



U.S. Department of Commerce
Bureau of Industry and Security

Annual Report to the Congress for Fiscal Year 2008

Bureau of Industry and Security Fiscal Year 2008 Annual Report

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INTRODUCTION

This report summarizes the activities of the Department of Commerce's Bureau of Industry and Security (BIS) during fiscal year (FY) 2008, from October 1, 2007, through September 30, 2008.

Today, American businesses and exporters face unprecedented economic challenges. The Department is deeply committed to getting the U.S. economy back on track, and facilitating international trade will be a key component of our success. BIS is charged with facilitating American prosperity and enhancing American national security. The 2008 report explains how BIS continues to support secure trade and ensure that U.S. exporters are able to compete in the global marketplace.

In FY 2008, BIS processed 21,290 export license applications worth approximately \$72.2 billion. Over the past decade, the number of export license applications has steadily increased, nearly doubling since 2000. While this growth in controlled trade is indicative of a robust international trade environment and a growing demand for controlled commodities, an increase in license applications is not an accurate measure of the Bureau's success. The role of BIS is to protect U.S. national security interests without overburdening U.S. exporters.

Accordingly, BIS implemented a number of reforms in 2008 to enhance the focus of the dual-use export control system, including revising the Commerce Control List (CCL) based upon a systematic review of the CCL, simplifying encryption controls, amending *de minimis* provisions, adding end-users of concern to the Entity List, and proposing the establishment of a new license exception for

intra-company transfers. In the coming years, BIS will implement similar reforms to facilitate U.S. trade and stimulate the U.S. economy.

BIS continued to provide guidance, both domestically and internationally, to new and experienced exporters through 41 domestic export control outreach seminars in 18 states. BIS conducted seven international export control outreach seminars in Hong Kong, Singapore, Malaysia, Austria, Germany, and two locations in Japan, to a combined audience of almost 800 attendees.

BIS continued its online training program through the presentation of four new Web seminars, reaching over 550 participants, and offered an introductory series of easy-to-use training modules intended to assist exporters and reexporters, particularly small and medium-sized enterprises. Since inception, these modules have been accessed more than 45,000 times. BIS will continue to create and update this content.

BIS also promoted American competitiveness through programs to strengthen the ability of U.S. industry to meet vital national security requirements. BIS initiated three assessments of the U.S. defense industrial and technological base and one foreign availability assessment. In coordination with the Department's International Trade Administration, BIS reviewed 171 filings submitted to the Committee on Foreign Investment in the United States detailing proposed foreign acquisitions of U.S. companies to ensure that the acquisitions did not threaten U.S. national security.

Effective enforcement is vital to a successful export control system. In FY 2008, BIS enforcement activities remained focused on preventing and deterring violations of U.S.

export control laws and regulations, disrupting illegal activities, and bringing violators to justice. BIS's investigations resulted in the criminal conviction of 40 individuals and businesses for export violations with penalties totaling more than \$2.7 million in criminal fines, over \$800,000 in forfeitures, and over 218 months of imprisonment.

BIS investigations also resulted in the completion of 56 administrative cases against individuals and businesses and over \$3.6 million in administrative penalties. These penalties include six cases and \$162,450 for antiboycott violations.

In response to changing conditions in Cuba, BIS published a final rule authorizing mobile phones and related software and equipment for the Cuban people by expanding the gift parcel license exception. Additionally, in an effort to strive toward more effective controls, BIS sought public comments on certain recommendations made by the Deemed Export Advisory Committee and on crime control license requirements.

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BIS worked in FY 2008 to advance 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. strategic technology leadership. BIS strengthened and streamlined the U.S. export control system, expanded participation in the global export control regime, and helped reduce illicit activity occurring outside the system. BIS also worked with the private sector to support the U.S. defense industrial and technological base.

In FY 2008, BIS continued to adapt its policies on controls of exports and reexports of U.S.-origin items to geopolitical, security, technological, and market developments.

Overview

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 principally accomplishes this mission by maintaining and strengthening an adaptable, efficient, and effective export control system.

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 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.

A central area of focus is implementation of export controls agreed to in the four major multilateral export control regimes: the Australia Group (chemical and biological nonproliferation), the Missile Technology Control Regime, the Nuclear Suppliers Group, and the Wassenaar Arrangement (conventional arms and related dual-use goods, software, and technologies). Other BIS regulations advance U.S. foreign policy and national security interests, including regulations that implement sanctions policies, execute legislation, specify licensing agency jurisdictional authority for a given item, and clarify the rights and obligations of U.S. exporters.

BIS consults closely with industry on the development of regulatory policy through its seven 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. In addition, to ensure that the exporting community and other members of the public have a means to provide their views, BIS solicits public comments on new final or proposed rules that it publishes.

The enforcement of both 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.

Priority is given to violations involving Weapons of Mass Destruction (WMD) proliferation, terrorism and State support of terror, and unauthorized military end-uses. BIS accomplishes its mission through preventive enforcement activities as well as by identifying and apprehending violators; imposing administrative penalties, including fines and denials of export privileges; and recommending criminal prosecution when appropriate.

Export Control Policy and Regulations

In FY 2008, BIS continued to adapt its dual-use export control policies to important geopolitical, security, technological, and market developments.

Foreign Policy-Based Controls

The EAR was amended to move Burma into more restrictive country groupings and impose a license requirement for exports, reexports, or transfers of most items subject to the EAR to persons listed in or designated pursuant to Executive Orders 13310 and 13448. These changes were made in response to the Government of Burma's continued repression of democratic opposition in Burma.

BIS amended the EAR to authorize the export of mobile phones and related software and equipment sent as gifts by individuals to eligible recipients in Cuba. The terms of License Exception Gift Parcels and Humanitarian Donations (GFT) were revised to allow the inclusion of those items in gift parcels. This change was made in response to President Bush's initiative to support democracy-building efforts in Cuba

through the free exchange of information. Additional changes to licensing policies for Cuba are expected in 2009.

BIS also amended the "tools of the trade" provision in License Exception Temporary Imports, Exports, and Reexports (TMP) of the EAR to reflect technical advances and to support the humanitarian efforts of non-governmental organizations in Sudan.

Country-Specific Initiatives

China

China continues to be one of the largest foreign markets for controlled items. In FY 2008, exports and reexports to end-users in China accounted for the most license applications of any country, as well as the third-highest value of license applications, behind Canada and Taiwan.

BIS continued successful efforts to facilitate U.S.-China civilian high-technology trade, consistent with U.S. security requirements. BIS has been working closely with the Chinese government to implement the Validated End-User (VEU) program, which was established in June 2007. The VEU program embodies a shift in U.S. export control policy to a more end-user-based system of controls, facilitating trade to companies with a track record of responsible use of licensed goods and technology. In October 2007, five companies in China were granted VEU status.

India

In February 2008, BIS officials led a U.S. government delegation to New Delhi for meetings of the 6th Annual U.S.-India High Technology Cooperation Group (HTCG). The HTCG included talks on areas as defense and strategic trade, biotechnology,

information technology, and nanotechnology. BIS also published a regulation making end-users in India eligible for VEU status.

Commodity-Specific Policies

Deemed Exports

On February 6, 2008, BIS announced the completion of the Deemed Export Advisory Committee's report. In response, BIS began working with other U.S. Government agencies, including the Departments of Defense, State, and Energy, to consider the report's analysis and recommendations as a basis for reforming current deemed export policy implementation. As a result, BIS created a new Technical Advisory Committee, the Emerging Technology and Research Advisory Committee (ETRAC). The ETRAC, established May 23, 2008, will provide recommendations to BIS on how to keep the Commerce Control List (CCL) current with respect to emerging technologies and research and development activities that have dual-use applications.

Encryption

Working with the National Security Agency (NSA) and its other interagency partners, BIS published a rule on October 3, 2008, to simplify and update the encryption provisions of the EAR. In coordination with NSA, BIS continues to review export controls on encryption products to minimize the impact of export controls on the encryption industry.

Short Supply Controls

BIS implements the statutorily mandated short supply controls on Western Red Cedar, as required by section 7(i) of the EAA. 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 monitoring of items under sections 7(a) or (b) of the EAA. In addition, 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.

BIS End-Use Information

In September 2008, BIS published a final rule on Additions of Certain Persons to the Entity List and Removal of General Order. BIS has added, and will continue to add, entities to the Entity List that BIS has reasonable cause to believe, based on specific and articulable facts, were, are or will be involved in activities that are contrary to the national security or foreign policy interests of the United States and/or those acting on behalf of such entities. The new rule enables BIS to focus its export control efforts more closely on these entities which previously may not have satisfied the criteria set forth in the EAR. Finally, the rule provides a procedure for listed entities to request removal from or modification to the list and identifies the End-User Review Committee, chaired by BIS, as the interagency group that will consider Entity List matters.

Export Licensing

Export License Processing

In FY 2008, BIS processed 21,293 export license applications valued at approximately \$72.1 billion. This marked an increase of 9

percent over the 19,512 applications processed in FY 2007 and represented the highest number of applications reviewed by the Bureau in over 15 years. BIS approved 17,945 license applications (84 percent), returned 3,171 applications without action (15 percent), and denied 177 applications (less than one percent). In FY 2008, BIS continued to ensure the timely review of all license applications, reducing BIS's average processing time from 28 days to 27 days.

The license applications with the highest value—\$50.2 billion—were for the export of crude oil. The highest number of license application approvals under one commodity classification was for chemical manufacturing facilities and equipment (Export Control Classification Number (ECCN) 2B350), with 2,212 approved applications for exports and reexports worth \$294 million.

China was the destination for the largest number of approved license applications. BIS approved 1,990 license applications for exports to China, valued at more than \$2.7 billion; 25 percent of these were for deemed export licenses to release controlled technology or source code to Chinese nationals working in U.S. companies and universities. In FY 2008, the average processing time for all approved licenses to China was 33 days, a 12 percent decrease from the average processing time of 38 days in FY 2007.

Licensing Impact

BIS obtains data from the Census Bureau (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 2007 (the most recent data available to BIS for this report), U.S. companies exported

\$2.8 billion of licensed items (of which 11.8 percent were exported under a special comprehensive license), and \$14.2 billion of items under a license exception, representing 0.2 percent and 1.2 percent, respectively, of overall U.S. trade. During the most recent two-year validation period for licenses (2005-2007), companies utilized 51.8 percent of licenses for controlled exports (not including software and technology) approved by BIS.

BIS is working with the Census Bureau and the Department of Homeland Security's U.S. Customs and Border Protection (CBP) to improve the Automated Export System (AES) and increase exporter compliance with the EAR.

Cases Escalated for Dispute Resolution

Under Executive Order 12981, BIS's Operating Committee (OC)—with membership from 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 2008, 422 cases were escalated to the OC for dispute resolution. The average processing time for these cases was 16 days, down from 17 days in FY 2007. Of these 422 cases, 20 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 (ECCN) and may request an official classification from BIS. In FY 2008, BIS processed 6,629

classification request applications in an average of 33 days.

Technical Reviews and Licensing of Encryption Items

In FY 2008, BIS processed 3,396 technical review requests for encryption items, including 627 requests for reviews of “mass market” encryption items. Most items submitted for review became eligible for export as “ENC Unrestricted” or “mass market” encryption commodities and software eligible for export and reexport without a license to both government and non-government end-users in most countries.

BIS also approved approximately 2,320 license applications for the export or reexport of “restricted” encryption products (such as high-end routers and other network infrastructure equipment) and technology outside the U.S. and Canada, to non-sanctioned end-users outside Country Group E:1.

Customs and Border Protection's Requests for License Determinations

BIS analyzes cases received from CBP, which inspects shipments prior to export. If there is a question regarding the export licensing documentation, CBP will detain the shipment and request a licensing determination from the Department of Commerce. The determination provided by BIS contributes to CBP’s decision on the action to be taken. BIS completed 471 such reviews in FY 2008.

Licensing Determinations

License Determinations (LDs) are used to support Customs and enforcement actions connected with potential violations of the

EAR. In FY 2008, BIS completed 409 LDs in an average of 30 days.

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 2008, BIS processed 539 CJ requests in an average of 37 days.

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

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

BIS conducted one review of a Special Comprehensive License (SCL) issued to a qualified exporter and consignee in place of an individual export license; 10 Export Management and Compliance Program (EMCP) reviews of corporate written compliance programs; and four two-day seminars on how to develop an EMCP.

BIS also continued to implement the VEU authorization created in FY 2007. Export Administration’s Office of Exporter Services (OExS) provides the initial review and analysis of VEU authorizations, which enable exporters and reexporters to send certain controlled items to specified end-users without first obtaining a BIS license. In FY 2008, OExS completed assessments of 12 end-user validation requests. OExS is

also responsible for assisting potential VEU candidates in developing compliance programs to satisfy the VEU requirements.

Export Enforcement

Penalties

BIS investigations in FY 2008 resulted in the criminal conviction of 40 individuals and businesses for export and antiboycott violations. The penalties for these convictions came to over \$2.7 million in criminal fines, over \$800,000 in forfeitures, and 218 months of imprisonment; compared to 16 convictions and over \$25.3 million in criminal fines in FY 2007.

In FY 2008, BIS investigations resulted in the completion of 56 administrative cases against individuals and businesses and over \$3.6 million in administrative penalties, as compared to 75 cases and over \$6 million in administrative penalties in FY 2007. Of these, six cases involved antiboycott violations that resulted in penalties of \$162,450 in FY 2008, as compared to 10 cases and \$194,500 in penalties in FY 2007.

Antiboycott Activities

During FY 2008, six companies agreed to pay civil penalties totaling \$162,450 to settle allegations that they violated the antiboycott provisions of the EAR. In addition, two of these companies were denied export privileges to 11 countries for a period of two years. In FY 2008, BIS responded to 1,109 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. Among them was a U.S.

company seeking to register its trademarks in Iraq. The company was able to register its trademarks in January 2008. This export success was the result of constructive communication between the BIS and the U.S. Embassy in Baghdad.

Preventive Enforcement

In FY 2008, BIS continued to emphasize its preventive and compliance enforcement activity. Export Enforcement officials participate in the export licensing process by making recommendations on proposed export transactions, 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 2008, BIS completed 490 end-use checks in over 50 different countries. Of these 490 checks, 151 were Pre-License Checks (PLC) and 339 were Post-Shipment Verifications (PSV). 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. Approximately 64 percent of these checks were conducted by our ECOs. The remaining checks were conducted by Foreign Commercial Service Officers and support personnel stationed at various U.S. Embassies. BIS used the results of these negative checks to prevent

future exports to unsuitable end-users and to take enforcement actions where appropriate.

In situations where BIS cannot make a recommendation on end-use checks because the U.S. Government was unable to conduct the check or was otherwise unable to verify the existence or authenticity of the end-users, end-users may be considered for inclusion on the BIS Unverified List (UVL). The presence of an end-user on the UVL serves as a “red flag” to exporters and reexporters, and should be considered when contemplating shipping items subject to the EAR to such end-users, or in transactions involving such end-users.

BIS completed a significant number of additional preventive enforcement actions in FY 2008, including the issuance of 181 warning letters; 104 detentions; 20 seizures; Temporary Denial Orders against nine individuals and 19 companies; renewals of Temporary Denial Orders previously issued against 11 individuals and 19 companies; related-persons orders against four individuals; five denials under Section 11(h) of the EAA (which authorizes denial of export privileges of parties convicted under certain Federal statutes); and conducting 1,194 outreach contacts with industry.

On September 17, 2008, BIS announced 75 additions to its Entity List because of their involvement in a global procurement network that sought to illegally acquire U.S.-origin dual-use and military components for the Iranian Government, or for their relationship to the Mayrow General Trading Company in the United Arab Emirates. The additions were made pursuant to expanded criteria for addition to BIS’s Entity List published on August 21, 2008. Under the expanded Entity List, a party may be placed on the Entity List if there is reason

to believe that the entity has been involved, is involved, or poses a significant risk of becoming involved in activities that are contrary to the national security or foreign policy interests of the United States.

On the same date, the Office of the U.S. Attorney for the Southern District of Florida unsealed an indictment naming 16 foreign corporations and individuals as defendants, targeting the same network. The defendants were charged with conspiracy and violations involving the Iran Trade Embargo, the Iranian Transactions Regulations, the EAR and the International Emergency Economic Powers Act (IEEPA).

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

Industry Outreach Activities

Seminars and Conferences

In FY 2008, BIS reached approximately 4,300 people through 41 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. In FY 2008, more than 93 percent of attendees rated the seminars either “good” or “excellent.” BIS held its 21st annual Update Conference on Export Controls and Policy from September 29 to October 1, 2008, in Washington, D.C.; the conference attracted over 1,000 participants.

BIS also launched an online training room that offers an introductory series of easy-to-use training modules, including the first half of the Essentials of Export Controls seminar and Deemed Export training that BIS currently offers around the United States.

This service offers exporters and reexporters—particularly small and medium-sized enterprises—with a cost-saving mechanism to stay current and learn more about U.S. export controls. The training modules were viewed over 45,000 times and the accompanying transcripts were viewed 18,000 times. BIS continues to offer a variety of online Web seminars, which were viewed over 10,000 times and whose accompanying slides downloaded over 8,000 times.

In addition to BIS seminars, Web seminars, 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 33 such programs, which reached more than 2,100 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 2008, BIS participated in three trade shows. BIS also supports the TPCC's weeklong Trade Officer's Training Conferences, held three times a year in Rosslyn, Virginia.

In FY 2008, BIS also conducted seven international export control outreach seminars, including seminars in Japan, Hong Kong, Singapore, Malaysia, and Austria. These seminars provided important export control information to companies in other countries that use U.S.-origin parts and components for manufacturing and assembly; companies that use U.S.-origin systems, software, or technology to develop

foreign-made products; and companies that reexport U.S.-origin items.

In addition, BIS continued to focus on the enforcement aspects of deemed export compliance and expanded outreach efforts involving individuals and companies not previously participating in the U.S. export control system through submission of applications for export licenses. In FY 2008, BIS conducted over 700 export enforcement outreaches to individuals and companies that had not previously submitted license applications, some of which include deemed export enforcement outreach contacts. BIS also initiated 29 leads and cases involving deemed export allegations.

BIS continued its focused outreach to the freight forwarding community in FY 2008 by conducting outreach presentations to freight forwarders and national forwarding associations.

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 2008, BIS conducted 69 Project Guardian outreach contacts.

Counseling

BIS regulatory specialists assisted approximately 53,000 business representatives in one-on-one counseling

sessions through its telephone counseling program at BIS's Outreach and Educational Services Division in Washington, D.C., 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 also conducted workshops in Washington, D.C., and Mexico City, Mexico, as part of the Security and Prosperity Partnership of North America (SPP). The SPP was established in March 2005 to aid 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), which 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 182 States Parties to the CWC are implementing the CWC's provisions in a rigorous, analytically sound, and equitable manner.

Multilateral Export Control Regimes

Australia Group

The Australia Group (AG) 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 2008, 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. At the 2008 AG Plenary meeting, held April 14-18, 2008, the United States successfully advocated for revision of the common control list definition of Highly Pathogenic Avian Influenza (HPAI).

Missile Technology Control Regime

The United States has been a member of the Missile Technology Control Regime (MTCR) since the MTCR's inception in 1987. The MTCR currently includes 34 member countries that have agreed to coordinate their national export controls to prevent missile proliferation.

During the November 2007 annual Plenary, the MTCR partners noted the direct relevance of UNSCRs 1718 (North Korea) and 1737 and 1747 (Iran) to MTCR export controls. The MTCR partners called on all States to take all necessary steps at a national level to fully and effectively implement the missile-relevant provisions of these resolutions. The growing interest by

many states in cooperating with or possibly adhering to the MTCR was discussed and the Plenary supported the Chair's ongoing outreach efforts to nonmembers.

The MTCR also held a Technical Experts meeting in conjunction with the Plenary to discuss additional changes to the MTCR control list, including amendments to the payload definition of "other UAVs [unmanned aerial vehicles]" to include the munitions support and deployment structure as part of the definition; new entry for Hexanitrohexaazaisowurtzitane (CL-20), an oxidiser substance usable in solid propellant rocket motors; clarifications to two polymeric substances (HTPB and CTPB) and vibration test modes; and new text closing a loophole and strengthening the controls for environmental chambers. Finally, an Index, provided for reference as a separate document from the Annex, was created and will be updated consequent to each update of the Annex.

Nuclear Suppliers Group

The Nuclear Suppliers Group (NSG) is a multilateral export control regime that was formally established in 1992 and now includes 45 members. The NSG 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 development of nuclear proliferation concern.

The NSG Plenary and related meetings were held the week of May 19 in Berlin, Germany. Participating Governments (PGs) welcomed the proposal for a criteria-based approach to tightening controls on

Enrichment and Reprocessing (ENR) Technology instead of an outright ban. PGs made progress on technical issues related to the controls on Dimensional Inspection Equipment.

On September 6, 2008, the NSG approved a statement by consensus excepting India from the Group's full-scope safeguards requirement for civil nuclear trade. This decision was made at the second of two Extraordinary Plenary sessions held August 21-22, 2008, and September 4-6, 2008. This was a historic decision by the NSG, which strengthens global nonproliferation principles while helping India to meet its energy requirements in an environmentally friendly manner. Ultimately, the NSG's actions helped pave the way for the completion of the U.S.-India Civil Nuclear Cooperation Initiative later in 2008.

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 also 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.

During FY 2008, participating countries concluded their third assessment of the

regime, undertaken every four years to carry out a wide-ranging review and evaluation of the Arrangement's overall functioning and its contribution to regional and international security and stability by preventing destabilizing accumulations of conventional arms and dual-use goods and technologies.

Wassenaar members agreed to amend entries on the control lists, including in technically complex and challenging areas, such as establishing controls on low-light-level and infrared sensors. Particular attention was given to items of potential interest to terrorists, such as devices used to initiate explosions and specialized equipment for the disposal of improvised explosive devices. The Wassenaar Experts Group continued its dialogue with its technical-level counterparts from the Missile Technology Control Regime aimed at developing a common understanding of terminology and technical parameters on controls of certain navigation systems.

Finally, the Wassenaar Plenary adopted a *Statement of Understanding on End-Use Controls for Dual-Use Items*. This document is intended to assist Wassenaar members on the application of flexible risk management principles to all three phases of end-use controls—pre-license phase, application procedure, and post-shipment phase—in order to subject sensitive dual-use cases to a greater degree of scrutiny.

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 184 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. BIS received and verified 732 declarations and reports from 571 plant sites and trading companies.

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 United States is currently working towards entry-into-force of the Additional Protocol. On February 5, 2008, President Bush signed Executive Order 13458, which designated BIS as 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 proposed Additional Protocol Regulation in July 2008, and its final regulation after the close of the fiscal year. BIS has since compiled the U.S. national declaration for

submission to the IAEA after congressional review.

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.

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 2008, in cooperation with the Department of Defense, BIS expedited the delivery of critical items in support of operations in Afghanistan and Iraq. In addition, in cooperation with the Department of Homeland Security, BIS expedited the delivery of equipment to support national emergency preparedness and critical infrastructure restoration programs, including response and recovery efforts after the Midwest floods and the destructive hurricanes that struck the United States. BIS also concluded an arrangement with the Department of Agriculture's Farm Service Agency that authorized the Federal Emergency Management Agency (FEMA) to place priority ratings, in accordance with the DPAS, on orders for Meals Ready to Eat and similar items to support FEMA's emergency preparedness activities. FEMA requested such assistance in order to

replenish its diminished stocks to support hurricane relief operations.

In FY 2008, BIS amended the DPAS regulation to reflect the transfer of certain DPAS-related responsibilities within the Department of Energy. The Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council also published a final rule, at BIS's request, amending the Federal Acquisition Regulation to reflect the current provisions of the DPAS regulation.

Committee on Foreign Investment in the United States

BIS's defense industrial base responsibilities extend to the evaluation of foreign investments in U.S. industries through participation in the Committee on Foreign Investment in the United States (CFIUS). On July 26, 2007, President Bush signed into law the Foreign Investment and National Security Act of 2007 (FINSA), which became effective on October 24, 2007. BIS is working closely with ITA and interagency CFIUS partners to fully implement FINSA.

BIS, in coordination with the Department of Commerce's International Trade Administration (ITA), reviewed 171 CFIUS filings to ensure that they did not threaten U.S. national security.

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

In FY 2008, BIS initiated the following three assessments, whose completion it anticipates in FY 2009:

U.S. Integrated Circuit Fabrication and Design Capabilities Assessment, which will assess the health of U.S. designers and manufacturers of integrated circuits for defense critical and essential circuit applications and the ability of U.S. designers and manufacturers to meet the needs of the DOD and its contractors.

Counterfeit Electronics, which will assess the impact of counterfeit electronics on U.S. defense readiness, supply chain integrity, critical infrastructure, and industrial capabilities.

Critical Technology and Industrial Base Assessment of the U.S. Five Axis Simultaneous Control Machine Tool Industry, which will examine the health and competitiveness of five axis simultaneous control machine tool producers and distributors.

BIS also completed its twelfth congressionally mandated report on the impact of offsets in defense trade and initiated rulemaking to update its offset reporting requirement regulation in order to enhance the assessment of the economic effects of offsets.

In FY 2008, BIS reviewed 45 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 91 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 2008, 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 led an interagency delegation to Brussels to meet with European Union officials and to discuss the European Union's proposed defense procurement initiative in order to increase understanding of the initiative, assess its impact on the U.S. defense industrial base, and continue a dialogue with European Union officials critical to the development of the initiative.

In FY 2008, BIS transferred certain defense trade advocacy program management-related responsibilities to the International Trade Administration's Advocacy Center.

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.

BIS certified 586 U.S. firms that were interested in participating in NATO procurement competitions.

Appendix A: BIS Mission Statement and Guiding Principles

Bureau of Industry and Security Mission:

Advance U.S. National Security, Foreign Policy, and Economic Objectives by Ensuring an Effective Export Control and Treaty Compliance System and Promoting Continued U.S. Strategic Technology Leadership.

Key Bureau Priorities:

Maintain and Strengthen an Adaptable and Effective U.S. Export Control and Treaty Compliance System.

Integrate Non-U.S. Actors to Create a More Effective Global Export Control and Treaty Compliance System.

Eliminate Illicit Export Activity Outside the Global Export Control and Treaty Compliance System.

Ensure Continued U.S. Technology Leadership in Industries that are Essential to National Security.

Guiding Principles of the Bureau of Industry and Security

This statement of principles represents the guiding philosophy of the Commerce Department's Bureau of Industry and Security in approaching its activities and fulfilling its responsibilities. This statement is not intended to dictate any particular regulatory action or enforcement action.

The Bureau's paramount concern is the security of the United States. The Bureau's mission is to protect the security of the United States, which

includes its national security, economic security, cybersecurity, and homeland security.

The Bureau's credibility—within government, with industry, and with the American people—depends upon its fidelity to this principle.

For example, in the area of dual-use export controls, the Bureau will vigorously administer and enforce such controls to stem the proliferation of weapons of mass destruction and the means of delivering them, halt the spread of weapons to terrorists or countries of concern, and further important U.S. foreign policy objectives. Where there is credible evidence suggesting that the export of a dual-use item threatens U.S. security, the Bureau must act to combat that threat.

Protecting U.S. security includes not only supporting U.S. national defense, but also ensuring the health of the U.S. economy and the competitiveness of U.S. industry.

The Bureau seeks to promote a strong and vibrant defense industrial base that can develop and provide technologies that will enable the United States to maintain its military superiority.

The Bureau must take great care to ensure that its regulations do not impose unreasonable restrictions on legitimate international commercial activity that is necessary for the health of U.S. industry. In protecting U.S. security, the Bureau must avoid actions that compromise the international competitiveness of U.S. industry without any appreciable national security benefits.

The Bureau strives to work in partnership with the private sector. The Bureau will seek to fulfill its mission, where possible, through public-private partnerships and market-based solutions.

U.S. security cannot be achieved without the active cooperation of the private sector, which today controls a greater share of critical U.S. resources than in the past. At the same time, the health of U.S. industry is dependent on U.S. security—of our borders, our critical infrastructures, and our computer networks.

The symbiotic relationship between industry and security should be reflected in the formulation, application, and enforcement of Bureau rules and policies.

The Bureau's activities and regulations need to be able to adapt to changing global conditions and challenges. The political, economic, technological, and security environment that exists today is substantially different than that of only a decade ago. Bureau activities and regulations can only be justified, and should only be maintained, to the extent that they reflect current global realities. Laws, regulations, or practices that do not take into account these realities—and that do not have sufficient flexibility to allow for adaptation in response to future changes—ultimately harm national security by imposing costs and burdens on U.S. industry without any corresponding benefit to U.S. security.

In the area of exports, these significant geopolitical changes suggest that the U.S. control regime—in the past, primarily list-based—must shift to a mix of list-based controls and controls that

target specific end-uses and end-users of concern.

The Bureau also should be creative in thinking about how new technologies can be utilized in designing better export controls and enforcing controls more effectively.

The Bureau's rules, policies, and decisions should be stated clearly, applied consistently, and followed faithfully. The Bureau's rules, policies, and decisions should be transparent and clearly stated. Once promulgated, Bureau rules and policies should be applied consistently, and Bureau action should be guided by precedent.

Uncertainty, and the delay it engenders, constitute a needless transaction cost on U.S. companies and citizens, hampering their ability to compete effectively. Voluntary compliance with Bureau rules and regulations should be encouraged and, to the extent appropriate, rewarded.

These precepts are particularly important with respect to the application and enforcement of export controls. An effective export control regime necessarily depends upon the private sector clearly understanding and seeking to implement Bureau rules and policies voluntarily.

Decisionmaking should be fact-based, analytically sound, and consistent with governing laws and regulations. Bureau decisions should be made after careful review of all available and relevant facts and without any philosophical predisposition.

A "reasonable person" standard should be applied to all decisions: How would

a “reasonable person” decide this issue? The Bureau’s mission does not lend itself to “ideological” decisionmaking, especially when it comes to its licensing and enforcement functions.

It is inappropriate to recommend outcomes based on an assumption that a position will be reviewed and “pared back” by another party, whether it be another office in the Bureau or another agency of the U.S. Government. Such an approach violates the public’s trust, undermines the Bureau’s credibility, and imposes substantial costs in terms of wasted time and effort.

The Bureau strives to work cooperatively with other parts of the U.S. Government and with state and local governments.

The Bureau shall seek to collaborate in a collegial and effective manner with other agencies and departments of the U.S. Government, including the National Security Council, the Department of Homeland Security, the State Department, the Defense Department, the Energy Department, and the intelligence community.

The Bureau shall consult with its oversight committees and other appropriate Members of Congress and congressional staff on matters of mutual interest.

The Bureau shall seek to enhance its relationships with state and local government officials and first responders to national emergencies.

International cooperation is critical to the Bureau’s activities. Fulfilling the Bureau’s mission of promoting security depends

heavily upon international cooperation with our principal trading partners and other countries of strategic importance, such as major transshipment hubs. Whether seeking to control the spread of dangerous goods and technologies, protect critical infrastructures, or ensure the existence of a strong defense industrial base, international cooperation is critical.

- With regard to export control laws in particular, effective enforcement is greatly enhanced by both international cooperation and an effort to harmonize the substance of U.S. laws with those of our principal trading partners.
- International cooperation, however, does not mean settling on the “lowest common denominator.” Where consensus cannot be broadly obtained, the Bureau will not abandon its principles, but should seek to achieve its goals through other means, including cooperation among smaller groups of like-minded partners.

Nothing contained herein shall create any rights or benefits, substantive or procedural, enforceable by any party against BIS, its officers and employees, or any other person.

Appendix B: Regulatory Changes in Fiscal Year 2008

BIS published 25 *Federal Register* actions affecting the Export Administration Regulations. These actions included the following:

Validated End-Users

On October 1, 2007, BIS published a rule adding India as an eligible destination for exports, reexports, and transfers under the Authorization Validated End-User (VEU) program.

In a rule published on October 19, 2007, BIS listed names of end-users in the People's Republic of China approved to receive exports, reexports, and transfers of certain items under VEU.

Expansion of the Entity List

On August 21, 2008, BIS published a rule expanding the scope of reasons for which it may add parties to the Entity List beyond proliferation concerns to include entities that appear to be acting contrary to the national security or foreign policy interests of the United States, based on specific and articulable facts.

On September 22, 2008, BIS published a rule adding entities to the Entity List under the expanded criteria. Many of these persons had previously been designated in a General Order as acting contrary to the national security or foreign policy interests of the United States. The Entity List provides notice to the public that certain exports and reexports to parties identified on the Entity List require a license from BIS and that availability of License Exceptions in such transactions is limited. The September 22, 2008, rule also eliminated the

General Order under which many of the entities affected by the new rule had previously been listed.

Systematic Review of the Commerce Control List

BIS published a rule implementing changes as a result of a systematic review of the Commerce Control List. This rule, published on April 18, 2008, made certain technical corrections.

Electronic Filing

A final rule published on August 21, 2008, required electronic filing of export and reexport license applications, classification requests, encryption review requests, and notifications for exports of agricultural commodities to Cuba. With certain exceptions, these documents must be filed via BIS's Simplified Network Application Process Redesign (SNAP-R). This rule addressed public comments made on the proposed rule, which was published October 19, 2007.

Deemed Exports

On May 19, 2008, BIS published a Notice of Inquiry soliciting public comment on two specific recommendations of the Deemed Export Advisory Committee. These recommendations involved narrowing the scope of technologies subject to deemed export licensing requirements and broadening the criteria used to assess country affiliation for foreign nationals with respect to deemed exports.

Country Policy

In response to the Government of Burma's continued repression of the democratic opposition in Burma, BIS published a rule

on October 24, 2007, that moved Burma into more restrictive country groupings and imposed a license requirement for most exports, reexports, and transfers to persons listed in or designated pursuant to Executive Orders 13310 and 13448.

On February 28, 2008, BIS published a rule increasing the number of end-uses for which certain computers and telecommunications devices may be exported temporarily to Sudan without a license for persons doing humanitarian and development work in that country.

A rule published on June 13, 2008, allowed exports of mobile phones as gifts sent by individuals to eligible recipients in Cuba. This action was intended to enable the free exchange of information among Cuban citizens and with persons in other countries.

BIS recognized Kosovo's sovereignty in a rule published on September 2, 2008. Amendments made in this rule included adding Kosovo to the Commerce Country Chart and the appropriate country groups.

End-Use and End-User Controls, Transfers

BIS proposed certain changes and clarifications of policy regarding transfers and certain end-use and end-user controls. The rule, published on April 18, 2008, also proposed a new definition of "transfer."

Temporary Exports of Technology

BIS expanded the availability of certain License Exceptions to include temporary exports of technology in a rule published on December 12, 2007.

Wassenaar Arrangement

On November 5, 2007, BIS published a rule amending the Commerce Control List to implement the agreement reached at the December 2006 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.

Missile Technology Control Regime

In order to reflect changes to the Missile Technology Control Regime (MTCR) Annex that were agreed to at the November 2007 MTCR plenary in Athens, Greece, BIS published a rule on June 16, 2008, that amended the Commerce Control List, including revising the technical notes to the definition of the term "payload."

Chemical and Biological Weapons

On July 8, 2008, BIS implemented changes to the Commerce Control List resulting from the April 2008 Australia Group plenary, including revising the listing for avian influenza viruses.

Additional Control List Changes

On November 7, 2007, BIS expanded licensing jurisdiction for certain micromachined angular rate sensors when those sensors were integrated into certain civil aircraft systems.

On September 2, 2008, BIS clarified the control list entry under which crew protection kits used as protective cabs on construction equipment are classified.

Technical Revisions

Throughout FY 2008, BIS published several rules making technical revisions to the Export Administration Regulations.

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

Improved Organizational Performance Management

In FY 2006, BIS undertook a review of its Government Performance and Results Act (GPRA) performance measures. The result of this review was a complete revision of the BIS GPRA performance measures. In FY 2008, BIS has continued to incorporate external GPRA performance metrics and internal milestones.

In FY 2004 and FY 2005, BIS was evaluated by the Office of Management and Budget (OMB) using OMB's Performance and Assessment Rating Tool (PART). PART assessments are designed to link organizational performance to budget decisions and provide a basis for making recommendations to improve program results. In FY 2008, BIS continued working to meet the OMB PART recommendations. Additionally, in FY 2008, BIS completed the PART Updates, which are available on the website www.ExpectMore.gov.

President's Management Agenda (PMA)

BIS also has supported the President's Management Agenda (PMA), particularly Strategic Management of Human Capital, Budget and Performance Integration, and Electronic Government (E-Gov).

For example, in the area of Strategic Management of Human Capital, BIS launched the Office of Personnel Management (OPM) Organizational Assessment Survey as a follow-up to the 2005 survey to monitor progress by obtaining employees' current perceptions of

the organization and workplace. As a result of the BIS Organizational Development Initiative, BIS employees established a voluntary Employee Advisory Council (EAC). The EAC provide a forum for BIS employees to give feedback to leadership. Another significant human capital accomplishment for BIS in FY 2008 was the effort to continue with the development of a comprehensive training program for BIS personnel that will assist with closing skill gaps. Sample Individual Development Plans (IDPs) for BIS core occupations were developed and posted to the BIS intranet site. These IDPs will serve as templates for BIS supervisors and employees to develop personal IDPs.

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. As stated in the OMB PART findings, "Budget requests are integrated with performance goals and describe the anticipated effects of resource requirements on performance."

The major E-Gov initiative accomplishments for BIS in 2008 were continued success in its program to replace the legacy export 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 control system. In 2008, as a result of the October 2006 deployment of the Simplified Network Application Process

System Redesign (SNAP-R)—its export license submission system—BIS continued to realize export licensing productivity improvements.

SNAP-R is a secure Web system used by exporters to submit export license applications, commodity classification requests, and supporting documents to the Department of Commerce via the Internet. SNAP-R significantly improves security and ease of use for exporters, and improves BIS's license receipt and processing effectiveness and efficiency. SNAP-R is a sub-system of the broader BIS ECASS-R service-oriented architecture (SOA) framework and high-security infrastructure. In its first two years of operation, BIS ECASS-R achieved over 99.5 percent availability and experienced zero outages, data integrity issues, or security incidents.

On October 3, 2008, BIS met its second major ECASS-R program development milestone by successfully deploying ECASS-R Stage 2 in production. ECASS-R Stage 2 includes two major subsystems. These include the: 1) redesigned Export Enforcement Investigative Management System (IMS-R), and 2) a high-security general support infrastructure, the BIS Export Control Cyber Infrastructure (BECCI).

IMS-R is an internal BIS system used by Export Enforcement staff to document and track investigations. It improves BIS's effectiveness by providing easier access, eliminating some previously manual processes, including analysis and reporting. A major feature of IMS-R is improved security, which directly relates to BECCI, the second major subsystem of the ECASS-R Stage 2 deployment. BIS requires extraordinary IT security measures due to its highly sensitive international trade data and

increasing levels of global cyberespionage threat. The National Institute of Standards and Technology's (NIST) Federal Information Processing Standards (FIPS) Publication 199, "Standards for Security Categorization of Federal Information and Information Systems" (FIPS-199), defines three levels of potential impact on organizations or individuals should there be a breach of security: low, medium, and high. BIS's international trade data—designated as "high: under FIPS-199—requires data security exceeding even the requirements of personal privacy information. The global cyberespionage threat requires security infrastructure over and above that commonly considered to be adequate. BECCI was developed to address the stringent requirements of protecting export control data and systems.

BIS completed independent certification and accreditation of the ECASS-R Stage 2 system IT security controls using criteria identified in the NIST Special Publications "Self-Assessment Guide for Information Technology (IT) Systems" (800-53) and "Recommended Security Controls for Federal Information Systems" (800-53A). BIS did this through independent security testing and evaluation at the "high" impact level, consistent with FIPS-199 guidance. In FY 2008, as in FY 2007, BIS achieved distinction as having one of the highest rated IT security programs within the Department of Commerce.

In addition, BIS continued to meet its enterprise architecture, IT security, and Web public data dissemination requirements. BIS implemented website improvements to support enhanced internal and external training initiatives.

Administrative Initiatives

BIS is in support of the Safety, Health, and Return to Employment (SHARE) initiatives to foster a safe and healthy work environment. During FY 2008, BIS successfully kept its injury and illness rate below one percent.

BIS also supports the Competitive Sourcing and Improved Financial Performance Initiatives. Annually, BIS performs a top-down review of all its positions and functions in accordance with the Federal Activities Inventory Report (FAIR) Act. BIS is a small organization with two primary functions: licensing and enforcement. As these functions are inherently governmental, there is not much flexibility for outsourcing.

BIS has changed the New Employee Orientation to an electronic format. This allows new employees to receive and review agency materials electronically prior to their on-site orientation.

BIS participated in the implementation process for the new Personal Identity Verification 2 (PIV-2) badges under the Homeland Security Presidential Directive 12 (HSPD-12). Enrollment for the new badges was conducted for Federal employees located at the Herbert C. Hoover Building (HCHB) beginning July 9, 2008.

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

Auditing Agencies

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 2008, 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.

Six GAO studies addressing BIS programs and activities were completed in FY 2008: 1) Analysis of Data for Exports Regulated by Department of Commerce (job code 120578); 2) Nuclear Proliferation Networks (job code 320443); 3) Sanctions Against Iran (job code 320462); 4) The U.S. Trade Embargo Against Cuba (job code 320468); 5) U.S. Government Agencies' Use of the Defense Production Act (job code 120709); and 6) Agency Actions Related to Re-baselining Information Technology Projects (job code 310867).

At the end of the fiscal year, four GAO studies addressing BIS programs and activities were pending final reports: (1) The Committee on Foreign Investment in the United States (job code 120690); (2) The Makeup and Health of Selected Sectors of the Defense Supplier Base (job code 120693); (3) Chinese Semiconductor Manufacturing Capabilities (job code 320547); and (4) Treasury's Office of Terrorism and Financial Intelligence (job code 320608).

During FY 2008, OIG did not complete any reviews addressing BIS programs and activities. However, OIG completed follow-up work with program offices on previous Export Control recommendations.

The various reviews and evaluations conducted during FY 2008 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 58 Freedom of Information Act (FOIA) requests relating to export licensing and enforcement as well as other types of management information.

IT Security

In addition to completing the security objectives described in the E-Gov section of this report, BIS completed additional security program operational improvements including, but not limited to: 1) enhanced multilevel e-mail screening, encryption, and auditing of data files and devices that BIS staff use for travel and work off-site, 2) more comprehensive IT Security Policy and Procedures, 3) Federally mandated security requirements, and 4) improved BIS Security Operations Center hardware, software, and staff operations. BIS continued to meet annual IT Security Awareness training requirements for all employees and contractors.

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

Table 1
Criminal Case Convictions Fiscal Year 2008

Sentencing Date	Defendant	Criminal Charges	Criminal Sanctions	Case Details
10/4/07	Spares Global, Inc.	One count of conspiracy in violation of 18 U.S.C. 371	\$40,000 criminal fine	False statements related to the export of graphite rods to the United Arab Emirates
10/11/07	Tak Components	16 counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	One year probation, a \$38,016 forfeiture, and a \$6,400 special assessment	Export of tractor parts to Iran via the United Arab Emirates
10/11/07	Saied Shahsavarani	One count of operating a money transfer business in violation of 18 U.S.C. 1960	Three years probation, a \$1,000 criminal fine, and a \$100 special assessment	Export of tractor parts to Iran via the United Arab Emirates
10/11/07	Theresa Chang	One count of making false statements in violation of 18 U.S.C. 1001	Three years probation and a \$5,000 fine	Export of nickel powder to Taiwan
10/15/07	Sharon Doe	Two counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1702	Three years probation, six months home detention, a \$5,000 criminal fine, and 235 hours of community service	Export of acid gate valves to Iran via Australia
10/24/07	Roger Unterberger	One count of making false statements in violation of 18 U.S.C. 1001	Ten days in prison (time served), one year probation, and a \$5,000 criminal fine	Export of pipe-cutting equipment to Iran via Germany
10/24/07	Go Trans (North America)	One count of making false statements in violation of 18 U.S.C. 1001	One year probation and a \$34,000 criminal fine	Export of pipe-cutting equipment to Iran via Germany
10/24/07	Muhammad Bhatti	One count of making false statements in violation of 18 U.S.C. 1001	One year probation and a \$100 special assessment	Export of pipe-cutting equipment to Iran via Germany
11/2/07	Gary Min	One count of theft of trade secrets in violation of 18 U.S.C. 1832	18 months in prison, two years supervised release, and a \$30,000 criminal fine	Economic espionage to China

11/30/07	Murray Rinsler	One count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	Two years probation, a \$20,000 criminal fine, and a \$100 special assessment	Export of aircraft parts to Iran via Israel and Germany
11/30/07	World Electronics	One count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	Two years probation, a \$20,000 criminal fine, and a \$400 special assessment	Export of aircraft parts to Iran via Israel and Germany
12/3/07	Philip Cheng	One count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	24 months in prison, three years supervised release, and a \$50,000 criminal fine	Export of an infrared camera to China
12/17/07	Andrew Freyer	Three counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705, and one count of aiding and abetting in violation of 18 U.S.C. 2	17 months in prison, two years probation, and a \$10,000 criminal fine	Export of acid gate valves to Iran via Australia
1/22/08	Green Supply Inc.	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705, and one count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	Two years probation, a \$17,500 criminal fine, and a \$800 special assessment	Export of crime control products to various locations
1/29/08	Gerd Walther	Two counts of making false statements in violation of 26 U.S.C. 7207	\$15,000 criminal fine	Export of semiconductors to the Soviet Bloc via West Germany and Austria
1/29/08	Ghassan Tabbaa	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705, and one count of false statements in violation of 18 U.S.C. 1001	Four days in prison (time served), six months home confinement, two years probation, forfeiture of a vehicle valued at \$105,543, and a \$200 special assessment	Export of automobiles to Syria
2/8/08	Mojtada Maleki-Gomi	One count of conspiracy in violation of 18 U.S.C. 371	18 months in prison, three years probation, and a \$200,000 criminal fine	Export of textile equipment to Iran via the United Arab Emirates
2/8/08	Babak Maleki	One count of making false statements in violation of 18 U.S.C. 1001	One year probation	Export of textile equipment to Iran via the United Arab Emirates


2/8/08	Bertrand Lalsing	One count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	Five months in prison, five months home confinement, two years probation, and a \$100 special assessment	Export of rifle scopes to Germany
2/14/08	Mazen Ghashim	Two counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	Three years probation and a \$200 special assessment	Attempted export of computers to Syria via the United Arab Emirates
3/12/08	MTS Systems Corporation	Two counts of making a false certification or writing in violation of 18 U.S.C. 1018	Two years probation and a \$400,000 criminal fine	Export of seismic test equipment to India
3/14/08	Proclad International Pipelines Ltd.	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	Five years probation, a \$100,000 criminal fine, and a \$400 special assessment	Attempted export of nickel alloyed pipes to Iran via the United Kingdom and the United Arab Emirates
3/19/08	Johanali Oveissi	One count of bulk cash smuggling in violation of 31 U.S.C. 5332	Three years probation, a \$2,500 criminal fine, and a \$100 special assessment	Export of firearms and money to Iran
4/28/08	Mohammad Mayssami	One count of failing to report a suspicious transaction in violation of 31 U.S.C. 5322	Two years probation, \$10,000 criminal fine, and 160 hours of community service	Export of computer equipment to Iran via the United Arab Emirates and Taiwan
5/1/08	Patrick Gaillard	One count of conspiracy in violation of 18 U.S.C. 371	One month in prison, six months home confinement, three years probation, a \$25,000 criminal fine, 300 hours of community service, and a \$100 special assessment	Export of laboratory equipment systems to Iran via the United Arab Emirates
5/15/08	Afshin Rezaei	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	Six months in prison (time served), and a \$50,000 criminal fine	Export of computers to Iran via the United Arab Emirates

5/22/08	Nelson Galgoul	One count of conspiracy in violation of 18 U.S.C. 371, and four counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	13 months in prison, three years supervised release, a \$100,000 criminal fine, and a \$109,291 forfeiture	Export of engineering software to Iran via Brazil
6/6/08	Khalid Ahmed	One count of smuggling in violation of 18 U.S.C. 554	Five months in prison, three years supervised release, and a \$1,500 criminal fine	Export of commodities to Sudan
6/6/08	Entisar Hagosman	One count of making false statements in violation of 18 U.S.C. 1001	Two months in prison (time served), and two years supervised release	Export of commodities to Sudan
6/6/08	WaveLab Inc.	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	One year probation, a \$15,000 criminal fine, and a \$85,000 forfeiture	Export of power amplifiers to China
6/9/08	CVC Services	Two counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705	Five years probation, \$51,000 criminal fine, and a \$800 special assessment	Export of valve parts to Iran via Italy
6/17/08	Parthasarathy Sudarshan	One count of conspiracy in violation of 18 U.S.C. 371	35 months in prison (15 months time served), two years supervised release, a \$60,000 criminal fine, and a \$100 special assessment	Export of electrical components to Entity List companies in India
7/17/08	Cryostar SAS	Two counts of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705, and one count of conspiracy in violation of 18 U.S.C. 371	Two years probation and a \$500,000 criminal fine	Export of cryogenic pumps to Iran via France
7/24/08	Euro Optics Inc.	One count of violating the International Emergency Economic Powers Act in violation of 50 U.S.C. § 1705, and one count of violating the Arms Export Control Act in violation of 22 U.S.C. 2778	Five years probation, a \$10,000 criminal fine, and a \$800 special assessment	Export of rifle scopes to various locations

8/7/08	James Angehr	One count of conspiracy in violation of 18 U.S.C. 371	Five years probation, six months confinement in a halfway house, a \$250,000 criminal fine, and a \$218,583 forfeiture	Export of engineering software to Iran via Brazil
8/7/08	John Fowler	One count of conspiracy in violation of 18 U.S.C. 371	Five years probation, four months confinement in a halfway house, a \$250,000 criminal fine, and a \$218,583 forfeiture	Export of engineering software to Iran via Brazil
8/11/08	Mythili Gopal	One count of conspiracy in violation of 18 U.S.C. 371	Four years probation, 60 days home confinement, a \$5,000 criminal fine, and 200 hours of community service	Export of electrical components to Entity List companies in India
8/28/08	Allied Telesis Labs Inc. (formerly Allied Telesyn Network)	One count of conspiracy in violation of 18 U.S.C. 371	Two years probation, and \$500,000 criminal fine	Export of telecommunications equipment from Singapore to Iran via the United Arab Emirates
9/9/08	James Francis Gareth	Two counts of providing false information to a federal agency in violation of 18 U.S.C. 922	51 months in prison, and two years probation	Export of firearms to Canada

Table 2
Department of Commerce Export Enforcement Cases Fiscal Year 2008

Order Date	Respondent	Charges	Sections Violated [Number of Violations]	Result
10/01/07	Aviation Services International B.V. Delta Logistics B.V. Robert Kraaiipoel Niels Kraaiipoel T.P.C. B.V. Mia Van Gemert Mojir Trading Reza Amidi Lavantia Ltd. Mita Zarek	Temporary Denial Order (TDO) issued based on showing of imminent violations in matter involving the export and attempted export of U.S.-origin items to Iran, with efforts to conceal activities and avoid detection by transshipping the items through third countries; numerous false statements to U.S. suppliers and freight forwarders regarding the end-users and countries of ultimate destination, thereby causing false statements to be made on the Shipper's Export Declarations; made false statements to the Office of Export Enforcement		TDO denying export privileges for 180 days (initial issuance)
10/10/07	Buehler Limited	Exported various items, including presses and blades to the Bhabha Atomic Research Center (BARC) in Mumbai, India, an organization on the BIS Entity List, without the required licenses; exported a replacement part (mold closure) from the United States to Iran through the United Kingdom without the required authorization	764.2(a) [5]	Settlement Agreement - civil penalty of \$27,000
10/10/07	Buehler United Kingdom	Aided and abetted the export of a replacement part (mold closure) from the United Kingdom to Iran without the required authorization; reexported an image analysis system containing specialized software from the United Kingdom to Iran without the required authorization and with knowledge that a violation would occur	764.2(a) [2] 764.2(b) [1] 764.2(e) [1]	Settlement Agreement - civil penalty of \$29,000
10/24/07	Megatech Engineering & Services Pvt. Ltd.	Conspired to export from the United States to the Indira Gandhi Centre for Atomic Research (IGCAR) in India, an organization on the BIS Entity List, a thermal fatigue test system and a universal testing machine; engaged in transactions with intent to evade the Regulations	764.2(d) [1] 764.2(h) [2]	Final Decision (litigated case) Export privileges denied for 15 years

10/24/07	Ajay Ahuja	Conspired to export from the United States to the Indira Gandhi Centre for Atomic Research (IGCAR) in India, an organization on the BIS Entity List, a thermal fatigue test system and a universal testing machine; engaged in transactions with intent to evade the Regulations	764.2(d) [1] 764.2(h) [2]	Final Decision (litigated case) Export privileges denied for 15 years
10/24/07	Ravi Shettigar	Conspired to export from the United States to the Indira Gandhi Centre for Atomic Research (IGCAR) in India, an organization on the BIS Entity List, a thermal fatigue test system and a universal testing machine; engaged in transactions with intent to evade the Regulations	764.2(d) [1] 764.2(h) [2]	Final Decision (litigated case) Export privileges denied for 15 years
10/24/07	T.K. Mohan	Conspired to export from the United States to the Indira Gandhi Centre for Atomic Research (IGCAR) in India, an organization on the BIS Entity List, a thermal fatigue test system and a universal testing machine; engaged in transactions with intent to evade the Regulations	764.2(d) [1] 764.2(h) [2]	Final Decision (litigated case) Export privileges denied for 15 years
11/05/07	S.P. Equipamentos de Proteção ao Trabalho Ltda.	Transferred a thermal imaging camera to State Secretariat of Civil Defense (Military Police of the State of Rio de Janeiro) in Brazil in violation of license conditions and with knowledge that a violation would occur	764.2(a) [1] 764.2(e) [1]	Set aside the Final Decision and Order (default order) of February 26, 2007, and vacated the order
11/06/07	Hamburger Woolen Company, Inc.	Exported restraint devices to England and Germany without the required U.S. Government authorization; made false statement on Shipper's Export Declarations	764.2(a) [10] 764.2(g) [10]	Settlement Agreement - civil penalty of \$110,000, \$80,000 suspended
11/08/07	 Hardinge, Inc.	Failed to comply with recordkeeping requirements	764.2(i) [1]	Settlement Agreement - civil penalty of \$3,000
11/08/07	Canberra Albuquerque	Exported thermal imaging cameras to Germany without the required licenses	764.2(a) [2]	Settlement Agreement - civil penalty of \$33,000

11/21/07	Lam Research Corporation	Deemed exports of technology to a Russian and a Chinese national in the United States without the required licenses; exported manometers to various destinations without the required licenses	764.2(a) [5]	Settlement Agreement - civil penalty of \$27,500 - after filing of charging letter
11/27/07	Ernest Koh Chong Tek	Knowingly and willfully exported from the United States to Iran, civilian aircraft wheel components and vanes that were listed on the Commerce Control Lists without first obtaining the required validated export licenses from the Commerce Department and the Department of the Treasury's Office of Foreign Assets Control.	Section 1702 and 1705(b) of IEEPA	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until October 13, 2016
11/27/07	Xu Weibo, a/k/a Kevin Xu Hao Li Chen a/k/a Ali Chan Xiu Ling Chen a/k/a Linda Chen Kwan Chun Chan a/k/a Jenny Chan	Knowingly and willfully ordered, bought, removed, concealed, stored, used, sold, loaned, disposed of, transferred, transported, financed, forwarded and otherwise serviced, in whole or part, items exported and to be exported from the United States, specifically certain Gallium Arsenide Monolithic Microwave Integrated Circuits to the People's Republic of China, with knowledge that a violation of the Act, the Regulations and any order, license and authorization issued thereunder, had occurred, was about to occur or was intended to occur	Section 1705(b) of IEEPA and Section 38 of the AECA	Export privileges denied under Section 11(h) of the EAA and Section 766.25 of the EAR until May 4, 2016
11/29/07	Proclad International Pipelines Ltd.	Caused, aided or abetted violations of the Regulations by ordering and attempting to export nickel alloy pipes from the United States to Iran through the United Arab Emirates without the required license and by providing false or misleading shipping documentation to two U.S. manufacturers of certain nickel alloy to disguise the true ultimate destination of Iran; conspired to export nickel alloy pipes from the United States to Iran through the United Kingdom and/or the United Arab Emirates without prior authorization and with knowledge that violations would occur; took actions to evade the Regulations; made false or misleading statements to an agent of BIS's Office of Export Enforcement	764.2(b) [3] 764.2(d) [1] 764.2(e) [2] 764.2(h) [2] 764.2(g) [2]	Settlement Agreement - civil penalty of \$100,000; export privileges denied for seven years, all of which is suspended

12/3/07	Electronica Aster S.p.A.	Aided and abetted the export of an instrument landing system from the United States through Italy to Iran without the required license and with knowledge that a violation would occur	764.2(b) [1] 764.2(e) [1]	Settlement Agreement - civil penalty of \$18,000
12/05/07	Cirrus Electronic LLC Cirrus Electronics Pte Ltd. Cirrus Electronics Marketing (P) Ltd. Parthasarathy Sudarshan Mythili Gopal Akn Prasad Sampath Sundar	TDO: Took actions to evade the Regulations by shipping items through Singapore and concealing the true identity of the end-user; exported items to Vikram Sarabhai Space Center (“VSSC”) and Bharat Dynamics Ltd (“BDL”) in India, organizations on the Entity List without the required licenses (TDO did not allege specific violations of the EAR)		TDO denying export privileges renewed for 180 days
12/07/07	Mine Safety Appliances Company	Reexported various safety equipment items from the United Arab Emirates to Iran and Syria without the required authorizations	764.2(a) [107]	Settlement Agreement - civil penalty of \$470,000
12/07/07	Cryostar-France SA	Conspired, aided and abetted, and attempted to export cryogenic pumps to Iran without the required authorizations and with knowledge that violations would occur; took actions to evade the regulations; made false statements to an Office of Export Enforcement Special Agent in the course of an investigation	764.2(d) [1] 764.2(b) [1] 764.2(e) [2] 764.2(c) [1] 764.2(h) [1] 764.2(g) [1]	Settlement Agreement - civil penalty of \$66,000; export privileges denied for two years, all of which is suspended
12/07/07	State of the Art, Inc.	Made false statement on Shipper’s Export Declarations; exported fixed resistors to the Space Application Center in India, an end-user on BIS’s Entity List, without the required license	764.2(g) [7] 764.2(a) [1]	Settlement Agreement - civil penalty of \$35,000
12/12/07	3DSP Corporation	Deemed exports of technology to a professor and students of the Beijing University of Aeronautics and Astronautics, an organization on the Entity List in the People’s Republic of China, without the required licenses	764.2(a) [6]	Settlement Agreement - civil penalty of \$36,000
12/21/07	Quality Penn Products, Inc.	Ordered the export of pallets of wood to Cuba without the required authorization and with knowledge that a violation would occur	764.2(a) [1] 764.2(e) [1]	Settlement Agreement - civil penalty of \$6,000

12/21/07	Marubeni Citizen-Cincom Inc.	Exported machine tools to Mexico and Brazil without the required licenses; made false statement regarding license authority on Shipper's Export Declaration	764.2(a) [3] 764.2(g) [1]	Settlement Agreement - \$32,940
1/16/08	Juan Sevilla and Related Persons: JS Engineering Cientec, S.A. de C.V.	Knowingly and willfully attempted to engage in the unauthorized sale and export to Iran of a United Computer Inclusive Hydraulic Floor Model Testing Machine	Section 1702 and 1705(b) of IEEPA	Export privileges denied under Section 11(h) of the EAA and Section 766.25 of the EAR until December 5, 2011
1/23/08	Elite International Transportation, Inc.	Made false or misleading representations, statements or certifications to the U.S. Government on export control documents	764.2(g) [55]	Settlement Agreement - civil penalty of \$156,000
1/23/08	Northrop Grumman Corporation	Reexported items from the United Kingdom to Italy, Germany and Qatar without the required licenses; violated terms of a license condition; exported specially designed components for navigation equipment to Italy, Malaysia, the Philippines and the United Kingdom without the required licenses; exported module manufacturing data by facsimile transmission to Singapore without the required licenses	764.2(a) [131]	Settlement Agreement - civil penalty of \$400,000
2/05/08	Protective Products International Corp.	Exported ballistic helmets to Kuwait, Chile, the Sultanate of Oman, Trinidad and Tobago, and Saudi Arabia without the required licenses; failed to comply with recordkeeping requirements	764.2(a) [5] 764.2(i) [4]	Settlement Agreement - civil penalty of \$65,000
2/11/08	SELEX Sistemi Integrati, Inc.	Exported an instrument landing system from the United States through Italy to Iran without the required license; made false statement regarding country of ultimate destination on a Shipper's Export Declaration	764.2(a) [1] 764.2(g) [1]	Settlement Agreement - civil penalty of \$13,200
2/12/08	Mohammad Fazeli	Willfully attempted to export 103 Honeywell pressure sensors to Iran, through the United Arab Emirates without the required authorization from the Department of the Treasury's Office of Foreign Assets Control	Sections 1701-1705 of IEEPA	Amended the September 12, 2007, Denial Order by deleting the two addresses listed in the Order and by adding the updated current address.

3/03/08	Ali Asghar Manzarpour	Caused, aided or abetted the export of a single engine aircraft to Iran without the required authorization and with knowledge that a violation would occur; took actions to evade the Regulations	764.2(b) [1] 764.2(e) [1] 764.2(h) [1]	Export privileges denied for 20 years (Default Judgment)
3/12/08	MTS Systems Corporation	Misrepresented material facts in connection with the submission of license applications regarding the export of seismic testing equipment to India, with knowledge that the equipment could be used in testing nuclear power plant components or on behalf of Indian nuclear facilities, and with knowledge that an Indian entity on the Entity List had provided funding for one of the transactions	764.2(g) [2]	Settlement Agreement - civil penalty of \$400,000
3/12/08	WaveLab Inc.	Bought and/or forwarded microwave amplifiers to People's Republic of China with knowledge that a violation would occur or was intended to occur	764.2(e) [11]	Settlement Agreement - export privileges denied for five years, all of which is suspended; perform an audit of internal compliance program within 12 months
3/14/08	DHL Holdings (USA), Inc.	Aided and abetted the export of 11 tiltometers to Mayrow General Trading in the United Arab Emirates without the required license	764.2(b) [1]	Settlement Agreement - civil penalty of \$37,500
3/18/08	Balli Group PLC Balli Aviation Balli Holdings Vahid Alaghband Hassan Alaghband Blue Sky One Ltd. Blue Sky Two Ltd. Blue Sky Three Ltd. Blue Sky Four Ltd Blue Sky Five Ltd. Blue Sky Six Ltd. Blue Airways Mahan Airways	TDO issued based on showing of imminent violations in matter involving the reexport of three U.S.-origin aircraft to Iran and the intended reexport of an additional three U.S.-origin aircraft to Iran; false statements to BIS regarding the ultimate destination and end-user of the aircraft; failure to comply with a BIS order to return the three additional aircraft to the United States		TDO denying export privileges for 180 days (initial issuance)

3/19/08	Agility International, Inc., formerly known as Matrix International Logistics, Inc.	Caused, aided or abetted the attempted export of concealable vests, body armor and bomb blast blankets to Iraq without the required authorization; made false or misleading representations on Shipper's Export Declaration	764.2(b) [1] 764.2(g) [1]	Settlement Agreement - civil penalty of \$13,200
3/28/08	Aviktor Trading Corporation	Exported a thermal imaging camera to Ecuador without the required license; failed to file a Shipper's Export Declaration	764.2(a) [2]	Settlement Agreement - civil penalty of \$16,000
4/04/08	Aviation Services International B.V. Delta Logistics B.V. Robert Kraaiipoel Niels Kraaiipoel T.P.C. B.V. Mia Van Gemert Mojir Trading Reza Amidi Lavantia Ltd. Mita Zarek	TDO issued based on showing of imminent violations in matter involving the export and attempted export of U.S.-origin items to Iran, with efforts to conceal activities and avoid detection by transshipping the items through third countries; numerous false statements to U.S. suppliers and freight forwarders regarding the end-users and countries of ultimate destination, thereby causing false statements to be made on the Shipper's Export Declarations; and false statements to the Office of Export Enforcement		TDO denying export privileges renewed for 180 days
4/18/08	Engineering Dynamics, Inc.	Conspired to export an engineering software program to Iran via Brazil without the required U.S. Government authorization	764.2(d) [1]	Settlement Agreement - civil penalty of \$132,791.39
4/30/08	Kabba & Amir Investments, Inc. d/b/a International Freight Forwarders	Aided and abetted an attempted unlicensed export of x-ray film processors to Cuba via Canada	764.2(b) [1]	Final Decision (litigated case) civil penalty of \$6,000; export privileges denied for three years, all of which is suspended if the civil penalty is timely paid in full
5/19/08	Related Person: Iberair Lines	See Result column		Added as a related person to the May 24, 2007, denial order against Winter Aircraft Products SA

5/19/08	Related Person: Ana Belen Diaz Sanchez	See Result column		Added as a related person to the May 24, 2007, denial order against Winter Aircraft Products SA
5/20/08	TFC Manufacturing, Inc.	Deemed export of technology for the production of aircraft parts to a national of Iran without the required license	764.2(a) [1]	Settlement Agreement - civil penalty of \$31,500
6/05/08	Andes Chemical Corporation	Exported sodium bifluoride to Jamaica without the required licenses; failed to file Shipper's Export Declarations	764.2(a) [8]	Settlement Agreement - civil penalty of \$60,000
6/06/08	Galaxy Aviation Trade Company Ltd. Hooshang Seddigh Hamid Shakeri Hendi Hossein Jahan Peyma Iran Air Ankair	TDO issued based on showing of imminent violation(s) in matter involving the intended reexport of U.S.-origin aircraft to Iran from Turkey without the required authorization		TDO denying export privileges for 180 days (initial issuance)
6/11/08	Brighton Equipment Corporation	Exported software to the People's Republic of China without the required export license	764.3(a) [1]	Settlement Agreement - civil penalty of \$17,500
6/20/08	Omega Engineering, Inc.	See Result column		Waived the remainder of the denial order period imposed under the previously issued November 12, 2003, denial order. The waiver was based upon extraordinary cooperation provided by the respondent in a criminal investigation
6/23/08	Reza Mohammed Tabib a/k/a Reza Tabib a/k/a Re Tabib and Related Person: Terri Tabib a/k/a Terri Repic	Criminal conviction involved willfully attempting to export and transship from the United States to Iran aircraft parts, including approximately three F-14 maintenance kits, without obtaining from the U.S. Department of Treasury, Office of Foreign Assets Control, a license or written authorization for such export and transshipment	Criminal violation(s) of Sections 1701-1705 of the International Emergency Economic Powers Act (IEEPA)	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until May 8, 2012.

7/10/08	Advanced Orientation Systems, Inc.	Exported tiltometers to Mayrow General Trading in the United Arab Emirates without the license required by General Order No. 3 of June 5, 2006	764.2(a) [1]	Settlement Agreement - civil penalty of \$31,500, \$16,500 suspended
7/10/08	Ankair	TDO originally issued based on showing of imminent violation(s) in matter involving the intended reexport of U.S.-origin aircraft to Iran from Turkey without the required authorization		Modified the June 6, 2008 TDO as to Ankair to cover all exports and reexports of items subject to the EAR
7/16/08	Select Engineering, Inc.	Sold and transported or caused to be transported medical electrode sensor elements and stainless steel snap connectors for export from the United States to Iran via the United Arab Emirates with knowledge that a violation would occur	764.2(e) [1]	Settlement Agreement - civil penalty of \$52,800
7/16/08	David Rainville	Made false statement to a BIS Special Agent in the course of an investigation	764.2(g) [1]	Settlement Agreement - civil penalty of \$35,200
7/18/08	Related Persons: Blue Airways FZE Blue Airways (of the UAE)	See Result column		Added two related persons to the March 17, 2008, denial order against Balli Group PLC, Blue Airways (of Armenia), et al.
8/11/08	Ingersoll Machine Tools, Inc.	Deemed exports of technology for vertical fiber placement machinery to Italian and Indian nationals and of production technology for 5-axis power mills to Indian nationals in the United States without the required licenses	764.2(a) [7]	Settlement Agreement - civil penalty of \$126,000
8/11/08	Advanced Micro Devices	Deemed exports of technology to Ukrainian and Chinese nationals in the United States without the required licenses	764.2(a) [2]	Settlement Agreement - civil penalty of \$11,000
8/12/08	Reson Inc.	Sold, transferred, transported, forwarded, or otherwise serviced, multibeam bathymetry echosounders with knowledge that violations would occur; deemed exports of technology to nationals of France and the United Kingdom in the United States without the required licenses	764.2(e) [6] 764.2(a) [2]	Settlement Agreement - civil penalty of \$83,000

8/12/08	Reson A/S	Reexported and caused, aided or abetted the export of multibeam bathymetry echosounders to India, Russia, Saudi Arabia, South Africa, and through Denmark to Germany, Russia and Singapore without the required licenses	764.2(a) [13] 764.2(b) [4]	Settlement Agreement - civil penalty of \$119,250
8/12/08	Reson Offshore Ltd.	Reexported multibeam bathymetry echosounders to South Africa without the required licenses	764.2(a) [2]	Settlement Agreement - civil penalty of \$9,900
8/12/08	Underwater Surveys (Pty) Ltd.	Reexported multibeam bathymetry echosounders to Denmark, Mozambique, the United Arab Emirates, and the United Kingdom without the required licenses	764.2(a) [6]	Settlement Agreement - civil penalty of \$29,700
8/15/08	Johnson Trading and Engineering Co. Ltd.	Caused the export of computer chips to the People's Republic of China, via Taiwan and Hong Kong, without the required licenses; took actions to evade the Regulations and with knowledge that a violation would occur	764.2(b) [7] 764.2(h) [1] 764.2(e) [1]	Settlement Agreement - civil penalty of \$90,000, \$30,000 suspended; implement an internal export controls compliance program within 6 months from the date of entry of the Order; perform audit of its internal export controls compliance program within 24 months of the date of entry of the Order; export privileges denied for five years, all of which is suspended
8/18/08	BAX Global Inc.	Forwarded Human Leukocyte Antigen (HLA) tissue-typing trays to Syria without the required licenses in violation of General Order No. 2 of the Regulations	764.2(b) [3]	Settlement Agreement - civil penalty of \$20,000
8/20/08	Cargoland Air and Ocean Cargo, Inc.	Attempted to export riot helmets to Venezuela without the required license	764.2(c) [1]	Settlement Agreement - civil penalty of \$36,000
9/04/08	Ralph Michel	See Result column		Amended the November 12, 2003, Denial Order by deleting the address listed in the Order and adding the new current address

9/04/08	Gusmer Europe, S.L.	Exported equipment for spray application systems for specialty polymer products to Cuba without the required licenses	764.2(a) [10]	Settlement Agreement - civil penalty of \$40,000
9/12/08	Nalco Company	Exported hardness test kits containing Triethanolamine to the Bahamas, Dominican Republic and Angola without the required licenses	764.2(a) [13]	Settlement Agreement - civil penalty of \$115,000
9/17/08	Balli Group PLC Balli Aviation Balli Holdings Vahid Alaghband Hassan Alaghband Blue Sky One Ltd. Blue Sky Two Ltd. Blue Sky Three Ltd. Blue Sky Four Ltd. Blue Sky Five Ltd. Blue Sky Six Ltd. Blue Airways Mahan Airways	TDO originally issued based on showing of imminent violations in matter involving the reexport of three U.S.-origin aircraft to Iran and the intended reexport 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 United States		TDO denying export privileges renewed for 180 days
9/19/08	Galaxy Aviation Trade Company Ltd. Hooshang Seddigh Hamid Shakeri Hendi Hossein Jahan Peyma	TDO originally issued based on showing of imminent violation in matter involving the intended reexport of U.S.-origin aircraft to Iran from Turkey without the required authorization		Final Decision (TDO Appeal): TDO affirmed and appeal denied
9/22/08	Demetrios International Shipping Co., Inc.	Caused, aided and/or abetted the export of two Raptor 100k stun guns to Algeria through France without the required licenses	764.2(b) [1]	Settlement Agreement - civil penalty of \$6,000
9/22/08	America II Electronics, Inc.	Exported analog-to-digital converters to Russia without the required licenses	764.2(a) [4]	Settlement Agreement - civil penalty of \$170,000
9/26/08	Marysol Technologies, Inc.	Exported laser resonator modules, cavities and components to the People's Republic of China, India, Belarus and Russia without the required export licenses	764.2(a) [9]	Settlement Agreement - civil penalty of \$180,000

9/29/08	Philip Cheng	Criminal conviction involved willfully engaging in brokering activities in facilitating the export and transfer of defense articles and defense services, specifically the brokering of the export of thermal imaging and infrared technology without having first registered with and obtained the required authorization from the Department of State	Criminal Violations of Section 38 of the Arms Export Control Act	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until December 3, 2015
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Table 3
Summary of Antiboycott Cases Closed in Fiscal Year 2008

Company Name & Location	Date Order Signed	Alleged Violations	Penalty Amount
Expeditors International of Washington, Inc	October 17, 2007	2 violations: 1 - 760.2(d) [Furnished prohibited business information]; 1-760.5[Failed to report in a timely manner].	\$2,250
Colorcon Limited (United Kingdom)	November 15, 2007	21 violations: 10 - 760.2(d)[Furnished prohibited business information]; 7-760.5[Failed to report in a timely manner]; 4 - 760.2(a) [Agreement to refuse to do business with blacklisted persons].	\$39,000
DMA Med-Chem Corporation	January 14, 2008	1 violation of 760.2(d)[Furnished prohibited business information]; Denial of export privileges to 11 boycotting countries for a period of 2 years.	\$2,400
AR-AM Medical Services LLC	January 14, 2008	3 violations of 760.2(d)[Furnished prohibited business information]; Denial of export privileges to 11 boycotting countries for a period of 2 years.	\$7,200
Aviall Pte. Ltd. (Singapore)	May 1, 2008	2 violations: 1 - 760.2(a)[Agreement to refuse to do business with blacklisted persons]; 1 -760.5[Failed to report in a timely manner].	\$3,600
Rhode & Liesenfeld, Inc Houston	September 29, 2008	36 violations of 760.2(d)[Furnished prohibited business information].	\$108,000

Appendix E-1
Number of Individual Firms, Transactions, Requesting Documents,
and Restrictive Trade Practices by Firm Type
 October 2007 through September 2008

ALL TRANSACTIONS (Summary Totals) (1)
 (Footnotes (*) are located at the end of Appendix E-1(e))
 (The column "Other" includes but is not limited to law
 firms, consulting firms, and general contractors)

Item	Exporter	Bank	Forwarder	Carrier	Insurer	Other	Total
Individual Firms Reporting	188	43	9	0	1	91	332
Transactions Reported	544	394	10	0	1	363	1312
Requesting Documents Involved	544	394	10	0	1	374	1323
Restrictive Trade Practices Requests (3)	676	401	10	0	1	398	1486

**Number of Individual Firms, Transactions, Requesting Documents,
and Restrictive Trade Practices by Firm Type
October 2007 through September 2008
Appendix E-1(a) All Transactions**

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
Exporter				
Number of Requests	77	467	0	544
Dollar Amount (\$000)	23317	3406231	0	3429548
Bank				
Number of Requests	291	103	0	394
Dollar Amount (\$000)	206168	46518	0	252685
Forwarder				
Number of Requests	4	6	0	10
Dollar Amount (\$000)	414077	538	0	414615
Carrier				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Insurer				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
Other				
Number of Requests	129	233	0	362
Dollar Amount (\$000)	235855	428247	0	664102
Total				
Number of Requests	501	810	0	1311
Dollar Amount (\$000)	879417	3881534	0	4760951

**Number of Individual Firms, Transactions, Requesting Documents,
and Restrictive Trade Practices by Firm Type
October 2007 through September 2008
Appendix E-1(b) Prohibited Transactions**

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
Exporter				
Number of Requests	21	172	0	193
Dollar Amount (\$000)	1992	2901010	0	2903002
Bank				
Number of Requests	5	2	0	7
Dollar Amount (\$000)	565	15667	0	16232
Forwarder				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	363	0	363
Carrier				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Insurer				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other				
Number of Requests	0	123	0	123
Dollar Amount (\$000)	0	174344	0	174344
Total				
Number of Requests	26	298	0	324
Dollar Amount (\$000)	2557	3091385	0	3093942

**Number of Individual Firms, Transactions, Requesting Documents,
 and Restrictive Trade Practices by Firm Type**
 October 2007 through September 2008
Appendix E-1(c) Prohibited as First Received, But Amended

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
Exporter				
Number of Requests	1	16	0	17
Dollar Amount (\$000)	58	4014	0	4072
Bank				
Number of Requests	7	51	0	58
Dollar Amount (\$000)	45118	20942	0	66061
Forwarder				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	130	0	130
Carrier				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Insurer				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other				
Number of Requests	0	10	0	10
Dollar Amount (\$000)	0	29230	0	29230
Total				
Number of Requests	8	79	0	87
Dollar Amount (\$000)	45176	54317	0	99493

**Number of Individual Firms, Transactions, Requesting Documents,
and Restrictive Trade Practices by Firm Type
October 2007 through September 2008
Appendix E-1(d) Exceptions to Prohibited**

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
Exporter				
Number of Requests	39	236	0	275
Dollar Amount (\$000)	19688	435866	0	455554
Bank				
Number of Requests	13	6	0	19
Dollar Amount (\$000)	16108	2239	0	18347
Forwarder				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
Carrier				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Insurer				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
Other				
Number of Requests	129	84	0	213
Dollar Amount (\$000)	235855	222218	0	458073
Total				
Number of Requests	181	328	0	509
Dollar Amount (\$000)	271651	660323	0	931974

**Number of Individual Firms, Transactions, Requesting Documents,
and Restrictive Trade Practices by Firm Type
October 2007 through September 2008
Appendix E-1(e) Not Prohibited**

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
Exporter				
Number of Requests	16	43	0	59
Dollar Amount (\$000)	1579	65340	0	66919
Bank				
Number of Requests	266	44	0	310
Dollar Amount (\$000)	144377	7669	0	152045
Forwarder				
Number of Requests	4	2	0	6
Dollar Amount (\$000)	414077	44	0	414121
Carrier				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Insurer				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other				
Number of Requests	0	16	0	16
Dollar Amount (\$000)	0	2455	0	2455
Total				
Number of Requests	286	105	0	391
Dollar Amount (\$000)	560033	75508	0	635541

Footnotes:

- (1) Includes but not limited to law firms, consulting firms, and general contractor
- (2) Two or more types of restrictive trade practices are often reported in connection with one
- (3) Transactions in this table are characterized as “take action” or “refuse” in terms of action taken on the original request, not on amended or deleted requests

- (4) “Refuse” does not necessarily mean that business was lost because a firm refused to comply with a prohibited boycott request. Rather, it indicates that firms refused to comply with the request and declined bidding on contracts totaling the dollar amounts indicated. Prohibited boycott language is often amended or deleted to permit U.S. firms to comply with U.S. law. Amendments and deletions are not reflected in these statistics
- (5) Dollar values may not add due to rounding.

Appendix E-2
Number of Restrictive Trade Practices by
Firm Type and Type of Restrictive Trade Practice
October 2007 through September 2008

ALL TRANSACTIONS

Restrictive Trade Practice	Exporter	Bank	Forwarder	Carrier	Insurer	Other	Total
Carrier	58	354	8	0	0	33	453
Manufacturer/Vendor/Buyer	75	1	0	0	0	23	99
Insurance	0	0	0	0	0	0	0
Finance	3	10	1	0	0	2	16
Origin of Goods	381	28	1	0	0	83	493
Marked Goods/Packages	0	0	0	0	0	0	0
War Reparations	0	0	0	0	0	0	0
Observe Boycott Laws	68	0	0	0	0	64	132
Race/Religion/Sex/Origin	0	0	0	0	0	0	0
Relations with Boycotted Country	46	8	0	0	0	21	75
Risk of Loss	0	0	0	0	0	0	0
Destination of Goods	21	0	0	0	1	170	192
Other Restrictive Trade Practices	24	0	0	0	0	2	26
Totals	676	401	10	0	1	398	1486

OTHER: Includes but are not limited to law firms, consulting firms, and general contractors.

TOTALS: Enhanced to the extent that an exporter and one or more other organizations report on the same transaction.

Appendix E-3
Number ⁽¹⁾ of Restrictive Trade Practices
by Originating Country and Type of Practice
October 2007 through September 2008

Country	Carrier	Manufacturer/Vendor/Buyer	Insurance	Finance	Origin of Goods	Marked Goods/Packaging	War Reparations	Observe Boycott Laws	Race/Religion/Sex/Origin	Relations w/Boycotted Country	Risk of Loss	Destination of Goods	Other Restrictive Practices	Total
Bahrain	7	2	0	0	4	0	0	2	0	1	0	0	0	16
Egypt	1	1	0	0	1	0	0	1	0	2	0	0	0	6
Iraq	8	0	0	0	1	0	0	0	0	0	0	0	0	9
Jordan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	21	3	0	0	34	0	0	3	0	0	0	0	0	61
Lebanon	73	1	0	0	2	0	0	0	0	1	0	0	0	77
Libya	13	38	0	0	44	0	0	28	0	26	0	2	6	157
Qatar	20	2	0	0	10	0	0	5	0	0	0	45	12	94
Saudi Arabia	8	6	0	4	38	0	0	5	0	6	0	2	5	74
Syria	9	4	0	0	18	0	0	0	0	20	0	0	0	51
UAE	263	36	0	11	134	0	0	77	0	14	0	6	1	542
Other (2)	30	6	0	1	208	0	0	11	0	5	0	137	2	400
Total	453	99	0	16	494	0	0	132	0	75	0	192	26	1487
Percent (3)	30	7	0	1	33	0	0	9	0	5	0	13	2	100

Appendix E-4
Number ⁽¹⁾ of Restrictive Trade Practices
by Originating Country and Type of Document
 October 2007 through September 2008

Country	Bid or Tender Proposal	Carrier Blacklist	Letter of Credit	Questionnaire	Requisition/ Purchase Order	Unwritten	Other Written	Total
Bahrain	2	0	5	0	4	0	2	13
Egypt	2	0	1	0	0	0	0	3
Iraq	5	0	0	0	4	0	0	9
Jordan	0	0	0	0	0	0	0	0
Kuwait	3	0	47	0	6	0	1	57

Lebanon	0	0	74	0	0	0	3	77
Libya	31	0	10	0	10	1	28	80
Qatar	37	0	15	0	39	0	1	92
Saudi Arabia	11	0	12	0	31	1	4	59
Syria	11	0	2	7	3	14	9	46
UAE (2)	158	2	290	1	20	0	28	499
Other (3)	170	2	35	1	169	2	10	389
Total	430	4	491	9	286	18	86	1324

Percentage (4)	32	0	37	1	22	1	6	99
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(1) All figures are enhanced to the extent that an exporter and one or more other service organizations reports on the same transaction.

(2) Includes Abu Dhabi, Sharjah, Ajman, Umm Al-Qaiwan, RA's Al-Khaimah and Fujairah.

(3) Includes Algeria, India, Iran, Malaysia, Nigeria, Oman, Pakistan, Tunisia, and Yemen.

(4) Percentages may not add due to rounding.

Appendix E-5
Number and Value of Exporter Transactions by Originating Country
and Decision on the Request

October 2007 through September 2008

Footnotes (*) are located at the end of Appendix E-5(a)

All Transactions(1)

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
Bahrain				
Number of Requests	4	4	0	8
Dollar Amount (\$000)	368	7154	0	7522
Egypt				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Iraq				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	18550	0	18550
Jordan				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Kuwait				
Number of Requests	7	15	0	22
Dollar Amount (\$000)	11303	170238	0	181542
Lebanon				
Number of Requests	2	1	0	3
Dollar Amount (\$000)	73	204	0	277
Libya				
Number of Requests	17	45	0	62
Dollar Amount (\$000)	1810	29138	0	30948
Qatar				
Number of Requests	12	24	0	36
Dollar Amount (\$000)	4531	3754	0	8285
Saudi Arabia				
Number of Requests	9	37	0	46

Appendix E-5
Number and Value of Exporter Transactions by Originating Country
and Decision on the Request

October 2007 through September 2008

Footnotes (*) are located at the end of Appendix E-5(a)

All Transactions(1)

Dollar Amount (\$000)	361	1221476	0	1221837
Syria				
Number of Requests	0	25	0	25
Dollar Amount (\$000)	0	65559	0	65559
UAE				
Number of Requests	10	111	0	121
Dollar Amount (\$000)	4284	1474956	0	1479240
Other(5)				
Number of Requests	16	200	0	216
Dollar Amount (\$000)	586	415201	0	415787
Total (4)				
Number of Requests	77	467	0	544
Dollar Amount (\$000)	23317	3406231	0	3429548

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(b) Prohibited Transactions

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
Bahrain				
Number of Requests	1	3	0	4
Dollar Amount (\$000)	91	7055	0	7146
Egypt				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Iraq				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	18550	0	18550
Jordan				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Kuwait				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	160647	0	160647
Lebanon				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Libya				
Number of Requests	17	33	0	50
Dollar Amount (\$000)	1810	27765	0	29575
Qatar				
Number of Requests	2	6	0	8
Dollar Amount (\$000)	88	2359	0	2447
Saudi Arabia				
Number of Requests	0	7	0	7
Dollar Amount (\$000)	0	1220236	0	1220236
Syria				
Number of Requests	0	18	0	18

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(b) Prohibited Transactions

Dollar Amount (\$000)	0	840	0	840
UAE				
Number of Requests	0	69	0	69
Dollar Amount (\$000)	0	1452757	0	1452757
Other (5)				
Number of Requests	1	26	0	27
Dollar Amount (\$000)	2	10802	0	10804
Total (4)				
Number of Requests	21	172	0	193
Dollar Amount (\$000)	1992	2901010	0	2903002

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(c) Prohibited as First Received, but Amended

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
Bahrain				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	99	0	99
Egypt				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Iraq				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Jordan				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Kuwait				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	5	0	5
Lebanon				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Libya				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	653	0	653
Qatar				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Saudi Arabia				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	500	0	500
Syria				
Number of Requests	0	1	0	1

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(c) Prohibited as First Received, but Amended

Dollar Amount (\$000)	0	0	0	0
UAE				
Number of Requests	1	7	0	8
Dollar Amount (\$000)	58	2489	0	2547
Other (5)				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	269	0	269
Total (4)				
Number of Requests	1	16	0	17
Dollar Amount (\$000)	58	4014	0	4072

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(d) Exceptions to Prohibited Transactions

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
Bahrain				
Number of Requests	2	0	0	2
Dollar Amount (\$000)	52	0	0	52
Egypt				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Iraq				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Jordan				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Kuwait				
Number of Requests	6	6	0	12
Dollar Amount (\$000)	11289	9416	0	20705
Lebanon				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	204	0	204
Libya				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	60	0	60
Qatar				
Number of Requests	8	3	0	11
Dollar Amount (\$000)	4246	775	0	5021
Saudi Arabia				
Number of Requests	5	24	0	29
Dollar Amount (\$000)	8	717	0	725
Syria				
Number of Requests	0	1	0	1

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(d) Exceptions to Prohibited Transactions

Dollar Amount (\$000)	0	1500	0	1500
UAE				
Number of Requests	3	28	0	31
Dollar Amount (\$000)	3509	19064	0	22573
Other (5)				
Number of Requests	15	171	0	186
Dollar Amount (\$000)	583	404131	0	404714
Total (4)				
Number of Requests	39	236	0	275
Dollar Amount (\$000)	19688	435866	0	455554

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**

October 2007 through September 2008

Appendix E-5(e) Prohibited as First Received, but Amended

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
Bahrain				
Number of Requests	1	0	0	1
Dollar Amount (\$000)	225	0	0	225
Egypt				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Iraq				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Jordan				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Kuwait				
Number of Requests	1	3	0	4
Dollar Amount (\$000)	14	170	0	185
Lebanon				
Number of Requests	2	0	0	2
Dollar Amount (\$000)	73	0	0	73
Libya				
Number of Requests	0	6	0	6
Dollar Amount (\$000)	0	660	0	660
Qatar				
Number of Requests	2	15	0	17
Dollar Amount (\$000)	197	620	0	817
Saudi Arabia				
Number of Requests	4	5	0	9
Dollar Amount (\$000)	352	23	0	375
Syria				
Number of Requests	0	5	0	5

**Number and Value of Exporter Transactions by Originating Country
and Decision on the Request**
October 2007 through September 2008
Appendix E-5(e) Prohibited as First Received, but Amended

Dollar Amount (\$000)	0	63220	0	63220
UAE (5)				
Number of Requests	6	7	0	13
Dollar Amount (\$000)	716	647	0	1363
Other (6)				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	0	0	0
Total (4)				
Number of Requests	16	43	0	59
Dollar Amount (\$000)	1579	65340	0	66919

Footnotes:

(1) Transactions figures and dollar values include bids, tenders and trade opportunities. Such figures may be duplicated and include dollar values for potential transactions that never resulted in a sale.

(2) Transactions in this table are characterized as “take action” or “refuse” in terms of action taken on the original request, not on amended or deleted requests in bidding on contracts totaling the dollar amounts indicated. Prohibited boycott language is often amended or deleted to permit U.S. firms to comply with U.S. law.

(3) This figure does not represent business lost due to refusals with Boycott Requests. Instead it indicates that U.S. companies refused to comply with the boycott request in bidding on contracts totaling this amount. The boycott language is often revised or eliminated to allow U.S. companies to bid consistent with U.S. Law. Such revisions are not reflected in these statistics.

(4) Dollar values may not add due to rounding.

(5) Includes Abu Dhabi, Sharjah, Ajman, Umm Al-Qaiwan, RA’s Al-Khaimah, and Fujairah.

(6) Includes Algeria, India, Iran, Malaysia, Nigeria, Oman, Pakistan, Tunisia, and Yemen.

Appendix E-6
**Number of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
(“Controlled-in-Fact”) Foreign Subsidiaries
October 2007 through September 2008
(Footnotes are located at the end of Appendix E-6(e))**

ALL TRANSACTIONS (Summary Totals)

Country	Individual Firms Reporting	Transactions Reported	Requesting Documents Involved	Restrictive Trade Practices Requests
United Kingdom	27	40	40	48
France	2	2	2	2
Germany	3	3	3	4
Netherlands	8	11	11	11
Belgium	4	6	6	8
Switzerland	9	16	16	20
Canada	2	2	2	3
Italy	4	9	9	10
Other (European Nations)	1	3	3	6
Other Arab League Nations (1)	42	201	212	285
All Other Nations	15	27	27	28
Total	117	320	331	425

**Number of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
ALL TRANSACTIONS (Summary Totals)
Appendix E-6(a) All Transactions**

Country	Take Action	Refuse	Undecided	Total
United Kingdom				
Number of Requests	3	37	0	40
Dollar Amount (\$000)	5438	53418	0	58856
France				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	98	0	98
Germany				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	75	0	75
Netherlands				
Number of Requests	0	11	0	11
Dollar Amount (\$000)	0	1678	0	1678
Belgium				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	549	0	549
Switzerland				
Number of Requests	2	14	0	16
Dollar Amount (\$000)	428	32448	0	32877
Canada				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	51	0	51
Italy				
Number of Requests	0	9	0	9
Dollar Amount (\$000)	0	1166	0	1166
Other European Nations				
Number of Requests	1	2	0	3
Dollar Amount (\$000)	58	27	0	85
Other Arab League Nations (1)				

**Number of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
ALL TRANSACTIONS (Summary Totals)
Appendix E-6(a) All Transactions**

Number of Requests	21	180	0	201
Dollar Amount (\$000)	237175	1796475	0	2033650
All Other Nations				
Number of Requests	2	25	0	27
Dollar Amount (\$000)	0	368988	0	368988
Total				
Number of Requests	29	290	0	319
Dollar Amount (\$000)	243100	2254974	0	2498073

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(b) Prohibited Transactions**

Country	Take Action	Refuse	Undecided	Total
United Kingdom				
Number of Requests	0	27	0	27
Dollar Amount (\$000)	0	48679	0	48679
France				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	85	0	85
Germany				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	0	0	0
Netherlands				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	1008	0	1008
Belgium				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	408	0	408
Switzerland				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	119	0	119
Canada				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
Italy				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	467	0	467
Other European Nations				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other Arab League Nations (1)				
Number of Requests	17	136	0	153

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(b) Prohibited Transactions**

Dollar Amount (\$000)	1810	1769183	0	1770993
All Other Nations				
Number of Requests	0	7	0	7
Dollar Amount (\$000)	0	6685	0	6685
Total				
Number of Requests	17	190	0	207
Dollar Amount (\$000)	1810	1826634	0	1828444

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(c) Prohibited as First Received, but Amended**

Country	Take Action	Refuse	Undecided	Total
United Kingdom				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	224	0	224
France				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	13	0	13
Germany				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Netherlands				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Belgium				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Switzerland				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	624	0	624
Canada				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	51	0	51
Italy				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other European Nations				
Number of Requests	1	2	0	3
Dollar Amount (\$000)	58	27	0	85
Other Arab League Nations (1)				
Number of Requests	0	4	0	4

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(c) Prohibited as First Received, but Amended**

Dollar Amount (\$000)	0	17393	0	17393
All Other Nations				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Total				
Number of Requests	1	11	0	12
Dollar Amount (\$000)	58	18332	0	18390

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(d) Exceptions to Prohibitions**

Country	Take Action	Refuse	Undecided	Total
United Kingdom				
Number of Requests	3	6	0	9
Dollar Amount (\$000)	5438	4397	0	9835
France				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Germany				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Netherlands				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	204	0	204
Belgium				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	141	0	141
Switzerland				
Number of Requests	2	0	0	2
Dollar Amount (\$000)	428	0	0	428
Canada				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Italy				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	135	0	135
Other European Nations				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other Arab League Nations (1)				
Number of Requests	4	31	0	35

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(d) Exceptions to Prohibitions**

Dollar Amount (\$000)	235365	7919	0	243283
All Other Nations				
Number of Requests	2	17	0	19
Dollar Amount (\$000)	0	362297	0	362297
Total				
Number of Requests	11	60	0	71
Dollar Amount (\$000)	241231	375092	0	616323

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(e) Not Prohibited**

Country	Take Action	Refuse	Undecided	Total
United Kingdom				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	119	0	119
France				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Germany				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	75	0	75
Netherlands				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	466	0	466
Belgium				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Switzerland				
Number of Requests	0	9	0	9
Dollar Amount (\$000)	0	31705	0	31705
Canada				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Italy				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	564	0	564
Other European Nations				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
Other Arab League Nations (1)				
Number of Requests	0	9	0	9

**Number of Requests of Individual Firms, Transactions, Requesting Documents
and Restrictive Trade Practices Received by
("Controlled-in-Fact") Foreign Subsidiaries
October 2007 through September 2008
Appendix E-6(e) Not Prohibited**

Dollar Amount (\$000)	0	1981	0	1981
All Other Nations				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	6	0	6
Total				
Number of Requests	0	29	0	29
Dollar Amount (\$000)	0	34915	0	34915

Footnotes:

(1) Includes Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Saudi Arabia, UAE, Qatar, and Yemen.

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

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
ALBANIA			
EAR99	ITEMS SUBJECT TO THE EAR NATIONAL ENERGY STRATEGY (N.E.S.)	2	\$3,387
0A979	POLICE HELMETS, SHIELDS AND PARTS	2	\$8,294
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$1,064
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	1	\$2,220
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$356,460
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	3	\$29,973
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	2	\$2,100
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	3	\$75,186
5D002	SOFTWARE FOR INFORMATION SECURITY	3	\$7
TOTAL APPLICATIONS: 12			
TOTAL CCL'S: 10			
TOTAL DOLLAR VALUE: \$478,692			

ARMENIA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$253,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$93,330
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,095,475
3A001	ELECTRONIC DEVICES/COMPONENTS	2	\$1,292
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$220,000
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$203,681
TOTAL APPLICATIONS: 6			
TOTAL CCL'S: 6			
TOTAL DOLLAR VALUE: \$1,866,778			

AZERBAIJAN

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$190,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,095,475
1C353	GENETICALLY MODIFIED MICROORGANISMS	1	\$10,104
2B229	CENTRIFUGAL BALANCING MACHINES	1	\$25,784
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$1,840,000
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	1	\$750,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	\$27,815
5D002	SOFTWARE FOR INFORMATION SECURITY	2	\$15,991
6A001	ACOUSTICS	1	\$1,600,000
6A003	CAMERAS	2	\$200,864
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	1	\$41,224
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	1	\$63,000
TOTAL APPLICATIONS: 14			
TOTAL CCL'S: 14			
TOTAL DOLLAR VALUE: \$5,860,259			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
BELARUS			
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	2	\$80,696
2B005	PROCESSING EQUIPMENT OF INORGANIC OVERLAYS/COATINGS	1	\$5,985
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	1	\$124,300
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	4	\$4
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	4	\$4
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	4	\$4
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	4	\$4
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	4	\$4
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	4	\$4
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$63,980
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	4	\$4
5D002	SOFTWARE FOR INFORMATION SECURITY	2	\$4
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	4	\$4
TOTAL APPLICATIONS: 10			
TOTAL CCL'S: 13			
TOTAL DOLLAR VALUE: \$274,997			
BULGARIA			
0A979	POLICE HELMETS, SHIELDS AND PARTS	1	\$10,304
0A985	DISCHARGE TYPE ARMS	3	\$220,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$577
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	13	\$967,142
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	3	\$1,051,234
5D002	SOFTWARE FOR INFORMATION SECURITY	16	\$82,999
6A003	CAMERAS	5	\$407,965
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	1	\$155,000
TOTAL APPLICATIONS: 28			
TOTAL CCL'S: 10			
TOTAL DOLLAR VALUE: \$2,895,223			
CAMBODIA			
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$75,000
TOTAL APPLICATIONS: 1			
TOTAL CCL'S: 1			
TOTAL DOLLAR VALUE: \$75,000			
CHINA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	10	\$176,667
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	8	\$325,974
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	1	\$1,698
1A002	COMPOSITE STRUCTURES OR LAMINATES	1	\$7,000,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	15	\$2,004,589
1B001	EQUIPMENT FOR PRODUCTION OF FIBERS, PREFORMS OR CO	2	\$3,857,500
1B119	FLUID ENERGY MILLS	3	\$91,281
1C006	FLUIDS AND LUBRICATING MATERIALS	3	\$336
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	51	\$147,438,865
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	25	\$16,215,844
1C202	ALUMINUM AND TITANIUM ALLOYS IN THE FORM OF TUBES/	26	\$8,627,749
1C210	FIBROUS/FILAMENTARY MATERIALS NOT CONTROLLED BY 1C	6	\$11,190,100
1C225	BORON AND BORON COMPOUNDS/MIXTURES AND LOADED MATE	2	\$210,000
1C227	CALCIUM CONTAINING BORON AND OTHER IMPURITIES	1	\$70

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1C229	HIGH PURITY BISMUTH WITH LOW SILVER CONTENT	1	\$46
1C230	BERYLLIUM	4	\$11,574
1C231	HAFNIUM	5	\$652,478
1C232	HELIUM-3 OR HELIUM ISOTOPICALLY ENRICHED IN THE HE	2	\$250,000
1C233	LITHIUM	1	\$18,135
1C234	ZIRCONIUM, WITH A HAFNIUM CONTENT	7	\$3,101,516
1C240	NICKEL POWDER OR POROUS NICKEL METAL	3	\$62,275
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	25	\$3,702,345
1C351	HUMAN PATHOGENS, ZOOSES, AND TOXINS	100	\$26,218
1C352	ANIMAL PATHOGENS	2	\$12
1C981	CRUDE PETROLEUM/TAR SANDS/CRUDE SHALE	1	\$1,000
1C991	VACCINES, IMMUNOTOXINS AND MEDICAL PRODUCTS	17	\$3,563
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	16	\$13
1E002	OTHER TECHNOLOGY	1	\$1
1E201	TECHNOLOGY FOR USE OF 1A002,1A202,1A225 TO 1B225	2	\$2
1E350	TECHNOLOGY FOR USE OF 1C350 CHEMICALS	1	\$0
1E351	TECHNOLOGY FOR USE OF MICROBIOLOGICAL MATERIALS	1	\$0
2A293	PUMPS DESIGNED TO MOVE MOLTEN METALS BY ELECTROMAG	1	\$644,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	94	\$95,365,455
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	25	\$29,822,308
2B005	PROCESSING EQUIPMENT OF INORGANIC OVERLAYS/COATINGS	13	\$1,318,709
2B006	DIMENSIONAL INSPECTION/MEASURING SYSTEMS OR EQUIPM	13	\$1,537,545
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	2	\$186,258
2B009	PRINTED CIRCUIT BOARDS/ROTARY TABLES FOR TOOLS IN	1	\$1,228,100
2B201	MACHINE TOOLS FOR REMOVING OR CUTTING METALS	3	\$1,497,853
2B204	ISOSTATIC PRESSES NOT CONTROLLED BY 2B004 OR 2B104	1	\$155,000
2B226	VACUUM AND CONTROLLED ENVIRONMENT INDUCTION FURNAC	2	\$65,000
2B227	VACUUM AND CONTROLLED ATMOSPHERE MELTING/CASTING F	1	\$150,000
2B229	CENTRIFUGAL BALANCING MACHINES	2	\$130,760
2B230	PRESSURE TRANSDUCERS	90	\$11,136,374
2B231	VACUUM PUMPS	22	\$831,356
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	314	\$56,773,341
2B351	TOXIC GAS MONITORING SYSTEMS & DEDICATED DETECTORS	17	\$5,539,010
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	55	\$2,882,180
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	1	\$0
2D202	"SOFTWARE" SPECIALLY DESIGNED FOR 2B201 EQUIPMENT	1	\$0
2D983	EQUIPMENT CONTROLLED BY 2A983	2	\$14,025
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	3	\$727,760
2E002	TECHNOLOGY SUPPORTING EQUIPMENT/PRODUCTION IN 2A/2	4	\$742,760
2E003	OTHER TECHNOLOGY	7	\$9
2E201	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	2	\$0
2E290	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	1	\$0
2E301	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2B	2	\$727,759
2E983	SOFTWARE CONTROLLED BY 2D983	3	\$301
3A001	ELECTRONIC DEVICES/COMPONENTS	51	\$30,031,733
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	28	\$1,748,424
3A225	INVERTERS/CONVERTERS/FREQUENCY CHANGERS/GENERATORS	4	\$137,248
3A230	HIGH SPEED PULSE GENERATORS	3	\$61,912
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	4	\$2,351,775
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	2	\$1,271,000
3A233	MASS SPECTROMETERS	86	\$10,935,122
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	4	\$128,792
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	82	\$470,208,436
3B002	ION IMPLANTATION EQUIPMENT FOR SEMICONDUCTORS	1	\$11,115
3C001	HETERO-EPITAXIAL MATERIALS	2	\$65,460
3C002	RESIST MATERIALS	3	\$26,680,000
3C003	ORGANO-INORGANIC COMPOUNDS DESCRIBED IN THIS ENTRY	8	\$15,661,500
3C004	HYDRIDES OF PHOSPHORUS, ARSENIC, OR ANTIMONY	27	\$36,820,838
3C005	SILICON CARBIDE WAFERS	3	\$148,000
3D001	SOFTWARE FOR DEV OR PROD OF EQUIP CERTAIN ITEMS IN	4	\$5
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	20	\$18
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	27	\$25
3D991	GENERAL PURPOSE ELECTRONIC EQUIPMENT FOR 3A992	1	\$1,663
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	276	\$15,203,055
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	245	\$1,555,733,135
3E003	OTHER "TECHNOLOGY"	19	\$18
3E201	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A	3	\$12,802
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	1	\$3,000,000

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	184	\$184
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	172	\$172
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	172	\$172
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	198	\$198
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	89	\$74,214,713
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	10	\$971,477
5B002	TEST/INSPECTION/PRODUCTION EQUIP FOR INFORMATION S	1	\$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	178	\$178
5D002	SOFTWARE FOR INFORMATION SECURITY	65	\$233,889
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	392	\$21,476,048
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	14	\$27,514
6A001	ACOUSTICS	4	\$965,404
6A002	OPTICAL SENSORS	1	\$17,000
6A003	CAMERAS	25	\$1,022,099
6A005	OPTICAL EQUIPMENT (LASERS)	7	\$1,681,972
6A006	MAGNETOMETERS/MAGNETIC GRADIOMETERS/COMPENSATION S	3	\$66,981
6A007	GRAVITY METERS (GRAVIMETERS)/GRAVITY GRADIOMETERS	1	\$353,430
6A203	CAMERAS/COMPONENTS NOT CONTROLLED BY ECCN 6A003	4	\$137,458
6E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT/MATERIALS/	1	\$1
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003,6A005	1	\$1
7A101	ACCELEROMETERS, OTHER THAN THOSE IN 7A001	3	\$81,920
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	19	\$42,738,966
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	2	\$203,000
7D003	OTHER SOFTWARE	1	\$100
7D101	SOFTWARE FOR COMMODITIES CONTROLLED BY 7A001/004,	4	\$2,000
7E004	OTHER TECHNOLOGY	2	\$600
7E101	TECHNOLOGY FOR EQUIPMENT/SOFTWARE CONTROLLED BY 7A	4	\$2,025
9A001	AERO GAS TURBINE ENGINES	1	\$8,000,000
9E003	OTHER TECHNOLOGY	6	\$9

TOTAL APPLICATIONS: 1989
TOTAL CCL'S: 111
TOTAL DOLLAR VALUE: \$2,738,855,302

CUBA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	299	\$4,254,725,953
1C991	VACCINES, IMMUNOTOXINS AND MEDICAL PRODUCTS	1	\$138,915
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	6	\$1,230,732
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	4	\$35,726,190
5A992	INFORMATION SECURITY EQUIPMENT	3	\$35,892,214
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$0
5D992	SOFTWARE NOT CONTROLLED BY 5D002	10	\$16,620,921
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	5	\$0
8A992	UNDERWATER SYSTEMS OR EQUIPMENT	37	\$140,000,000
9A991	AIRCRAFT AND CERTAIN GAS TURBINE ENGINES N.E.S.	14	\$120,000
9E991	TECHNOLOGY FOR THE DEV/PROD/USE WITH ITEMS IN 9A99	5	\$0

TOTAL APPLICATIONS: 348
TOTAL CCL'S: 11
TOTAL DOLLAR VALUE: \$4,484,454,925

ESTONIA

0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	3	\$180,961
1C230	BERYLLIUM	1	\$2,050
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$1,000
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$28,500
6A003	CAMERAS	4	\$109,400

TOTAL APPLICATIONS: 10
TOTAL CCL'S: 5
TOTAL DOLLAR VALUE: \$321,911

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
GEORGIA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	2	\$268,600
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$70,000
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	2	\$90,009
0A985	DISCHARGE TYPE ARMS	2	\$5,886,750
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	\$72,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,095,475
1A005	BODY ARMOR	1	\$968,172
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$1,250,000
1C353	GENETICALLY MODIFIED MICROORGANISMS	1	\$1,684
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	2	\$19,229
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$1,840,000
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	1	\$750,000
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	\$54,450
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	2	\$0
TOTAL APPLICATIONS: 15			
TOTAL CCL'S: 14			
TOTAL DOLLAR VALUE: \$12,366,369			

KAZAKHSTAN

0A979	POLICE HELMETS, SHIELDS AND PARTS	1	\$6,250
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	8	\$556,029
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$500,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$625,000
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	9	\$586,999
2D983	EQUIPMENT CONTROLLED BY 2A983	1	\$10,000
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$2,120,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	1	\$5,000
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	\$50,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	3	\$324,590
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	2	\$605,815
5D002	SOFTWARE FOR INFORMATION SECURITY	3	\$61,444
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	1	\$3
6A001	ACOUSTICS	3	\$456,262
6A003	CAMERAS	3	\$197,034
6D003	OTHER SOFTWARE	1	\$4,070,000
TOTAL APPLICATIONS: 34			
TOTAL CCL'S: 18			
TOTAL DOLLAR VALUE: \$10,174,428			

KOREA DEMOCRATIC PEOPLE'S REPUBLIC

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	7	\$601,050
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	2	\$57,706
4D994	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 4A994/4B994/	1	\$1,000
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	3	\$125,371
5D992	SOFTWARE NOT CONTROLLED BY 5D002	3	\$17,121
8A992	UNDERWATER SYSTEMS OR EQUIPMENT	3	\$0
9A991	AIRCRAFT AND CERTAIN GAS TURBINE ENGINES N.E.S.	2	\$0
TOTAL APPLICATIONS: 14			
TOTAL CCL'S: 7			
TOTAL DOLLAR VALUE: \$802,248			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
KYRGYZSTAN			
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	1	\$689
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	\$3,895
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	\$0
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$252,015
TOTAL APPLICATIONS: 5			
TOTAL CCL'S: 4			
TOTAL DOLLAR VALUE: \$256,599			
LAOS			
TOTAL APPLICATIONS: 0			
TOTAL CCL'S: 0			
TOTAL DOLLAR VALUE: \$0			
LATVIA			
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$1,000
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$1
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	\$1
6A003	CAMERAS	6	\$152,712
9A012	UNMANNED AIR VEHICLE SYSTEMS	1	\$2,500
TOTAL APPLICATIONS: 9			
TOTAL CCL'S: 5			
TOTAL DOLLAR VALUE: \$156,214			
LITHUANIA			
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$198
0A985	DISCHARGE TYPE ARMS	1	\$66,500
1B201	FILAMENT WINDING MACHINES	1	\$564,345
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$1,000
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	1	\$119,820
2B006	DIMENSIONAL INSPECTION/MEASURING SYSTEMS OR EQUIPM	1	\$10,000
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$60,000
6A003	CAMERAS	3	\$134,054
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$7,000
TOTAL APPLICATIONS: 11			
TOTAL CCL'S: 9			
TOTAL DOLLAR VALUE: \$962,917			
MOLDOVA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$253,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,095,475
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	3	\$11,250,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	\$40,000
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	2	\$40,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$1,695
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$1
6A003	CAMERAS	1	\$302,280
TOTAL APPLICATIONS: 6			
TOTAL CCL'S: 8			
TOTAL DOLLAR VALUE: \$12,982,451			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
MONGOLIA			
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$8
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	2	\$2,940
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
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	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
6A001	ACOUSTICS	1	\$920

TOTAL APPLICATIONS: 5
TOTAL CCL'S: 11
TOTAL DOLLAR VALUE: \$3,876

ROMANIA

0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$53,280
0A985	DISCHARGE TYPE ARMS	2	\$5,271,500
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	2	\$2
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	2	\$2
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	21	\$61,623,200
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	2	\$199,746
5D002	SOFTWARE FOR INFORMATION SECURITY	33	\$535,440
5D991	SOFTWARE FOR DEV/PROD/USE WITH 5B994 TEST EQUIPMEN	1	\$2
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	5	\$5
6A003	CAMERAS	6	\$62,211
9E003	OTHER TECHNOLOGY	1	\$150,000

TOTAL APPLICATIONS: 46
TOTAL CCL'S: 11
TOTAL DOLLAR VALUE: \$67,895,388

RUSSIA FEDERATION

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	20	\$2,148,575
0A979	POLICE HELMETS, SHIELDS AND PARTS	3	\$15,703
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	3	\$6,225
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	12	\$391,944
0A985	DISCHARGE TYPE ARMS	1	\$275,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	145	\$9,341,351
0D999	SPECIFIC SOFTWARE	1	\$1,000
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	2	\$300,000
1A003	MANUFACTURES OF NON-FLUORINATED POLYMERIC SUBSTANC	2	\$6,622
1A005	BODY ARMOR	2	\$111,250
1A984	CHEMICAL AGENTS, INCLUDING TEAR GAS	2	\$7,648
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	2	\$2,000,000
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	2	\$15,645
1C006	FLUIDS AND LUBRICATING MATERIALS	1	\$7,500
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	4	\$9,401,036
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	\$5,000,000
1C351	HUMAN PATHOGENS, ZOONOSES, AND TOXINS	1	\$319
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	3	\$1,001
1E101	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A10	2	\$1
1E103	TECHNOLOGY TO REGULATE TEMPERATURE OF COMPOSITES	2	\$1
1E201	TECHNOLOGY FOR USE OF 1A002,1A202,1A225 TO 1B225	1	\$1
1E202	TECHNOLOGY FOR DEVELOPMENT OR PRODUCTION OF 1A202,	1	\$1
1E350	TECHNOLOGY FOR USE OF 1C350 CHEMICALS	1	\$14,000,000
1E351	TECHNOLOGY FOR USE OF MICROBIOLOGICAL MATERIALS	1	\$1,000,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	14	\$8,854,487
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	3	\$495,000
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	3	\$101,000

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
2B201	MACHINE TOOLS FOR REMOVING OR CUTTING METALS	1	\$1,786,125
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	13	\$210,706
2B351	TOXIC GAS MONITORING SYSTEMS & DEDICATED DETECTORS	1	\$26,646
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	1	\$12,752
2D983	EQUIPMENT CONTROLLED BY 2A983	3	\$4,230,001
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	1	\$0
2E003	OTHER TECHNOLOGY	2	\$1
2E201	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	2	\$1
2E301	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2B	1	\$0
2E983	SOFTWARE CONTROLLED BY 2D983	2	\$2
3A001	ELECTRONIC DEVICES/COMPONENTS	52	\$4,282,045
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	20	\$3,217,373
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	8	\$7,352,000
3A292	OSCILLOSCOPES AND TRANSIENT RECORDERS	1	\$16,000
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	11	\$143,050
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	6	\$86,839
3A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	4	\$78,232
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	4	\$3,336,180
3C001	HETERO-EPITAXIAL MATERIALS	1	\$30,900
3C005	SILICON CARBIDE WAFERS	1	\$62,750
3D001	SOFTWARE FOR DEV OR PROD OF EQUIP CERTAIN ITEMS IN	1	\$22
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	3	\$24
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	3	\$3
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	10	\$0
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	11	\$258
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	10	\$10
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	\$250
3E201	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A	1	\$1
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	5	\$13,792,848
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	2	\$1,405,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	11	\$11
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	7	\$7
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	7	\$7
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	12	\$12
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	22	\$53,994,244
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	7	\$1,244,444
5A992	INFORMATION SECURITY EQUIPMENT	2	\$3,003,496
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	7	\$7
5D002	SOFTWARE FOR INFORMATION SECURITY	31	\$195,074
5D991	SOFTWARE FOR DEV/PROD/USE WITH 5B994 TEST EQUIPMEN	1	\$400
5D992	SOFTWARE NOT CONTROLLED BY 5D002	2	\$7,041
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	12	\$22
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	3	\$4
6A001	ACOUSTICS	4	\$4,299,002
6A003	CAMERAS	96	\$3,000,941
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003,6A005	1	\$1
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	8	\$137,681,476
7D003	OTHER SOFTWARE	1	\$1
7D101	SOFTWARE FOR COMMODITIES CONTROLLED BY 7A001/004,	3	\$501
7E001	TECHNOLOGY FOR DEVELOPMENT OF EQ. CONTROLLED BY 7A	3	\$2
7E004	OTHER TECHNOLOGY	1	\$2
7E101	TECHNOLOGY FOR EQUIPMENT/SOFTWARE CONTROLLED BY 7A	3	\$3,501
9A001	AERO GAS TURBINE ENGINES	1	\$960,000
9A004	SPACECRAFT	11	\$12,976,869
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	4	\$1,043,000
9D001	SOFTWARE FOR DEV OF CERTAIN EQUIP/TECHNOLOGY IN 9A	1	\$1
9D018	SOFTWARE FOR USE OF ITEMS IN 9A018	1	\$15,000
9E018	TECHNOLOGY FOR DEV/PROD/USE OF ITEMS IN 9A018	1	\$5,000
TOTAL APPLICATIONS: 532			
TOTAL CCL'S: 85			
TOTAL DOLLAR VALUE: \$311,981,395			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
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TAJIKISTAN

TOTAL APPLICATIONS: 0
TOTAL CCL'S: 0
TOTAL DOLLAR VALUE: \$0

TURKMENISTAN

0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$71,500
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$2,343
6A003	CAMERAS	1	\$55,764

TOTAL APPLICATIONS: 3
TOTAL CCL'S: 3
TOTAL DOLLAR VALUE: \$129,607

UKRAINE

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	3	\$264,435
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	11	\$687,637
0A985	DISCHARGE TYPE ARMS	1	\$90,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	26	\$4,600,685
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,095,475
1C353	GENETICALLY MODIFIED MICROORGANISMS	1	\$1,684
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$384,463
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	2	\$648,635
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	1	\$2,170
3A001	ELECTRONIC DEVICES/COMPONENTS	2	\$4,681
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	2	\$17,657,720
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	17	\$252,800
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	1	\$680,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	\$90,000
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	16	\$0
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	2	\$0
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	2	\$800,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	\$567,272
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	3	\$574,966
5D002	SOFTWARE FOR INFORMATION SECURITY	8	\$50,858
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	2	\$1
6A003	CAMERAS	10	\$112,443
6A006	MAGNETOMETERS/MAGNETIC GRADIOMETERS/COMPENSATION S	1	\$30,000
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	1	\$5,806,625

TOTAL APPLICATIONS: 91
TOTAL CCL'S: 26
TOTAL DOLLAR VALUE: \$34,402,552

UZBEKISTAN

2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	1	\$100,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	\$135,000
6A003	CAMERAS	2	\$19,600

TOTAL APPLICATIONS: 4
TOTAL CCL'S: 3
TOTAL DOLLAR VALUE: \$254,600

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
VIETNAM			
0A985	DISCHARGE TYPE ARMS	1	\$5,449,250
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	\$5,071
1A005	BODY ARMOR	1	\$375,577
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$63
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	1	\$2,470,000
1C231	HAFNIUM	1	\$8,500
1C234	ZIRCONIUM, WITH A HAFNIUM CONTENT	1	\$4,260
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	\$6,600
1C351	HUMAN PATHOGENS, ZOOZOSES, AND TOXINS	1	\$11,220
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$1,000
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	1	\$100,000
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	12	\$331,260
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	5	\$766,993
2E003	OTHER TECHNOLOGY	1	\$750,000
3A001	ELECTRONIC DEVICES/COMPONENTS	1	\$32,076
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	\$50,251
3A232	DEFONATORS/MULTIPOINT INITIATION SYSTEMS	2	\$774,700
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	1	\$5,000
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	1	\$1
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	1	\$1
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	3	\$84,000
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	4	\$4
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	3	\$3
3E003	OTHER "TECHNOLOGY"	1	\$1
4D980	SOFTWARE FOR DEV/PROD/USE WITH 4A980 ITEMS	1	\$37,000
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	22	\$1,127,356
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	8	\$1,952,948
5D002	SOFTWARE FOR INFORMATION SECURITY	19	\$160,617
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	4	\$12
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	3	\$4
6A002	OPTICAL SENSORS	1	\$13,940
6A003	CAMERAS	7	\$108,680
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	2	\$567,530
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$593,500
TOTAL APPLICATIONS: 90			
TOTAL CCL'S: 35			
TOTAL DOLLAR VALUE: \$15,787,419			

Appendix G: 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 2007, U.S. exports to these countries totaled \$80.2 billion, which represents a 22 percent increase of \$14.7 billion from 2006 levels, and about 6.9 percent of total U.S. exports. China is the largest single export market among the controlled country group, with roughly 81 percent of the total. Russia ranks second with roughly 9 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 (6.9%), the overall adverse impact through injury to U.S. industry and job displacement is probably minimal.

Controlled Destinations	Calendar Year 2007 U.S. Exports (in millions)
Albania	\$34
Armenia	\$111
Azerbaijan	\$178
Belarus	\$102
Cambodia	\$139
China	\$65,236
Cuba	\$447
Georgia	\$364

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.

Iraq	\$1,560
Kazakhstan	\$753
Kyrgyzstan	\$49
Laos	\$6
Macao	\$226
Moldova	\$53
Mongolia	\$26
North Korea	\$2
Russia	\$7,365
Tajikistan	\$53
Turkmenistan	\$185
Ukraine	\$1,342
Uzbekistan	\$89
Vietnam	\$1,903
Total Exports to Controlled Destinations	\$80,221
Total Exports to All Countries	\$1,163,300
U.S. Exports to Controlled Destinations as a Percent of Overall U.S. Exports	6.9%
Percent of U.S. Exports to Controlled Destinations Requiring a BIS License	0.8%
Percent of U.S. Exports to Controlled Destinations Subject to a BIS License Requirement	2.2%

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 (\$256.3 billion in 2007), 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 applied for exports to China in past fiscal years shows that a significant number involve technology, manufacturing equipment, software, and/or

components for use in foreign-invested production facilities. Among the top-valued manufacturing equipment exported in 2007 are machine tools and parts thereof used in semiconductor manufacturing and hand-operated taps, cocks, and valves. Examples of the top-valued components are silicon chips and wafers for integrated circuits and monolithic integrated circuits. Many other types of products, such as aircraft and waste and scrap, 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.

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 either without a license or under a license exception. For example, a license is generally not required for exports to controlled destinations (except Cuba, Sudan, Syria, and Iran) 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 H: 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>

Text file: <http://www.usda.gov/oce/commodity/wasde/latest.txt>