, without the required licenses.	764.2(a) [445]	Settlement Agreement - civil penalty of $110,000

12/29/09	Ning Wen	Conspired and caused exports of electronic components to the People's Republic of China without the required licenses and with knowledge that violations would occur; took actions to evade the Regulations.	764.2(d) [1] 764.2(b) [55] 764.2(e) [55] 764.2(h)[13]	Settlement Agreement (after filing of charging letter) - civil penalty of $1,364,000, all of which is suspended; export privileges denied for 15 years
12/29/09	Hailin Lin	Conspired and caused exports of electronic components to the People's Republic of China without the required licenses and with knowledge that violations would occur; took actions to evade the Regulations.	764.2(d) [1] 764.2(b) [55] 764.2(e) [55] 764.2(h)[13]	Settlement Agreement (after filing of charging letter) - civil penalty of $1,364,000, all of which is suspended; export privileges denied for 15 years
01/28/10	Robert E. Quinn	Made false statements to a BIS Special Agent in the course of an investigation.	764.2(g) [1]	Settlement Agreement – civil penalty of $11,000, all of which is suspended
02/05/10	Balli Aviation Ltd. Balli Group PLC	Conspired with an Iranian airline and others, known and unknown, to export or reexport, or attempt to export or reexport, certain U.S.-origin aircraft to Iran for the use of the Iranian airline; acted contrary to the terms of a Temporary Denial Order.	764.2(d) [1] 764.2(k) [1]	Settlement Agreement - joint BIS/OFAC agreement with the respondent - civil penalty of $15,000,000, of which $2,000,000 is suspended; export privileges denied for five years, all of which is suspended; conduct external audits concerning exports and reexports to Iran
02/12/10	Sirchie Acquisition Company, LLC	Aided and abetted violations of a denial order under the Regulations.	764.2(b) [10]	Settlement Agreement – civil penalty of $2,500,000; suspended five-year denial of export privileges

02/18/10	Afshin Rezaei	Underlying criminal conviction for knowingly and willfully exporting and causing to be exported laptop computers from the United States to Iran without having obtained the required authorization from the U.S. Department of the Treasury.	Sections 1702 and 1705(b) of IEEPA	Export privileges denied until May 15, 2018, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)
02/26/10	Mohamad M. Elkateb	Conspired to export of U.S.-origin lab equipment from the United States to Syria, via Indonesia, without the required U.S. Government authorization.	764.2(d) [1]	Settlement Agreement – export privileges denied for one year
03/02/10	Aviation Services International, B.V.	Conspired to export U.S.-origin items, including aircraft parts, electronic components, and polymide film, on multiple occasions from the United States to Iran, via the Netherlands, Cyprus and the U.A.E., without the required U.S. Government authorization	764.2(d)	Settlement Agreement - joint BIS/OFAC agreement with the respondent – civil penalty of $250,000, all of which is suspended; export privileges denied for seven years
03/02/10	Robert Kraaipoel	Conspired to export U.S.-origin items, including aircraft parts, electronic components, and polymide film, on multiple occasions from the United States to Iran, via the Netherlands, Cyprus and the U.A.E., without the required U.S. Government authorization.	764.2(d)	Settlement Agreement - civil penalty of $250,000, all of which is suspended; export privileges denied for seven years

03/02/10	Niels Kraaipoel	Conspired to export U.S.-origin items, including aircraft parts, electronic components, and polymide film, on multiple occasions from the United States to Iran, via the Netherlands, Cyprus and the U.A.E., without the required U.S. Government authorization.	764.2(d)	Settlement Agreement - civil penalty of $250,000, all of which is suspended; export privileges denied for three years, all of which is suspended
03/09/10	Mahan Airways	TDO originally issued based on showing of imminent violations in matter involving the re-export of three U.S.-origin aircraft to Iran and the intended re-export of three additional U.S. origin-aircraft, false statements to BIS regarding the ultimate destination and end-user of the aircraft, and a failure to comply with a BIS order to return the three additional aircraft to the U.S.		TDO denying export privileges renewed for 180 days as to Mahan Airways
03/18/10	Telogy International NV	Reexported oscilloscopes from Belgium to Israel, and a spectrum analyzer from Belgium to South Africa, without the required licenses.	764.2(a) [23]	Settlement Agreement – civil penalty of $437,000, of which $362,000 suspended
03/18/10	G & W International Forwarders	Aided and abetted an act prohibited by the Regulations by arranging for the export of a Stack Sizer Screening Machine from the United States to Indian Rare Earths, Ltd., an entity in India that is listed on BIS's Entity List.	764.2(b) [1]	Settlement Agreement –civil penalty of $20,000; perform audit of internal export control compliance program within 12 months

03/25/10	Aqua-Loop Cooling Towers, Co.	Conspired to export filament winding machines and hog hair filter media, and caused, aided or abetted the export of hog hair filter media, to Iran, via the U.A.E., without the required licenses and with knowledge that violations of the Regulations would occur.	764.2(d) [1] 764.2(b) [2] 764.2(e) [2]	Settlement Agreement (after filing of charging letter) – civil penalty of $100,000, all of which is suspended; export privileges denied for 10 years
03/25/10	Bob Rahimzadeh	Caused, aided or abetted the export of hog hair filter media to Iran, via the U.A.E., without the required licenses and with knowledge that violations of the Regulations would occur.	764.2(b) [2] 764.2(e) [2]	Settlement Agreement (after filing of charging letter) – civil penalty of $100,000, all of which is suspended; export privileges denied for 10 years
03/26/10	DeepSouth Hardware Solutions, Inc.	Exported parts and accessories for automatic regulating and controlling instruments to Pakistan Atomic Energy Commission's Chashma Nuclear Power Plant, an entity on BIS's Entity List, without the required license.	764.2(a) [1]	Settlement Agreement – civil penalty of $32,000
04/29/10	Star CNC Machine Tool Corp.	Exported national security controlled Swiss lathe machines to Colombia, Brazil and Costa Rica without the required licenses.	764.2(a) [4]	Settlement Agreement – civil penalty of $16,000

04/29/10	Orion Air, S.L. Syrian Pearl Airlines	TDO issued based on showing of imminent violation in matter involving the reexport and attempted reexport to Syria of BAE 146-300 aircraft containing U.S.-origin engines and other U.S.-origin parts, without the U.S. Government authorization required by General Order No. 2.		TDO denying export privileges renewed for 180 days
05/05/10	GE Healthcare Bioscience BioProcess Corp.	Exported bioreactor kits controlled on chemical/biological grounds to the People's Republic of China, Singapore, Taiwan, Mexico and India, and reexported a bioreactor kit to Israel, without the required licenses.	764.2(a) [9]	Settlement Agreement – civil penalty of $126,000
05/05/10	Telogy LLC	Took action to evade the Regulations in connection with the unlicensed export to the People's Republic of China of a spectrum analyzer controlled for national security reasons, and in connection with the unlicensed export of oscilloscopes controlled for nuclear non-proliferation reasons to India and Israel.	764.2(h) [3]	Settlement Agreement – civil penalty of $76,000
05/17/10	Wesco Industrial Products, Inc.	Exported relief valves controlled on chemical/biological grounds to Hong Kong, Singapore and Mexico without the required licenses.	764.2(a) [3]	Settlement Agreement – civil penalty of $50,000

05/28/10	Shu Quan-Sheng	Underlying criminal conviction included illegally exporting space launch technical data and defense services to the People's Republic of China.	Section 38 of the AECA	Export privileges denied until April 10, 2014, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)
05/28/10	Joseph Piquet	Underlying criminal conviction based on his role in a conspiracy to purchase high-tech military and dual-use electronic components from a domestic corporation and to then export the items to Hong Kong and the People's Republic of China without first obtaining the required export licenses.	Section 1705(a) of IEEPA and Section 38 of the AECA	Export privileges denied until May 14, 2019, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)
05/28/10	Aaron Robert Henderson and related person Valhalla Tactical Supply	Underlying criminal conviction for knowingly and willfully exporting and causing to be exported an EOTech sighting device from the United States to Taiwan without having first obtained a validated export license from the Department of Commerce.	Section 1705 of IEEPA	Export privileges denied until September 18, 2019, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)
05/28/10	Green Supply, Inc. and related persons Robert Leland Green and William Robert Green	Underlying criminal conviction for knowingly and willfully exporting firearm scopes and sights, night vision goggles, global positioning systems, and other items without the required licenses, in violation of IEEPA, and for knowingly and willfully exporting firearm magazines and clips without the required licenses, in violation of the AECA.	Section 1705 of IEEPA and Section 38 of AECA	Export privileges denied until January 22, 2013, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)

06/21/10	Oyster Bay Pump Works, Inc.	Exported a microplate processing conveyor system to Cuba via Germany without the required license, and sold power supply units for export to Cuba via Germany with knowledge that violations would occur. Sold microplate conveyor and test tube conveyor systems for export to Iran via the U.A.E. with knowledge that violations would occur. Destroyed documents and altered records with intent to evade the Regulations.	764.2(a) [1] 764.2(e) [3] 764.2(h) [2]	Settlement Agreement – civil penalty of $300,000, all of which is suspended; export privileges denied for three years, all of which is suspended; perform audit of internal export control compliance program within 12 months
06/21/10	Patrick Gaillard	Caused, aided or abetted the export of a microplate processing conveyor system to Cuba via Germany without the required license, and sold power supply units for export to Cuba via Germany with knowledge that violations would occur. Sold microplate conveyor and test tube conveyor systems for export to Iran via the U.A.E. with knowledge that violations would occur. Destroyed documents and altered records with intent to evade the Regulations.	764.2(b) [1] 764.2(e) [3] 764.2(h) [2]	Settlement Agreement – civil penalty of $300,000, of which $275,000 is suspended; export privileges denied for three years, all of which is suspended
06/30/10	MTI Corporation	Attempted to export a bench-top muffle furnace to Solid State Physics Laboratory, an entity in India that is listed on BIS's Entity List, without the required license.	764.2(c) [1]	Settlement Agreement – civil penalty of $20,000

07/22/10	3M Imtec Corporation	Sold, forwarded and otherwise serviced dental equipment exported to Iran via the U.A.E. with knowledge that violations of the Regulations would occur.	764.2(e) [8]	Settlement Agreement - joint BIS/OFAC agreement with the respondent - civil penalty of $125,000
07/22/10	Tyco Valves & Controls LP	Exported butterfly valves, ball valves and valve assemblies to the People's Republic of China, U.A.E., Jordan, Brazil, Mexico, Chile, Israel, India, Singapore, and El Salvador without the required licenses.	764.2(a) [26]	Settlement Agreement – civil penalty of $218,000
07/22/10	Security 20/20, Inc.	Stored, sold or transported a handheld explosive detection device that was to be exported to India, with knowledge that a violation of the Regulations would occur.	764.2(e) [1]	Settlement Agreement – civil penalty of $50,000, of which $35,000 is suspended
07/28/10	Pulsafeeder, Inc.	Exported various pumps to Russia, People's Republic of China and Brazil without the required licenses.	764.2(a) [13]	Settlement Agreement – civil penalty of $80,000
07/28/10	Reliance Steel & Aluminum Company	Exported aluminum materials to Malaysia, Taiwan and Hong Kong without the required licenses.	764.2(a) [3]	Settlement Agreement – civil penalty of $29,000
07/28/10	Service Steel Aerospace Corp.	Exported titanium materials to Israel and Mexico without the required licenses.	764.2(a) [3]	Settlement Agreement – civil penalty of $12,000
07/28/10	Yarde Metals, Inc.	Exported aluminum materials to Singapore and Israel without the required licenses.	764.2(a) [3]	Settlement Agreement – civil penalty of $12,000

09/03/10	Mahan Airways Gatewick LLC	TDO originally issued based on showing of imminent violations in matter involving the re-export of three U.S.-origin aircraft to Iran and the intended re-export of three additional U.S. origin-aircraft, false statements to BIS regarding the ultimate destination and end user of the aircraft, and a failure to comply with a BIS order to return the three additional aircraft to the U.S.		TDO denying export privileges renewed for 180 days as to Mahan Airways and added Gatewick LLC as a related person
09/07/10	Rigel Optics, Inc. and related person Donald Wayne Hatch	Underlying criminal conviction for knowingly and wilfully exporting and causing to be exported from the United States to Italy night vision goggles, which were designated as a defense article on the USML, without having first obtained from the Department of State a license for such export or written authorization for such export.	Section 38 of the AECA	Export privileges denied until May 12, 2019, pursuant to Section 766.25 of the EAR (see also Section 11(h) of the EAA)
09/27/10	New England Trading Global Inc.	Exported sodium cyanide and potassium cyanide to Israel without the required licenses.	764.2(a) [13]	Settlement Agreement – civil penalty of $365,000, all of which is suspended

09/29/10	International Photo Equipment Company	Sold or stored, in whole or in part, photography equipment exported or to be exported from the United States through Lebanon to Syria with knowledge that a violation of the Regulations would occur.	764.2(e) [2]	Settlement Agreement – civil penalty of $45,000, all of which is suspended
09/29/10	Adam Karesh	Sold or stored, in whole or in part, photography equipment exported or to be exported from the United States through Lebanon to Syria with knowledge that a violation of the Regulations would occur.	764.2(e) [2]	Settlement Agreement – civil penalty of $45,000, of which $20,000 is suspended
09/30/10	Edco, Inc.	Took actions with the intent to evade the Regulations.	764.2(h) [1]	Settlement Agreement – civil penalty of $52,000, of which $26,000 is suspended
09/30/10	Mark Vorobik	Made a false or misleading statement to the U.S. Government in the course of an investigation.	764.2(g) [1]	Settlement Agreement – civil penalty of $52,000, of which $26,000 is suspended

Table 3
Summary of Antiboycott Cases Closed in Fiscal Year 2010

Company Name & Location	Date Order Signed	Alleged Violations	Settlement Amount
Thermon (UK) Limited (Voluntary Self Disclosure)	8/13/10	2 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$2,000
Thermon Europe, BV (Voluntary Self Disclosure)	8/13/10	1 X 760.2(a) Refusing to do business with a boycotted country or resident of a boycotted country 2 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country* 4 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$18,500
Thermon Far East, Ltd (Voluntary Self Disclosure)	8/13/10	4 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$12,000
MultiCam, Inc.	8/3/10	4 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country* 4 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$28,800
Mashreqbank PSC (Voluntary Self Disclosure)	7/23/10	4 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$12,800
OAC Shipping Company Inc.	7/23/10	2 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$6,600

Company Name & Location	Date Order Signed	Alleged Violations	Settlement Amount
Plane Cargo Inc	6/21/10	1 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$5,200
Messina, Inc.	6/9/10	2 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$10,800
United Source One, Inc.	3/26/10	11 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$19,800
Nectron International	1/27/10	1 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country* 1 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$8,000
Fortessa Inc	1/27/10	1 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country* 1 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$8,000
GM Daewoo Auto & Technology Company (Voluntary Self Disclosure)	1/8/10	59 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$88,500
JP Morgan Chase Bank, NA (Voluntary Self Disclosure)	1/8/10	3 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country*	$19,125

Company Name & Location	Date Order Signed	Alleged Violations	Settlement Amount
York International Corporation (Voluntary Self Disclosure)	11/5/10	6 X 760.2(a) Refusing to do business with a boycotted country or resident of a boycotted country 15 X 760.2(d) *Furnishing information about business relationships with or in a boycotted country* 101 X 760.5 *Failure to report receipt of a boycott request in a in a timely manner*	$140,850
Total			$380,975

Appendix D: Number of Individual Firms, Transactions, Requesting Documents and Restrictive Trade Practices by Firm Type

October 2009 – September 2010
Boycott Requests Reported to the
Office of Antiboycott Compliance, U.S. Department of Commerce

Country	Prohibited Requests	Permissible Boycott-Related Requests	Amended Requests	Exceptions	Totals
Algeria	0	0	0	2	**2**
Bahrain	6	7	1	4	**18**
Iraq	29	1	0	0	**30**
Jordan	0	0	0	0	**0**
Kuwait	9	1	4	10	**24**
Lebanon	2	12	2	2	**18**
Libya	103	8	5	6	**122**
Oman	24	10	3	6	**43**
Qatar	13	21	6	43	**83**
Saudi Arabia	23	24	4	27	**78**
Syria	32	1	0	0	**33**
United Arab Emirates	127	47	14	84	**272**
Yemen	2	1	8	1	**12**
Total Requests from Arab League Members	**370**	**133**	**47**	**185**	**735**
Bangladesh	1	1	4	51	**57**
Iran	0	0	0	4	**4**
Malaysia	6	0	0	49	**55**
Nigeria	0	0	2	1	**3**
Pakistan	3	0	8	45	**56**
Requests from all other Countries	6	9	5	20	**40**
	386	**143**	**66**	**355**	**950**

Prohibited requests describe those requests to take an action that would be prohibited under section 760.2 of the regulations, mainly actions to enforce the secondary and tertiary aspects of the boycott.

Permissible boycott-related requests are for actions that fall outside the prohibitions of the regulations, but nonetheless still require compliance with some level of the boycott.

Amended requests were ones that were prohibited, but were subsequently adjusted and reclassified as permissible or an exception.

Exceptions are requests to take actions that would be prohibited, but for a specific exception in the regulations that allow the action.

Appendix E: Approved Applications for Country Group D:1 and Cuba

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
ALBANIA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$216,500
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	$173
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$1,068,975
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	5	$53,235
5D002	SOFTWARE FOR INFORMATION SECURITY	1	$22,766
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000

TOTAL APPLICATIONS: 7
TOTAL CCL'S: 6
TOTAL DOLLAR VALUE: $1,424,649

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
ARMENIA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$216,500
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	$62,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$1,068,975
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	$234,467
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	$240,000
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	2	$0
5D002	SOFTWARE FOR INFORMATION SECURITY	1	$0
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	$0
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000

TOTAL APPLICATIONS: 8
TOTAL CCL'S: 9
TOTAL DOLLAR VALUE: $1,884,942

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
AZERBAIJAN			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	2	$216,919
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	$4,048
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$1,068,975
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	2	$3,145,000
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$650
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	3	$16,598,545
5D002	SOFTWARE FOR INFORMATION SECURITY	2	$56,132
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$307,899

TOTAL APPLICATIONS: 10
TOTAL CCL'S: 9
TOTAL DOLLAR VALUE: $21,461,168

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE

BELARUS

0A985	DISCHARGE TYPE ARMS	1	$35,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	8	$5,561
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	1	$33,500
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	2	$3,069
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	1	$1
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	1	$200,000
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	1	$1
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	4	$4
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	3	$3
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	3	$3
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	3	$3
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	3	$3
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$20,398
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	3	$3
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	3	$3

TOTAL APPLICATIONS: 17
TOTAL CCL'S: 15
TOTAL DOLLAR VALUE: $297,552

BURMA

1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	2	$54,894

TOTAL APPLICATIONS: 2
TOTAL CCL'S: 1
TOTAL DOLLAR VALUE: $54,894

CAMBODIA

1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	$280,000
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$533,600

TOTAL APPLICATIONS: 2
TOTAL CCL'S: 2
TOTAL DOLLAR VALUE: $813,600

CHINA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	13	$7,766,611
0A918	POWER CONTROL SEARCHLIGHTS AND BAYONETS IN 0A918	2	$11,734
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	8	$224,857
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	23	$2,562,233

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1A002	COMPOSITE STRUCTURES OR LAMINATES	2	$7,750,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	42	$4,876,308
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	4	$1,242,638
1A202	COMPOSITE STRUCTURES, OTHER THAN THOSE CONTROLLED	1	$37,978
1A995	PROTECTIVE AND DETECTION EQUIPMENT	1	$696
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	1	$19,679
1B001	EQUIPMENT FOR PRODUCTION OF FIBERS, PREFORMS OR CO	1	$214,345
1B101	OTHER EQUIPMENT FOR PRODUCTION OF FIBERS/PREFORMS/	1	$243,250
1B117	PRODUCTION EQUIPMENT FOR TESTING OF PROPELLANTS	1	$90,000
1B118	CONTINUOUS MIXERS	1	$265,300
1B119	FLUID ENERGY MILLS	4	$146,367
1C002	METAL ALLOYS, POWDER OR ALLOYED MATERIALS	2	$41,770
1C005	SUPERCONDUCTIVE COMPOSITE CONDUCTORS	1	$283,821
1C006	FLUIDS AND LUBRICATING MATERIALS	9	$8,880
1C007	CERAMIC BASE AND PRECURSOR MATERIALS	6	$173,969
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	49	$101,646,364
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	58	$28,366,260
1C011	METALS AND COMPOUNDS	4	$5,665,003
1C107	GRAPHITE AND CERAMIC MATERIALS	1	$812,000
1C111	PROPELLANTS AND CONSTITUENT CHEMICALS	2	$162,593
1C202	ALUMINUM AND TITANIUM ALLOYS IN THE FORM OF TUBES/	32	$3,990,479
1C210	FIBROUS/FILAMENTARY MATERIALS NOT CONTROLLED BY 1C	9	$41,183,239
1C216	MARAGING STEEL NOT CONTROLLED BY 1C116	1	$1,850,688
1C225	BORON AND BORON COMPOUNDS/MIXTURES AND LOADED MATE	1	$30,000
1C228	MAGNESIUM CONTAINING IMPURITIES OTHER THAN CALCIUM	1	$60
1C229	HIGH PURITY BISMUTH WITH LOW SILVER CONTENT	2	$183
1C230	BERYLLIUM	4	$178,460
1C231	HAFNIUM	16	$891,626
1C233	LITHIUM	3	$38,300
1C234	ZIRCONIUM, WITH A HAFNIUM CONTENT	6	$3,809,848
1C238	CHLORINE TRIFLUORIDE	1	$2,003,640
1C240	NICKEL POWDER OR POROUS NICKEL METAL	1	$7,000,000
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	28	$18,510,753
1C351	HUMAN PATHOGENS, ZOONOSES, AND TOXINS	81	$27,111
1C352	ANIMAL PATHOGENS	3	$70,355
1C353	GENETICALLY MODIFIED MICROORGANISMS	1	$4
1D001	SOFTWARE UTILIZED FOR DEVELOPMENT/USE OF EQUIPMENT	1	$0
1D002	SOFTWARE UTILIZED FOR DEVELOPMENT OF ORGANIC MATRI	2	$2
1D003	SOFTWARE DESIGNED FOR EQPT CONTROLLED UNDER 1A004	1	$10
1D101	SOFTWARE USED FOR ITEMS CONTROLLED BY 1A/1B/1C MIS	1	$10,000
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	17	$70,530,215
1E002	OTHER TECHNOLOGY	3	$3
1E101	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A10	1	$1
1E201	TECHNOLOGY FOR USE OF 1A002,1A202,1A225 TO 1B225	2	$101
1E350	TECHNOLOGY FOR USE OF 1C350 CHEMICALS	3	$900,000
1E351	TECHNOLOGY FOR USE OF MICROBIOLOGICAL MATERIALS	3	$0
2A226	VALVES NOT CONTROLLED BY 0B001	2	$28,146
2A292	PIPING/FITTINGS/VALVES MADE/LINED WITH NAMED ALLOY	1	$0
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	43	$19,370,225
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	47	$36,602,397
2B005	PROCESSING EQUIPMENTOF INORGANIC OVERLAYS/COATINGS	4	$16,749,889
2B006	DIMENSIONAL INSPECTION/MEASURING SYSTEMS OR EQUIPM	24	$1,202,159
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	6	$226,500
2B009	PRINTED CIRCUIT BOARDS/ROTARY TABLES FOR TOOLS IN	3	$4,512,500

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
2B201	MACHINE TOOLS FOR REMOVING OR CUTTING METALS	6	$871,023
2B226	VACUUM AND CONTROLLED ENVIRONMENT INDUCTION FURNAC	6	$9,195,878
2B230	PRESSURE TRANSDUCERS	131	$13,418,845
2B231	VACUUM PUMPS	20	$847,168
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	307	$37,322,728
2B351	TOXIC GAS MONITORING SYSTEMS & DEDICATED DETECTORS	2	$58,369
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	58	$4,277,359
2B991	NUMERICAL CONTROL UNITS FOR MACHINE TOOLS	1	$290,792
2B996	DIMENSIONAL INSPECTION OR MEASURING SYSTEMS/EQUIP	1	$550
2D001	SOFTWARE FOR EQUIPMENT IN CATEGORY 2A/2B	1	$0
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	11	$192,956
2D983	EQUIPMENT CONTROLLED BY 2A983	3	$571,218
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	2	$2
2E002	TECHNOLOGY SUPPORTING EQUIPMENT/PRODUCTION IN 2A/2	5	$3
2E003	OTHER TECHNOLOGY	5	$6
2E201	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	3	$31,520
2E290	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	1	$1
2E301	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2B	3	$1
2E983	SOFTWARE CONTROLLED BY 2D983	8	$2,070
3A001	ELECTRONIC DEVICES/COMPONENTS	110	$2,046,156,232
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	49	$3,430,014
3A225	INVERTERS/CONVERTERS/FREQUENCY CHANGERS/GENERATORS	10	$180,495
3A227	HIGH VOLTAGE D-C POWER SUPPLIES	1	$85,000
3A230	HIGH SPEED PULSE GENERATORS	1	$22,095
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	$6,750,000
3A233	MASS SPECTROMETERS	138	$20,190,863
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	$232,732
3A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	1	$15,097
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	90	$2,613,786,749
3B992	EQUIPMENT FOR THE INSPECTION/TESTING OF COMPONENTS	1	$69,300
3C001	HETERO-EPITAXIAL MATERIALS	1	$150,000
3C002	RESIST MATERIALS	6	$2,693,813
3C003	ORGANO-INORGANIC COMPOUNDS DESCRIBED IN THIS ENTRY	9	$40,625,225
3C004	HYDRIDES OF PHOSPHORUS, ARSENIC, OR ANTIMONY	33	$45,981,456
3C005	SILICON CARBIDE WAFERS	4	$322,850
3C006	SUBSTRATES SPECIFIED IN 3C005	1	$785
3D001	SOFTWARE FOR DEV OR PROD OF EQUIP CERTAIN ITEMS IN	7	$25,007
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	23	$23
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	40	$40
3D991	GENERAL PURPOSE ELECTRONIC EQUIPMENT FOR 3A992	1	$9,290
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	266	$9,261,263
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	259	$259
3E003	OTHER "TECHNOLOGY"	21	$21
3E980	TECHNOLOGY FOR ITEMS CONTROLLED BY 3A980 AND 3A981	1	$1
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	4	$965,278
4A004	SYSTOLIC ARRAY/NEURAL/OPTICAL COMPUTERS	2	$1
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	196	$196
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	180	$180
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	205	$12,204
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	48	$28,503,745
5B002	TEST/INSPECTION/PRODUCTION EQUIP FOR INFORMATION S	4	$4
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	193	$375,200
5D002	SOFTWARE FOR INFORMATION SECURITY	21	$110,769
5D992	SOFTWARE NOT CONTROLLED BY 5D002	2	$18,244

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	433	$376,462
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	25	$80,043
5E991	TECHNOLOGY FOR DEV/PROD/USE OF 5B994 OR 5D991	1	$0
6A001	ACOUSTICS	10	$29,459,447
6A002	OPTICAL SENSORS	13	$303,828
6A003	CAMERAS	58	$2,979,798
6A005	OPTICAL EQUIPMENT (LASERS)	7	$1,195,347
6A006	MAGNETOMETERS/MAGNETIC GRADIOMETERS/COMPENSATION S	2	$29,000
6A203	CAMERAS/COMPONENTS NOT CONTROLLED BY ECCN 6A003	7	$275,510
6A205	LASERS, OTHER THAN THOSE SPECIFIED IN 6A005	1	$136,000
6A991	MARINE OR TERRESTRIAL ACOUSTIC EQUIPMENT	1	$306,450
6E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT/MATERIALS/	5	$5
6E002	TECHNOLOGY FOR PRODUCTION OF EQUIPMENT/MATERIALS I	3	$3
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003,6A005	2	$2
7A101	ACCELEROMETERS, OTHER THAN THOSE IN 7A001	1	$17,850
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	12	$19,769,645
7D003	OTHER SOFTWARE	2	$3,960,002
7D101	SOFTWARE FOR COMMODITIES CONTROLLED BY 7A001/004,	3	$502
7E001	TECHNOLOGY FOR DEVELOPMENT OF EQ. CONTROLLED BY 7A	3	$1,002
7E004	OTHER TECHNOLOGY	5	$14,603,005
7E101	TECHNOLOGY FOR EQUIPMENT/SOFTWARE CONTROLLED BY 7A	2	$501
7E102	TECHNOLOGY FOR PROTECTION AGAINST EMI AND EMP	1	$5,000
8A001	SUBMERSIBLE VEHICLES OR SURFACE VESSELS	1	$73,556
8A002	SYSTEMS OR EQUIPMENT FOR SUBMERSIBLE VEHICLES	1	$15,745
8C001	SYNTACTIC FOAM FOR UNDERWATER USE	1	$10
9B002	ON-LINE CONTROL SYSTEMS FOR GAS TURBINE ENGINES	2	$39,501
9D001	SOFTWARE FOR DEV OF CERTAIN EQUIP/TECHNOLOGY IN 9A	1	$1
9D003	SOFTWARE FOR USE OF FADEC FOR CERTAIN PROPULSION S	1	$1
9D004	SOFTWARE FOR VIBRATION TEST EQUIPMENT	1	$1
9E003	OTHER TECHNOLOGY	5	$10,005
9E018	TECHNOLOGY FOR DEV/PROD/USE OF ITEMS IN 9A018	1	$1

TOTAL APPLICATIONS: 2304
TOTAL CCL'S: 143
TOTAL DOLLAR VALUE: $5,353,022,693

CUBA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	284	$4,125,028,722
1A995	PROTECTIVE AND DETECTION EQUIPMENT	1	$0
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	1	$41,895
1C992	OIL WELL PERFORATORS	1	$0
2A994	PORTABLE ELECTRIC GENERATORS AND SPECIALLY DESIGNE	2	$2,000
2B999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	1	$0
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	4	$2,407,660
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	5	$82,495
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	10	$8,232,836
5A992	INFORMATION SECURITY EQUIPMENT	63	$523,198,108
5B991	TELECOMMUNICATIONS TEST EQUIPMENT	1	$92,500
5D002	SOFTWARE FOR INFORMATION SECURITY	7	$415
5D992	SOFTWARE NOT CONTROLLED BY 5D002	9	$157,600

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	$15
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	14	$0
7E994	OTHER TECHNOLOGY RELATED TO NAVIGATION OR AVIONICS	1	$0
8A002	SYSTEMS OR EQUIPMENT FOR SUBMERSIBLE VEHICLES	2	$0
8A992	UNDERWATER SYSTEMS OR EQUIPMENT	39	$0
9A991	AIRCRAFT AND CERTAIN GAS TURBINE ENGINES N.E.S.	20	$4
9E991	TECHNOLOGY FOR THE DEV/PROD/USE WITH ITEMS IN 9A99	12	$0
9E993	TECHNOLOGY FOR THE DEV/PROD/USE OF TRACTORS IN 9A9	1	$10,000

TOTAL APPLICATIONS: 388
TOTAL CCL'S: 21
TOTAL DOLLAR VALUE: $4,659,254,250

GEORGIA

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$216,500
0A979	POLICE HELMETS, SHIELDS AND PARTS	1	$25,876
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	$279,651
0A984	SHOTGUNS, BUCKSHOT,SHOTGUN SHELLS	2	$90,400
0A985	DISCHARGE TYPE ARMS	1	$50,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	$216,032
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	$1,077,993
1A005	BODY ARMOR	1	$5,336
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	$2,590,000
1C353	GENETICALLY MODIFIED MICROORGANISMS	1	$73,700
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	$11,188
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	1	$0
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	$11,367,902
5D002	SOFTWARE FOR INFORMATION SECURITY	2	$20,008
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	$10
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000

TOTAL APPLICATIONS: 18
TOTAL CCL'S: 16
TOTAL DOLLAR VALUE: $16,087,596

IRAQ

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$549,480
0A018	ITEMS ON THE INTERNATIONAL MUNITIONS LIST	4	$326,979
0A978	SAPS	1	$154,920
0A979	POLICE HELMETS, SHIELDS AND PARTS	5	$358,513
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	3	$167,720
0A984	SHOTGUNS, BUCKSHOT,SHOTGUN SHELLS	1	$4,248
0A985	DISCHARGE TYPE ARMS	1	$50,000
0A986	SHOTGUN SHELLS (EXCEPT BUCKSHOT SHELLS) AND PARTS	3	$2,980
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	$15,640
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$56,680

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1A005	BODY ARMOR	6	$1,051,294
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	8	$12,023,400
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	9	$964,832
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	1	$22,267
1B999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	9	$5,034,632
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	1	$40,000
1C992	OIL WELL PERFORATORS	16	$233,308,604
1C999	SPECIFIC MATERIALS, N.E.S.	4	$433,803
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$129,942
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	2	$31,463
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	2	$19,837,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	5	$5,786,200
3A292	OSCILLOSCOPES AND TRANSIENT RECORDERS	1	$400,000
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	$4,065,184
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	$180,000
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	2	$9,040
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	2	$100,000
3E201	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A	3	$2,200
3E980	TECHNOLOGY FOR ITEMS CONTROLLED BY 3A980 AND 3A981	1	$1,016,800
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$21,185
6A003	CAMERAS	3	$90,904
9A012	UNMANNED AIR VEHICLE SYSTEMS	1	$38,900
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	14	$17,222,488

TOTAL APPLICATIONS: 97
TOTAL CCL'S: 33
TOTAL DOLLAR VALUE: $303,497,298

KAZAKHSTAN

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$216,500
0A984	SHOTGUNS, BUCKSHOT,SHOTGUN SHELLS	5	$84,538
0A986	SHOTGUN SHELLS (EXCEPT BUCKSHOT SHELLS) AND PARTS	1	$13,750
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	43	$3,707,531
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	$1,095,175
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$150,000
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	1	$141
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$29,880
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	2	$113,555
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	5	$8,830,900
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	$40,000
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	$1
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	1	$1
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	2	$40,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	$1
5A001	TELECOMMUNICATIONS/TRANSMISSION EQUIPMENT	1	$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	6	$190,011
5B001	EQUIPMENT FOR DEV/PROD OR USE OF ITEMS IN 5A001	1	$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	2	$2

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
5D002	SOFTWARE FOR INFORMATION SECURITY	3	$87,995
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	2	$2
6A006	MAGNETOMETERS/MAGNETIC GRADIOMETERS/COMPENSATION S	1	$60,000
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	1	$61,342
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000

TOTAL APPLICATIONS: 71
TOTAL CCL'S: 26
TOTAL DOLLAR VALUE: $14,784,329

KOREA DEMOCRATIC PEOPLES REPUBLIC

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	15	$3,078,607
2A994	PORTABLE ELECTRIC GENERATORS AND SPECIALLY DESIGNE	1	$874
9A991	AIRCRAFT AND CERTAIN GAS TURBINE ENGINES N.E.S.	3	$0

TOTAL APPLICATIONS: 18
TOTAL CCL'S: 3
TOTAL DOLLAR VALUE: $3,079,481

KYRGYZSTAN

0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	6	$4,042
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	1	$1
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	$1
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	1	$1
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$17,208
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	1	$1
5D002	SOFTWARE FOR INFORMATION SECURITY	1	$1,260
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	1	$1
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$412,695

TOTAL APPLICATIONS: 9
TOTAL CCL'S: 12
TOTAL DOLLAR VALUE: $435,213

LAOS

1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	3	$994,137
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$52,000
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	1	$28,500
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$317,800

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE

TOTAL APPLICATIONS: 6
TOTAL CCL'S: 4
TOTAL DOLLAR VALUE: $1,392,437

LIBYA

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	$244,000
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$1,000,000
1C018	MATERIALS ON THE INTERNATIONAL MUNITIONS LIST	2	$180,000
1C298	GRAPHITE NOT FOR USE OTHER THAN IN A NUCLEAR REACT	1	$7,050,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$2,063,428
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	4	$34,317
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	$1,440,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	$4,792,500
3A233	MASS SPECTROMETERS	1	$107,396
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$1,506
6A003	CAMERAS	4	$149,129
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$114,106

TOTAL APPLICATIONS: 19
TOTAL CCL'S: 12
TOTAL DOLLAR VALUE: $17,176,382

MACAO

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
3A233	MASS SPECTROMETERS	1	$118,500
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	6	$13,261,980
5D002	SOFTWARE FOR INFORMATION SECURITY	2	$13
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	1	$3

TOTAL APPLICATIONS: 8
TOTAL CCL'S: 4
TOTAL DOLLAR VALUE: $13,380,496

MOLDOVA

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$30,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	3	$105,220

TOTAL APPLICATIONS: 4
TOTAL CCL'S: 2
TOTAL DOLLAR VALUE: $135,220

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE

MONGOLIA

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$11,500
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	2	$633,512
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	$1
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	1	$1
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	1	$1
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	1	$1

TOTAL APPLICATIONS: 4
TOTAL CCL'S: 9
TOTAL DOLLAR VALUE: $645,019

RUSSIA FEDERATION

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	16	$1,765,643
0A919	MILITARY COMMODITIES	1	$6,300
0A979	POLICE HELMETS, SHIELDS AND PARTS	2	$44,239
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	4	$32,800
0A984	SHOTGUNS, BUCKSHOT,SHOTGUN SHELLS	13	$2,079,725
0A985	DISCHARGE TYPE ARMS	1	$100,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	561	$12,522,366
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	2	$250,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	3	$893,434
1A005	BODY ARMOR	1	$1,750
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$2,000,000
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	1	$22,959
1B001	EQUIPMENT FOR PRODUCTION OF FIBERS, PREFORMS OR CO	1	$16,000,000
1C002	METAL ALLOYS, POWDER OR ALLOYED MATERIALS	1	$8,080
1C006	FLUIDS AND LUBRICATING MATERIALS	4	$91,733
1C007	CERAMIC BASE AND PRECURSOR MATERIALS	1	$71
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	4	$5,626,960
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	2	$306,100
1C234	ZIRCONIUM, WITH A HAFNIUM CONTENT	1	$1,340
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	$3,000,000
1C351	HUMAN PATHOGENS, ZOONOSES, AND TOXINS	1	$100
1C352	ANIMAL PATHOGENS	1	$0
1C353	GENETICALLY MODIFIED MICROORGANISMS	3	$200
1D003	SOFTWARE DESIGNED FOR EQPT CONTROLLED UNDER 1A004	1	$5
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	6	$1,003
2A293	PUMPS DESIGNED TO MOVE MOLTEN METALS BY ELECTROMAG	1	$160,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	10	$6,585,033
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	6	$1,795,000
2B005	PROCESSING EQUIPMENTOF INORGANIC OVERLAYS/COATINGS	1	$622,500
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	4	$243,000
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	24	$27,941,795

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	3	$752,679
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	4	$2,403
2D983	EQUIPMENT CONTROLLED BY 2A983	1	$1
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	1	$0
2E003	OTHER TECHNOLOGY	1	$0
2E983	SOFTWARE CONTROLLED BY 2D983	1	$4
3A001	ELECTRONIC DEVICES/COMPONENTS	62	$22,267,187
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	17	$2,603,900
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	8	$16,092,000
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	$25,368
3A991	ELECTRONIC DEVICES AND COMPONENTS	1	$44,455
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	1	$15,241
3A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	4	$50,323
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	2	$3,642,900
3C004	HYDRIDES OF PHOSPHORUS, ARSENIC, OR ANTIMONY	2	$452,800
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	2	$2
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	6	$6
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	$56,000
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	1	$0
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	22	$271
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	22	$22
3E003	OTHER "TECHNOLOGY"	1	$1
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	$250
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	2	$236,720
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	21	$21
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	18	$18
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	21	$21
5A001	TELECOMMUNICATIONS/TRANSMISSION EQUIPMENT	1	$26,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	28	$417,783,115
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	18	$18
5D002	SOFTWARE FOR INFORMATION SECURITY	22	$198,486
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	25	$37
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	8	$2
6A001	ACOUSTICS	8	$13,193,851
6A002	OPTICAL SENSORS	2	$958,755
6A003	CAMERAS	40	$1,954,478
6A005	OPTICAL EQUIPMENT (LASERS)	5	$366,740
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	4	$10,631,219
7B001	TEST/CALIBRATION/ALIGNMENT EQUIPMENT CONTROLLED BY	1	$700,000
7D003	OTHER SOFTWARE	1	$0
7D101	SOFTWARE FOR COMMODITIES CONTROLLED BY 7A001/004,	2	$1,500
7E001	TECHNOLOGY FOR DEVELOPMENT OF EQ. CONTROLLED BY 7A	1	$0
7E004	OTHER TECHNOLOGY	1	$0
7E101	TECHNOLOGY FOR EQUIPMENT/SOFTWARE CONTROLLED BY 7A	2	$1,400
9A004	SPACECRAFT	22	$3,862,941
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	5	$565,000

TOTAL APPLICATIONS: 926
TOTAL CCL'S: 77
TOTAL DOLLAR VALUE: $578,588,271

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE

TAJIKISTAN

0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	3	$1,202
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	2	$5,180,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$282,240
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$78,430

TOTAL APPLICATIONS: 7
TOTAL CCL'S: 4
TOTAL DOLLAR VALUE: $5,541,872

TURKMENISTAN

1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$358
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$160,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$106,025
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$216,000

TOTAL APPLICATIONS: 4
TOTAL CCL'S: 4
TOTAL DOLLAR VALUE: $482,383

UKRAINE

0A984	SHOTGUNS, BUCKSHOT,SHOTGUN SHELLS	7	$391,709
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	69	$1,046,729
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	1	$60,000
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	$2,590,000
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	$5,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$29,519
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	1	$113,000
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	1	$22,000
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	2	$6,001
2E003	OTHER TECHNOLOGY	1	$50
3A001	ELECTRONIC DEVICES/COMPONENTS	7	$43,262
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	$1,760,000
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	12	$129,602
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	9	$0
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	$462,627
5D002	SOFTWARE FOR INFORMATION SECURITY	4	$14
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	$0
6A003	CAMERAS	6	$4,048,600
6A005	OPTICAL EQUIPMENT (LASERS)	1	$198,450
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	3	$5,497,458
7E102	TECHNOLOGY FOR PROTECTION AGAINST EMI AND EMP	1	$5,000
9A003	GAS TURBINE ENGINE PROPULSION SYSTEMS	1	$1,209,600
9E003	OTHER TECHNOLOGY	1	$5,000

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE

TOTAL APPLICATIONS: 121
TOTAL CCL'S: 23
TOTAL DOLLAR VALUE: $17,623,621

UZBEKISTAN

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	$216,500
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	$400
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	$1,068,975
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	$135,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	$11,340,000
5D002	SOFTWARE FOR INFORMATION SECURITY	1	$20,000
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	$63,000

TOTAL APPLICATIONS: 4
TOTAL CCL'S: 7
TOTAL DOLLAR VALUE: $12,843,875

VIETNAM

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	7	$500,333
0A985	DISCHARGE TYPE ARMS	1	$1,260,500
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	$423,900
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	2	$67,500
1A003	MANUFACTURES OF NON-FLUORINATED POLYMERIC SUBSTANC	1	$1,350,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	$25,617
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	$832,500
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	$100,000
1C006	FLUIDS AND LUBRICATING MATERIALS	1	$1,658
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	4	$80,097
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	1	$2,470,000
1C210	FIBROUS/FILAMENTARY MATERIALS NOT CONTROLLED BY 1C	1	$3,060
1C225	BORON AND BORON COMPOUNDS/MIXTURES AND LOADED MATE	1	$318
1C231	HAFNIUM	1	$8,500
1C233	LITHIUM	1	$558
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	11	$3,930,951
1C352	ANIMAL PATHOGENS	1	$200
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	$1,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	$41,407
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	2	$449,500
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	9	$826,995
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	2	$7,198
3A001	ELECTRONIC DEVICES/COMPONENTS	18	$1,261,654
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	1	$68,400
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	$2,910,000
3A233	MASS SPECTROMETERS	3	$433,815
3A991	ELECTRONIC DEVICES AND COMPONENTS	1	$39,000
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	1	$1

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	1	$1
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	1	$20,000
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	1	$5,000
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	9	$20,010
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	3	$2
3E003	OTHER "TECHNOLOGY"	1	$1
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	$20,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	25	$1,402,809,245
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	1	$1
5D002	SOFTWARE FOR INFORMATION SECURITY	12	$1,022,493
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	5	$13
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	3	$3
6A003	CAMERAS	4	$63,775
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	1	$307,150
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	$480,000

TOTAL APPLICATIONS: 118
TOTAL CCL'S: 46
TOTAL DOLLAR VALUE: $1,421,842,359

Appendix F: Report on Domestic Impact of U.S. Exports to Controlled Countries

In accordance with Section 14(e) of the Export Administration Act of 1979 (EAA), as amended, the Bureau of Industry and Security (BIS) continues to assess the impact on U.S. industry and employment of output from "controlled countries" resulting, in particular, from the use of U.S. exports of turnkey plants and manufacturing facilities.

Section 14(e), which was added as an amendment to the Act in 1985, requires the following:

"*... a detailed description of the extent of injury to U.S. industry and the extent of job displacement caused by U.S. exports of goods and technology to controlled countries."*
"... a full analysis of the consequences of exports of turnkey plants and manufacturing facilities to controlled countries... to produce goods for export to the United States or compete with U.S. products in export markets."

Goods and Technology Exports

Historically, the dollar value of trade with controlled destinations, other than China, has been low. In calendar year 2009, U.S. exports to these countries totaled $83.4 billion, which represents a 7.1 percent decrease from 2008 levels of $89.8 billion, and about 7.9% of total U.S. exports. China is the largest single export market among the controlled country group, with roughly 83 percent of the total. Russia ranks second with roughly 6 percent of the total. An analysis of exports by commodity category indicates that computer and electronic products, transportation equipment, machinery, chemicals, and waste and scrap represented over half of the total U.S. exports to controlled countries, especially China. Given the small share of U.S. exports to controlled countries relative to total U.S. exports (7.9%), the overall adverse impact through injury to U.S. industry and job displacement is probably minimal.

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[1] For the purpose of this section, "controlled countries" are: Albania; Armenia; Azerbaijan; Belarus; Cambodia; China (PRC); Cuba; Georgia; Iraq; Kazakhstan; Kyrgyzstan; Laos; Macao; Moldova; Mongolia; North Korea; Russia; Tajikistan; Turkmenistan; Ukraine; Uzbekistan; and Vietnam.

Controlled Destinations	Calendar Year 2009 U.S. Exports (in millions)
Albania	$48
Armenia	$77
Azerbaijan	$185
Belarus	$137
Cambodia	$127
China	$69,497
Cuba	$533
Georgia	$364
Iraq	$1,772
Kazakhstan	$604
Kyrgyzstan	$57
Laos	$20
Macao	$209
Moldova	$27
Mongolia	$41
North Korea	$1
Russia	$5,332
Tajikistan	$41
Turkmenistan	$294
Ukraine	$887
Uzbekistan	$98
Vietnam	$3,097
Total Exports to Controlled Destinations	$83,448
Total Exports to All Countries	$1,056,895
U.S. Exports to Controlled Destinations as a Percent of Overall U.S. Exports	7.9%
Percent of U.S. Exports to Controlled Destinations Requiring a BIS License	0.4%
Percent of U.S. Exports to Controlled Destinations Subject to a BIS License Requirement	1.9%

Although the bases for our export controls are national security, foreign policy, and short supply, BIS—as part of its defense industrial base monitoring responsibilities—reviews on an ongoing basis the potential impact of U.S. technology transfers. U.S. and other Western firms choose to establish production facilities in China for a variety of reasons, including: technology transfer requirements imposed by China; a desire to take advantage of China's large pool of labor; the desire for proximity to the market for their products; and a desire to take advantage of business incentives created by Chinese local and national governments. The United States runs a trade deficit with China ($226.9 billion in 2009), and more than 50 percent of China's exports originate from foreign-invested enterprises. Thus, these practices and trends raise concerns with regard to their impact on the competitiveness of U.S. industry and employment over the long term.

A review of licenses applications for exports to China in the past fiscal year shows that a significant number involve manufacturing equipment and facilities, electronics, and/or components for use in foreign-invested production facilities. Among the top-valued manufacturing equipment exported in 2009 were equipment for semiconductors, chemical manufacturing facilities, acoustics and electronic components. Examples of the top-valued components are mass spectrometers, integrated circuits and pressure transducers. Many other types of products, such as aircraft, computers and other electronic components are doubtless exported without the need for an export license (i.e., because they are not controlled for national security reasons or are eligible for shipment under a license exception).

BIS also monitors certain forms of technology transfer as part of its overall responsibilities for the defense industrial base. These responsibilities include reviewing the impact of offsets on defense trade, participating in the Treasury Department-chaired Committee on Foreign Investment in the United States, and assessing the health and competitiveness of strategic industry sectors. Further information on these activities, including copies of the industrial sector assessments, is available from BIS's website at www.bis.doc.gov.

Critical Technology Assessments

BIS conducts critical technology assessments to examine the impact of export controls on key existing or emerging technologies subject to the Export Administration Regulations (EAR). These technologies are dual-use, meaning they have both civilian and military applications. For a given technology, BIS evaluates the scope and impact of current U.S. export controls, foreign export control practices, the sector's economic status, and the foreign availability (i.e., availability-in-fact, non-U.S. source, sufficient quantity, and comparable quality) of product substitutes.

BIS published two assessments in FY 2010. The first was entitled *Impact of U.S. Export Controls on Green Technology Items*, and examined the impact of export controls on items controlled under 88 different ECCNs that are considered to be or can be used to produce green technology products. The assessment found that most green technology-related items do not require a BIS export license. However, some of the high-technology parts, materials, and equipment used to produce green technology items such as wind power, solar power, alternative fuel vehicles, water purification and energy efficiency would likely require an export license.

The second assessment was on *Fine Grain Graphite,* and examined the impact of export controls on and the foreign availability in China and India of fine grain graphite controlled for missile technology and anti-terrorism reasons under ECCN 1C107.a. The assessment showed that the United States is gaining market share, but the U.S. export licensing process for fine grain, high density graphite, especially to China, requires more license conditions and places additional burden on exporters in comparison to the processes of other MTCR members, placing U.S. exporters at a competitive disadvantage. In the assessment, BIS recommended that the U.S. Government amend the EAR to establish a faster system for reviewing license applications submitted for the export of fine grain, high density graphite destined for specific allied countries, in order to increase U.S. exporter competitiveness within the market.

In FY 2010, BIS initiated the following assessment, whose completion it anticipates in FY 2011:

Impact of U.S. Export Controls on Encryption Items, which examines the impact of export controls and reporting requirements on encryption items controlled under several ECCNs in Part II of Category 5 of the Commerce Control List.

Turnkey Plants and Facilities Exports

The Export Administration Regulations (EAR) require a license to export certain items for turnkey plants and facilities to controlled destinations. As a result of several revisions to the EAR in recent years, an increasing number of items for turnkey plants and facilities have become eligible for export to controlled destinations without a license or under a license exception. For example, a license is generally not required for exports to controlled destinations (except Cuba and North Korea) of items for turnkey plants and facilities that are classified as EAR99 (the designation for items that are subject to the EAR but not specifically listed on the Commerce Control List). In addition, certain items for turnkey plants and facilities may be listed in a Commerce Control List entry where the applicable reason for control does not require a license to one or more controlled destinations, as indicated in the appropriate Reason for Control column of the Commerce Country Chart. Other items for turnkey plants and facilities may be eligible for export to controlled destinations under a license exception, such as License Exception CIV (Civilian), which authorizes exports of certain national security-controlled items to civil end users, for civil end-uses, in most controlled countries, except Cuba and North Korea; or License Exception TSU (Technology and Software, Unrestricted), which authorizes exports of operation technology and software, sales technology, and software updates, subject to certain conditions.

U.S. export data that are available from the Bureau of the Census do not provide the level of specificity needed to identify exports of turnkey plants or items for turnkey plants and facilities. This precludes a thorough assessment of the impact of U.S. exports of items for turnkey plants and facilities to controlled countries. However, the small number of such exports in the past, coupled with the low percentage of U.S. exports destined for controlled countries and items subject to a license requirement, make it reasonable to conclude that the ultimate impact on U.S. production is insignificant.

Appendix G: Agricultural Supply Tables and Information

The U.S. Department of Agriculture (USDA) regularly updates the World Agricultural Supply and Demand Estimates (WASDE) report. That information may be accessed in three ways:

http://www.usda.gov/oce/commodity/wasde

PDF file: http://www.usda.gov/oce/commodity/wasde/latest.pdf

Appendix H: Export Control Reform Speeches and Fact Sheets

Fact Sheets

Fact Sheet on the President's Export Control Reform Initiative, April 20, 2010
http://www.whitehouse.gov/the-press-office/fact-sheet-presidents-export-control-reform-initiative

President Obama Lays the Foundation for a New Export Control System to Strengthen National Security and the Competitiveness of Key U.S. Manufacturing and Technology Sectors,
August 30, 2010
http://www.bis.doc.gov/news/2010/white_house_fact_sheet.htm

Speeches

Remarks as delivered by Secretary of Defense Robert M. Gates, Ronald Reagan Building and International Trade Center in Washington, DC
April 20, 2010

http://www.defense.gov/speeches/speech.aspx?speechid=1453

The Administration's Export Control Reform Plans Remarks by General Jones, National Security Advisor, June 30, 2010

http://www.export.gov/build/fragments/fl_eg_outsidelinks/redirect.asp?URL=http%3A//www.aia-aerospace.org/assets/speech_jones_06302010.pdf

Video Remarks by the President to the Department of Commerce Annual Export Controls Update Conference, August 31, 2010
http://www.whitehouse.gov/the-press-office/2010/08/30/video-remarks-president-department-commerce-annual-export-controls-updat

Secretary of Commerce Gary Locke Remarks to BIS Update Conference Tuesday, August 31, 2010

http://www.bis.doc.gov/news/2010/seclocke_bis_update_remarks.htm

Under Secretary of Commerce Eric L. Hirschhorn Remarks to BIS Update Conference, August 31, 2010

http://www.bis.doc.gov/news/2010/hirschhorn_bis_update_remarks.htm

Assistant Secretary of Commerce Kevin Wolf Remarks to BIS Update Conference, August 31, 2010

http://www.bis.doc.gov/news/2010/wolf_bis_update_remarks.htm

Commerce Assistant Secretary David W. Mills Remarks to BIS Update Conference, September 1, 2010

http://www.bis.doc.gov/news/2010/mills_bis_update_remarks.htm