

1. BXA Background

The Bureau of Export Administration (BXA) administers and enforces laws and regulations which govern exports of dual-use commodities, technology and software from the United States and its territories and reexports of such items from third countries. In addition, BXA regulates certain activities of U.S. persons related to proliferation concerns. BXA has the responsibility of implementing the Clinton Administration's commercial encryption policy and will be responsible for compliance by the U.S. business community with the Chemical Weapons Convention. BXA investigates violations of export controls and implements the antiboycott provisions of the Export Administration Act. BXA is responsible for a variety of programs related to maintaining a strong U.S. defense industrial base. BXA also participates in the efforts of the U.S. government to assist many of the new independent states of the former Soviet Union, the Baltics and Central Europe in developing effective export control systems.

2. Fiscal Year 1997 Highlights

Export Controls in the 21st Century

BXA's export control agenda for the 21st century is focused on preventing the proliferation of weapons of mass destruction while seeking to promote U.S. competitiveness in the global marketplace. BXA recognizes that U.S. industry cannot successfully compete internationally if an export control system does not reflect a changed security environment. The Administration continues to take important actions to remove unnecessary obstacles to exporting and strengthen multilateral regimes. The Administration has actively involved industry as part of its public-private partnership effort.

Export Licensing Liberalizations

The Clinton Administration continues to make major progress in eliminating unnecessary and ineffective export controls and streamlining the export control process. It has simultaneously strengthened the implementation and enforcement of those export controls which are still required to combat proliferation and protect other U.S. national security and foreign policy interests while easing or eliminating unnecessary controls. These actions have greatly reduced obstacles for exporters.

BXA, through multilateral efforts, liberalized export controls for oscilloscopes and certain transient recorders which substantially reduce the paperwork burden by decreasing the number of license applications exporters and reexporters are required to submit for oscilloscopes. U.S. manufacturers hold over 70 percent of the world market share for oscilloscopes in an international market estimated at \$50 to \$100 million per year, with most of the manufacturing done in the United States.

Earlier this year, the Administration announced the liberalization of the encryption licensing policy for banks and financial institutions and for highly formatted financial-specific encryption items used by financial institutions and others to generate secure, private electronic

transactions. This follows the December 1996 publication of an interim rule transferring certain encryption items from the U.S. Munitions List administered by the State Department to the Commerce Control List. This rule implemented the Administration plan to promote a worldwide key management infrastructure with the use of key escrow and key recovery encryption items.

BXA has simplified export controls on mixtures that contain traces of controlled precursor chemicals to permit exports of many common commercial products, such as dry cleaning solvents, while maintaining license requirements for mixtures that contain significant quantities of precursor chemicals. BXA published a rule adding South Korea to the Australia Group (AG). Membership in the Australia Group exempts exports of certain AG-controlled chemicals to South Korea from license requirements, thereby decreasing the overall licensing burden on U.S. exporters.

BXA published a rule introducing a licensing review policy for the approval, on a case-by-case basis, of certain exports to human rights organizations, news bureaus, and individuals and non-governmental organizations engaged in activities that promote democratic activity in Cuba. This change will allow the U.S. government to support the Cuban people and encourage democratic activity without removing license requirements on exports to this embargoed country.

Commodity Jurisdiction

BXA continues to make progress in the transfer of nonmilitary items from the State Department's Munitions List to the Commerce Control List. This effort ensures that U.S. exporters of such items are not unduly burdened by overly restrictive licensing policies. On September 29, 1997, BXA published a regulation transferring jurisdiction from the Department of State to the Department of Commerce, of satellite fuel, ground support equipment, test equipment, payload adapter/interface hardware, and replacement parts for the preceding items, when included with a specific commercial communications satellite launch. This follows the October 21, 1996 transfer of jurisdiction of certain commercial communications satellites and certain hot section technology for the development and production of commercial aircraft engines to the Commerce Control List. This rule also imposed national security and foreign policy controls on certain commercial communications satellites and hot section technology for development, production or overhaul of commercial aircraft engines and clarifies the jurisdiction for developmental aircraft designed for civilian use.

Electronic Security Interests

BXA is responsible for implementing President Clinton's commercial encryption policy to promote the growth of electronic commerce and secure communications worldwide while protecting the public safety and national security. These efforts include the development of the rationale and the new regulatory framework for the transfer of jurisdiction for licensing commercial encryption products from State's U.S. Munitions list to Commerce's Control List, liberalized treatment for recoverable products, and implementation of a new program involving

review and oversight of commitments by encryption manufacturers to build and market key recovery products.

The Chemical Weapons Convention

BXA will oversee U.S. business community compliance with the Chemical Weapons Convention which entered into force on April 29, 1997. In carrying out its responsibilities under the treaty and implementing legislation, BXA will publish new regulations, conduct industry outreach activities, develop an information management system to comply with the treaty's reporting requirements, and manage international inspections at U.S. commercial facilities. BXA, in conjunction with the Arms Control and Disarmament Agency (ACDA), has sponsored a number of CWC industry outreach programs to inform industry of its rights and obligations under the CWC, including the completion of declarations and on-site inspection protocols.

Harmonizing Multilateral Export Controls

BXA continues to work to harmonize multilateral lists and list interpretations to increase transparency and consistency, and to maintain a level playing field for U.S. companies. BXA supports the expansion of transparency and information exchange in the Wassenaar Arrangement, which focuses on exports of arms and sensitive dual-use equipment and technologies. BXA is participating in the standardization of the control language of the Nuclear Suppliers' Group dual use control list to conform with the European Union, Wassenaar, and Missile Technology Control Regime control lists. A substantial majority of members of the multilateral non-proliferation regimes now have "catch-all" controls, which were first advanced by the United States to help prevent weapons of mass destruction and missile proliferation. BXA also participates in on-going international discussions of the U.S. encryption initiative.

Defense Trade Advocacy

As part of our role in defense advocacy and support for U.S. industry impacted by defense downsizing, BXA continued to work with the interagency community on defense advocacy issues. BXA coordinates its efforts with the Trade Promotion Coordinating Committee and the International Trade Administration's Advocacy Center. In FY 1997, BXA defense advocacy efforts supported sales of \$2-3 billion. Examples include support for the \$740 million F-100 Aegis Radar System sale to Spain and the \$700 million sale of the Kaman Seasprite helicopter to Australia and New Zealand.

U.S. Defense Diversification

During FY 1997, BXA continued to implement its U.S. defense diversification programs to provide assistance to the defense industry which has been negatively impacted by defense downsizing. BXA's Resource Matching Program offers a series of workshops designed to provide a variety of defense export and manufacturing information to small and medium size

defense firms. The Competitive Enhancement and Needs Assessment Program targets defense subcontractors to determine which government services that would be most useful to firms diversifying their operations. In June 1997, one of the six Navy Best Manufacturing Practices (BMP) satellite centers in the U.S. at the Commerce Department. The purpose of the center is to provide government agencies and industry with information about how the BMP's resources can be used to improve the manufacturing competitiveness of U.S. companies.

Enhanced Proliferation Control Initiative

In December 1996, BXA implemented guidelines issued by the National Security Council to streamline the export licensing review process for entities of proliferation concern. The development of a list of entities through the "Is Informed" process arose from the Enhanced Proliferation Control Initiative (EPCI) begun in 1990 to stem the spread of missile technology as well as nuclear, chemical and biological weapons. This improved process has injected accountability, transparency and timeliness into the "Is Informed" process. Since February 1997, BXA has published several Commerce Department rules which added names to the "Entity List." Publishing this entity's list allows the U.S. government to identify for U.S. businesses some of the organizations and companies that may be involved in proliferation activities. Under EPCI, BXA has the authority to inform exporters individually or through published notices that a license is required for exports and reexports of normally uncontrolled goods and technology when there is an unacceptable risk of use in or diversion to activities related to nuclear, chemical or biological weapons or missile proliferation, even if the end user is not primarily weapons-related.

Industry Outreach

In FY 1997, BXA continued to conduct extensive outreach and counseling services through the Office of Exporter Services Exporter Counseling Division, Export Seminar Staff and Western Regional Offices located in Irvine and Santa Clara, California. These offices advised businesses and conducted seminars on export control and defense conversion issues. In FY 1997, BXA responded to over 200,000 telephone calls, directly counseled over 1,300 visitors in its offices, and organized 84 seminars attended by over 6,500 participants. BXA held six of these programs overseas, reaching over 1,000 participants in Japan, Sweden, Austria, The Netherlands, France, and the United Kingdom. BXA also developed a new enhanced export seminar program to increase government-industry interaction on export policy.

BXA's Internet Website

BXA's Web Page on the Internet allows BXA to provide guidance on a wide range of topics of interest to both established exporters and those new to exporting. Since its debut in the fall of 1996, the number of visitors accessing the Website continues to grow. In FY 1997, BXA expanded its list of export fact sheets and specialized pages, based on input from the business community. Informative documents are available for downloading from the site, including the BXA Annual Report, the BXA Foreign Policy Report, Export Management System guidelines,

the summary of the second Annual Report on Offsets, and the President's Export Council Subcommittee on Export Administration's report on unilateral economic sanctions. In addition, exporters may now request export license application forms via the Internet. BXA continues to explore ways to develop the site to offer additional electronic services to the business community, including the ability to submit license applications via the Internet.

Export Management Systems

Earlier this year, BXA published its revised Export Management System (EMS) Guidelines. EMS is an optional program that companies may implement, as good business practice, to ensure compliance with the Export Administration Regulations (EAR). Working in close cooperation with industry, BXA revised the guidelines to assist companies with the establishment of internal procedures for screening exports. Establishing an EMS can greatly reduce the risk of inadvertently exporting to a prohibited end-use or end-user. BXA offers on-site EMS reviews of companies' written and operational programs and conducts EMS workshops and seminars to educate the export community on the various tools available to them to assist them in complying with the EAR.

Defense Industrial Base Assessments

BXA completed three major industrial base projects and initiated two new research efforts during FY 1997. The three completed projects are assessments of the U.S. semiconductor processing materials industry, conducted at the request of the semiconductor industry, the U.S. emergency aircraft ejection seat industry, a study sponsored by the U.S. Air Force, and a ball and roller bearing statistical handbook, a joint effort with the American Bearings Manufacturers Association. New research efforts have been initiated to study the optoelectronics industry, a study requested by that industry's trade association, and the high performance energetic materials industry, a project sponsored by the U.S. Navy.

3. Export Administration Programs

BXA's Export Administration is comprised of five offices under the Office of the Assistant Secretary. Three EA offices have responsibility for dealing with a wide range of export control policy and licensing activities, including dual-use nuclear and missile goods and technologies; dual-use chemical and biological goods and technologies; and commercial encryption policy, dual-use goods and technologies related to conventional arms, certain other dual-use sensitive goods and technologies and foreign policy controls. EA also has an office which focuses on strategic industries and economic security issues, and an office which focuses on EA's administrative, education and compliance responsibilities. This organizational structure allows BXA to formulate and implement timely policy changes, undertake quality analysis of licensing decisions, focus on issues of international competitiveness, and provide increased customer service.

The Office of Strategic Trade and Foreign Policy Controls (STFPC) is responsible for implementing multilateral export controls under the Wassenaar Arrangement, which deals with conventional arms and related sensitive dual-use goods and technology. The office has the lead within BXA for the development of encryption policy, the licensing of commercial encryption products and the regulation of key recovery agents. It is also responsible for the bilateral High Performance Computer Agreement and for implementing unilateral U.S. foreign policy controls for antiterrorism, regional stability and crime control.

The Office of Nuclear and Missile Technology Controls (NMT) administers U.S. multilateral and unilateral export controls on dual-use nuclear and missile goods and technology to prevent the spread of weapons of mass destruction. The office is responsible for all export control policy issues relating to the Nuclear Suppliers Group (NSG) and Missile Technology Control Regime (MTCR) and represents the Department in international negotiations on the export controls that are shared by member-nations of these regimes. It also has the responsibility for reviewing proposed exports of items subject to license requirements under the Enhanced Proliferation Control Initiative (EPCI).

The Office of Chemical and Biological Controls and Treaty Compliance has overall responsibility for administering export controls and policy development relating to the Australia Group (e.g. chemical weapons precursors and biological agents). This office develops, implements and oversees U.S. industry requirements under the Chemical Weapons Convention, the Biological Weapons Convention and other relevant treaties. The office also carries out the provisions governing deemed exports to foreign nationals in the United States and executes BXA responsibilities in furtherance of its controls on exports for short supply reasons.

The Office of Strategic Industries and Economic Security (SIES) is the focal point within the Commerce Department for issues relating to the health and competitiveness of the U.S. defense industrial base. As such, SIES plays a leadership role in a wide range of issues which relate to both the national and economic security of the United States. Its efforts include assisting American companies to diversify from defense to commercial production and markets, promoting the sale of U.S. weapons systems to our allies, analyzing the impact of export controls on key industrial sectors, and conducting primary research and analysis on critical technologies and defense-related sectors.

The Office of Exporter Services (OExS) is responsible for counseling exporters, conducting export control seminars, and drafting and publishing changes to the Export Administration Regulations. It develops brochures and other written guidance to educate and train exporters, and to ensure compliance with the Export Administration. It is also responsible for licensing and compliance actions relating to the special comprehensive license, for administering the processing of license applications and commodity classifications and advisory committees and for implementing the End User Verification process through which U.S. exporters are informed of entities of proliferation concern.

4. Export Enforcement Programs

BXA's Export Enforcement (EE) arm is comprised of three offices: The Office of Export Enforcement (OEE), the Office of Enforcement Support (OES), and the Office of Antiboycott Compliance (OAC). OEE has eight field offices located throughout the continental United States. EE works to prevent the illegal export of dual-use items which are controlled for national security and other reasons and investigates alleged illegal export transactions. EE works with U.S. Attorneys and BXA's Office of Chief Counsel in seeking appropriate sanctions for violators.

OEE and OES personnel perform a variety of checks on export transactions which raise proliferation concerns. Special agents spot-check shipments, audit exporters' records, detain or seize suspect shipments, seek temporary denial orders, and carry out pre-license and post-shipment verifications. In cases of suspected or alleged violations, OEE special agents often work with the U.S. Customs Service, the FBI, and the Treasury Department's Office of Foreign Assets Control. OEE, in conjunction with the Department of Justice and the Commerce Department's Office of Chief Counsel, pursues criminal and administrative prosecution of cases.

OEE's mission also involves educating export control personnel and businesses about compliance with U.S. export control regulations, the proliferation threat from rogue nations, and the need for businesses to be more fully aware of their responsibilities under the U.S. export control system. OEE provides export control technical assistance to Foreign Commercial Service personnel and foreign export control officials.

The Office of Antiboycott Compliance enforces the antiboycott provisions of the EAR, provides advice to the public, and issues reports on foreign boycotts. The EAR prohibits U.S. persons from complying with certain aspects of unsanctioned foreign boycotts against countries friendly to the United States. OAC conducts investigations of alleged violations, prepares cases for settlement, and provides support in criminal prosecution or administrative litigation of cases. OAC also monitors international boycott developments.

5. Nonproliferation and Export Control Cooperation Programs

The Nonproliferation and Export Control Cooperation (NEC) office coordinates BXA's activities in support of U.S. export control cooperation programs with the former republics of the Soviet Union and other new states in the Central Asian and Caucasian regions, and the Baltic and Central European states. The NEC team conducts technical exchanges to assist those nations in developing their own effective export control systems with the goal of preventing terrorist and rogue nations from obtaining weapons of mass destruction and other sensitive materials. The technical exchanges are focused on the following five functional areas of export control cooperation: legal and regulatory foundations, licensing procedures, enforcement mechanisms, industry-government relations, and system administration and automation support.

4. Technical Advisory Committees

The Technical Advisory Committees (TACs) have been chartered pursuant to statute since 1973 to provide advice and assistance for U.S. industry regarding the creation and implementation of export control policy. The TACs advise the Department of Commerce on proposed revisions to the U.S. and international export control lists, on worldwide availability and utilization of production technology, and on export control regulations and procedures.

During FY 1997, the Committees addressed technical and administrative issues regarding nonproliferation controls and foreign policy controls. BXA continued to rely on the Committees as a valuable source of information and advice on regulatory and policy matters.

6. FY 1997 Technical Advisory Committee Activities

The Information Systems Technical Advisory Committee (ISTAC) addressed issues relating to Control List Categories 3, 4, and 5. The ISTAC forwarded to BXA comments and proposals on the following topics: export regulation changes and subsequent Composite Theoretical Performance (CTP) level changes for certain license exceptions for exports of computers, key escrow and key management of encryption items, the effects on U.S. industry of unilateral controls vs. multilateral controls, the impact on U.S. industry of controls on technical data, controls for low technology level items, and the restrictions put on licenses for transfers of technology to foreign nationals who are not permanent residents of the United States (deemed exports).

The Materials Technical Advisory Committee (MTAC) reviewed proposals regarding Control List Category 1. The MTAC provided comments and advice regarding the Chemical and Biological Weapons Conventions, the Wassenaar Arrangement, the Missile Technology Control Regime, and the Nuclear Suppliers Group. The MTAC also submitted to BXA draft reports on centrifuges for nuclear fuel processing and on the Biological Weapons Convention Protocol. The MTAC commented on the technical parameters for ECCN 2A292 (pipes and valves). The MTAC reviewed a draft regulation for implementation of the Chemical Weapons Convention and submitted written comments.

The Materials Processing Equipment Technical Advisory Committee (MPETAC) made recommendations regarding proposed revisions to Control List Category 2. A Committee member presented information on license processing delays on 5-axis machine tools. The MPETAC approved a post-shipment visit document proposed by the Department of Energy. The MPETAC agreed with the content of a White Paper on machine tools prepared by technical experts from five countries participating in the Wassenaar Arrangement, and pursued interagency discussion of this issue.

The Regulations and Procedures Technical Advisory Committee (RPTAC) made recommendations on a range of issues, including the following: the "deemed export" rule, encryption policy, the Enhanced Proliferation Control Initiative, Customs' Automated Export System, the license review process, regulations implementing the Wassenaar Arrangement, text revisions for the Export Administration Regulations, changes to the Foreign Trade Statistics Regulations, and unilateral foreign policy controls.

The Sensors and Instrumentation Technical Advisory Committee (SITAC) focused on a relaxation of export controls on oscilloscopes and on the commodity jurisdiction process. The SITAC also provided comments on Entity List implementation. After a corporate presentation on licensing requirements for ECCN 6C002, the SITAC concluded that it could recommend revisions to the control parameters for that entry.

The Transportation and Related Equipment Technical Advisory Committee (TransTAC) advised the Department regarding commodities and technical data within Control List Categories 7, 8, and 9. The TransTAC reviewed the "hot section" technology issue and submitted related definition statements to BXA. The TransTAC also reviewed Wassenaar Arrangement documents and gave input on a number of key items. The Committee provided considerable support for the Department during commodity jurisdiction negotiations on developmental aircraft and commercial communication satellites.

President's Export Council Subcommittee on Export Administration

The President's Export Council Subcommittee on Export Administration (PECSEA) deliberated within the structure of its task forces, which included the following: Unilateral Economic Sanctions, Enhanced Proliferation Control Initiative (EPCI), Principles of Exporting, Technology Advance, and Commodity Jurisdiction. The PECSEA prepared an extensive report, "Unilateral Economic Sanctions: A Review of Existing Sanctions and Their Impacts on U.S. Economic Interests with Recommendations for Policy and Process Improvement", which was submitted by the President's Export Council to the President in June. The report has since been circulated extensively.

1. The Office of Exporter Services

The Office of Exporter Services (OExS) is responsible for administering EA's education and compliance programs and implements export policy within Export Administration. In this capacity, OExS develops BXA's outreach seminar program for the purpose of educating the exporting community on export controls, regulations, and licensing issues. OExS provides the exporting community with advice on a broad range of export issues, including licensing and documentation requirements for export transactions, and special country policies. OExS implements the EPCI End-User Verification process through which U.S. exporters are informed of proliferation concerns. It develops Internal Control Program Guidelines and Export Management System Guidelines which companies use to ensure exports are consistent with the EAR. Finally, OExS administers International Cooperative Licenses to facilitate the export of items needed to fulfill U.S. partnership obligations in international cooperative efforts.

Regulatory Reform

January 1, 1997 marked the end of the transition period to the revised Export Administration Regulations (EAR), at which time compliance with the new provisions became mandatory. This reform effort to simplify and streamline the EAR began in 1995. It involved industry participation, followed by the publication of an interim rule on March 25, 1996. OExS continues to address comments and suggestions from the exporting community on the reform effort and published corrections and clarifications to the text of the EAR on May 9, 1997. Remaining corrections and clarifications to the Commerce Control List will be published in the near future.

During FY 1997, OExS codified regulatory policy making substantive changes to license requirements for encryption, jet engine hot sections, commercial satellites, oscilloscopes, humanitarian assistance exports to Cuba, and making changes in the way BXA implements the U.S. government's compliance with Australia Group controls of chemical precursors. Each of these regulatory changes are outlined, in detail, in the section of this report specifically dealing with those policy areas.

Customer Service

Industry counseling remains an essential component of BXA's mission. Through a variety of outreach programs, BXA promotes an understanding of U.S. export control laws which enhance compliance and facilitate U.S. international competitiveness. OExS accomplishes its outreach and counseling activity through its headquarters in Washington, D.C. and its Western Regional Office (WRO) located in Orange County, and Silicon Valley, California. The regional offices are located in the fastest growing, high technology regions in the United States, and are within commuting distance to over 10% of the total U.S. population and the third largest port in the world.

Export Compliance Seminar Program

In response to the constant changes in export policy and licensing procedures, OExS provides a range of seminars and workshops to educate and inform the exporting community. An important aspect of this activity is cosponsoring programs throughout the United States with a variety of industry trade associations, universities and colleges, state and local governments, and nonprofit international business related organizations. Working with these organizations furthers BXA's goal of maintaining a cooperative relationship with industry.

In FY 1997, OExS conducted 84 export compliance seminars with over 6,500 participants. Six of these programs were held overseas and reached over 1,000 participants in Japan, Sweden, Austria, The Netherlands, France, and the United Kingdom. In addition to its own programs, OExS participated in over 180 international trade-related events, reaching over 16,000 business representatives. These events were sponsored by numerous public and private sector organizations.

OExS continued to offer a series of seminar programs to assist defense-dependent firms diversify into new commercial and international markets. This Resource Matching Program initiative brings together the best public and private sector resources in the fields of regulatory compliance, international marketing and finance, and technology deployment to help firms adversely affected by reduced defense procurement. During FY 1997, WRO conducted a series of eight "hands-on" workshops that were attended by approximately 650 participants in seven western states. BXA representatives also participated in another 18 conferences providing trade competitiveness counseling to 5,565 attendees.

In FY 1997, OExS reformatted its export licensing seminar program to include increased government-industry interaction on export licensing policy and an extended format. The Bureau of Census, Office of Foreign Assets Control, and Export Enforcement participate in these scheduled programs. As part of the program, OExS continues to provide specialized workshops, including commercial encryption licensing and export management systems.

Update 1997

BXA's tenth annual Update Conference on Export Controls and Licensing attracted the largest exporting audience ever with over 950 participants. The annual conference is BXA's premiere event, in addition to serving as the largest Department of Commerce event in the Washington, D.C. area. This program allows high-level government officials to conduct policy and regulatory sessions with business and industry to discuss significant changes to export control policies. BXA's Update West conference, held in California, attracted over 550 U.S. industry participants. Commerce Department officials and representatives from the interagency community discussed major developments in export control policy, including the newly released encryption export control liberalizations, technical data and software controls, export

management systems, proliferation controls, and other issues relating to export control requirements.

One-on-one Counseling

To complement its seminar program, OExS regulatory specialists provide extensive, one-on-one counseling to the exporting community. Counselors provide accurate and in-depth responses on a wide range of export control and licensing issues of interest to the exporting community. This year's implementation of the revised EAR brought an increase in correspondence and telephone calls. OExS experienced its highest demand for one-on-one counseling this year, providing guidance through over 200,000 inquiries and 1,300 visitors.

Through OExS, BXA advises industry on a broad range of export control issues, including export licensing requirements to ship high technology products, documentation requirements for export transactions, and special country policy concerns. Counselors act as intermediaries between exporters and licensing officials by forwarding relevant case-specific information to the licensing officers, and arranging meetings with licensing officers and industry representatives. In addition, OExS provides referrals to other trade organizations which offer assistance with export related issues such as trade finance and marketing.

As part of the BXA and industry cooperative effort, OExS authorizes emergency processing through the licensing system on export applications which meet specific criteria. If approved, verbal authorization to ship is given to the exporter followed by issuance of a license. These cases are often approved within a few hours of receipt of the application. In FY 1997, OExS granted emergency processing to 59 cases, representing \$42 million in authorized exports.

In FY 1997, OExS continued its customer service initiatives through the distribution of brochures and export control-related publications. OExS published two "how-to" documents to assist exporters entitled the "BXA's Basic Guide for Exporters" and "Facts You Should Know About Support Documents." As an additional service to industry, OExS maintains export control material in information libraries in Washington, D.C. and Orange County, California. Information and publications on exporting, marketing, Denied Persons List, and seminar schedules, as well as counseling services, are among the many types of export control and marketing information available. OExS also ensures that this information is made available to various regional government trade offices. This information is also available on BXA's Web Site.

Expanded Automation Services

Through its automation efforts, OExS dramatically enhanced its customer service capabilities. OExS's "Fax-on-Demand" system, which enables exporters to access useful information by facsimile 24 hours a day, was expanded this year. The system now provides over 60 documents, covering such areas as recent regulatory changes, upcoming workshops, useful points of contact, and a wide variety of other competitiveness and trade-related information.

OExS also expanded its free broadcast subscription services with its broadcast E-mail system, "netFacts". This system complements our longstanding facsimile service, "Fast Facts." Together, these two systems provide regular and timely updates to subscribers on regulatory and policy changes, upcoming workshops, and other items of interest. Approximately 3,000 organizations currently subscribe to these broadcast services. OExS is expanding its subscriber base for these automation services from the Western region to include the entire United States. With this expansion, OExS anticipates a dramatic increase in customer outreach by the end of FY 1998.

To further assist defense-dependent firms, WRO initiated a free, subscription-based service, entitled "The Resource Matching Program Information Service." Distributed via broadcast facsimile and broadcast E-mail, this monthly publication reaches approximately 1,400 companies. The WRO also published a booklet, entitled "Federal, State & Local Programs Helping California Companies." These initiatives were undertaken with support from the Department of Commerce's Economic Development Administration.

Export License Processing

For the first time in four years, BXA received an increased number of license applications. During FY 1996, 8,705 license applications were received. In contrast, BXA received 11,472 applications in FY 1997, representing a 24% increase. This increase can be attributed to the transfer of certain encryption items from the U.S. Munitions List to the Commerce Control List, the establishment of the Entity List to inform exporters of certain end-users that are ineligible to receive specified items without a license, and the heightened industry awareness of end-users which may raise proliferation concerns.

The number of license applications received continues to remain well below the 26,126 applications submitted to BXA in FY 1993. Dramatic licensing liberalizations implemented following the September 30, 1993 release of the Trade Promotion Coordinating Committee's (TPCC) report to Congress on developing a "National Export Strategy" has reduced licensing activity by over 55% over the past four fiscal years. By the end of FY 1997, BXA acted upon 10,557 applications (including cases that were pending from FY 1996), approving 8,717 individual licenses, returning 1,522 without action and denying 318. (See Table II. 1-1). At the end of FY 1997 there were 1,668 applications still pending.

During FY 1997, BXA experienced a slight increase in the number of applications pending past statutory deadlines. By the end of FY 1997, 56 applications were still pending over the statutory deadlines compared to 49 in FY 1996. This remains a substantial decrease from FY 1995 when the number of applications still pending past the statutory deadline was 82.

Under the implementation of Executive Order 12981, the average processing time for applications which did not require referral to another agency was 10 days, while the average processing time for applications requiring referral was 34 days. During FY 1997, 91 percent of all

applications required interagency referral. Overall, average processing times (referred and non-referred) decreased from 33 days in FY 1996 to 32 days in FY 1997.

Export License Referral Process

The Department of Commerce, both by law and practice, refers certain applications, based on the level of technology, the appropriateness of the items for the stated end-use, and the country of destination, to other agencies for review and recommendation. The principal referral agencies are the Department of Defense, the Department of Energy, the Department of State and the Arms Control and Disarmament Agency (ACDA). Since the transfer of jurisdiction of commercial encryption products to Commerce, the Department of Justice and the National Security Agency (NSA) have a role in the license review process for encryption license applications.

Under EO 12981, applications that are in dispute among the agencies are referred to the Operating Committee (OC), which is chaired by the Department of Commerce. Prior to such dispute, certain license applications can be discussed, on a consultive basis, at State-chaired working-level interagency groups which review cases subject to nuclear nonproliferation, missile technology, and chemical/biological weapons controls.

With the Executive Order implementation, the role of the OC was expanded to include the review of all license applications for which reviewing departments and agencies are not in agreement. The Commerce Chair considers the recommendations of the reviewing agencies and informs them of the Chair's decision within 14 days after receipt of the agency recommendations. Agency recommendations are required to be submitted within 30 days of receipt of the original referral from Commerce. Any reviewing agency may appeal the decision of the Chair of the OC to the Chair of the Advisory Committee on Export Policy (ACEP). In the absence of a timely appeal, the Chair's decision will be final. The ACEP is an Assistant Secretary-level body which is chaired by Commerce with its principal members coming from the agencies listed above.

An agency must appeal a matter to the ACEP within five days of the OC's final decision. Appeals must be in writing from an official appointed by the President with consent of the Senate, or an officer properly acting in such capacity, and must cite both the statutory and regulatory bases for the appeal. Decisions of the ACEP are based on a majority vote. Any dissenting agency may appeal the decision to the Export Administration Review Board (EARB) by submitting a letter from the head of the agency. In the absence of a timely appeal, the majority vote decision of the ACEP shall be final.

The Secretary of Commerce is the Chair of the EARB, a Cabinet-level group with the Secretaries of Defense, Energy and State as the other statutory members. The Chair of the Joint Chiefs of Staff and the Director of Central Intelligence have non-voting rights as members of the Board. Export applications considered by the EARB are resolved by a majority vote. Any

agency may appeal the decision to the President. In the absence of a timely appeal, the decision of the EARB shall be final.

Executive Order 12981 reduced the time permitted to process license applications. No later than 90 calendar days after it is submitted, a complete license application will either be finally disposed of or escalated to the President for decision. Prior to Executive Order 12981 implementation, statutory authority required all license applications to be resolved within 120 days after an application was submitted.

The Commodity Jurisdiction (CJ) process is intended to improve interagency coordination with regard to commodity jurisdiction and commodity classification requests. Commodity classifications and munitions license applications referred to the CJ process, as well as any CJ requests, have a 95 calendar day cumulative time line for resolution of any conflict. This process provides for greater efficiency and transparency, similar to the interagency dispute resolution process for export license applications.

Electronic Licensing

In FY 1997, the number of all license applications submitted electronically using the Export License Application and Information Network (ELAIN) increased to 40%, from 30% the previous year. For the remaining 60% submitted on an export license application form, the License Application Scanning System (LASSie), a PC-based forms processing and image management system, scans applications into the system. The 748P Multipurpose Application Form can be used to apply for an export license or a classification request. For both LASSie and ELAIN, technical specifications, import certificates, and other documents are submitted by telefax or express mail. OEXS is working on the development of the capability to receive licenses via the Internet in FY 1998.

OEXS updated the Multipurpose Application Records & Retrieval System (MARRs) as the replacement for the current microfiche system. MARRs is a PC-based forms and image management system. The automated data base provides an electronic image of all export and classification requests and supporting documentation whether submitted manually or electronically. The database is accessible to all BXA personnel with export licensing duties and will be available to any U.S. Government Agency to which export requests are referred in FY 1998. It is capable of accepting exporter transmissions of various digitized media and allows immediate access for retrieval of all data existing within the data base.

“Is Informed” Process

The development of a list of entities of concern through the “Is Informed” process arose from the Enhanced Proliferation Control Initiative (EPCI) begun in 1990 to stem the spread of missile technology as well as nuclear, chemical and biological weapons. Under EPCI, BXA can

impose licensing requirements on exports and reexports of normally uncontrolled goods and technology where there is an unacceptable risk of use in or diversion to activities related to nuclear, chemical or biological weapons or missile proliferation, even if the end-user is not primarily weapons-related. BXA maintains an "Entity List" to provide notice to the public of certain entities subject to such licensing requirements. Since February 1997, the BXA has published several Commerce Department rules which added names to the "Entity List."

The process of publicly identifying these entities was revised by the National Security Council in December 1996. The guidelines issued by the National Security Council incorporate many aspects of Executive Order 12981 which streamlined the export licensing review process. This improved process injects accountability, transparency and timeliness into the "Is Informed" process.

Activities of companies which raise a proliferation concern are reviewed by a BXA-chaired interagency group. This group has 14 days to determine if the export of an item to a particular entity presents an unacceptable risk of use in or diversion to missile and nuclear-related proliferation activities. If a positive determination is made, the committee decides if a licensing requirement should be imposed for otherwise "uncontrolled" items to that entity. Decisions are made by a majority vote. Agencies which disagree with the majority vote may escalate the decision to the Advisory Committee on Export Policy.

Special Licensing and Export Compliance

Special Comprehensive License

OExS has developed a more efficient mechanism for exporters who routinely make high volume shipments of pre-approved items to pre-approved destinations, end-uses, and end-users. A special license was established for exporters to use in lieu of submitting individual applications. By reducing the paperwork burden on exporters and reexporters, allowing more flexibility and improving delivery times by not having to wait for individual license approvals from BXA, this license helps U.S. firms remain competitive in the global market place.

This licensing option, titled the Special Comprehensive License (SCL), is available to experienced exporters that are reliable and have a strong corporate commitment to the development and maintenance of an Internal Control Program (ICP). Because BXA does not review each individual transaction authorized by an SCL, parties to the SCL must have the mechanisms in place to ensure that each export and reexport made under an SCL meets all the terms and conditions of the license and are in accordance with all applicable provisions of the EAR.

The SCL provides flexibility that allows a company to tailor a license to its individual needs and may authorize a number of activities, i.e, servicing, export and reexport of capital equipment, and/or exporting items for the purpose of resale and reexport. Each company ICP

must be customized to each license depending upon the type of activity, items to be exported/reexported and the destinations.

International Cooperative Licenses

The Commerce Department is authorized to establish licenses which assist in the effective and efficient implementation of the Export Administration Act (EAA), as described under section 4(a)(4) of the EAA, as amended (50 U.S.C.A. app s 2403(a)(4) (1991). Under this authority, BXA establishes U.S. government-held licenses to fulfill USG roles in international cooperative projects. These licenses are crafted after the Special Comprehensive License structure and paperwork requirements and require an Internal Control Program, but are not necessarily bound by the restrictions described in Part 752 of the EAR. Three such licenses currently exist.

Internal Control Programs

An Internal Control Program (ICP) is a mandatory requirement of the Special Comprehensive License and International Cooperative License. Each license holder crafts its ICP to ensure that its export and reexport procedures comply with the requirements of the license and the EAR. Elements of the ICP include customer screening, auditing, training and administrative. OExS revises and distributes ICP Guidelines as well as other tools that can be used by the SCL holders in the implementation of their programs. One such tool is the SCL Holder Review Module that can be used by the companies to audit their own programs. Although this Module was developed for the SCL ICP review, it is also used by companies that do not hold SCLs. For example, over sixty Review Modules were requested by exporters after an Export Management Systems Workshop when it was announced that they were available on disk in various software versions or via E-Mail.

OExS counsels exporters and consignees who participate in this procedure to develop and refine their internal control programs on an ongoing basis. The ICP has been the standard for use by multinational companies worldwide since its implementation in 1985 and is now being requested by other countries to use as a model for establishing similar programs.

Systems Reviews

Section 4 of the EAA requires the Secretary to conduct periodic reviews of all active Special Licenses. The purpose of these reviews is to evaluate the adequacy of the mandatory ICPs implemented by SCL holders and consignees, to ensure compliance with the EAR and the terms of the license. Systems Reviews are viewed not only as a compliance activity but also as an educational opportunity, since guidance is provided to the SCL holder and consignees at the time of the reviews.

Export Management Systems Guidelines

An Export Management System (EMS) is an optional compliance program that companies may implement as good business practice, in order to ensure compliance with the EAR and to prevent sales to end-users of concern. Establishing an EMS can greatly reduce the risk of inadvertently exporting to a prohibited end-use/user. BXA published the first EMS Guidelines in September 1992. Working with industry, OExS revised and reprinted the guidelines in FY 1997 to assist companies with the establishment of internal procedures for screening exports. Exporters now assume greater responsibility as even decontrolled commodities and technologies may require prior approval from the U.S. Government because of concerns over the proliferation of weapons of mass destruction.

The EMS Guidelines include both Administrative and Screening Elements which are beneficial in developing a foundation for a compliance program within an individual firm. The Administrative Elements include: Management Policy, Responsible Officials, Record keeping, Training, Internal Reviews and Notification. The Screening Elements include: Denied Persons, Product Classification/License Determination, Diversion Risk, Nuclear, Missile, Chemical & Biological Weapons, Antiboycott Compliance and Is Informed/Entity List. Through the various screening elements and checklists within the Guidelines, companies can develop ways to know their customers. The Guidelines provide suggestions for how exporters can comply with the General Prohibitions described in the EAR. Those prohibitions require that an export license be obtained even when items are eligible for export under various license exceptions and “No License Required” (NLR).

OExS counsels firms on the development of EMS programs that are customized to their specific business activities. Reviews have taken place in the form of one-on-one counseling and review of draft programs at the Department of Commerce. OExS now offers on-site EMS reviews of companies’ written and operational programs. OExS also conducts EMS workshops and seminars to educate the export community on the various tools available to them to assist them in complying with the EAR. In FY 1998, OExS will offer a new EMS workshop that teaches Internet search options available to the export community to better know customers. The new workshop is a cooperative effort with the Non-Proliferation Center (NPC).

Table II-1.3 Summary of Systems Reviews

Fiscal Year	1984-88	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Special Licensing and Compliance Division (SLCD)											
Domestic:	282	69	42	52	39	16	9	9	3	1	522
Foreign:	88	61	82	24	41	32	19	0	0	0	347
Desk:	0	0	6	6	12	0	0	5	1	19	19
Total:	370	130	130	82	92	48	28	14	4	20	918
Western Regional Office *											
Domestic:	0	38	44	33	22	6	3	**	**	**	146
Mini:	0	2	4	0	0	0	0	**	**	**	6
WRO Total:	0	40	48	33	22	6	3	**	**	**	152
Total Reviews											
Conducted:	370	170	178	115	114	54	31	14	4	20	1070

* Established in 1988

** Discontinued systems reviews, function returned to Special Licensing and Compliance Division

Definitions: "Domestic": 1 or 2 day on-site visit to Special License Holder
 "Foreign": 1 or 2 day on-site visit to the Special License Consignee
 "Desk": Special License Holder, Special License Consignee, and Export Management System reviews conducted by written correspondence
 "Mini": half day on-site visit to Special License Holder

2. The Office of Strategic Trade and Foreign Policy Controls

The Office of Strategic Trade & Foreign Policy Controls (STFPC) implements the multilateral export controls under the Wassenaar Arrangement to control the spread of conventional arms and related technologies. It is also responsible for the bilateral High-Performance Computer Regime with Japan.

The Office is responsible for all policy actions, export licenses, commodity classifications, and advisory opinions for commodities subject to these two regimes. STFPC also represents the Department in international negotiations on export controls and control list development for both regimes. In addition, the Office implements U.S. foreign policy controls to ensure that exports are consistent with our national goals relating to human rights, crime control, antiterrorism, and regional stability. In this fiscal year, the President transferred from the State Department to the Bureau of Export Administration the jurisdiction for commercial communications satellites, commercial jet engine hot sections and encryption hardware and software. The Bureau created a new Encryption Division within STFPC to handle encryption policy and the large volume of licenses and industry outreach it brings.

National Security Controls

The United States maintains national security controls on the export and reexport of strategic commodities and technical data worldwide to prevent the diversion of such strategic items to certain destinations. To achieve this objective, the United States pursues a multilateral approach and imposes controls in cooperation with other nations participating in the Wassenaar Arrangement.

Policy Towards Individual Countries

Section 5(b) of the Export Administration Act of 1979, as amended (the Act), requires the President to establish a list of controlled countries for national security purposes. Executive Order 12214 (May 2, 1980) delegated this authority to the Secretary of Commerce.

Initially, this list comprised those countries named in Section 620(f) of the Foreign Assistance Act of 1961 (FAA) (22 U.S.C. Sec. 2370 (f) at the time of the enactment of the Export Administration Act in 1979. The Secretary of Commerce, however, may add or remove countries from the list of controlled countries under criteria provided in Section 5(b). Since 1980, the Secretary has removed countries from the list of controlled countries, including the former Federal Republic of Yugoslavia in 1985, Hungary in 1992, and the Czech Republic, Poland, and the Slovak Republic in 1994. Public Law 102-511 (October 24, 1992) amended Section 620(f) of the FAA to delete the former Soviet Bloc countries and certain other nations from the list of

Communist countries. Under Section 5(b) of the Act, the United States, however, continues to control exports to some of the countries deleted from the list in Section 620(f) of the FAA.

The countries currently controlled under Section 5(b) of the Act are: Albania, Bulgaria, Cuba, Estonia, Latvia, Lithuania, Mongolia, the Newly Independent States of the former Soviet Union, North Korea, the People's Republic of China, Romania, Vietnam, and Tibet. The Department, along with other concerned agencies, provides technical export control development assistance to many of these countries with a view to removing additional nations from the list of controlled countries.

Wassenaar Arrangement

The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies is a multilateral regime currently consisting of 33 member countries. Its purpose is to contribute to regional and international security and stability by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilizing accumulations of these commodities. The initial elements agreed to in the Wassenaar Arrangement obligate member countries to exchange information on certain dual-use license approvals and denials.

In April 1997, the U.S. Government participated in the first submission of transfer data made by member countries in the regime since the November 1996 implementation of the Wassenaar dual-use export control list. Such submissions of certain transfer data are required on a semi-annual basis. Additionally, the first List Review exercise of the regime occurred in June 1997. In October and November 1997, BXA representatives attended working group meetings of the Wassenaar Arrangement in Vienna, Austria. In October, Wassenaar's thirty-three members agreed to raise the control level for computers from 1350 million theoretical operations per second (MTOPS) to 2000 MTOPS, and to hold annual list review sessions.

Export Control Changes

On October 21, 1996, BXA published a rule accepting jurisdiction over commercial communications satellites and hot section technology, formerly on the U.S. Munitions List administered by the State Department. This rule also imposed enhanced national security and foreign policy controls on these items. As a result of the implementation of this rule, BXA has approved 22 licenses, authorizing the export of 71 commercial communications satellites and having a total value of \$3,954,233,970. The rule, however, has not impacted the licensing activity in the area of hot section technology. BXA has not received any license applications for the export of hot section technology since the change in agency jurisdiction, and U.S. policy regarding the licensing of hot section technology has not changed.

On March 3, 1997, the Department of Commerce published a rule in the Federal Register affecting exports to Cuba. Specifically, this rule implements the President's October 6, 1995

licensing policy for the approval, on a case-by-case basis, of exports of certain commodities and software, such as fax machines and low-level computers, to assist human rights organizations, news bureaus, individuals and non-governmental organizations engaged in activities that promote democratic activity in Cuba. This rule is consistent with the Cuban Democracy Act of 1992 and the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996. However, the ban on all U.S. flights to Cuba continues to apply to temporary sojourn flights that BXA previously allowed under licenses for humanitarian, journalistic, or other approved purposes. The President took this action following the shootdown of U.S. civilian aircraft by Cuban military aircraft in February 1996.

On September 29, 1997, BXA amended the 1996 transfer of licensing jurisdiction of commercial communications satellites from the Department of State to the Department of Commerce. This revision transferred licensing jurisdiction of satellite fuel, ground support equipment, test equipment, payload adapter/interface hardware and replacement parts for the preceding items from State to Commerce if they are included with a specific commercial communications satellite.

In late 1997, BXA will publish an interim rule to incorporate the Wassenaar Dual-Use List into the Commerce Control List (CCL). This rule harmonizes the CCL with the European Union Control List by ensuring that identical ECCNs both lists identify the same items. Among other things, the rule will also institute or clarify reporting requirements for certain computer and software exports and exports made under certain license exceptions, and remove license exception eligibility for some very sensitive items.

Encryption

On December 30, 1996, BXA issued a regulation implementing the Clinton Administration's encryption policy that was announced by the Vice President on October 1, 1996. A Presidential Memorandum and Executive Order dated November 15, 1996 fully outline the Administration's policy. The Administration is implementing its policy in several parts, including maintaining export controls, developing standards, and promoting international cooperation. The encryption policy aims to promote the growth of electronic commerce and secure communications worldwide while protecting the public safety and national security.

BXA's regulation establishes licensing policies and procedures for companies to follow for approval to export encryption products. It also creates a new license exception for recoverable encryption products and certain non-recoverable products. Key elements of the regulation include the transfer of commercial encryption items from the U.S. Munitions List to the Commerce Control List, liberalized treatment for recoverable products and a two-year transition period during which non-key recovery 56-bit DES or equivalent strength encryption products may be approved for export based on a company's plan to build and market key recovery products.

Beginning on January 1, 1997, nonrecoverable 56-bit DES or equivalent strength encryption products are exportable under a special license exception, which the company can

renew every six months during a two-year transition period. The transition period began on January 1, 1997 and will end on December 31, 1998. This special license exception requires a one time review of the product and submission of a satisfactory business and marketing plan to build and market recoverable encryption products. Renewal of the license exception requires submission to Commerce of a report showing that the company has made progress on the recovery product.

In August, BXA created an Encryption Division within STFPC. In addition to licensing, members of the Encryption Division serve as Federal Liaisons on the Technical Advisory Committee (TAC) that is developing the Federal Information Processing Standard (FIPS) for the Federal Key Management Infrastructure. The purpose of this FIPS is to specify the requirements of cryptographic systems used by federal government agencies. These systems will provide for recovery of plain-text data from stored or communicated cipher-text when cryptographic keys are not otherwise available. BXA's role is important because this standard may be adopted and used by non-federal government agencies on a voluntary basis resulting in the manufacture of a single product line which vendors hope would qualify as an "exportable" key recovery product. The TAC intends to submit a FIPS proposal to the Administration in early 1998.

Members of the Encryption Division are also part of a delegation, headed by Ambassador David Aaron, whom the President designated as Special Envoy to Encryption, to brief countries on the U.S. encryption policy and to participate in the various international working groups. The Administration is making these efforts to reach a harmonized international approach regarding compatible infrastructures for a key management infrastructure and on export controls pertaining to key recovery encryption products. This year, Ambassador Aaron's delegation has briefed more than 12 countries on the U.S. encryption initiative. On-going discussions with other countries continue to take place on a routine basis.

On April 24, 1997, the Secretary of Commerce established the President's Export Council Subcommittee on Encryption, which will consist of approximately 40 members, to function solely as an advisory body. The Subcommittee will advise the Secretary of Commerce, through the Assistant Secretary for Export Administration, on matters pertinent to the implementation of encryption policy that will support the growth of commerce while protecting the public safety and national security.

On May 8, 1997, BXA announced that it would allow the export of the strongest available data encryption products to support electronic commerce around the world. Strong encryption products are used by banks, financial institutions and others to generate secure, private electronic transactions, and will form the basis for an electronic commerce infrastructure managed by the private sector. Because banks and other financial institutions are subject to explicit legal requirements and have shown a consistent ability to provide appropriate access to transaction information in response to authorized law enforcement requests, key recovery will not be required for certain financial-specific products.

The announcement was part of the overall Administration initiative to promote the development of an electronic commerce environment users can trust. The existence of a robust security infrastructure will permit users from homes and businesses to perform all types of commercial data transactions, ranging from managing investment transactions to purchasing goods and services without fear of losing valuable personal or proprietary data. That infrastructure will manage encryption and digital signature keys to provide privacy, message integrity, user authentication, and recovery services.

In the nine month period from the transfer of commercial encryption items to Commerce through the end of FY 1997, BXA has received over 1,000 encryption license applications valued at more than \$500,000,000. Forty companies have submitted commitment plans which lay out how they will build and market key recovery products. These companies include some of the largest software and hardware manufacturers in the country. BXA has approved 32 of these plans; none have been rejected. Furthermore, eight companies have submitted requests for a one-time review of key recovery encryption items which will facilitate the establishment of a key management infrastructure (KMI). Four of these products have been approved for eligibility under License Exception KMI. BXA has also approved four U.S. entities to serve as their own Key Recovery agents for these products (i.e. corporate "self-escrow").

Bilateral Cooperation/Country Policy

Hong Kong

On July 1, 1997, the British returned sovereignty over Hong Kong to the People's Republic of China (PRC). The PRC has designated Hong Kong as a Special Administrative Region and has coined the phrase "one country, two systems" to signify the PRC's policy of non-interference in Hong Kong for all matters, except defense and foreign policy. In accordance with the U.S.-Hong Kong Policy Act of 1992, the U.S. Government continues to treat Hong Kong as a separate territory and to support Hong Kong's continued access to sensitive technologies as long as such technologies are protected.

In November 1996, at the request of the Hong Kong government, BXA sent a senior engineer to Hong Kong for a six-month period. The BXA analyst advised members of the Hong Kong Trade Department in technical matters related to export controls. In early October, the United States and Hong Kong signed an agreement establishing regular discussions on export controls. BXA has tentatively scheduled the first meeting for January 1998. The agreement also reaffirms the United States commitment to maintain its export control policy for Hong Kong. Hong Kong authorities have committed to continue to adhere to various multilateral export control regimes and to maintain an effective export control system.

Kazakhstan

In August 1997, STFPC organized a two-day advanced technical workshop on the Commerce Control List as part of a five-day technical exchange workshop and training for a Kazak delegation of senior policy and licensing officials, organized by NEC. This in-depth training built on information provided in a previous seminar in September 1995. STFPC organized presentations on the multilateral regimes, commodity classification case studies, and licensing review exercises, including the interagency review process. The technical exchange is part of an effort to help the former states of the Soviet Union develop effective export controls consistent with the multilateral regimes.

Russia

In September 1997, a Russian delegation of licensing officers and other export control officials visited BXA for a workshop on Export Control Licensing Practices and Procedures. STFPC coordinated speakers from the various regime offices for presentations on such topics as an overview of the licensing process, interagency referral and dispute resolution. The U.S. participants also had the opportunity to listen to a presentation by the visiting delegation on the structure of the export licensing system in the Russian Federation.

North Korea

Although the United States has an embargo against North Korea, BXA approved, with the support of the Departments of State and Defense, 45 licenses for humanitarian aid to famine victims. These licenses included \$38 million in food supplies from the U.S. Government, as the President had promised.

China

In October 1997, U.S. and Chinese representatives met in Beijing for the eleventh annual meeting of the Joint Commission on Commerce and Trade. The two countries agreed to begin holding bilateral export control seminars, with the first one in early 1998. These seminars will provide opportunities to discuss issues of concern, promote mutual understanding of the respective export control systems, and enhance future cooperation.

Sudan

On November 3, 1997, President Clinton signed Executive Order 13067, which imposed an embargo on Sudan, effective November 4, 1997. This Executive Order expands existing prohibitions instituted since the Secretary of State designated Sudan as a state sponsor of international terrorism. These sanctions block Sudanese assets in the United States, and prohibit, *inter alia*, the export to Sudan of virtually all goods, technology, or services from the United States, and the facilitation by any U.S. person of the export or reexport of goods, technology or

services to Sudan from any destination. The Department of the Treasury's Office of Foreign Assets Control (OFAC) will implement the Executive Order.

3. Office of Nuclear and Missile Technology Controls

The Office of Nuclear & Missile Technology Controls (NMT) administers U.S. multilateral and unilateral export controls on items relating to nuclear and missile technology. The United States is a member of both the Nuclear Suppliers Group (NSG) and the Missile Technology Control Regime (MTCR), which are international groups whose focus is to prevent the spread of weapons of mass destruction. This Office represents the Department in international negotiations on the export controls that are shared by member-nations of the NSG and MTCR. NMT is also responsible for all policy actions, export licenses, commodity classifications, and advisory opinions for items subject to nuclear and missile technology controls. NMT, composed of the Nuclear Technology Division and Missile Technology Division, also has responsibility for reviewing commodities subject to the Enhanced Proliferation Control Initiative (EPCI) and the Nuclear Referral List (NRL). NMT includes the Nuclear Technology Division and the Missile Technology Division.

Multilateral Controls

A key effort in NMT is the harmonization of nuclear and missile technology export controls with other supplier nations. The Nuclear Suppliers Group and the Missile Technology Control Regime are the primary focus of NMT's global harmonization efforts. Country-members of these regimes are committed to the control of exports that could contribute to the proliferation of weapons of mass destruction (WMD) and their delivery systems, and NMT is Commerce's lead office in regime activities promoting nonproliferation efforts.

A recent successful effort led by NMT to harmonize the control lists of the United States and the EU, including the structure and numbering of control entries, has resulted in a more level playing field for U.S. exporters as they compete for export sales with their European counterparts. A second, no less important aspect of this harmonization of controls has been that cooperative efforts on an international level have been enhanced.

Another harmonization effort now underway is the revision of control language in the NSG and MTCR control lists to conform them with the EU control language. While it is not possible to conform the numbering systems of the NSG and MTCR control lists with the EU list, the structure, style, and content of the controls will be as similar as possible to those of the EU. This reformatting initiative will provide clarity and consistency among the various control regimes with which exporters must comply to compete for sales on a global basis. Completion of this project by both the NSG and MTCR is anticipated in FY 1998.

The Nuclear Suppliers Group

The Nuclear Suppliers Group was formally established in 1992 and now totals 34 member-countries, with the addition of Brazil and Ukraine in 1996. Two documents guide NSG members in establishing national controls: the Guidelines and the Annex. The NSG Guidelines establish the underlying precepts of the regime, provide a degree of order and predictability among suppliers and ensure harmonized standards and interpretations of NSG controls. All members commit to full-scope International Atomic Energy Agency (IAEA) safeguards on all fissionable materials in current peaceful activities; physical protection against the unauthorized use of transferred materials and facilities; and restraint in the transfer of sensitive facilities, technology, and weapons-usable materials. The Guidelines also call for consultations among members on specific sensitive cases to ensure that transfers do not contribute to risks of conflict and instability.

The Annex is the actual list of 70 categories of items subject to NSG controls. It also contains a General Technology Note, which ensures that exports of technology directly associated with listed items will be subject to the same degree of scrutiny and control as the items themselves. NSG members are required to establish national licensing procedures for the transfer of Annex items.

Consultations among members were informal in the 1980s, and member-countries consulted regularly on a bilateral basis. A framework for consultation on dual use guidelines and an exchange of information on procurement activities of potential recipient countries was established. Since the early 1990's, formal annual plenary meetings have been held to provide the opportunity for these multilateral consultations. The Plenary also provides the opportunity for members to review the Annex and the Guidelines to ensure that NSG controls are focused on truly sensitive nuclear technology, and that they provide the means to meet evolving nuclear proliferation challenges. Overall responsibility for NSG activities lies with the member states; the NSG proceeds on the basis of consensus.

Multilateral Control Actions

A major change in NSG controls occurred this year with the liberalization of controls on oscilloscope exports. Oscilloscopes were considered key to the development of nuclear weapons in the 1950's and 1960's, but new technology introduced in the early 1970's replaced the role formerly played by oscilloscopes in weapons development. Concurrently, a new use for oscilloscopes, the testing of consumer products, resulted in an explosion in oscilloscope demand in world markets. After three years of both multilateral and unilateral consultations, in which NMT was the leading U.S. advocate of responsible liberalization, agreement was reached in the NSG to liberalize oscilloscopes. Effective August 6, 1997, in concert with the NSG decision, U.S. oscilloscope exports were liberalized to all but the most sensitive destinations.

Cooperation by non-member countries with the organization's actions is a goal of the NSG. To foster cooperation, rather than resistance to the NSG's pursuit of nuclear nonproliferation, NSG members seek to make the functions of the NSG more transparent to non-member governments. Transparency -- demonstrating to non-members the precepts and procedures that are adhered to by NSG members -- became a focus of the NSG in 1997. In October, the first "transparency" meeting of the NSG was held in Vienna, Austria, where over 150 non-member countries were invited to learn more about the NSG. Additional seminars are planned for 1998.

In October 1996, NMT participated in the NSG Dual Use meeting and Formatting meeting to discuss reformatting the NSG control lists, information exchanges, and plans for the NSG transparency seminar. In May 1997, NMT participated in the NSG Dual Use meeting and a Plenary where agreement was reached to decontrol oscilloscopes and consideration was given to the control of parts and components of controlled items. The United States presented end-user information on U.S. license denials. In addition, Ukraine and Brazil were welcomed as new NSG members. In July 1997, the Annex working group met to generate proposed changes to the format of the NSG control lists and to establish a separate working group to examine the administration of graphite controls among member nations. Finally, in October 1997, at the NSG Dual Use meeting, the United States again shared information on end-users involved in U.S. license denials. NSG members agreed to study their nations' graphite production and brief members at the next meeting on how graphite controls are implemented under national discretion. The next Plenary meeting of the NSG is scheduled for March 1998.

Unilateral Control Actions

The United States unilaterally controls certain items for nuclear nonproliferation reasons. For example, turbines and generators for nuclear power plants are controlled for nuclear and antiterrorism reasons to countries that do not abide with or have not signed the Nuclear Non-Proliferation Treaty. Also controlled are the pipes, valves, cranes, and pipe fittings associated with turbines and generators that are used on the non-nuclear island of commercial power plants (balance of plant). Because these pipes, valves, cranes, and pipe fittings are corrosion-resistant, they are also commonly used in non-nuclear production facilities, such as breweries, where corrosion is a problem. There are numerous foreign producers of these items who are free to ship them without restriction. Consequently, U.S. controls on these items, particularly the license requirement, adversely affect U.S. industry's efforts to market them worldwide for non-nuclear purposes.

The Missile Technology Control Regime

On April 16, 1987, the United States, Canada, France, Germany, Italy, Japan and the United Kingdom created the Missile Technology Control Regime (MTCR) whose focus is to limit the proliferation of missiles capable of delivering weapons of mass destruction. The MTCR is not a treaty-based regime, but rather an informal group of countries that have agreed to coordinate

their national export controls to help prevent missile proliferation. The MTCR now has 29 member countries with the addition of Turkey in 1997.

The MTCR Guidelines and the Equipment and Technology Annex form the basis for U.S. missile technology controls. The Guidelines provide licensing policy, procedures, review factors, and standard assurances on missile technology exports. The Annex is the list of items of missile-related commodities subject to controls, and is divided into two categories. Category I items include missile subsystems, production facilities, and production equipment for missile systems capable of delivering a 500 kg payload to at least a 300 km range. Category II items include materials, components, and production and test equipment, many of which are dual use commodities with both civilian as well as military applications.

On its inception, the MTCR was focused on missile delivery systems for nuclear weapons. In 1993, the MTCR extended its scope to include delivery systems for all weapons of mass destruction. Category II of the MTCR Annex was then expanded to include missiles with a 300 km range, regardless of payload, as well as major subsystems, production facilities, and production equipment for such delivery systems. NMT is responsible for administering controls on exports of dual use manufacturing equipment for Category I items and on all dual use items in Category II. A considerable portion of the license applications reviewed for missile-related concerns are for commercial aviation exports, including avionics, navigation, telemetry, composite materials, and test equipment.

Recent Actions

The member-countries of the MTCR continue to have concerns about regional missile proliferation. In both 1996 and 1997, interested members of the regime met intercessionally between annual plenaries to exchange information and discuss regional missile proliferation projects of concern. To limit the spread of delivery systems for weapons of mass destruction, the member countries of the MTCR are also seeking to foster the cooperation of non-members.

The MTCR Transshipment Seminar and Workshop series, in which NMT plays a major role, is an outreach program for both MTCR and invited non-MTCR countries to explore different approaches to the problem of illegal transshipments of sensitive items to missile programs worldwide. The series of seminars was initiated by the United States, with the first seminar held in Washington, DC in July 1996. In 1997, two "expert-level" workshops were held on legal and regulatory authority (March 1997 in the United Kingdom), and licensing and enforcement (June 1997 in Switzerland), with MTCR member countries and six non-member countries plus Hong Kong in attendance. The transshipment series served as a precedent-setting forum for both MTCR members and non-member countries to meet and discuss topics of mutual concern. The success of the transshipment series has motivated the MTCR to continue additional outreach efforts in 1998.

NMT participated in both the annual MTCR Plenary and the Technical Experts Meeting (TEM) held in October 1996. At the plenary, export control and nonproliferation issues were discussed, including regional proliferation concerns, transparency, outreach, and membership. At the TEM, proposals on reformatting the MTCR Equipment and Technology Annex were presented, along with other proposals for specific revisions to the Annex. The technical proposals required further study by some regime members and an intercessional TEM was held in April 1997. At that meeting, a draft proposal to reformat the Annex was selected, despite reservations by several countries on particular items, including software. Later that same month, NMT participated in an MTCR policy intercessional meeting on regional proliferation concerns. At this meeting, Turkey's membership request was accepted and the regime expanded to 29 participating countries. In early November 1997, NMT attended the annual meetings of the MTCR Plenary and TEM, where agreement was reached at the Plenary to continue the success of the transshipment workshop series by offering other workshops on export control issues in 1998. At the TEM, the reformatting proposal was accepted in principle, with outstanding issues to be resolved by mid-1998.

Enhanced Proliferation Control Initiative

In December 1990, the U.S. Government launched the Enhanced Proliferation Control Initiative (EPCI) which led to the imposition of chemical, biological, and missile end-use and end-user-based controls that were similar to the nuclear end-use and end-user-based "catch-all" controls already in effect. The EPCI provisions, implemented in the Export Administration Regulations, require that exporters obtain a license if they know or are informed by BXA that a proposed export will be used in nuclear, chemical or biological weapons or missile activities. U.S. persons are also restricted from activities in support of nuclear, chemical or biological weapons, or missile-related activities. These regulations are designed to prevent exports that could make a material contribution to proliferation activities of concern but are not intended to affect legitimate commercial trade.

EPCI began as a unilateral control, but with U.S. leadership, a large majority of our nonproliferation regime partners have also incorporated so-called "catch-all" export controls. For example, the European Union and Australia implemented catch-all controls in 1995, as did Japan in 1996 and Argentina in 1997. At present, approximately two-thirds of the NSG and MTCR member countries have some form of catch-all controls, and the United States continues to encourage other countries to adopt similar measures. Information exchanges in the NSG on EPCI export denials have also enhanced multilateral awareness of proliferation projects of concern worldwide.

In 1997, the Bureau of Export Administration began publication of an EPCI "Entity List" as part of the Export Administration Regulations. Publication of the names of the entities involved in proliferation activities in the EAR provides exporters with additional information on which to conducting international business.

Industry Outreach

Beyond the routine contacts that are a necessary part of the export licensing process, NMT staff participates at many industry briefings, trade association seminars, and one-on-one consultations with exporters to clarify the scope of U.S. nuclear and missile technology controls. These efforts promote U.S. exports by reassuring buyer and seller alike of the legitimacy of proposed export sales, and advise the participants of the transaction on their export control obligations.

One of the industries most directly affected by controls on nuclear technology is the machine tool industry. Machine tools, critical to the development and production of all technologies, are subject to both nuclear and national security export controls. To ensure that the domestic machine tool industry is fully aware of the constraints on their products, in FY 1997, NMT gave a seminar to the Association for Manufacturing Technology (AMT) to familiarize these industry experts with the proliferation control regimes. The success of this seminar led to a request from AMT for a NMT machine tool expert to provide advice and guidance to U.S. industry at an international trade show in China. NMT's on-site advice reassured both exporter and importer that proposed export sales fell within the parameters of U.S. export controls, resulting in U.S. export sales valued at \$10 million.

4. The Office of Strategic Industries and Economic Security

The Office of Strategic Industries and Economic Security (SIES) is the focal point within the Commerce Department for issues relating to the health and competitiveness of the U.S. defense industrial base. As such, SIES plays a leadership role on a wide range of issues which relate to both the national and economic security of the United States. Its efforts include assisting American companies to diversify from defense to commercial production and markets, promoting the sale of U.S. weapons systems to our allies, analyzing the impact of export controls on key industrial sectors, and conducting primary research and analysis on critical technologies and defense-related sectors. SIES includes the Strategic Analysis Division, the Defense Program Division, and the Economic Analysis Division.

Defense Industrial Base Assessments

SIES industrial base assessments are comprehensive research studies of key sectors of the U.S. industrial base. The majority of these assessments are initiated at the request of either the Department of Defense's (DOD) secretariat or one of its service branches or at the request of an industry association or group. SIES also conducts several other types of assessments, including critical technology assessments, which are typically requested by Congress. SIES also conducts studies to determine the impact of imports on national security. These assessments can be

requested by an industry, trade association, or other interested party under Section 232 of the Trade Expansion Act of 1962, as amended.

In all of its research efforts, SIES devises industry-specific surveys to collect information from academia, foreign companies with U.S. sales operations, the U.S. government, and U.S. companies. This is done with the assistance of industry experts, both from the private sector and other government agencies. SIES, on behalf of the Commerce Department, has statutory authority to collect this information. The collected data serves as the core of SIES analyses, as in most cases data with this level of detail is unavailable from other sources. A brief summary of SIES analytic efforts which took place during FY 1997 follows:

Ball and Roller Bearings Forum

Since 1986, SIES has conducted three comprehensive assessments of the antifriction bearings industry, which supplies critical components for almost all Defense weapon systems, based on requests from Congress, DOD, and the industry. In May 1997, SIES completed a fourth publication, a joint SIES/American Bearing Manufacturers Association (ABMA) research project, *Ball and Roller Bearing Statistical Handbook*. The ABMA is adding market information to this handbook, which will then be published by the association.

On June 25, 1997, SIES hosted an industry/government forum to discuss the ball and roller bearings issue. SIES recognized a need for such a forum after the DOD's Defense Logistics Agency (DLA) expressed concerns regarding the declining domestic production base for bearings and extensive administrative costs associated with obtaining waivers to the domestic procurement requirement of ball and roller bearings. The main objective of the forum, sponsored by SIES in cooperation with DLA and the ABMA, was to address these issues and promote greater industry/government cooperation in this sector.

Semiconductor Materials Industry Assessment

A major research project published this year involved segments of many industries which produce and/or supply semiconductor processing materials. This assessment was conducted to determine the ability of the supply base on which the U.S. semiconductor industry depends to meet the industry's requirements as part of its *National Technology Roadmap*, a 15 year industry plan. Most segments of the U.S. semiconductor materials industry (manufacturing equipment, components and parts, and raw materials) were healthier in 1995 than in 1991, as a result of the tremendous growth for semiconductor orders from the communications industry, various consumer products manufacturers, and the automotive industry.

One significant area of the U.S. semiconductor materials industry has been impaired by global competition. Total shipments of domestic packaging materials declined in several

important areas between 1991 and 1995. In addition, total research and development (R&D) in this area fell a dramatic 94 percent during the same time period. The decline in R&D was indicative of the abandoned effort of two U.S. companies to challenge the foreign domination of the U.S. ceramic materials industry. The episode demonstrates that even in a time of sharply increasing demand for semiconductors, global competition has itself also correspondingly increased.

Ejection Seat Assessment

SIES conducted this national security assessment at the request of the U.S. Air Force. The request, made by the Crew Systems Directorate of the Armstrong Laboratory at Wright-Patterson Air Force Base in Ohio, was in response to the Congressional report accompanying the FY 1996 National Defense Authorization Act (Air Force RDT&E on Aircraft Ejection Seats) which stated that “the committee is also concerned about the sustainment of the U.S. (ejection seat) industrial base during this period of virtually no aircraft production.”

SIES found that a sharp drop in worldwide defense expenditures for aircraft crippled the already fragmented U.S. ejection seat industry. Currently, only one firm, McDonnell Douglas, actively assembles seats. Most of the world market is dominated by Martin-Baker, a British firm, against whom the U.S. industry is poorly structured to compete. In sharp contrast to the U.S. industry, which is comprised of many small firms or divisions of larger companies with small financial stakes in the industry, Martin-Baker is an integrated company dedicated to the production, servicing, and improvement of ejection seats. However, Boeing’s recent merger with McDonnell Douglas, plus Boeing’s long term interest in escape systems, and the future business potential (over 3,000 seats) for the Joint Strike Fighter in which Boeing is a contender, although still a decade off, could combine to revitalize a domestic capability.

Optoelectronics Assessment

In FY 1997, SIES, in cooperation with the Optoelectronics Industry Development Association (OIDA) and DOD, initiated an assessment designed to analyze the long-term health and competitiveness of the U.S. optoelectronics industry. The assessment will highlight various growth areas within the industry and identify emerging markets for optoelectronics products. In addition, the assessment will contain recommendations for ensuring that the industry can maintain its capacity to support defense-related missions and programs.

The optoelectronics industry represents a particularly important segment of the U.S. defense industrial base because optoelectronics technology has a number of critical defense applications, including data communications and telecommunications for command and control, as well as high bandwidth video transmission for intelligence, reconnaissance, display, and electronic warfare systems. This technology is also widely used in weapon-delivery platforms, sensors, guidance systems, and optical computing.

SIES initiated this assessment at the request of OIDA, which asked BXA to consider updating an earlier critical technology assessment of the optoelectronics industry (conducted in 1992-93). To obtain the industry data needed to conduct the assessment, SIES has developed a survey instrument that will be distributed to more than 600 U.S. firms engaged in various optoelectronics activities. The data collected from the survey will be analyzed and compiled in a report designed to assist the optoelectronics industry in its strategic planning activities. SIES expects to complete the assessment in FY 1998.

High Performance Energetic Materials Assessment

In June 1997, the U.S. Navy's Naval Surface Warfare Centers requested that SIES conduct a study of U.S. high performance military-grade explosives and components. This request follows the 1995 SIES publication of a cartridge and propellant actuated device industry assessment which was also conducted for the Navy. The scope of this latest Navy-requested study was broadened in September to include propellants, in part at the request of the Office of the Secretary of the Army for Research, Development, and Acquisition. With the addition of propellants to the scope of work, the study was redefined to cover all "energetic materials".

The initiation of such a study is the result of significant declines in U.S. capabilities in the high performance energetic materials sector. Over the last seven years DOD's munitions budget has decreased by over 75 percent. As a consequence, a number of companies involved in producing these explosive materials have gone out of business. There is growing concern that this trend will result in some cases in higher cost end items due to lack of competition, and in other cases a lack of supply which could jeopardize national security interests.

The study involves a two-phase data collection effort, first from the approximately one dozen high performance explosive and propellant suppliers to the military, and second, from these firms' immediate suppliers of critical chemicals. There is particular concern about the viability of these subcontractors, which supply specialty chemicals that are unique component ingredients without which the prime contractors will be unable to produce explosives and propellants. This study is still in the early stages and is expected to be completed during FY 1998.

Offsets in Defense Trade

In defense trade, offsets are industrial compensation practices mandated by many foreign governments when purchasing defense articles. Offsets include mandatory co-production, licensed production, subcontractor production, technology transfer, countertrade, and foreign investment. Offsets may be direct, indirect, or a combination of both. Direct offsets refer to compensation, such as co-production or subcontracting, "directly" related to the system being exported. Indirect offsets apply to compensation unrelated to the exported item, such as foreign investment or countertrade. There has long been concern that offset practices may be detrimental to the U.S. defense industrial base, particularly to defense subcontractors. Offsets may create or enhance foreign competitors, displace U.S. firms, and reduce U.S. employment.

In August 1997, SIES submitted its second annual report, *Offsets In Defense Trade*, to Congress. This reporting is required by Section 309 of the Defense Production Act. The new report includes data on both new offset agreements made in 1995, and transactions completed during 1995 to fulfill agreements made in previous years.

In 1995, U.S. prime contractors reported a total of 45 new offset agreements valued at over \$6 billion. The defense export contracts which these agreements facilitated were valued at \$7.4 billion. This represents a substantial increase in new offset obligations in comparison to previous years, both in value and as a percentage of export contracts. European governments demanded by far the largest portion of offsets at \$5.2 billion, or 86 percent of the value of all new U.S. offset agreements. New agreements made with this region rose to 104.3 percent of the value of defense export contracts.

Prime contractors reported a total of 671 offset fulfillment transactions in 1995 valued at \$2.7 billion. This figure represented an increase over previous years as well. Europe was the major party in these transactions, receiving over 70 percent of the value of transactions. About 40 percent were direct offsets (related to the exported defense system), which is somewhat higher than the previous two years, but not a significant reversal of the general trend toward more indirect offsets.

Over 75 percent of 1995 transactions were comprised of purchases, subcontracting, and credit transfers. The transfer of technology accounted for another eight percent. Among the beneficiaries of offset transactions were 738 different public and private foreign organizations. The great majority were private firms.

According to the surveyed prime contractors' 1995 offset transaction reports, over 90 percent of existing offset agreements arose from the export of aerospace systems. However, only 50 percent of offset transactions were aerospace-related. The other 50 percent were across a wide array of other industries, distributed among 172 Standard Industrial Classification sectors. This supports the contention made in last year's report that indirect offsets are increasing both in volume and in scope.

Major declines in U.S. defense procurement of aircraft in recent years have placed U.S. aerospace companies in a position of greater reliance on international sales for their revenues. Consequently, the importance of offsets as a marketing tool has apparently increased in the current environment. To better understand the broadening impact of offsets on non-aerospace industries, the report includes case studies on three specific industries: commercial shipbuilding; gears; and machine tools. It is evident that in the machine tool and gear industries U.S. firms lose work to foreign companies when production is transferred overseas.

Based on the 1990 policy statement released by the White House, the official U.S. Government policy regards certain offsets to be economically inefficient and market distorting. The policy directs that the U.S. Government will not enter any such agreements itself nor provide

financing for such arrangements. The decision whether to engage in offsets, and the responsibility for negotiating and implementing offset arrangements, resides with the companies involved. U.S. policy also calls for consultations with our friends and allies regarding the use of offsets in defense procurement.

In support of U.S. policy, and building upon our data collected from industry, SIES is hosting a series of meetings with interested parties to solicit their concerns, to broaden their understanding of the complexity of the issue, and to ascertain support in the United States for an international initiative. These interested parties include the interagency community, affected subcontractors and suppliers, labor unions, congressional staff members, and representative associations. If there is a domestic consensus, SIES will advocate for the U.S. Government to pursue, as appropriate, bilateral and multilateral consultations on offsets in defense trade.

In a related effort, BXA and the Defense Department co-sponsored a workshop on June 9, 1997, entitled *Policy Issues in Aerospace Offsets*. The workshop, hosted by the National Research Council's Board on Science, Technology, and Economic Policy, served as a forum for exchanging views and building a consensus as to what would constitute an appropriate U.S. policy on commercial aerospace offsets. The summary report from this workshop is being included in this year's Trade Promotion Coordinating Committee (TPCC) annual report to the Congress. This report assesses foreign competitive practices and proposes actions that should be undertaken by the United States in response to these practices.

Analyses of U.S. Technology Transfers

SIES continues to provide support to the Under Secretary in his role as a member of the National Science and Technology Council's (NSTC) Committee on National Security (CNS). The NSTC was formed by the President in late 1994 to provide advice on the direction of national science and technology investment. With an overall goal to identify ways to improve national policy mechanisms governing international technology interactions, the CNS will consider the export of U.S. technology in the context of its impact on U.S. national and economic security, competitiveness, the adequacy of existing control mechanisms, and interagency approaches and concerns. The CNS has established an interagency working group to address the following areas of global trade and technology transfer:

- Sales and contracts with foreign buyers which impose mandatory requirements for technology transfer as a condition of sale;
- Joint commercial ventures with foreign partners involving technology sharing and next generation product development; and
- Government-to-government agreements on the cooperative development and production of defense equipment.

In FY 1997 SIES also initiated an in-depth technology transfer study to examine the nature and scope of U.S. and foreign technology transfers to the People's Republic of China and to assess the short and long term competitive and strategic implications of such transfers. This study will focus on technology transfers within a number of strategic industry sectors and will explore the mechanisms by which such transfers take place. The study will also address the extent to which these technology transfers could affect the competitiveness of U.S. industry, including the well-being of the U.S. defense industrial base, by creating serious Chinese competitors for U.S. companies in the world market. SIES anticipates that the study will be completed in FY 1998.

Analytic Support Activities

During FY 1997, SIES participated in BXA's ongoing monitoring of U.S. exports to Hong Kong, following the return of the former British colony to Chinese sovereignty. SIES identified several broad categories of strategic items and established procedures for monitoring U.S. exports of these items to Hong Kong. SIES also provided input on the potential economic impact on U.S. industry of placing additional end-users on BXA's entity list (i.e., Supplement No. 4 to Part 744 of the Export Administration Regulations), which informs exporters that a license is required for certain exports to designated end-users. In addition, SIES participated in a BXA study that addressed transfers of controlled U.S. technology to foreign nationals who are not permanent residents of the United States (generally referred to as "deemed exports" of U.S. technology).

Defense Diversification Programs

In response to defense downsizing and increased international competition, SIES developed several programs to assist industry in its efforts to diversify into the commercial market. During FY 1997, SIES expanded programs begun three years ago to provide direct assistance to the defense industry, with particular emphasis placed on small and medium-sized defense subcontractors.

To assist these firms in making the necessary changes to survive in today's market, SIES launched the Competitive Enhancement and Defense Diversification Needs Assessment. Participating firms simply complete a short survey that gathers basic information about the company and asks what type of assistance would be of benefit to them, such as manufacturing technology deployment, product/service development, R&D programs, exporting, financing, marketing, employee retraining, and business development. In FY 1997, SIES sent the Needs Assessment Survey to approximately 7,500 firms nationwide. These companies were identified through supplier and membership mailing lists provided by major defense prime contractors, trade organizations, and state agencies interested in strengthening the supplier base.

After analyzing completed surveys, SIES forwards summary information to appropriate members of an interagency response team who follow up directly with the firms, providing them

information about the programs that their organizations offer. The team includes such diverse agencies as the National Institute of Standards and Technology, the U.S. Commercial Service, the Economic Development Administration, Department of Energy Laboratories, the Department of Labor, the Export-Import Bank, NASA Regional Technology Transfer Centers, various DOD agencies, and the Small Business Administration.

A unique SIES initiative, a series of conferences entitled “Commercialization of Defense Technologies,” took place at the end of FY 1996 and in the first quarter of FY 1997. These conferences were designed to help small- and medium-sized businesses take advantage of emerging and existing technologies. Speakers and presentations included private sector success stories, technology transfer and the latest news on partnering effectively with federal and state agencies. SIES co-sponsored the conferences with Commerce’s Economic Development Administration and the Small Business Administration. The events were held at six sites around the country between August and December 1997.

One of SIES’s partners in its defense diversification efforts is the U.S. Navy’s Best Manufacturing Practices (BMP) Program, a part of the Office of Naval Research. Based on this long-standing partnership, BXA opened the Commerce Department satellite center of the BMP program in June 1997. The BXA center is one of the six Navy satellite centers nationwide. The purpose of the center is to provide government agencies and industry with information about how the BMP’s resources can be used to improve the manufacturing competitiveness of U.S. companies.

The Navy created the BMP program in 1985 to identify cutting-edge practices in the areas of design, test production, facilities, logistics, management, and the environment; disseminate information on these practices to the U.S. industrial base; and develop methods for U.S. industry to use the data. The data is public, non-proprietary information which BMP makes broadly available. The data is gathered during surveys of organizations conducted by independent teams of government and industry experts.

BXA and the BMP program have worked together for several years on meeting the challenge of helping U.S. industry to become more competitive and diversify into new markets. The two organizations have successfully cooperated to promote defense conversion and have co-exhibited at conferences around the country. The addition of the satellite center to the Commerce Department’s headquarters broadens the partnership and assists both organizations to leverage existing resources to best assist the American industrial base.

In FY 1997, SIES also commenced a pilot project to assist manufacturing firms in the vicinity of the closing Long Beach, California, Naval Shipyard. This project is an outgrowth of the Competitive Enhancement and Diversification Needs Assessment survey program. Because of the shipyard closure, the City of Long Beach is investigating the possibility of claiming the shipyard structures and surplus manufacturing equipment as personal property. This “personal property” will be used to assist small- and medium-sized businesses in the local community.

In phase one of this project, SIES will survey Long Beach manufacturing firms with a survey similar to the Needs Assessment survey. Information collected by this new survey will cover such topics as firm size, growth potential, equipment needs, and employee training practices. With this information SIES will match the equipment needs of local firms with the inventory of equipment housed at the shipyard.

In phase two of the project, the Department of Energy's Oak Ridge Centers for Manufacturing Technology will then set up some of the inventoried equipment for which a need has been found and make this equipment available for lease to local businesses. Oak Ridge engineering staff will also provide lessees with the necessary training to operate the equipment. Local organizations (trade groups as well as a local university business incubator) will also be involved in the training and support of the project. If successful, it is hoped that this pilot project can be expanded to other communities around the country which are home to closing military bases.

International Diversification and Defense Market Assessments

SIES developed this program to assist small and medium-sized U.S. companies in their efforts to diversify and/or expand into overseas commercial and defense markets. The program is structured to provide current market information for dual-use and defense products and is implemented through publication of a series of international diversification and defense market assessment guides. These guides provide information to U.S. manufacturers regarding dual-use and defense markets in specific regions: Europe; the Middle East; the Pacific Rim; and the Western Hemisphere. Each chapter within the guides provides comprehensive information on how to do business in a specific country. This information includes details on specific upcoming commercial and defense trade opportunities open to U.S. firms in these markets, as well as a listing of key points of contact, both in the United States and in the host country, who can provide additional information and assistance to U.S. firms.

In FY 1997, BXA published its second edition of the Pacific Rim Guide. A second edition of the European Guide will follow by year's end. Updates of the Middle East and Western Hemisphere Guides are planned for FY 1998. These guides are available in printed format as well as electronically through the BXA Internet Web page and the National Trade Data Bank (NTDB).

Defense Memoranda of Understanding

The review of Defense Memoranda of Understanding (MOU) is an important SIES activity. MOUs are international agreements between the United States and its allies for various types of cooperation in defense industrial and defense technological fields. Examples of such agreements include allowing a foreign country to produce a U.S. weapons system under license or, more often, establishing a cooperative R&D program for advanced military technology.

SIES's role is to determine whether these agreements will result in an adverse impact on the U.S. industrial base and competitiveness of U.S. industry.

The FY 1990 authorizing legislation gave the Secretary of Commerce a unilateral option, with Presidential consent, to call for an interagency review of any MOU that Commerce believes may have significant detrimental effects on the U.S. industrial base. SIES has now reviewed almost 600 international defense agreements since this statutory authority was delegated to the Department.

In FY 1997, a great amount of effort was devoted to interagency and bilateral consultations related to violations of the use of technology provided under terms and conditions of the U.S.- Switzerland M109 Howitzer Coproduction MOU. This use resulted in a formal notification to Congress, under the Arms Export Control Act, of the Swiss violations. SIES will continue to participate in activities related to this issue in FY 1998.

SIES is maintaining an active role in the Production Phase MOU of the U.S.-Japan FS-X Fighter Program (now known as the F-2 fighter) through participation in the Production Coordinating Group (PCG). U.S. industry was guaranteed 40 percent of the Production Phase of the program which required a new MOU. The Production Phase MOU, which was successfully negotiated and approved by the Congress in FY 1996, guarantees U.S. aerospace industry a 40 percent workshare of the production of 130 aircraft during the 12 year life of the Production Phase. This program has a net direct economic benefit to U.S. industry of approximately \$4 billion.

SIES also continues to emphasize the importance of technology flowback from the F-2 program. In November 1997, the fourth in a series of SIES/U.S. Air Force-led U.S. industry technology exchange visits to Japan will take place to examine the F-2 Digital Flight Control System developed by Mitsubishi Heavy Industries (MHI) Corporation. This visit follows successful U.S. industry delegation visits in December 1995 to Mitsubishi Electric Corporation (MELCO) to examine the FS-X Integrated Electronic Warfare System (IEWS), and in November 1994 to MELCO to examine the Phased Array Radar technology. These technology exchange visits to Japan and industry meetings facilitate U.S.-Japan company-to-company relationships and technology flowbacks to the United States.

Emergency Preparedness

The National Security Emergency Preparedness (NSEP) program has been the Department's focal point to ensure that the nation's industrial/technology base can respond effectively to the requirements of national emergencies. In view of the dramatic changes in our national security strategy in the post-Cold War era, the NSEP focus has shifted to supporting the U.S. response to regional conflicts, humanitarian missions and peacekeeping operations, catastrophic natural, accidental, and man-caused disasters, and the potential threat of violence aimed at disrupting the continuity of the government.

As a result of this change in focus, SIES is working closely with the interagency community to support a comprehensive National Security Council-led review of NSEP planning, policies, and procedures. This project also included a Congressionally-mandated review of the post-Cold War relevancy and effectiveness of the DPA, a primary source of NSEP authority. Commerce is the lead Federal agency responsible for industrial emergency preparedness planning and implementation of a variety of NSEP programs, and SIES has been a major interagency contributor to ongoing reviews and assessments of the industrial/technology base.

SIES has also continued its work in representing the U.S. on the NATO Industrial Planning Committee (IPC) which is responsible for coordinating industrial preparedness planning among the NATO allies. SIES plays a leading role in the IPC's industrial analysis subgroup, whose current focus is defense industry consolidation within the NATO Alliance nations and improvements in international industrial emergency supply protocols. The NATO North Atlantic Council issued a recommendation to member nations for the adoption of priorities and allocations plans and procedures to ensure Alliance-wide industrial base cooperation to meet critical and urgent member nation defense requirements.

During FY 1997, SIES participated in the development of a NOAA-led budget initiative for FY 1999 to establish a strategic framework for Commerce leadership in reducing the economic cost and social impact of natural disasters. Other Commerce agencies involved in this initiative are the Bureau of Economic Analysis, Economic Development Administration, the National Institute of Standards and Technology, and Trade Administration. BXA's contribution to the initiative includes: (1) using DPAS authority to ensure timely industrial base response for the repair or replacement of damaged or destroyed facilities, and the acquisition of urgently required natural disaster reduction equipment; (2) the licensing of exports of natural disaster reduction controlled equipment and technologies; and (3) working with other agencies and industry to promote the expansion of U.S. global market share for this equipment and technology.

Finally, SIES discontinued its administration of the Department of Commerce National Defense Executive Reserve Program (NDER) program. The NDER, a group of several hundred trained, private sector businesspeople and professionals prepared to assist SIES in the event of a national security emergency, had been established in the 1950s. Following a thorough review, the Department determined that the NDER was no longer needed in the post Cold War era.

Defense Priorities and Allocations System

Under Title I of the Defense Production Act (DPA), the President is authorized: (1) to require that contracts or orders relating to certain approved defense and energy programs be accepted and performed on a preferential basis over all other contracts or orders; and (2) to allocate materials, facilities, and services in such a manner as to promote approved programs. In addition, Section 18 of the Selective Service Act of 1948, and similar provisions in several other statutes, authorize the President to require prompt delivery of any articles and materials for the

exclusive use of the U.S. Armed Forces. This priorities and allocation authority for resources is delegated to the Department of Commerce, and within Commerce to SIES.

In addition, a provision of the National Defense Authorization Act of 1995 amended the definition of "national defense" in the DPA to include emergency preparedness activities as defined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). With Federal Emergency Management Agency (FEMA) approval, SIES staff will be able to use the DPA priorities authority for industrial resources to ensure timely industrial response to catastrophic natural disaster and other civil emergency situations.

SIES implements its priorities and allocations authority under the Defense Priorities and Allocations System (DPAS) Regulations. The goals of the DPAS are to assure the timely availability of industrial resources to meet current national defense requirements and to provide a regulatory framework for rapid industrial response to national security emergency requirements with minimal disruption to normal commercial activities. Although the DPAS is designed to be largely self-executing, SIES can provide Special Priorities Assistance (SPA) for problems that do arise. Such assistance can include obtaining timely delivery of items needed to fill priority rated defense contracts, granting priority rating authority, and resolving production and delivery conflicts between rated defense contracts.

During FY 1997, SIES continued to work a number of SPA cases to ensure timely U.S. industrial base support for NATO's continuing involvement in Bosnia and the deployment of U.S. and other Alliance nation peacekeeping troops to the area. By working closely with the communications and computer equipment suppliers, SIES significantly reduced delivery lead times for urgently needed items. NATO has recommended to its Alliance nation members that they adopt priorities and allocations plans and procedures to ensure international industrial base defense cooperation in the event of a future NATO defense emergency.

Other FY97 SPA cases included granting priority rating authority, with U.S. Air Force (USAF) sponsorship, to three Japanese companies to support the timely acquisition of component parts, sub-assemblies, and materials for the production of 130 aircraft as part of the production phase of the F-2 program; ensuring delivery of USAF C-17 aircraft electronic components and F-16 aircraft brake system components; and ensuring the supply of composite material for the U.S. Army anti-tank SABOT program. Also in FY 1997, FEMA, under the authority of the Stafford Act, approved a request by the Federal Bureau of Investigation (FBI) to use DPAS priority rating authority to ensure the availability of communications equipment for an urgent anti-terrorist civil emergency preparedness program.

As part of the effort to review our nation's NSEP planning, policies, policies, and procedures, SIES has proposed an update and revision of the DPAS, including its supporting documents (i.e., agency Delegations of Authority, interagency Memoranda of Understanding, and DPAS Emergency Delegation 1), thus ensuring its effectiveness and efficiency in the post-Cold War era. Publication of a revised DPAS is anticipated early in FY 1998.

During FY 1997, SIES staff continued to provide DPAS training to government and industry personnel, including presentations to NATO procurement officials and to Alliance nation representatives at a NATO Industrial Planning Committee meeting in Brussels, Belgium, on DPAS support for NATO and foreign county defense procurement in the United States; to FBI and National Security Council officials on the use of DPAS under the Stafford Act; and to the U.S. Army Corps of Engineers on the use of the DPAS to support renovation of the Pentagon. A revised training program using updated training materials, including a new videotape presentation, a printed regulation booklet, and electronic access to all DPAS materials, and the electronic filing and transmission of SPA requests, will be implemented upon publication of the revised DPAS regulations.

Defense Trade Advocacy

SIES serves as the lead organization within the Department on international defense trade advocacy issues. The Department will consider supporting conventional arms transfers only after the U.S. Government determines them to further U.S. national security and foreign policy objectives. At that point, the Commerce Department determines if the transfer is also in the economic interests of the United States. If it is, the Department will support it as it would any other export.

SIES recommends the appropriate level of Departmental support for the transfer and generates high level government-to-government advocacy on behalf of the U.S. firm involved in the international defense procurement competition. SIES coordinates its efforts with the Secretary's Trade Promotion Coordinating Committee (TPCC), the International Trade Administration's Advocacy Center, and the Foreign Commercial Service Posts worldwide. This process involves many branches of the U.S. Government and requires the notification and approval of Congress.

In FY 1997, SIES defense advocacy efforts supported sales of \$2-3 billion. Examples include SIES support for the \$740 million F-100 Aegis Radar System sale to Spain and the \$700 million sale of the Kaman Seasprite helicopter to Australia and New Zealand.

Economic Analysis of U.S. Export Controls

Since late 1994, SIES has the expanded responsibility for analyzing the economic impact of U.S. export control policies and export licensing decisions. During FY 1997, SIES performed a wide array of economic impact studies on a number of critical export control issues, as outlined below.

Dual-use export controls

SIES has participated in a number of activities that address the TPCC recommendation on the review of "existing unilateral dual-use export controls and policies, including those now

required by statute.” Specifically, SIES has prepared analyses on the economic impact on U.S. industry of a number of unilateral foreign policy controls (e.g., crime control and detection commodities, regional stability controls, and antiterrorism controls). SIES also conducts annual reviews of the economic impact on U.S. industry of U.S. foreign policy based export controls, the results of which are included in BXA’s annual foreign policy report to the Congress.

In addition to analyzing the effects of existing export controls, SIES has provided the Administration with analyses of the economic impact of proposed changes in unilateral U.S. export controls, such as proposals to tighten licensing requirements on certain crime control items (based on human rights considerations). These analyses include assessments of how the competitiveness of U.S. industries would be affected by proposed changes in U.S. export controls.

Export License Reviews

SIES also has prepared economic impact assessments to assist other offices in BXA (and sometimes other agencies, as well) in reviewing export license applications. These applications generally consist of transactions that do not clearly fall within the scope of certain export controls or licensing policies and where failure to complete the transaction would probably have serious economic consequences for the exporting company. The economic impact assessments also address the extent to which denials of individual export license applications could have a long term adverse impact on the overall competitiveness of U.S. exporters in various foreign markets.

Control List Reviews

SIES regularly provides support to BXA’s regime offices (i.e., the offices responsible for administering export controls on dual-use goods subject to control under the Wassenaar Arrangement, Nuclear Suppliers Group, Australia Group, and Missile Technology Control Regime) by providing economic impact data that address issues such as the appropriate level of export controls for various goods and technologies. For example, SIES provides information to BXA’s regime offices concerning the U.S. industry sectors likely to be most severely impacted by the imposition of new export controls or by the continuation of existing export controls. The information provided by SIES often consists of data on the international markets for specific goods, as well as major U.S. and foreign producers of such goods (e.g., semiconductor manufacturing equipment).

U.S. Obligations under International Agreements

SIES has examined the economic impact of additional export controls, licensing policies, or inspection requirements that might arise from future U.S. obligations under various international agreements such as the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC). In addition, SIES has conducted research and provided data in

support of BXA's ongoing efforts to strengthen the BWC with protocols that ensure a level playing field for U.S. companies and protection for company proprietary information during inspections.

Industry Outreach

In an effort to more effectively perform its mission, SIES interacts with the exporters on an ongoing basis to keep them informed about SIES's role within BXA. SIES staff members have made presentations before the Technical Advisory Committees (TACs) describing the role the office plays in ensuring that U.S. export control officials are made aware of the economic impact that their decisions can have on individual U.S. companies, various industrial sectors, and U.S. industry as a whole. An important goal of these outreach activities is to obtain valuable feedback from the exporting community on the impact of export controls on companies and industry sectors in the U.S.

Foreign Availability Assessments

Foreign availability assessments identify foreign sources of specific items subject to U.S. national security export controls and evaluate whether such items are of comparable quality and are available from foreign sources in sufficient quantities to render ineffective either the continuation of U.S. export controls on the items or the denial of an export license for the items. There are two types of foreign availability assessments: (1) denied license assessments and (2) decontrol assessments. The purpose of a denied license assessment is to determine whether a specific export license application should be approved on the grounds of foreign availability, while a decontrol assessment addresses the issue of whether U.S. national security export controls on specific items should be removed because foreign availability exists for such items.

SIES is responsible for reviewing foreign availability submissions and conducting foreign availability assessments. SIES received one foreign availability submission during FY 1997. This submission requested that BXA initiate a decontrol assessment for certain full authority digital engine control (FADEC) software and technology subject to U.S. national security export controls. SIES is reviewing the submission to determine whether there is sufficient evidence to meet the criteria in the Export Administration Regulations (EAR) for initiating a foreign availability assessment.

In addition, SIES completed its review of a foreign availability submission, received during FY 1996, that requested BXA to initiate a foreign availability assessment for certain transponders subject to U.S. national security export controls. SIES determined that the submission did not contain sufficient evidence to satisfy the criteria for initiating a foreign availability assessment as set forth in the EAR. SIES will receive and review any properly prepared foreign availability

submission but will accept a foreign availability submission and initiate an assessment only after it determines that there is sufficient evidence to support the belief that foreign availability exists.

Foreign Investment

Section 5021, the "Exon-Florio" provision, of the Omnibus Trade and Competitiveness Act of 1988 (which amended Section 721 of the Defense Production Act of 1950) provides authority for the President to review the effects on national security of certain mergers, acquisitions, and takeovers of U.S. companies by foreign interests.

The interagency Committee on Foreign Investment in the United States (CFIUS) and the Treasury Department have authority to implement the law in consultation with other CFIUS members. SIES represents BXA on the CFIUS. The law provides a framework for a maximum 90-day review of foreign transactions. This period includes 30 days to determine whether to investigate a transaction, 45 days to complete an investigation, and a final 15 days for the President to act.

SIES conducts Exon-Florio national security reviews in coordination with other relevant offices within the Department. In FY 1997, the Department reviewed 70 investment notifications; no cases went to the 45-day investigation period. SIES, as a participant in CFIUS, works to ensure that the U.S. defense industrial base will not be compromised by foreign acquisitions. This is consistent both with the confines of the law and the Administration's open investment policy.

National Defense Stockpile

The National Defense Stockpile, managed by DOD under the authority of the Strategic and Critical Materials Stockpiling Act of 1979, as amended (Stockpiling Act), is a \$6 billion holding of strategic and critical materials which are unavailable in the United States in sufficient quantities to meet anticipated national security emergency requirements. SIES provides Commerce Department input into policy development and ongoing operation of the National Defense Stockpile, including acquisition, disposal, and storage of stockpiled materials.

SIES (for the Department) and the Department of State co-chair the Stockpile Interagency Market Impact Committee (MIC), which was established by the FY 1993 National Defense Authorization Act (NDAA) to provide expert interagency advice to DOD on Stockpile acquisitions and disposals. This advice helps DOD to meet its statutory obligation to avoid undue market impact while protecting the government from avoidable loss. SIES, along with the other MIC members, also encourages DOD to adopt innovative marketing programs designed to maximize the return on Stockpile material sales to the Government while minimizing the effects of these sales on both domestic and global markets. In view of growing Congressional interest in disposing of an increasing quantity of excess Stockpile materials, the MIC, beginning in FY 1997, agreed to meet semi-annually to review DOD Stockpile sales and market conditions to ensure that

proposed sales will not and do not cause undue market impact. Additional meetings are scheduled as needed to deal with urgent issues.

The FY 1993 NDAA also directed the MIC to “consult from time to time with representatives of producers, processors and consumers of the type of materials stored in the stockpile.” Accordingly, under SIES leadership, it is MIC policy to seek as much public input as possible to the MIC review of DOD’s proposed Annual Material Plan (AMP) for disposal of excess Stockpile materials, to help guide the MIC in fulfilling its mission. Furthermore, since publication of material disposal quantities for the first time in the proposed FY 1997 AMP, SIES has received a significant increase in the number of public comments on the materials. This action followed Congressional approval to publish AMP material quantities, thus making the MIC review process more transparent and enabling the public to more effectively and efficiently assess how proposed disposals will impact their business or industry. The AMP material quantities will be published with all proposed AMP as standard procedure.

To further assist the MIC in its work, SIES in FY 1997 published a comprehensive *Minerals Expert Guide* to Federal Government commodity experts and industry commodity associations. This guide, distributed for Government use only, lists Agency points of contact, U.S. and international minerals specialists, and metals and minerals industry associations and committees.

5. Office of Chemical and Biological Controls and Treaty Compliance

BXA's Office of Chemical and Biological Controls and Treaty Compliance (CBTC) carries out activities aimed at halting the spread of chemical and biological weapons through multilateral export controls and international treaty agreements. CBTC provides technical and policy analysis support efforts to ensure that chemical and biological weapons (CBW) export controls are implemented in a way that will optimize their nonproliferation impact, as well as take into consideration the business realities of the current marketplace. CBTC has the primary responsibility for policy review and licensing of dual use chemical and biological exports. In addition to its nonproliferation role, the Office administers requirements governing the export of domestic materials that are in short supply and transfers of controlled technology to foreign nationals in the United States (deemed exports). The Office consists of the Chemical and Biological Controls Division, the Treaty Compliance Division and the Foreign Nationals and Short Supply Programs.

Australia Group Regime

Concerned countries have recognized that multilaterally coordinated export controls offer the best opportunity to make a significant difference in the spread of chemical weapons. In 1985, Australia recommended that like-minded countries consult with each other to harmonize their

individual measures and explore possible areas for future cooperation. This consultative body came to be known as the Australia Group. Today, the Australia Group (AG) is a forum of thirty industrialized countries that cooperate in curbing the proliferation of chemical and biological weapons (CBW) through the coordination of export controls, the exchange of information and other diplomatic actions.

Multilateral Control Actions

CBTC works to improve and harmonize AG coordinated export controls as a means of restricting proliferation-related activities. CBTC takes the lead in responding to AG proposals and in initiating U.S. recommendations based on BXA's licensing experiences and played an active role in the U.S. Delegation to the annual Australia Group (AG) meeting, held in Paris in October 1997. BXA chaired the Implementation and Enforcement Experts Meeting, which addressed critical technical issues about the scope of AG controls.

Chemical Mixtures: The AG controls the export of chemical mixtures that contain precursor chemicals. The U.S. implemented this control in the Export Administration Regulations in accordance with the AG agreement. In October 1996, the United Kingdom proposed to revise the rule to change the calculation method. CBTC supported this change which simplified the calculation method, made application preparation and review easier, and improved coordination among AG members. At the same time, CBTC urged the adoption of a low threshold limit for all precursor mixtures consistent with the AG's nonproliferation objectives.

No Undercut Provisions: The AG partners observe a no undercut policy that provides for notification to all members of each member's denial of an export license for an AG controlled item. The purpose is to prevent undercutting another member's denial without first consulting them to learn more about the rationale for the denial decision. CBTC ensures that notification of U.S. denials is communicated promptly to the AG partners. Denial notifications received from other AG members are incorporated into CBTC's automated license application screening process so that any applications for a transaction denied by another member will be swiftly brought to our attention. This procedure has worked well in closing the loophole for potential diverters who shop around to acquire items for proliferation purposes.

The AG and Chemical Weapons Convention Obligations: The Chemical Weapons Convention (CWC), which entered into force on April 28, 1997, prohibits the development, production, stockpiling, transfer and use of chemical weapons, as well as assistance to others in developing or acquiring them. Since completion of the Treaty, an international debate has been waged concerning the utility of the AG in light of the legally binding nature of the Treaty. The CWC currently does not provide an export control structure equivalent to the AG. In contrast to the CWC's focus on chemical weapons, their agents and precursors, the AG controls cover a range of items, including precursors, biological agents, chemical and biological production

equipment, technical data and manufacturing facilities. The AG and the CWC exist in tandem and the export control coordination of the AG will continue to be a valuable adjunct to U.S. nonproliferation policy for the foreseeable future.

Export Control Liberalizations

As of October 1996, the Republic of Korea (South Korea) became a member of the AG. Consequently, the Export Administration Regulations were revised so that South Korea would be afforded the same licensing treatment as other AG members, including exemption from certain licensing requirements. In addition, corrections were made to the Commerce Country Chart to remove licensing requirements for Romania and South Africa. These actions reduced the administrative burden on U.S. exporters by eliminating license application requirements for certain exports controlled for chemical and biological weapons purposes.

The Commerce Control List (CCL) of the Export Administration Regulations was revised to simplify export controls on mixtures that contain traces of controlled precursor chemicals. Exports now may be made without applying for a license for mixtures that contain a cumulative total concentration of no more than 10,000 parts by weight (pbw) per million of all controlled precursors in the mixture (chemicals listed on CWC Schedule 1 are excluded). This change permits exports of many common commercial products, such as dry cleaning solvents, while maintaining license requirements for mixtures that contain significant quantities of precursor chemicals.

Sanctions

On May 21, 1997, the United States imposed sanctions on five Chinese individuals, two Chinese companies, and one Hong Kong company for knowingly and materially contributing to Iran's chemical weapons program. The sanctions prohibit the U.S. Government from procuring any goods or services from the sanctioned entities or persons, and prohibits imports by United States Government of any products produced by the sanctioned entities. The imposition of sanctions, which were announced by the Department of State, was effected pursuant to the Arms Export Control Act, the Export Administration Act of 1979, as amended, and the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991.

International Agreements

Chemical Weapons Convention

Over 150 states negotiated in the United Nations Conference on Disarmament to complete a comprehensive ban on chemical weapons. That treaty, the Chemical Weapons Convention, was

completed in 1993. It entered into force on April 29, 1997 and as of August 1, 1997, it had been ratified by ninety-eight states including the United States. The CWC bans the development, production, acquisition, stockpiling, retention, use, and direct or indirect transfer of chemical weapons. The Convention is the first major arms control treaty to have a significant impact on the private sector. Certain commercial chemical production and processing facilities will be required to submit data declarations and to permit international inspections.

CBTC cooperates with other U.S. Government agencies in participating in the various meetings and daily operations in The Hague of the Organization for the Prohibition of Chemical Weapons (OPCW), the international governing body for the Chemical Weapons Convention. In February 1997, CBTC participated in the CWC Preparatory Commission Chemical Expert Group to work out the technical details of the treaty's declaration and inspection requirements. The group is considering issues such as guidelines for the assessment of risks during inspections and model facility agreements that will govern the activities of the inspectors. The CWC Executive Council, which is comprised of 41 member states, meets monthly to discuss a variety of CWC implementation issues. Participation in these sessions affords BXA the opportunity to represent U.S. industry concerns in the inspection planning process as well as to interact with the OPCW staff. The First Conference of States Parties to review the operation of the CWC since its entry-into-force is scheduled for May 1998.

Outreach

Over the course of FY 1997, CBTC engaged in a concentrated outreach effort toward industry to maintain a dialogue about the possible impact of CWC requirements and to provide information on industry's rights and obligations, the completion of declarations and on-site inspection protocols.

Biological and Toxins Weapons Convention

The Biological and Toxins Weapons Convention (BWC) entered into force in 1975 to prohibit the development, production, and stockpiling of biological agents or toxins that do not have peaceful uses. The Third Review Conference of States Parties to the BWC agreed in 1991 to consider ways to strengthen the implementation and effectiveness of the Convention.

CBTC is cooperating with other U.S. Government agencies in the development of a protocol to the BWC that can be supported by industry. Industry's concerns about the protection of confidential business information are a significant consideration in crafting the protocol. CBTC works with industry organizations to coordinate and promote cooperation with government in addressing BWC issues. CBTC provides representation for multilateral and bilateral discussions relevant to the BWC, including an Ad Hoc Group working to develop a protocol to strengthen the treaty. In November 1996, CBTC joined the U.S. Delegation to the Fourth BWC Review Conference (Revcon) which affirmed support for the basic principles of the convention and endorsed the work of the Ad Hoc Group. CBTC attended sessions of the Ad Hoc Group held in

September 1996, and March, July and September 1997, during which work progressed on the development of specific elements of a protocol. In addition, CBTC participated in discussions bilaterally with Japan in January 1997 and with small groups of like-minded countries throughout the year.

Convention on Biodiversity

The Convention on Biological Diversity (CBD) aims to conserve the world's biological diversity by stemming the loss of the earth's species, their habitats, and ecosystems. The United States has signed, but not ratified, the treaty, and therefore is not a party. However, as the largest exporter of biotechnology products, the United States is playing a constructive role in the development of a Biosafety Protocol.

In 1995, an international Ad Hoc Working Group was formed to develop the Biosafety Protocol by July 1998. A primary focus of this Protocol is the regulation of the movement of any living modified organism that may adversely affect, or be threatening to, the environment of the importing country. It is envisioned that the Protocol will require that an exporting country inform an importing country in advance of its intent to export a living modified organism or a product containing one. CBTC participates in the interagency Biosafety Working Group (BWG), chaired by the Department of State, to develop the U.S. position on the potential impact of the protocol on U.S. trade in biotechnology products and agricultural commodities.

Transfers of Technology to Foreign Nationals in the United States

The Department of Commerce requires U.S. companies to obtain prior approval from BXA before foreign nationals from certain countries are allowed to work on projects involving controlled technology. An export license is required because the Export Administration Regulations (EAR) considers any release of controlled technology or software to a foreign national to be a "deemed export" to the home country. CBTC led interagency negotiations to develop an overall policy for the effective review of these license applications. As a result of this effort, license applications for deemed exports generally can be approved provided that the foreign national recipient is acceptable and that the U.S. applicant accepts license conditions designed to prevent the diversion of sensitive technology. BXA continues to review this policy to ensure that its implementation does not negatively impact U.S. companies' hiring practices.

Short Supply Controls

Sections 3(2)(c) and 7 of the Export Administration Act of 1979, as amended, (the Act) authorize 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". In support of this objective, Section 7 also authorizes the President to monitor exports of certain goods to determine the impact of such exports on the domestic supply and whether this impact has an adverse effect on the U.S. economy.

BXA also 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 (FRCSRA) of 1990, as amended. BXA continued to conduct economic, policy, regulatory, and technical analyses of Congressionally mandated controls for domestically produced petroleum and unprocessed timber.

During FY 1997, as authorized by Section 7 of the Export Administration Act of 1979 (the Act), the Department of Commerce controlled certain domestically produced crude oil and unprocessed Western Red Cedar timber harvested from Federal and state lands.

Section 7(k) of the Act specifies that for purposes of export controls imposed under this Act, the shipment of crude oil, refined petroleum products, or partially refined petroleum products from the United States for use by the Department of Defense or United States-supported installations or facilities should not be considered as exports.

Section 14(a)(13) of the Act requires a report on any monitoring program conducted pursuant to this Act or Section 812 of the Agricultural Act of 1970. Therefore, this chapter includes a report by the U.S. Department of Agriculture (USDA) on its monitoring activities during FY 1997.

Crude Oil and Refined Petroleum Products

Exports of most domestically produced crude oil continued to be subject to statutory restrictions in FY 1997. Four separate statutes require the Department to administer various restrictions on the export of domestically produced crude oil.

- The Energy Policy and Conservation Act (EPCA) requires the President to prohibit the export of domestically produced crude oil (Section 103).
- The Mineral Leasing Act (MLA) prohibits exports of domestic crude oil transported by pipeline over Federal rights-of-way granted under Section 28(u).
- The Naval Petroleum Reserves Production Act (NPRPA) of 1976 restricts exports of petroleum (crude or refined products) produced from the Naval Petroleum Reserves.

- The Outer Continental Shelf Lands Act (OCSLA) restricts exports of crude oil or natural gas produced from Federally owned submerged lands of the Outer Continental Shelf.

Licensing Actions

All of the statutes establish various stringent tests (e.g., consumer savings through lower prices for replacement oils) a license applicant must meet before BXA can authorize crude oil exports. BXA can authorize exports only by a national interest finding issued by the President or his delegated representative. The President has retained the authority to make national interest findings under three of the statutes but has delegated to the Secretary of Commerce the authority to make findings under EPCA.

Since the legislation came into effect, there have been only five national interest findings providing exemptions from the statutory prohibitions. The President issued two findings that allow: 1) as of 1985, the export to Canada of crude oil produced in the lower 48 states; and 2) as of 1989, the export of 50,000 barrels per day (B/D) of Alaskan North Slope (ANS) crude pursuant to the U.S.-Canadian Free Trade Agreement. In 1985, the Secretary of Commerce issued a finding allowing the export of Alaskan Cook Inlet crude oil to Pacific Rim energy markets. On October 23, 1992, the President authorized the export of 25,000 B/D of California heavy crude oil having a gravity (i.e., weight) of 20 degrees API or lower. On April 28, 1996, the President determined that exports of ANS crude oil when transported on U.S.-flag tankers are in the national interest.

During FY '97, exports of domestically produced crude oil resulting from BXA licensing actions for exporters taking advantage of the license exception for Alaskan North Slope (ANS) crude oil totaled 47.5 million barrels or 130,300 barrels per day (B/D). The discussion below reviews: 1) exports from the lower 48 states; and 2) exports from Alaska.

Exports of Crude Oil From the Lower 48 States

During FY 1997, BXA approved 12 licenses for exports of crude oil originating from the lower 48 states. These licenses involved a total of 23,250,400 barrels of crude oil or approximately 63,700 B/D. This included:

Exports to Canada: During FY 1997, BXA issued three licenses totaling more than 19 million barrels for shipment to Canada of crude oil produced in the lower 48 states.

Crude Oil For Testing Purposes: The Department can authorize the export of small quantities of domestically produced crude oil for testing purposes under a license. In FY 1997, BXA issued one license covering approximately 400 barrels of crude oil.

Temporary Exports for Convenience or Efficiency of Transportation: Pursuant to Section 7(d) of the Act, the Department permits Alaskan North Slope (ANS) crude oil to be shipped to U.S. East Coast, Gulf Coast, and Caribbean ports through approved non-U.S. transshipment terminals and approved temporary non-U.S. storage facilities. Participating companies report monthly to BXA on the quantities of ANS crude oil leaving Valdez, Alaska, the quantities entering, leaving, or in temporary storage at transshipment terminals; and the quantities en route and discharged at various U.S. terminals. During FY 1997, there was no activity under this authority.

The Department also authorizes temporary exports to Canada and Mexico for convenience and efficiency of transportation. During FY 1997, BXA issued one license for 550,000 barrels for temporary exports to Canada under this authority.

Exports of California Heavy Crude Oil: During FY 1997, BXA issued eight licenses pursuant to the California rule making to export 25,000 B/D of California heavy crude oil. The five licenses were for 4.1 million barrels of crude and were valued at \$74.1 million. The bulk of the heavy crude oil exported was for use as bunker fuel for vessels in foreign trade.

Exports From Alaska

Alaskan North Slope Crude Oil: On May 31, 1996, BXA amended the short supply provisions of the Export Administration Regulations by establishing License Exception TAPS authorizing such exports with certain conditions. The License Exception TAPS was based on: 1) Public Law 104-58, which allows for the export of crude oil transported by pipeline over right-of-way granted pursuant to Section 203 of the Trans-Alaska Pipeline Authorization Act (TAPS); 2) the President's April 28, 1996, determination that such exports are in the national interest; and 3) the President's direction to the Secretary of Commerce to issue a license exception with conditions for the export of TAPS crude oil. During FY 1997, U.S. firms exported 24 cargoes of ANS crude oil totaling approximately 24.3 million barrels, pursuant to license exemption TAPS.

Crude Oil from Cook Inlet: The Department authorizes the export of crude oil derived from state-owned submerged lands in Alaska's Cook Inlet under an IVL unless the oil has been or will be transported by a pipeline over a Federal right-of-way granted pursuant to the Mineral Leasing Act or the Trans-Alaska Pipeline Authorization Act. In FY 1997, there was no activity under this program

Wood Products

BXA administers short supply export controls on Western Red Cedar, as mandated by Section 7(i) of the Act. BXA also administers the ban on exports of unprocessed timber originating from public lands in all or parts of 17 western states pursuant to FRCSRA.

Western Red Cedar: Section 7(i) of the EAA prohibits the export of unprocessed Western Red Cedar (WRC) harvested from state or Federal lands. This prohibition applies to those contracts entered into after September 30, 1979. However, exports of unprocessed WRC harvested from state or Federal lands under contracts entered into before October 1, 1979, are permitted under an export License. During FY 1997, BXA did not issue any export licenses for WRC.

FRCSRA: Under FRCSRA, the Department of Commerce is responsible for administering the ban on the export of unprocessed timber originating from public lands in 17 western continental states. In the alternative, the affected states can request the Secretary of Commerce to authorize them to administer their own programs. BXA has undertaken the following actions implementing FRCSRA:

- First Log Export Order: On August 23, 1993, the Secretary of Commerce signed a General Order (Order) prohibiting the export of unprocessed timber originating from non-Federal public lands located west of the 100th meridian in the contiguous United States.
- Advance Notice of Proposed Rule making: On June 7, 1995, BXA published in the Federal Register an advance notice of proposed rule making requesting comments on regulations the Department is considering to administer FRCSRA. BXA will issue a final rule making during FY 1998.
- Second Log Export Order: On September 29, 1995, the Secretary of Commerce issued a second Order, as required by Section 491(b)(2)(B) of FRCSRA. The Order applies to states with annual unprocessed timber sales greater than 400 million board feet. It prohibits the export of the lesser of 400 million board feet or that State's annual sales volume of any unprocessed timber originating from public lands. The Order became effective January 1, 1996. Washington State is currently the only state with over 400 million board feet in annual timber sales.

Congressional Action: On September 30, 1996, Congress passed and the President signed Public Law 104-208. Section 319 of Title III of Section 101(d) of Title I of P.L. 104-208 required the Secretary of Commerce to extend until September 30, 1997, the order issued under Section 491(b)(2)(A) of the FRCSRA prohibiting the export of non-Federal timber originating from public lands in states with annual sales greater than 400,000,000 board feet (i.e., Washington state). Section 319 also requires the Secretary of Commerce to make effective on October 1, 1997, the prohibition of section 491(b)(2)(B) of FRCSRA on the export of only the lesser of 400,000,000 board feet or the annual sales volume of unprocessed timber origination from public lands in states west of the 100th meridian in the contiguous 48 states with more than 400,000,000 board feet of annual sales volume of such timber. Effective October 1, 1997, therefore, the export of such timber that is in excess of 400,000,000 board feet is permitted, unless prohibited by any other provision of law. As the Secretary of Commerce has delegated the authority for carrying out the policies and programs necessary to administer laws regarding the control of U.S.

exports to the Under Secretary, the Under Secretary issued the order required under P.L. 104-208 on October 18, 1996.

AGRICULTURAL COMMODITIES

WHEAT

Domestic Situation

The United States' production of wheat rose in 1996/97 for the first time in four years, to 62 million tons. Prices slid throughout the year from the record high \$262 (f.o.b. Gulf) per ton reached during 1995/96 but still remained historically high, partially due to a continued tight domestic situation resulting from record low carry in stocks. The season average farm price is estimated to have been \$4.30 per bushel, down just 25 cents from 1995/96. While the level of global trade remained unchanged from the prior year, United States' exports dropped 20 percent as other exporters flooded the market with large amounts of wheat, pushing prices down to levels where the United States found it difficult to compete. The slowdown allowed for a much needed buildup of reserves, which had been drawn down to record lows after the United States' reliably satisfied the high global demand for imports during the 1995/96 season.

World Supply and Trade

In response to the low availabilities and record high prices of the 1995/96 season, and with the timely benefit of near-perfect growing weather worldwide, global wheat production surged 45 million tons in 1996/97 to a near record 582 million tons. However, quality was occasionally sacrificed for increased yield in producing the bumper crop. The expanded production exceeded consumption for the first time in four years and caused prices to pull back from the levels reached at the end of 1995/96. Nevertheless, world trade remained flat as traditional importers and exporters alike enjoyed abundant harvests, resulting in reduced import demand at a time of increased exportable supplies. Traditional exporters Argentina, Australia and the European Union all achieved record production levels, and both Argentina and Australia exported record amounts as well. Imports by China plunged nearly 10 million tons as domestic production there soared to new highs, while exports to the former Soviet Union, continuing a decline brought about by independence, hit a new low. Unanticipated demand from India, Iran, Iraq and Pakistan made up for a good portion of the lost business. The global bumper crop provided an opportunity for some rebuilding of severely depleted world stocks; however, rising consumption (much of it feed) kept the stocks-to-use ratio at an all-time low.

COARSE GRAINS

Domestic Situation

U.S. corn production in 1996/97 of 236 mmt was up 49 mmt from the previous year. Domestic utilization increased about 16 mmt to 178 mmt. The season average price for corn fell by 54 cents to \$2.70 per bushel in 1996/97. U.S. corn exports fell approximately 7 mmt to about 45.5 mmt and stocks increased 13 mmt to 24 mmt.

World Supply and Trade

World coarse grain production was up 104 mmt to a record 903 mmt in 1996/97 with corn production rising 85 mmt to 591 mmt. World coarse grain trade increased 3 mmt to 90.9 mmt, while corn trade fell about 2 mmt to 64.4 mmt. Competition for U.S. corn rebounded slightly in 1996/97 as China returned to being a net exporter of 2.7 mmt.

Actions Taken by Other Countries

The international coarse grains marketplace became considerably more competitive for U.S. exporters in 1996/97. A record corn harvest in China allowed that country to reemerge as a net exporter while record production allowed for record exports from Argentina. Nonetheless, both feed and total use of coarse grains set new records, allowing U.S. exporters to consolidate recent gains in major import markets.

RICE

Domestic Situation

1996/97 U.S. rice production (rough basis) fell by 116,000 mt from the previous year, to 7.8 mmt. Domestic utilization and exports (milled basis) also declined slightly, to 3.4 mmt and 2.4 mmt, respectively. As a result, carry-out stocks increased 74,000 tons, to 885,000 tons.

World Supply and Trade

World rice production (rough basis) increased 11 mmt in 1996/97, to a record 563 mmt. Ample supplies allowed for growth in consumption as well as some stock-building. Stocks grew to 54 mmt (milled basis), a 3.6 mmt increase over the previous year. World trade in calendar year 1996 declined 1.5 mmt from the record level achieved in 1995, however, the 19.5 mmt traded in 1996 was still the second highest trade level on record. Thailand was again the top rice exporter in the world in 1996, followed by India, Vietnam, and the United States. Seventy-five percent of the rice exported in 1996 came from these four sources. In 1997, world trade is forecast to decline slightly, to 17.9 mmt. The top exporters in 1997 are expected to remain the same as the previous year, with the exception of India. Indian exports are forecast to decline from 3.5 mmt in 1996 to only 1.5 mmt in 1997, dropping India's export level below that of Pakistan and into fifth place. Major importers in 1996 included Indonesia, Iran, Brazil, and the Philippines.

Action Taken by Other Countries

As a result of Japan's minimum access commitment under the terms of the Uruguay Round, U.S. rice sales have been made to this previously closed market. Although South Korea made a similar market access commitment, the United States has yet to sell any rice to South Korea.

SOYBEANS AND PRODUCTS

Domestic Situation

U.S. soybean production increased 5.6 mmt in 1996 to 64.8 mmt in response to increased plantings and improved yields. Soybean acreage increased in 1996 in line with an increase in overall plantings of grains and oilseeds coupled with improved returns for soybeans relative to corn. In addition, wet weather in parts of the U.S. necessitated a change from corn to soybean planting that added between 1.5 and 2.0 million acres of additional soybean acreage in 1996. Yields rebounded in 1996 to 37.6 bu/acre, second to 1994's record yield. U.S. soybean exports in 1996/97 reached 24.0 mmt, up three percent from last year's good showing. Soybean crush increased 5 percent to 39.1 mmt while ending stocks declined 37 percent to 3.1 mmt, the lowest level in over 20 years.

Total soybean meal consumption in the United States rose 2 percent to 24.6 mmt as demand by the poultry and pork industries remained high. This increase occurred despite high prices for soybean meal. Exports of soybean meal rose 13 percent to 6.3 mmt in 1996/97 as average prices increased 15 percent compared to a year earlier, and 66 percent above the 1994/95 level.

U.S. soybean prices for 1996/97 averaged \$271/MT, a 10 percent increase over the 1995/96 level. The increase in soybean prices in 1996/97 was in response to a tight supply situation that resulted from strong demand for soybeans and soybean meal, particularly in export markets. Reduced soybean stocks, the lowest in over 20 years, only added to the situation. Soybean meal prices were also higher in 1996/97, rising 15 percent to \$298/MT. Strong demand in both the domestic and export markets helped keep prices high. In contrast, soybean oil prices for the same period declined 9 percent to \$496/MT. Expanded crush led to increased soybean oil production and larger stocks. This despite improved export demand and growing domestic consumption.

World Oilseeds and Products Supply and Trade

Total world oilseed production increased slightly in 1996/97 to 257.5 mmt. Soybean production, up 6 percent to 131.7 mmt, accounted for most of the increase while reductions in rapeseed, sunflowerseed, and cottonseed production helped offset the increase in soybean production. World rapeseed production was down 4.0 mmt from the previous year's record level to 30.6 mmt. Production declines were noted in Canada, Europe (particularly Germany and Poland), and China. Large stocks left over from the 1995 crop discouraged plantings in 1996. World sunflowerseed

production fell 2.1 million tons primarily due to drought in Russia and the Ukraine which cut yields dramatically. Production was also lower in Argentina and the U.S. as growers switched to more profitable crops.

World cottonseed production declined 4 percent to 34.2 mmt in 1996/97 due to reduced cotton production in most major producing areas. The exceptions were India and the U.S. where small increases were noted. World oilseed exports for 1996/97 were 5 percent higher reflecting an increase in soybean exports. World soybean exports were up 13 percent to 36.2 mmt as exports from Brazil rebounded from year earlier levels and U.S. exports continued to grow. World rapeseed exports fell 8 percent to 5.4 mmt following production shortfalls in Canada and Poland.

World protein meal production rose 1 percent in 1996/97 to 148.7 mmt. Production increases were noted for soybean meal and all other minor protein meals in 1996/97. Production of rapeseed, sunflowerseed, and cottonseed meal were lower due to reduced seed production noted earlier. World protein meal exports declined slightly in 1996/97 to 49.5 mmt due to a reduction in soybean, cottonseed, rapeseed, and peanut meal exports. While both Argentina and the U.S. increased soybean meal exports, reduced exports by Brazil and India helped bring the world soybean export figure lower for 1996/97.

World vegetable and marine oil production increased 2 percent in 1996/97 to 74.4 mmt. Increases were noted for all vegetable and marine oils except rapeseed, sunflowerseed, and cottonseed oils. Major increases included olive oil, up 55 percent to 2.2 mmt, coconut oil, up 8 percent to 3.3 mmt, and palm oil, up 7 percent to 17.1 mmt. Vegetable and marine oil exports increased in 1996/97 as soybean, palm, sunflowerseed, coconut, and olive oil exports grew. World soybean oil exports rose 10 percent to 5.8 mmt while palm oil exports increased 7 percent to 10.6 mmt. China's vegetable oil imports rose 23 percent in 1996/97, but remained nearly 1 mmt below 1994/95's record year. Palm oil imports accounted for much of the increase in 1995/96.

COTTON

Domestic Situation

Cotton production in MY 1996/97 was 18.9 million bales, up 6 percent from the previous season. Upland cotton production, at 18.4 million bales, was 870 thousand bales above the 1995/96 level. American-Pima production totaled 529 thousand bales, up 44 percent from 1995/96.

The area planted to all cotton totaled 14.64 million acres, a 14% percent decrease from the previous year. Harvested area, at 12.9 million acres, was down 20 percent from the previous year. Abandonment of upland cotton acreage during 1996/97 totaled 12 percent, up from 6 percent a year earlier. Upland yields averaged 701 pounds per acre, 168 pounds above yields realized the previous year.

Total cotton mill use during 1996/97 was 11.1 million bales, up from 10.6 million the previous year. Upland cotton use, at 11.0 million bales, was up 5 percent. American-Pima consumption was estimated at 100 thousand bales. Total marketing year 1996/97 exports are estimated at 6.9 million bales, down 10 percent from the previous season. According to U.S. Census data, the largest shipments during 1996/97 were to China, Japan, Indonesia, Korea, and Mexico, the same as in 1995/96. United States ending stocks for 1996/97 were estimated at 3.8 million bales, up 1.2 million bales from the previous year.

International cotton prices in 1996/97 were lower than the previous season, with the Cotton A-Index (average of 5 lowest c.i.f. Northern Europe quotes) averaging 78.58 cents per pound. The A-Index reached its highest level in July 1997 with a monthly average of 81.34 cents per pound, while the season's lowest prices were in September 1996 when the A-Index averaged 75.30 cents per pound.

World Supply and Trade

World 1996/97 cotton production is estimated at 88.7 million bales, down 4 percent from the previous season. Foreign production is estimated at 69.8 million bales, down 6 percent. The 1996/97 season was characterized by smaller crops in major producing countries including China, Pakistan, Uzbekistan and Turkey, which more than offset increased production by the United States and India. World consumption for 1996/97 is estimated at 87.8 million bales, up slightly from the previous year. The major increase in consumption was for China, although consumption also increased for the United States, India and Turkey, which more than offset modest decreases in S.E. Asia and Pakistan. Exports for 1996/97 totaled 26.4 million bales, down 4 percent from the previous year. Increased exports from the Franc-Zone Africa, Australia, and India more than offset decreased exports from the United States and Pakistan.

World ending stocks for 1996/97 are estimated at 36.3 million bales, 8 percent higher than the previous year. China and the United States increased stocks by 2.7 and 1.2 million bales respectively, accounting for most of the world increase, while stocks were drawn down slightly in European Union.

HIDES AND SKINS

Domestic Situation

In 1996, the United States produced almost 1.20 mmt of raw cattle hides and skins, approximately 30 percent of the total world production. The United States exported approximately 56 percent of its production to foreign markets, mostly in the form of whole cattle hides. Exports for 1996 totaled 20 million whole hides valued at nearly \$1.13 billion. Although the quantity increased slightly, the valued dropped from \$1.22 billion for the previous year. Low prices and weak demand in 1996 resulted in calfskin exports of 3.35 million pieces or \$101 million, down from 5.21 million pieces or \$194 million in 1995.

In 1996, Korea, Japan, Taiwan, Mexico, and China purchased approximately 86 percent of total U.S. exports of whole cattle hides. Korea was the largest purchaser of U.S. whole cattle hides, buying over 8 million hides or about 40 percent of total U.S. exports. Korea has been a steady purchaser, with imports ranging between 7.5 million and 10.3 million whole cattle hides per year for the last ten years. Taiwan was the second largest purchaser of U.S. hides, edging out Japan, buying almost 3 million pieces, while Japan dropped to third place importing about 2.4 million pieces. Mexico edged out China for fourth place by more than doubling its imports of U.S. cattle hides from 900 thousand in 1995 to over 2.1 million in 1996. Although China dropped to fourth place in 1996 it still increased its imports of U.S. hides by 22 percent to almost 1.7 million pieces.

World Supply and Trade

Hides and skins production for the 30 major countries reported by USDA has been relatively constant over the last ten years. Production increased from 1988 to 1990, then declined in 1991 through 1994 because of a downturn in Eastern Europe and Russia. Production started increasing in 1995 and continued throughout 1996, because of an upturn in output in South America and the United States which offset the declines in Russian production. In 1997, production is projected to remain relatively stable with slight increases in South American production to offset European and Russian declines. Trade in raw hides and skins between major countries in 1996 decreased slightly compared to 1995. The United States, South America, Canada, and Australia increased in their exports. Production declined in Europe, Russia, and Hong Kong. In 1996, Korea, Japan, and Italy still accounted for over 50 percent of the world hide trade.

WOOD PRODUCTS

Domestic Situation

In 1997, the inflation-adjusted value of new construction put in place is expected to decline by 1 percent from 1996's record level of \$501 billion. Residential construction, which generally accounts for more than one-third of the softwood lumber and structural panel products and a substantial portion of other wood products consumed annually in the United States, is expected to be down almost 3 percent in value in 1997 on an inflation-adjusted basis. The decline in the residential construction sector would have been larger had it not been for a modest gain in the residential maintenance and repair sector, another large consumer of wood building products. Residential housing starts are expected to total 1.40 million units in 1997, compared to 1.48 million units in 1996.

Prices of wood products were generally lower in 1997 because of slower domestic sales, coupled with increased supplies and a stronger dollar. The Random Lengths framing lumber composite price stood at \$398 per thousand board feet (MBF) on September 12, 1997, compared to \$455 a year earlier. Lumber prices are still high by historical standards, however. It is expected that lumber prices will remain relatively high over the near and medium term, given the generally favorable outlook in the residential construction sector.

The United States and Canada entered into an agreement in 1996 that caps Canadian tax-free exports to the United States at 14.7 billion board feet annually. Volumes in excess of this amount are assessed an export tax of U.S.\$50/MBF for volumes in excess of 14.7 billion board feet, up to 15.35 billion board feet, and U.S.\$100/MBF for volumes in excess of 15.35 billion board feet. The maritime provinces, Manitoba, and Saskatchewan are exempt from the export tax. The level of tax-free shipments increases if lumber prices increase above a specified level. Imports from Canada in 1996 accounted for a 35.6 percent share of the U.S. softwood lumber market.

U.S. wood products exports, following a small decline in 1996, are estimated at \$7.5 billion in 1997, with modest gains being registered in most sectors, with the exception of softwood logs and softwood and hardwood chips, which were down significantly. Softwood logs which historically account for one-quarter of total U.S. exports on a value basis, were down 14 percent through the first six months of the year, led by a 17 percent decline in sales to Japan, our leading overseas market. Softwood logs exports on a volume basis were down 7 percent through the first six months of 1997. Hardwood logs exports, on the other hand, were up significantly in both value and quantity over the first six months of 1997, and appeared to be well on their way to reversing the downturn registered in 1996. U.S. hardwood log exports for the year are expected to total \$290-\$300 million, which would make 1997 a record year for hardwood log exports.

U.S. wood product imports hit an estimated record \$13.0 billion in 1997 and marked the fifth increase in almost as many years. Significant gains were registered in almost all product sectors, including softwood lumber. Softwood lumber imports, which historically account for over one-half of total wood products imports on a value basis, were up an estimated 15 percent in 1997. (Imports of softwood lumber on a volume basis were down slightly.) U.S. imports of both softwood and hardwood logs in 1997 remained relatively unchanged from the 1996 level and continue to represent only a small percentage of the softwood and hardwood logs consumed annually in the United States.

World Supply and Trade

Indications are that worldwide sawlog and veneer log production may have declined slightly in 1997, a reflection of increased environmental pressure around the world to reduce harvest levels to sustainable levels and to eliminate harvesting of primary forests. This past February, in New York, governments concluded two years of debate on forestry-related issues under the auspices of the U.N. Commission on Sustainable Development's (CSD) Intergovernmental Panel on Forests (IPF). The IPF was successful in producing agreement on 135 proposals for action to promote sustainable forest management in such areas as forest assessment and monitoring, national programs, and donor coordination. No agreement could be reached on several key issues, however, particularly in the areas of finance and trade.

The United Nations at a Special Session in June agreed to establish an ad hoc open-ended Intergovernmental Forum on Forests (IFF). The IFF has been tasked with promoting and facilitating the implementation of IPF's proposals for actions; reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of forests; and considering matters left

pending by IPF, in particular trade and environment in relation to forest products and services, transfer of technology and the need for financial resources. The IFF also has been tasked with identifying and working toward a consensus on the elements of possible international arrangements and mechanisms to cover forests, and with reporting its findings to the CSD in 1999. The outcome of these discussions could have a significant impact on harvest levels, and, consequently, the volume of wood products that enters international trade.

The United States and Japan established a Housing Experts Group under the Enhanced Initiative on Deregulation of the Japanese Economy. The initiative, which was announced by President Clinton and Prime Minister Hashimoto on June 19, 1997 in Denver, is aimed at improving market access for foreign companies and foreign goods and services and providing Japanese consumers with a greater choice of products and services at lower cost. U.S. industry expects that recent changes (and those that have been announced) in the building products sector have the potential to expand the market for U.S. wood products in Japan by \$500 million annually by the end of the decade.

Actions Taken by Other Nations in 1996/97

The list of countries party to regional or bilateral free trade agreements continued to grow in 1996-1997. Canada and Chile signed a bilateral free trade agreement on November 18, 1996. Canadian tariffs on wood products were eliminated immediately, as were Chilean tariffs except for tariffs on some panel products and a few species of logs which will be phased out over six years. On June 7, 1997, Chile also signed a trade accord with Bolivia.

Nicaragua banned the export of mahogany logs on June 5, 1997. Later that same month, the Parties of the Convention on International Trade in Endangered Species (CITES) rejected a U.S. and Bolivian proposal to list bigleaf mahogany in Appendix II of CITES, following strong objections by Brazil and several countries that produce mahogany. Inclusion of bigleaf mahogany in Appendix II would have required export permits for all shipments of bigleaf mahogany, as well as confirmation that the shipments were not detrimental to the survival of the specie.

ALL GRAIN SUMMARY
 PRODUCTION, CONSUMPTION, STOCKS AND TRADE
 TOTAL FOREIGN COUNTRIES, USA, AND TOTAL WORLD
 (MILLION METRIC TONS)

	1993/94	1994/95	1995/96	1996/97	1997/98 Sept 12
WHEAT					
All Foreign Countries					
Production	494.1	461.4	477.9	520.3	527.9
Consumption	528.7	512.6	519.3	544.4	546.9
Ending Stocks	126.0	104.6	95.1	95.8	104.1
USA					
Production	65.2	63.2	59.4	62.1	68.2
Imports	3.2	2.4	1.7	2.6	2.6
Consumption	33.7	35.0	31.0	35.5	34.7
Exports	33.1	32.5	33.6	26.6	29.5
Ending Stocks	15.5	13.8	10.2	12.1	18.3
World Total, Trade	100.2	98.2	95.4	95.6	96.5
RICE					
All Foreign Countries					
Production	350.3	358.2	366.3	374.6	372.8
Consumption	355.4	363.7	367.4	373.1	376.5
USA					
Production	5.2	6.6	5.6	5.6	5.9
Imports	0.2	0.2	0.3	0.4	0.4
Consumption	3.3	3.3	3.4	3.4	3.6
Exports	2.8	3.1	2.6	2.5	2.8
World Total, Trade	16.5	21.0	19.5	17.9	18.5
TOTAL COARSE GRAINS					
All Foreign Countries					
Production	610.9	586.3	589.2	635.3	618.5
Consumption	650.7	650.9	659.2	671.8	687.3
USA					
Production	186.5	284.9	209.4	267.6	263.2
Imports	4.6	3.1	2.4	3.3	2.9
Consumption	185.9	207.9	180.1	204.7	210.8
Exports	40.0	65.7	58.7	51.8	57.8
Ending Stocks	27.4	45.3	14.4	28.6	26.3
World Total, Trade	85.7	97.1	87.9	90.9	91.1

WORLD TOTAL GRAIN, INCLUDING RICE

All Foreign Countries

Production	1,455.2	1,406.0	1,433.5	1,530.2	1,519.2
Consumption	1,534.8	1,527.3	1,545.9	1,589.3	1,610.6

USA

Production	256.9	354.7	274.5	335.3	337.4
Imports	8.0	5.7	4.4	6.2	5.9
Exports	75.9	101.3	94.9	80.9	90.1
World Total, Trade	202.4	216.3	202.8	204.3	206.0

Trade data are reported on an international year basis. All other data are reported using marketing years. Rice production data is on a milled basis.

WORLD WHEAT, FLOUR AND PRODUCTS TRADE
JULY/JUNE YEAR
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
EXPORTS					
Argentina	4,492	7,844	4,416	10,000	9,700
Australia	12,751	7,784	12,086	18,000	13,000
Canada	18,728	21,509	16,850	18,000	18,500
India	28	77	1,506	735	0
Kazakstan	5,500	3,500	4,356	2,250	3,000
Saudi Arabia	2,015	1,651	181	0	0
Turkey	1,194	1,830	963	1,000	1,000
EU	20,066	17,110	13,250	15,500	15,500
Eastern Europe	328	2,606	4,900	654	2,900
Others	2,055	1,712	3,334	2,850	3,350
Subtotal	67,157	65,623	61,842	68,989	66,950
United States	33,084	32,533	33,594	26,611	29,500
WORLD TOTAL	100,241	98,156	95,436	95,600	96,450
IMPORTS					
Algeria	4,812	5,653	3,401	3,200	4,300
Bangladesh	1,065	1,732	1,210	1,100	1,200
Bolivia	424	435	320	400	400
Brazil	5,769	6,545	5,470	5,200	5,400
Chile	790	632	783	500	750
China	4,310	10,241	12,469	2,800	2,500
Colombia	920	829	994	900	950
Cuba	1,083	1,059	726	825	900
Ecuador	404	420	381	450	450
Egypt	5,866	5,856	5,918	7,000	7,200
Ethiopia	710	556	521	250	500
Georgia	799	680	456	600	500
India	83	29	50	1,800	1,000
Indonesia	2,925	3,818	3,612	4,200	4,500
Iran	3,537	3,192	2,744	7,000	5,500
Iraq	737	688	509	1,200	3,000
Israel	1,369	981	838	900	1,100

Japan	5,993	6,310	6,101	6,000	6,100
Jordan	734	740	859	600	700
Korea, North	105	124	235	200	200
Korea, South	5,647	4,293	2,554	3,300	2,500
Lebanon	419	381	479	450	450
Libya	1,123	1,191	941	950	950
Malaysia	1,327	1,157	1,065	1,200	1,200
Mexico	1,828	1,374	1,571	1,950	1,500
Morocco	2,403	1,221	2,431	1,500	2,400
Nigeria	816	560	673	1,025	900
Pakistan	2,085	2,123	1,903	3,000	3,000
Peru	1,338	1,205	943	1,300	1,300
Philippines	2,217	2,051	1,964	2,150	2,200
Russia	5,000	1,879	4,991	2,000	1,500
South Africa	598	759	702	950	700
Sri Lanka	825	942	937	900	1,000
Taiwan	916	895	1,092	1,100	1,100
Thailand	719	686	785	800	800
Tunisia	806	1,511	938	775	1,400
Turkey	644	444	2,080	2,250	1,500
UAE	359	285	378	576	550
Ukraine	100	274	200	200	50
Uzbekistan	3,500	2,000	1,500	1,200	1,200
Venezuela	1,037	1,144	1,022	1,200	1,200
Vietnam	371	437	325	425	500
Yemen	1,784	2,085	2,026	2,100	2,100
EU	1,707	2,085	2,545	2,400	2,200
O.W. Europe	506	540	371	500	505
Eastern Europe	2,426	1,928	1,563	3,765	1,400
United States	3,161	2,390	1,748	2,577	2,600
Subtotal	86,097	86,360	85,324	85,668	83,855
Other Countries	12,203	10,643	8,669	9,701	9,770
Unaccounted	1,941	1,153	1,443	231	2,825
WORLD TOTAL	100,241	98,156	95,436	95,600	96,450

WORLD WHEAT PRODUCTION, CONSUMPTION AND STOCKS
LOCAL MARKETING YEARS
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
PRODUCTION					
Algeria	1,100	750	1,250	2,200	650
Argentina	9,700	11,300	8,600	16,100	12,700
Australia	16,479	8,903	16,504	23,586	16,000
Brazil	2,107	2,185	1,540	3,200	2,800
Canada	27,232	23,122	25,037	29,801	23,000
China	106,390	99,300	102,215	110,300	121,000
India	57,210	59,840	65,470	62,620	67,000
Japan	638	565	444	478	500
Kazakstan	11,659	9,052	6,490	7,700	10,000
Mexico	3,596	4,151	3,460	3,375	3,800
Morocco	1,573	5,523	1,100	5,900	2,100
Pakistan	16,157	15,212	17,002	16,907	17,000
Russia	43,500	32,100	30,100	34,900	39,000
Saudi Arabia	3,600	2,679	2,000	1,200	1,500
Tunisia	1,400	500	530	2,000	900
Turkey	16,500	14,700	15,500	16,000	16,000
Ukraine	21,831	13,857	16,273	13,500	19,000
EU	82,930	84,541	86,161	99,000	97,050
Eastern Europe	30,620	33,962	34,970	26,300	34,750
Others	39,888	39,159	43,289	45,273	43,124
Subtotal	494,110	461,401	477,935	520,340	527,874
United States	65,220	63,167	59,400	62,099	68,234
WORLD TOTAL	559,330	524,568	537,335	582,439	596,108
CONSUMPTION					
Algeria	5,700	5,900	5,600	5,300	5,100
Australia	4,100	3,900	3,654	4,500	4,400
Brazil	8,000	8,100	8,100	8,100	8,200
Canada	9,340	7,821	7,752	8,093	8,200
China	110,646	110,525	112,000	113,000	114,000
Egypt	10,516	9,956	11,613	12,735	13,100
India	56,482	57,695	63,300	65,920	67,300

Japan	6,369	6,400	6,061	6,078	6,200
Morocco	4,956	5,321	4,887	5,200	5,400
Pakistan	17,900	18,137	18,905	20,107	20,000
Russia	48,945	42,616	39,420	37,814	38,000
Turkey	15,200	15,183	16,420	17,250	16,600
Ukraine	19,469	15,844	16,100	16,800	16,700
EU	72,178	73,780	76,649	81,117	83,735
Eastern Europe	30,968	32,226	31,221	30,786	33,125
Others	107,936	99,226	97,667	111,586	106,825
Subtotal	528,705	512,630	519,349	544,386	546,885
United States	33,738	35,014	31,024	35,502	34,700
WORLD TOTAL	562,443	547,644	550,373	579,888	581,585
ENDING STOCKS					
Australia	3,710	2,405	1,975	2,081	1,711
Canada	11,117	5,679	6,728	9,086	6,586
EU	16,218	11,706	10,718	14,491	14,391
Others	94,942	84,806	75,690	70,148	81,459
Subtotal	125,987	104,596	95,111	95,806	104,147
United States	15,472	13,787	10,234	12,090	18,272
WORLD TOTAL	141,459	118,383	105,345	107,896	122,419

REGIONAL WHEAT IMPORTS, PRODUCTION, CONSUMPTION AND STOCKS
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
IMPORTS					
North America 1/	5,121	3,875	3,424	4,677	4,300
Latin America 2/	13,877	14,310	12,456	12,745	13,375
EU	1,707	2,085	2,545	2,400	2,200
Other Wst. Eur. 3/	506	540	371	500	505
Former USSR	13,500	7,674	9,448	6,295	5,640
Eastern Europe 4/	2,426	1,928	1,563	3,765	1,400
Middle East 5/	10,578	9,523	10,390	15,837	15,710
North Africa 6/	15,010	15,432	13,629	13,425	16,250
Other Africa 7/	5,701	5,359	4,677	5,515	5,170
South Asia 8/	4,151	4,861	4,220	6,875	6,275
Other Asia 9/	25,261	30,953	30,914	22,905	22,340
Oceania 10/	462	463	356	430	460
PRODUCTION					
North America 1/	96,048	90,440	87,897	95,275	95,034
Latin America 2/	14,244	16,027	12,172	22,328	18,106
EU	82,930	84,541	86,161	99,000	97,050
Other Wst. Eur. 3/	901	818	973	1,010	1,015
Former USSR	83,477	60,698	60,282	64,309	76,940
Eastern Europe 4/	30,620	33,962	34,970	26,300	34,750
Middle East 5/	36,578	34,398	34,997	34,274	32,130
North Africa 6/	9,003	11,033	8,730	15,965	9,710
Other Africa 7/	3,937	4,215	4,420	5,611	5,343
South Asia 8/	77,118	78,867	86,862	83,347	87,870
Other Asia 9/	107,776	100,476	103,157	111,234	121,960
Oceania 10/	16,698	9,093	16,714	23,786	16,200
CONSUMPTION					
North America 1/	48,502	48,159	43,627	48,595	48,100
Latin America 2/	22,532	22,643	21,411	22,848	23,165
EU	72,178	73,780	76,649	81,117	83,735
Other Wst. Eur. 3/	1,487	1,533	1,424	1,510	1,520
Former USSR	89,362	76,545	72,650	71,943	73,750
Eastern Europe 4/	30,968	32,226	31,221	30,786	33,125
Middle East 5/	41,135	42,232	44,262	48,208	48,540

North Africa 6/	24,701	24,739	24,959	26,690	27,010
Other Africa 7/	9,251	9,578	9,270	10,466	10,388
South Asia 8/	80,264	82,058	88,920	92,022	93,445
Other Asia 9/	132,361	131,244	130,850	133,203	134,185
Oceania 10/	4,761	4,523	4,200	5,125	5,030

ENDING STOCKS

North America 1/	27,039	20,033	17,407	21,946	25,728
Latin America 2/	2,200	2,468	1,150	2,225	1,741
EU	16,218	11,706	10,718	14,491	14,391
Other Wst. Eur. 3/	730	555	475	475	475
Former USSR	32,036	19,941	11,257	6,468	10,448
Eastern Europe 4/	5,626	6,684	7,096	5,721	5,846
Middle East 5/	12,072	10,351	9,980	10,383	8,283
North Africa 6/	2,316	4,042	1,432	4,132	3,082
Other Africa 7/	806	803	668	928	903
South Asia 8/	13,108	14,545	16,175	11,963	13,463
Other Asia 9/	25,478	24,735	26,897	26,983	36,248
Oceania 10/	3,830	2,520	2,090	2,181	1,811

1/ Includes Canada, Mexico, and the United States.

2/ Includes Central America, Caribbean, and South America.

3/ Includes Azores, Cyprus, Iceland, Malta & Gozo, Norway, and Switzerland.

4/ Includes Albania, Bulgaria, Czechia, Hungary, Poland, Romania, Slovakia, and Former Yugoslavia.

5/ Includes Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, and Yemen.

6/ Includes Algeria, Egypt, Libya, Morocco, and Tunisia.

7/ Includes all other African countries except North Africa.

8/ Includes Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka.

9/ Includes all other Asian countries except South Asia.

10/ Includes Australia, Fiji, New Zealand, and Papua New Guinea

WORLD RICE TRADE
CALENDAR YEAR
THOUSAND METRIC TONS

	1994	1995	1996	Estimated 1997	Projected 1998 Sept 12
EXPORTS					
Argentina	215	342	365	600	600
Australia	570	519	475	700	650
Burma	619	645	265	250	100
China	1,519	32	300	750	500
Guyana	183	203	225	225	200
India	600	4,201	3,556	1,500	1,500
Pakistan	1,399	1,592	1,663	1,650	1,700
Thailand	4,738	5,931	5,280	4,800	5,250
Uruguay	396	470	596	650	675
Vietnam	2,222	2,308	3,100	3,250	3,500
EU	185	323	301	350	350
Others	1,025	1,358	757	880	630
Subtotal	13,671	17,924	16,883	15,380	15,655
United States	2,794	3,073	2,624	2,500	2,800
WORLD TOTAL	16,465	20,997	19,507	17,880	18,455
IMPORTS					
Bangladesh	175	1,566	700	100	100
Brazil	1,098	987	800	1,000	1,250
Canada	190	214	220	220	225
China	700	1,964	850	600	1,000
Colombia	195	114	100	150	150
Costa Rica	40	58	85	90	100
Cote d'Ivoire	187	387	300	300	350
Cuba	252	316	400	350	350
Ghana	90	106	154	100	125
Guinea	255	291	250	200	200
Haiti	140	204	175	175	175
Indonesia	1,120	3,011	1,233	750	1,000
Iran	645	1,633	1,350	1,000	1,250
Iraq	64	92	236	600	600
Jamaica & Dep	75	74	75	75	75

Japan	2,473	29	445	600	650
Jordan	127	76	90	110	100
Korea, North	53	683	350	300	250
Korea, South	4	13	110	77	90
Malaysia	317	402	572	550	600
Mexico	242	245	310	275	275
Nigeria	300	450	500	700	600
Peru	220	258	400	200	350
Philippines	0	277	900	1,100	1,000
Russia	48	125	350	300	200
Saudi Arabia	698	615	750	750	700
Senegal	252	402	700	400	500
Singapore	251	293	312	325	350
South Africa	402	634	600	500	500
Sri Lanka	39	25	300	150	150
Syria	136	203	125	150	150
Turkey	235	445	350	250	250
UAE	80	85	85	85	90
Yemen	172	68	143	100	100
EU	725	762	895	650	700
O.W. Europe	60	30	34	37	37
Eastern Europe	127	185	135	150	145
United States	244	221	268	350	350
Subtotal	12,431	17,543	15,652	13,819	15,087
Other Countries	2,453	2,638	2,472	2,306	2,254
Unaccounted	1,581	816	1,383	1,755	1,114
WORLD TOTAL	16,465	20,997	19,507	17,880	18,455

WORLD RICE PRODUCTION, CONSUMPTION AND STOCKS
LOCAL MARKETING YEARS
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
PRODUCTION					
Australia	1,083	1,137	951	1,407	1,189
Bangladesh	27,064	25,252	26,533	27,753	27,753
Brazil	10,515	10,885	10,050	9,559	9,338
Burma	15,086	16,000	17,000	15,517	16,552
China	177,700	175,930	185,214	195,000	191,429
Egypt	4,198	4,565	4,798	4,919	4,919
India	120,462	121,752	119,442	120,822	121,512
Indonesia	46,638	49,743	51,100	50,615	51,231
Japan	9,793	14,977	13,435	12,930	12,363
Korea, South	6,404	6,882	6,386	7,189	6,581
Pakistan	5,993	5,171	5,905	6,391	6,451
Philippines	9,923	10,475	11,174	11,231	11,231
Taiwan	2,211	2,061	2,071	1,753	1,778
Thailand	19,200	21,400	21,800	20,758	21,212
Vietnam	24,317	24,615	26,792	27,273	27,273
EU	1,971	2,043	1,979	2,520	2,464
Others	37,248	38,655	39,227	39,544	39,654
Subtotal	519,806	531,543	543,857	555,181	552,930
United States	7,081	8,972	7,887	7,771	8,231
WORLD TOTAL	526,887	540,515	551,744	562,952	561,161
CONSUMPTION					
Bangladesh	18,300	17,780	18,337	18,600	18,700
Brazil	7,850	7,900	7,925	7,950	8,000
Burma	8,300	8,700	9,600	9,000	9,500
China	128,000	129,000	130,000	132,000	134,000
Egypt	2,378	2,500	2,750	2,800	2,900
India	76,045	77,307	78,000	79,500	80,000
Indonesia	32,277	34,011	33,691	34,300	35,200
Iran	2,550	2,650	2,700	2,800	2,900
Japan	9,400	9,350	9,300	9,250	9,200
Korea, North	1,153	2,083	1,650	1,600	1,500

Korea, South	5,300	5,300	5,200	5,100	5,100
Philippines	6,725	7,142	7,700	8,000	8,400
South Africa	396	400	500	600	550
Taiwan	1,475	1,450	1,450	1,450	1,450
Thailand	8,500	8,400	8,600	8,800	8,600
Vietnam	13,827	13,948	14,583	14,750	14,500
EU	1,786	1,819	1,910	1,960	1,905
Others	31,139	33,971	33,497	34,623	34,063
Subtotal	355,401	363,711	367,393	373,083	376,468
United States	3,323	3,344	3,418	3,390	3,581
WORLD TOTAL	358,724	367,055	370,811	376,473	380,049
ENDING STOCKS					
Brazil	1,095	1,277	986	536	386
Burma	687	622	617	592	592
China	25,173	21,256	21,456	25,806	26,306
India	14,230	14,083	12,203	11,743	11,243
Indonesia	525	1,858	2,615	1,965	1,065
Korea, South	1,393	1,006	615	912	772
Pakistan	1,324	711	513	523	548
Philippines	1,274	941	1,479	1,479	1,479
Thailand	410	203	711	811	961
Others	4,537	6,331	8,490	8,921	8,683
Subtotal	50,648	48,288	49,685	53,288	52,035
United States	865	1,051	811	885	772
WORLD TOTAL	51,513	49,339	50,496	54,173	52,807

NOTES: Production is on a rough basis; all other data are reported on a milled basis.

REGIONAL RICE IMPORTS, PRODUCTION, CONSUMPTION AND STOCKS
THOUSAND METRIC TONS

	1994	1995	1996	Estimated 1997	Projected 1998 Sept 12
IMPORTS					
North America 1/	676	680	798	845	850
Latin America 2/	2,250	2,394	2,295	2,426	2,792
EU	725	762	895	650	700
Other West. Eur. 3/	60	30	34	37	37
Former USSR	71	215	440	395	280
Eastern Europe 4/	127	185	135	150	145
Middle East 5/	2,370	3,425	3,320	3,230	3,425
North Africa 6/	176	80	115	125	120
Other Africa 7/	2,640	3,320	3,619	2,980	3,077
South Asia 8/	281	1,783	1,068	345	325
Other Asia 9/	5,316	7,117	5,210	4,747	5,390
Oceania 10/	192	190	195	195	200
	1993/94	1994/95	1995/96	1996/97	1997/98
PRODUCTION					
North America 1/	7,291	9,357	8,236	8,147	8,681
Latin America 2/	18,358	19,592	18,793	18,855	18,883
EU	1,971	2,043	1,979	2,520	2,464
Other West. Eur. 3/	0	0	0	0	0
Former USSR	1,831	1,527	1,198	1,083	1,102
Eastern Europe 4/	78	76	72	66	66
Middle East 5/	3,003	2,858	2,973	3,102	3,148
North Africa 6/	4,237	4,628	4,830	4,982	4,982
Other Africa 7/	10,849	10,721	10,926	10,575	10,307
South Asia 8/	159,652	158,613	158,045	161,113	161,907
Other Asia 9/	318,534	329,963	343,741	351,102	348,432
Oceania 10/	1,083	1,137	951	1,407	1,189
CONSUMPTION					
North America 1/	3,998	4,058	4,163	4,135	4,341
Latin America 2/	13,003	13,310	13,678	13,770	14,006
EU	1,786	1,819	1,910	1,960	1,905
Other West. Eur. 3/	60	35	36	37	37
Former USSR	1,167	1,117	1,093	1,045	1,000

Eastern Europe 4/	219	227	181	187	187
Middle East 5/	4,643	4,799	4,932	5,425	5,625
North Africa 6/	2,551	2,649	2,886	2,966	3,061
Other Africa 7/	10,019	9,553	10,350	9,788	9,701
South Asia 8/	101,035	101,934	103,299	105,038	105,645
Other Asia 9/	219,509	224,159	227,229	229,801	233,194
Oceania 10/	441	435	435	440	450

ENDING STOCKS

North America 1/	936	1,124	892	967	869
Latin America 2/	1,779	2,260	1,925	1,487	1,289
EU	201	280	378	319	304
Other West. Eur. 3/	17	12	11	8	8
Former USSR	0	0	90	93	43
Eastern Europe 4/	0	0	0	0	0
Middle East 5/	360	942	1,170	995	910
North Africa 6/	133	283	433	533	608
Other Africa 7/	713	631	850	736	691
South Asia 8/	16,257	15,257	13,993	13,693	13,068
Other Asia 9/	30,994	28,459	30,698	35,225	34,950
Oceania 10/	123	91	56	117	67

NOTES: Production is on a rough basis; all other data reported on a milled basis.

1/ Includes Canada, Mexico, and the United States.

2/ Includes Central America, Caribbean, and South America.

3/ Includes Azores, Cyprus, Iceland, Malta & Gozo, Norway, and Switzerland.

4/ Includes Albania, Bulgaria, Czechia, Hungary, Poland, Romania, Slovakia, and Former Yugoslavia.

5/ Includes Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, and Yemen.

6/ Includes Algeria, Egypt, Libya, Morocco, and Tunisia.

7/ Includes all other African countries except North Africa.

8/ Includes Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka.

9/ Includes all other Asian countries except South Asia.

10/ Includes Australia, Fiji, New Zealand, and Papua New Guinea

WORLD COARSE GRAIN TRADE
OCTOBER/SEPTEMBER YEAR
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
EXPORTS					
Argentina	4,855	6,313	7,821	10,900	8,800
Australia	4,954	1,489	4,279	4,360	1,960
Canada	5,638	4,361	4,244	5,525	5,350
China	12,041	1,601	247	3,550	1,525
South Africa	3,006	2,576	1,809	2,200	500
Russia	475	1,831	463	700	1,050
Turkey	793	817	161	505	605
EU	10,080	8,108	4,440	7,850	9,000
Others	3,778	4,342	5,755	3,453	4,550
Subtotal	45,620	31,438	29,219	39,043	33,340
United States	40,041	65,671	58,656	51,826	57,776
WORLD TOTAL	85,661	97,109	87,875	90,869	91,116
IMPORTS					
Australia	6	433	21	0	0
Algeria	1,973	1,321	587	950	1,300
Brazil	1,417	1,762	511	525	1,425
Belarus	450	386	270	150	250
Canada	587	1,114	751	910	810
Chile	478	557	433	835	740
China	1,318	6,366	2,962	2,125	2,550
Colombia	1,273	1,373	1,483	1,790	1,865
Costa Rica	382	410	340	350	370
Dominican Republic	658	685	649	700	700
Egypt	2,211	2,613	2,245	3,101	3,075
Iran	891	1,476	1,471	1,700	1,700
Israel	1,076	1,234	1,044	1,500	900
Japan	21,197	21,101	20,279	20,215	20,465
Jordan	799	1,047	912	1,050	1,250
Korea, North	258	115	76	450	350
Korea, South	5,778	8,966	10,139	8,700	9,300

Malaysia	1,977	2,415	2,343	2,400	2,700
Mexico	4,872	5,832	8,491	4,960	6,160
Morocco	488	885	536	625	650
Peru	764	1,100	885	960	910
Poland	352	933	544	775	600
Romania	863	80	11	85	60
Russia	3,160	809	860	600	450
Saudi Arabia	5,579	3,934	3,889	6,800	6,600
South Africa	54	457	410	325	225
Taiwan	5,885	6,622	6,033	5,740	4,700
Tunisia	665	611	576	601	601
Turkey	178	516	799	975	625
Uzbekistan	305	222	255	255	255
Venezuela	1,087	1,221	1,243	1,411	1,501
Yugoslavia	329	187	43	5	0
Zimbabwe	0	25	93	75	100
EU	2,729	4,653	4,257	2,575	2,875
O.W. Europe	596	543	549	630	630
United States	4,604	3,115	2,390	3,275	2,900
Subtotal	75,239	85,119	78,380	78,123	79,592
Other Countries	8,070	8,027	5,929	9,218	8,582
Unaccounted	2,352	3,963	3,566	3,528	2,942
WORLD TOTAL	85,661	97,109	87,875	90,869	91,116

WORLD COARSE GRAIN PRODUCTION, CONSUMPTION AND STOCKS
LOCAL MARKETING YEARS
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
PRODUCTION					
Australia	9,842	5,406	9,625	9,830	7,055
Argentina	13,289	13,855	14,085	17,992	15,910
Brazil	33,760	38,216	33,236	37,830	35,805
Canada	24,041	23,394	24,122	27,987	25,440
China	117,178	114,291	124,504	141,090	123,150
Egypt	5,885	6,580	6,278	6,370	6,385
Hungary	5,352	6,200	6,308	7,040	7,165
India	31,020	30,080	29,690	33,050	32,700
Indonesia	5,400	6,100	6,000	6,600	7,000
Mexico	22,709	20,605	23,848	26,500	26,000
Philippines	5,030	4,534	4,324	4,250	4,200
Romania	10,164	10,637	12,077	11,065	12,385
South Africa	13,990	5,400	10,986	9,513	9,148
Ukraine	20,289	18,526	15,607	9,540	14,200
Yugoslavia	6,755	8,253	9,153	9,003	9,303
EU	92,499	86,621	88,488	103,730	106,861
Others	193,675	187,648	170,886	173,911	175,819
Subtotal	610,878	586,346	589,217	635,301	618,526
United States	186,453	284,886	209,436	267,582	263,223
WORLD TOTAL	797,331	871,232	798,653	902,883	881,749
CONSUMPTION					
Argentina	8,519	7,671	7,045	6,552	7,420
Brazil	34,361	37,036	37,837	39,385	37,780
Canada	19,428	21,320	21,224	21,328	22,097
China	108,703	117,053	122,281	131,155	138,375
Egypt	7,951	8,893	8,735	9,521	9,465
India	32,014	30,215	29,681	32,810	32,780
Indonesia	6,151	7,047	7,244	7,400	8,000
Japan	21,898	21,585	20,616	20,538	20,767
Korea, South	6,282	9,148	10,728	9,207	9,730
Malaysia	2,030	2,315	2,536	2,400	2,750

Mexico	27,426	26,616	30,857	32,085	32,960
Romania	10,826	10,695	10,865	10,620	11,395
Russia	54,496	43,827	35,802	32,200	34,050
Saudi Arabia	7,231	7,011	6,177	6,904	7,604
South Africa	8,871	7,357	8,525	8,568	8,473
Yugoslavia	7,261	7,858	7,989	8,298	8,503
Others	287,279	285,295	291,065	292,821	295,143
Subtotal	650,727	650,942	659,207	671,792	687,292
United States	185,862	207,900	180,120	204,685	210,761
WORLD TOTAL	836,589	858,842	839,327	876,477	898,053
ENDING STOCKS					
Canada	5,021	3,296	2,901	4,945	3,848
China	26,759	28,762	33,700	42,210	28,010
Russia	5,985	6,236	1,531	1,031	3,281
EU	18,021	12,397	9,759	13,661	15,812
Others	40,666	40,196	33,220	31,513	28,439
Subtotal	96,452	90,887	81,111	93,360	79,390
United States	27,383	45,338	14,440	28,597	26,263
WORLD TOTAL	123,835	136,225	95,551	121,957	105,653

REGIONAL COARSE GRAIN IMPORTS, PRODUCTION, CONSUMPTION AND STOCKS
THOUSAND METRIC TONS

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98 Sept 12
IMPORTS					
North America 1/	10,063	10,061	11,632	9,145	9,870
Latin America 2/	7,010	8,343	6,904	8,410	9,196
EU	2,729	4,653	4,257	2,575	2,875
Other West. Eur. 3/	596	543	549	630	630
Former USSR	5,555	2,819	2,064	1,855	1,750
Eastern Europe 4/	2,210	1,265	772	1,709	840
Middle East 5/	9,307	9,306	9,057	13,186	12,100
North Africa 6/	6,159	5,731	4,206	5,777	6,126
Other Africa 7/	1,949	1,772	1,096	2,334	1,932
South Asia 8/	0	0	4	0	0
Other Asia 9/	37,609	47,790	43,464	41,485	42,715
Oceania 10/	39	488	91	55	55
PRODUCTION					
North America 1/	233,203	328,885	257,406	322,069	314,663
Latin America 2/	57,824	62,970	58,675	67,538	63,369
EU	92,499	86,621	88,488	103,730	106,861
Other West. Eur. 3/	3,847	3,859	3,730	4,183	4,322
Former USSR	95,587	81,832	59,411	55,157	65,217
Eastern Europe 4/	44,465	46,852	52,037	49,766	52,839
Middle East 5/	20,119	18,940	18,422	17,668	17,524
North Africa 6/	7,743	11,026	7,711	12,773	8,643
Other Africa 7/	63,137	58,120	67,455	65,001	64,520
South Asia 8/	34,960	34,467	33,822	37,227	36,939
Other Asia 9/	135,195	133,650	143,120	159,454	141,436
Oceania 10/	10,473	6,036	10,160	10,435	7,675
CONSUMPTION					
North America 1/	232,716	255,836	232,201	258,098	265,818
Latin America 2/	58,839	61,622	62,902	64,907	64,560
EU	87,670	88,530	91,572	96,395	97,909
Other West. Eur. 3/	2,483	2,519	2,607	2,749	2,554
Former USSR	97,040	83,057	66,005	57,986	60,984
Eastern Europe 4/	45,974	47,791	48,960	49,607	51,924
Middle East 5/	27,880	28,171	27,541	29,104	28,994

North Africa 6/	14,560	15,177	13,188	16,910	16,174
Other Africa 7/	61,063	61,510	64,981	65,847	65,702
South Asia 8/	35,954	34,602	33,817	36,987	37,019
Other Asia 9/	163,242	175,866	182,161	188,834	196,983
Oceania 10/	6,042	5,392	5,837	6,230	5,775

ENDING STOCKS

North America 1/	34,682	50,662	20,771	36,297	32,066
Latin America 2/	7,384	10,128	5,041	3,903	3,208
EU	18,021	12,397	9,759	13,661	15,812
Other West. Eur. 3/	1,027	988	803	685	665
Former USSR	13,634	12,444	6,373	4,099	7,957
Eastern Europe 4/	3,320	2,678	3,950	4,093	3,508
Middle East 5/	6,265	4,568	3,969	4,614	4,239
North Africa 6/	549	2,070	568	2,208	803
Other Africa 7/	4,520	3,145	3,345	2,955	2,655
South Asia 8/	620	420	420	620	520
Other Asia 9/	31,909	35,464	39,345	47,700	33,168
Oceania 10/	951	553	724	594	584

NOTES: Imports are reported on an international year basis. All other data are reported using marketing years.

1/ Includes Canada, Mexico, and the United States.

2/ Includes Central America, Carribean, and South America.

3/ Includes Azores, Cyprus, Iceland, Malta & Gozo, Norway, and Switzerland.

4/ Includes Albania, Bulgaria, Czechia, Hungary, Poland, Romania, Slovakia, and Former Yugoslavia.

5/ Includes Bahrian, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, and Yemen.

6/ Includes Algeria, Egypt, Libya, Morocco, and Tunisia.

7/ Includes all other African countries except North Africa.

8/ Includes Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka.

9/ Includes all other Asian countries except South Asia.

10/ Includes Australia, Fiji, New Zealand, and Papua New Guinea

TABLE 1.
MAJOR OILSEEDS: WORLD SUPPLY AND DISTRIBUTION
(MILLION METRIC TONS)

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98
PRODUCTION					
Soybean	117.75	137.65	124.46	131.65	147.40
Cottonseed	29.49	32.90	35.61	34.18	34.41
Peanut	23.98	26.46	26.28	26.65	24.58
Sunflowerseed	20.74	23.37	25.72	23.66	24.97
Rapeseed	26.71	30.28	34.61	30.62	33.20
Copra	4.97	5.48	5.03	5.40	5.46
Palm Kernel	4.25	4.62	4.97	5.34	5.50
TOTAL	227.88	260.76	256.67	257.49	275.51
EXPORTS					
Soybean	28.18	32.16	31.95	36.18	38.30
Cottonseed	0.91	1.03	0.94	0.80	0.95
Peanut	1.49	1.60	1.78	1.53	1.52
Sunflowerseed	2.57	3.19	3.77	2.74	3.67
Rapeseed	5.28	5.85	5.84	5.41	5.43
Copra	0.24	0.21	0.21	0.22	0.21
Palm Kernel	0.06	0.06	0.06	0.06	0.06
TOTAL	38.73	44.11	44.54	46.93	50.15
IMPORTS					
Soybean	28.37	32.81	32.08	36.13	38.29
Cottonseed	0.89	1.04	0.89	0.87	0.90
Peanut	1.44	1.53	1.54	1.47	1.57
Sunflowerseed	2.51	3.14	3.72	2.81	3.56
Rapeseed	5.20	5.91	5.64	5.47	5.50
Copra	0.26	0.24	0.22	0.24	0.24
Palm Kernel	0.04	0.05	0.05	0.06	0.05
TOTAL	38.69	44.72	44.13	47.06	50.11

CRUSH

Soybean	102.07	109.83	112.14	115.74	120.60
Cottonseed	22.98	25.26	28.32	26.46	26.44
Peanut	12.84	14.42	14.06	14.59	13.05
Sunflowerseed	17.95	20.55	22.45	21.80	22.55
Rapeseed	24.33	27.15	30.63	28.54	29.72
Copra	4.95	5.50	4.97	5.40	5.46
Palm Kernel	4.26	4.51	4.94	5.28	5.43
TOTAL	189.38	207.22	217.50	217.80	223.25

ENDING STOCKS

Soybean	17.34	23.70	16.72	12.39	18.68
Cottonseed	0.53	0.63	0.59	0.57	0.50
Peanut	0.61	0.75	0.55	0.49	0.51
Sunflowerseed	0.79	0.94	1.54	1.16	1.04
Rapeseed	0.80	0.97	1.61	0.95	1.06
Copra	0.11	0.08	0.11	0.10	0.09
Palm Kernel	0.12	0.18	0.16	0.17	0.19
TOTAL	20.30	27.24	21.28	15.82	22.06

NOTE: Totals may not add due to rounding.
DATE: September 1997

TABLE 6
SOYBEANS: WORLD SUPPLY AND DISTRIBUTION
(MILLION METRIC TONS)

	1993/94	1994/95	1995/96	Estimated 1996/97	Projected 1997/98
PRODUCTION					
United States	50.92	68.49	59.24	64.84	74.73
Brazil	24.70	25.90	23.70	26.50	28.00
Argentina	12.40	12.50	12.43	11.50	14.20
China	15.31	16.00	13.50	13.50	13.50
European Union	0.81	1.03	0.94	1.15	1.41
Paraguay	1.80	2.20	2.40	2.60	2.70
Other	11.81	11.53	12.24	11.56	12.85
TOTAL	117.75	137.65	124.46	131.65	147.40
EXPORTS					
United States	16.03	22.81	23.17	23.95	25.86
Brazil	5.43	3.57	3.45	8.30	7.35
Argentina	3.07	2.50	2.09	0.70	1.50
Paraguay	1.20	1.45	1.60	1.65	1.68
China	1.10	0.39	0.22	0.20	0.20
Other	1.35	1.43	1.42	1.38	1.72
TOTAL	28.18	32.16	31.95	36.18	38.30
IMPORTS					
European Union	13.11	16.05	14.24	15.12	15.08
Germany	2.79	2.96	3.21	3.43	3.41
Netherlands	4.14	4.62	4.20	4.30	4.45
Spain	1.72	2.85	2.34	2.53	2.60
Italy	1.17	1.30	0.99	1.05	0.68
Bel-lux	1.22	1.37	1.22	1.17	1.23
Portugal	0.53	0.95	0.68	0.62	0.77
Other W. Europe	0.29	0.40	0.38	0.38	0.38
Eastern Europe	0.28	0.24	0.20	0.20	0.31
FSU-12	0.10	0.10	0.07	0.05	0.06
Russia	0.07	0.04	0.04	0.01	0.02
Ukraine	0.03	0.02	0.02	0.02	0.02
China	0.13	0.16	0.80	2.20	3.00
Japan	4.86	4.84	4.78	4.88	4.75
Korea, Rep of	1.16	1.38	1.42	1.60	1.55
Taiwan	2.50	2.60	2.65	2.37	2.50

Indonesia	0.71	0.62	0.72	0.80	0.92
Mexico	2.20	1.87	2.40	3.06	3.10
Brazil	0.11	1.20	0.80	0.80	2.00
Other	2.94	3.36	3.63	4.73	4.45
Total	28.37	32.81	32.08	36.13	38.29
Crush					
United States	34.72	38.24	37.27	39.05	40.69
Latin America	31.90	33.39	36.57	36.17	37.72
Brazil	18.44	20.19	21.57	19.80	20.20
Argentina	8.77	8.59	10.29	10.80	11.65
Mexico	2.64	2.33	2.44	3.08	3.20
European Union	12.24	14.43	13.65	14.70	14.74
Other W Europe	0.28	0.39	0.38	0.38	0.38
FSU-12	0.53	0.43	0.34	0.21	0.18
Eastern Europe	0.42	0.41	0.43	0.47	0.55
Asia	19.56	19.68	20.50	21.45	22.76
Japan	3.70	3.76	3.70	3.81	3.70
China	7.61	8.09	7.45	8.80	9.60
Taiwan	2.24	2.34	2.36	2.07	2.19
Other	2.42	2.87	3.01	3.32	3.58
TOTAL	102.07	109.83	112.14	115.74	120.60
ENDING STOCKS					
United States	5.69	9.11	4.99	3.13	7.76
Brazil	5.46	7.20	5.07	2.90	3.75
Argentina	3.77	4.67	4.22	4.02	4.72
Other	2.43	2.72	2.44	2.34	2.45
TOTAL	17.34	23.70	16.72	12.39	18.68

NOTE: Totals may not add due to rounding.

DATE: September 1997

WORLD COTTON SUPPLY, USE AND TRADE¹
 1993/94 - 1997/98 (Season Beginning August 1)
 In 1,000 480 Lb. Bales

	1993/94	1994/95	1995/96	Estimate 1996/97	Forecast 1997/98
Production					
World Total	76,732	85,609	92,381	88,719	88,824
United States	16,134	19,662	17,900	18,942	18,418
China	17,200	19,900	21,900	19,300	17,500
India	9,487	10,814	12,649	13,500	12,800
Pakistan	6,282	6,250	8,200	7,300	8,000
Uzbekistan	6,067	5,778	5,740	4,750	5,800
Turkey	2,766	2,886	3,911	3,600	3,500
Consumption					
World Total	85,455	85,631	86,876	87,819	89,585
China	21,300	21,000	20,600	21,000	21,200
United States	10,418	11,198	10,647	11,117	11,300
India	9,916	10,544	11,946	12,500	12,900
Pakistan	6,725	6,750	7,200	7,000	7,200
EU 4/	5,617	5,535	5,149	5,175	5,265
S.E. Asia 2/	4,506	4,505	4,456	4,295	4,425
Turkey	3,215	3,904	4,363	4,550	4,600
Imports					
World Total	27,794	30,606	27,627	28,630	27,977
EU 4/	5,194	4,930	4,748	4,651	4,645
S.E. Asia 2/	4,527	4,370	4,635	4,355	4,415
Brazil	1,869	1,612	1,768	2,300	2,300
Japan	1,993	1,750	1,516	1,355	1,300
Korea	1,689	1,747	1,661	1,400	1,350
Russia	3,000	2,159	1,100	900	1,050
China	808	4,060	3,045	3,500	2,700
Exports					
World Total	26,707	28,365	27,524	26,448	27,922
United States	6,862	9,402	7,675	6,950	7,200
Uzbekistan	5,800	5,006	4,524	4,550	4,900
AfricaFranc 3/	2,026	2,682	2,798	3,377	3,452
Australia	1,682	1,345	1,466	2,350	2,500
India	305	84	617	1,100	300
Pakistan	318	148	1,433	120	900
Argentina	317	905	1,222	1,300	1,300

Ending Stocks					
World Total	26,251	28,301	33,568	36,280	35,182
China	6,101	8,878	13,202	14,987	13,937
United States	3,530	2,650	2,609	3,820	3,700
Pakistan	1,694	1,692	1,358	1,773	1,748
India	2,085	2,731	2,855	2,975	2,775
EU /4	1,651	1,651	1,861	1,677	1,713

1/ World import and export totals have been expanded to include trade among the 12 republics of the former Soviet Union and the 3 Baltic States from 1970/71 onward.

2/ Includes Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

3/ Includes Benin, Burkina, Cameroon, CAR, Chad, Cote d'Ivoire, Mali, Niger, Senegal, and Togo.

4/ European Union (EU) now includes 15 countries with the addition of Austria, Finland, and Sweden.

Totals may not add due to rounding.

Source: USDA/FAS

WOOD PRODUCTS:
SAWLOGS/VENEER LOGS PRODUCTION AND TRADE 1992-1996
Calendar Year
1,000 cubic meters

	1992	1993	1994	1995	1996
SAWLOG/VENEER LOG PRODUCTION					
Softwood	603,306	605,091	601,015	607,417	NA
Hardwood	300,656	294,338	294,052	305,002	NA
WORLD TOTAL	903,963	895,429	895,067	912,419	NA

SAWLOG/VENEER LOG EXPORTS

SOFTWOOD

United States	13,838	11,956	10,961	11,561	10,767
Canada	1,142	1,126	952	676	600
Russia	NA	11,600	11,950	16,001	13,000
New Zealand	4,117	4,289	4,837	5,257	5,300
Sweden	338	410	401	500	1,431
Other	NA	NA	NA	NA	NA

HARDWOOD

Malaysia	17,797	9,382	8,561	7,864	6,987
Papua New Guinea	1,929	2,867	3,066	2,600	2,600
France	1,537	1,350	1,485	2,029	2,000
United States	1,015	1,074	1,195	1,213	1,147
Ivory Coast	248	320	376	311	180
Other	NA	NA	NA	NA	NA

SAWLOG/VENEER LOG IMPORTS

SOFTWOOD

Japan	14,967	14,730	14,434	14,651	17,993
China (Mainland)	2,272	1,512	1,191	590	639
Korea, South	4,744	5,414	5,701	6,450	6,762
Canada	3,543	3,477	3,816	5,024	4,000
United States	167	388	427	247	379
Other	NA	NA	NA	NA	NA

HARDWOOD

Japan	10,902	8,703	7,944	7,038	6,685
Korea, South	3,591	2,233	2,011	1,778	1,372
Italy	2,603	2,442	3,022	3,194	2,720
France	1,042	1,040	1,010	1,593	1,600
Thailand	2,006	1,607	1,529	1,186	764
Other	NA	NA	NA	NA	NA

SOURCE: USDA/FAS Forest Products Annual Reports; FAO Yearbook/Forest Products/1995;
ITTO Annual Review and Assessment of the World Tropical Timber Situation in 1996
NA-Not Available

6. Export Enforcement

In fiscal year 1997, BXA's Office of Export Enforcement (OEE) and the Office of Enforcement Support (OES) continued their programs to prevent and investigate dual-use export control violations and thereby protect important national security and foreign policy interests safeguarded by the Export Administration Act (EAA) and Export Administration Regulations (EAR). Additionally, Export Enforcement implemented the antiboycott policy and program articulated in Section 8 of the EAA through the Office of Antiboycott Compliance. BXA's Export Enforcement arm has 158 trained professionals assigned solely to enforcing the EAA and the EAR, of whom 101 are special agents. Export Enforcement protects U.S. national security, foreign policy, and economic interests by educating exporters, interdicting illegal exports, and prosecuting violators. Working closely with BXA's licensing officers and policy staff, BXA's export law enforcement officers apply their special skills and understanding of the export control system to minimize exports of potentially damaging items to unreliable users.

When there is reason to believe that the EAA and the EAR have been violated, Export Enforcement's special agents and compliance officers investigate and recommend the initiation of appropriate charges. Fiscal year 1997 ended with the imposition of \$1,642,500 in civil penalties and \$1,010,000 in criminal fines for export control violations of the EAA and EAR. A total of \$226,000 in civil penalties for antiboycott violations of the EAA and EAR were imposed.

Export Control Enforcement

The Office of Export Enforcement (OEE) is headquartered in Washington, D.C. Its Investigations Division has eight field offices, located in Los Angeles and San Jose, California; Chicago; Dallas; Miami; Boston; New York; and Herndon, Virginia. Special Agents are empowered to make arrests, carry firearms, execute search warrants, and seize goods about to be illegally exported.

OEE's Intelligence Division, also located at headquarters, is staffed by special agents and intelligence analysts. This staff serves as a conduit between the intelligence community and OEE's field offices, and produces analytical reports on export control problem areas.

OES assists OEE's field offices and BXA's licensing offices by receiving and disseminating export control-related information. OES also makes recommendations to BXA's licensing officers concerning pending license applications based on intelligence and investigative information.

During FY 1997, OEE conducted numerous investigations, some of which led to both criminal and administrative sanctions. It also issued 141 warning letters in cases of minor violations,

informing these entities that OEE had reason to believe they had violated the EAR and that increased compliance efforts were warranted.

In FY 1997, Commerce special agents worked with the Department of Justice to secure indictments and informations against 20 individuals and 8 companies. (See Table II.5-1 for a list of FY 1997 criminal indictments and informations for EAA violations.) Criminal fines imposed in cases investigated by Commerce or joint Commerce-Customs investigations totalled \$1,010,000.

In addition, administrative sanctions -- either a civil monetary penalty, a denial of export privileges, or both -- were levied on individuals and/or businesses. Civil monetary penalties imposed by Commerce in FY 1997 totaled \$1,642,500. Under the EAA, the maximum civil penalties were \$10,000 per violation for items controlled for foreign policy reasons and \$100,000 per violation for items controlled for national security reasons. During periods when the EAA has lapsed and the EAR are continued in effect under International Emergency Economic Powers Act (IEEPA), the maximum civil penalty, regardless of the reason for the control, is \$10,000 per violation.

Administrative sanctions may also include a denial of export privileges. An order denying export privileges prohibits the denied person from participating in any export transaction involving any U.S.-origin goods or technology. It also prohibits other firms or individuals from engaging in transactions with, or on behalf of, the denied person when U.S.-origin goods or technology are involved. Parties who violate this prohibition may also be fined, denied export privileges themselves, or subjected to other sanctions authorized by the EAA or EAR. They also may be subject to criminal penalties. In FY 1997, 20 parties were denied export privileges for EAA and EAR violations. (Administrative cases completed in FY 1997 are summarized in Table II.5-2.)

OEE and OES routinely review all incoming license applications. During FY 1997, Commerce enforcement personnel closely examined export license applications to assess diversion risks, identify potential violations, and determine the reliability of proposed consignees as recipients of controlled U.S.-origin commodities or technical data. Of these, Commerce enforcement personnel recommended that 192 license applications either be rejected or returned without action because of diversion risks or other enforcement concerns.

In addition, as part of BXA's ongoing responsibility for preventing illegal exports before they occur, its enforcement staff initiated 437 pre-license checks (PLCs) and assessed the results of 379 PLCs completed in FY 1997. Of the applications subject to PLCs, EE recommended that 54 be rejected or returned without action. Together, these applications represented nearly \$26 million worth of trade in situations where violations of the EAA and EAR may have occurred had the transactions been completed. During the fiscal year, EE also initiated 373 post-shipment verifications (PSVs). OEE special agents conducted 185 PSVs in 1997 as part of the Safeguards

Verification program, while the remainder were conducted overseas by Foreign Commercial Service or other personnel assigned by the American Embassy. Of a total of 285 PSVs completed during FY 1997, 10 produced information that required further enforcement action.

Export Enforcement Initiatives

Flagship for the 21st Century

This year, Under Secretary for Export Administration William Reinsch designated Export Enforcement as BXA's "Flagship for the 21st Century." In recognition of the lead role that EE will play in BXA's future, Under Secretary Reinsch asked that EE undergo a process of strategic and performance planning to meet Congressionally-mandated standards and to provide EE a blueprint for its activities over the next five years. To meet this challenge, all employees of EE and EE's external stakeholders took part in a six month process of establishing goals and developing strategies and performance measures to meet these goals. As a result, EE has a performance and results-driven management plan which will allow it to continue its traditional mission as well as take on new enforcement challenges and missions for the 21st Century.

Counterterrorism Activities

For FY 1997, Congress authorized \$3,900,000 to BXA for counterterrorism. To meet its counterterrorism responsibilities, Export Enforcement has recruited and hired new agents and conducted four training sessions. Training sessions included presentations from the intelligence community, the FBI, the Justice Department, the State Department, and the Immigration and Naturalization Service to discuss the terrorist threat, how to identify foreign terrorist organizations and their activities, and the role of export controls in denying terrorists access to U.S.-origin controlled items. Export Enforcement has also developed and is seeking interagency agreement for a regulation that would impose a license requirement for items exported or reexported to Specially Designated Terrorists.

Encryption Controls

Another new area of responsibility is the President's initiative on encryption controls. On December 30, 1996, Commerce published the final regulation on encryption controls in the Federal Register, implementing the President's policy to transfer certain encryption controls from the State Department to Commerce. OEE is currently pursuing a number of investigations concerning alleged violations of the encryption regulations.

Chemical Weapons Convention

The Chemical Weapons Convention treaty entered into force on April 29, 1997. The CWC bans the development, production, acquisition, stockpiling, retention, use, and direct or indirect transfer of chemical weapons. Certain commercial chemical production and processing facilities will be required to submit data declarations and to permit international inspections. Export Enforcement is preparing to meet its anticipated responsibilities of obtaining warrants for inspections and enforcing export controls required by the Convention through training of special agents on the requirements of the treaty and by participating in mock inspection exercises.

High Performance Computer Survey

In March 1997, Export Enforcement initiated a survey of all high performance computers over 2,000 MTOPs exported from the United States since January 25, 1996. EE initiated this survey in response to questions raised regarding exports of high performance computers to Russian nuclear-design facilities. Based on survey results, EE initiated post-shipment verifications on certain exports of high performance computers to ensure that they are not being used for military or proliferation-related purposes.

The Fastener Quality Act

Another area of responsibility for Export Enforcement is the Fastener Quality Act. This Act, originally passed in 1990 and amended in 1996, requires that certain threaded fasteners meet specified technical standards and that they be tested by an accredited laboratory. OEE's experience in investigating complex cases and its industry outreach programs provide a valuable foundation to build the Fastener Quality Act enforcement program. As with export controls, prevention will be emphasized as well as investigations of possible violations.

A rule implementing the Act was published in the Federal Register on September 26, 1996. It was originally to apply to fasteners made on or after May 27, 1997. However, a shortage of accredited laboratories for testing fasteners forced postponement until May 26, 1998. During 1997, Export Enforcement worked with the National Institute of Standards and Technology to draft a proposed rule intended to recognize the role of Statistical Process Control and Quality Assurance Systems in some fastener manufacturing operations. A notice seeking comment on the proposed rule was published on September 8, 1997.

Project Outreach

As part of its public education efforts, OEE special agents participated in numerous seminars and trade shows across the country. They also developed contacts with private sector firms

through Project Outreach, a program which provides firms with specific export guidance, while giving OEE a better understanding of the private sector's needs as well as valuable information with which to initiate investigations. OEE conducted 546 Project Outreach visits during the fiscal year.

Safeguards Verification Program

OEE's Safeguards Verification Program was developed in 1990 to ensure the legitimate use of strategic U.S. goods and technology by the newly emerging democracies of Central Europe, the traditional diversion points to the former Soviet Union. Since then, OEE's Safeguards Verification Program has expanded worldwide to conduct on-site pre-license and post-shipment checks using Export Enforcement personnel instead of officers from Commerce's Foreign and Commercial Service. The Safeguards Verification Teams travel overseas to determine the disposition of licensed or otherwise controlled U.S.-origin commodities, particularly those of proliferation concern. These Safeguards Verification Teams also assess the suitability of foreign firms to receive U.S.-origin licensed goods and technology.

In addition to conducting pre-license and post-shipment checks, Safeguards Verification Teams also conduct educational visits to foreign firms, often in cooperation with host government officials, or provide guidance and support on preventive enforcement matters to the American Embassy personnel and/or host government export control officials, stressing the importance of detecting and preventing the diversion of U.S.-origin products to proliferation projects.

International Law Enforcement Cooperation

In FY 1997, Export Enforcement (EE) was faced with a number of difficult and demanding investigations with broad international consequences -- including ones involving high performance computers allegedly illegally exported to Russia and China. Working with counterparts in Hong Kong and Beijing, one of these computers was ultimately returned to the United States. Other aspects of these investigations are ongoing.

This year marked EE's initial involvement in the DOD-FBI Counter proliferation Program for NIS countries. EE special agents were part of the US government enforcement group which provided extensive training to both Kazak and Uzbek enforcement authorities at the Budapest-based International Law Enforcement Academy.

Export Enforcement's work with Hong Kong export control officials resulted in an agreement between Secretary Daley and his counterpart, Hong Kong Secretary Denise Yue, to establish regular meetings on export controls. This agreement reaffirms the U.S. policy of treating Hong Kong differently from the rest of China on export controls following the return of Hong Kong to

China in 1997. Hong Kong authorities committed to continue to adhere to various international export control regimes.

Export Enforcement's work with Chinese officials in Beijing, through the Joint Commission on Commerce and Trade, resulted in a joint statement by the Chinese and U.S. governments agreeing to bilateral export control seminars which will begin in 1998.

Export Enforcement hosted a number of enforcement seminars with other countries, including the first multilateral enforcement workshops with the Baltic nations in June and with the South Central European nations in July.

This year, the premier international export control workshop -- Commerce's "Symposium for Export Control Officials" -- had an enforcement theme. During this workshop, EE was able to provide senior export control officials from 20 countries "real world" examples of effective enforcement techniques.

EE also took part in interagency teams that visited Singapore, Thailand and Tokyo to discuss export controls and enforcement issues. In Tokyo, EE represented the Department at the January 1997 Asian Export Control Seminar involving 16 Pacific Rim countries. EE also chaired the seminar's enforcement panel.

Throughout the year, EE continued its enforcement assistance to the four nuclear Newly Independent States, as well as Baltic, Central European, Central Asian, and Transcaucasian states. The Assistant Secretary for Export Enforcement and other senior EE officials met with many Central European and NIS export control delegations in Washington, D.C. to provide perspectives on EE's investigative and preventive enforcement techniques.

As a result of EE's efforts, the governments of these countries have either implemented or initiated export control programs that incorporate effective enforcement concepts including development of watch lists, end-use checks, a professionally-trained investigative force, interagency and international law enforcement cooperation, and use of administrative and criminal sanctions and penalties.

Shipper's Export Declaration Review Program

Export Enforcement's Shippers Export Declaration (SED) Review Program continued to expand during FY 1997. Under the program, on-site reviews of selected SEDs are conducted by OEE special agents at U.S. ports prior to export. OEE special agents review numerous transactions before selecting a smaller target group for closer scrutiny.

In addition to these on-site checks, a systematic post-shipment review of SEDs at EE Headquarters is conducted by analysts in the Office of Enforcement Support (OES). OES receives from the Census Bureau microfilm copies of the actual SEDs and computerized information and uses the information to produce lists of SEDs targeted for closer review.

OES analyzes SEDs that may warrant further review, focusing particularly on validated license shipments, certain license exception shipments, shipments bound for or transiting through destinations of concern, and shipments of strategic commodities of proliferation concern. SED searches may also be customized depending on specific information known.

Visa Application Review Program

OEE initiated the Visa Application Review Program in 1990 to prevent unauthorized access to controlled technology or technical data by foreign nationals visiting the United States. Section 734.2(b) of the EAR defines the export of technical data to include the release of technology or software to a foreign national (other than persons lawfully admitted for permanent residence in the United States). A release of technology to a foreign national is deemed to be an export to the home country of that person. Under the Visa Application Review Program, during FY 1997, OEE reviewed information on 45,000 visa applications to detect and prevent possible EAR violations. Of these, 247 applications were referred to OEE's field offices for further investigation. In some instances, based upon OEE's recommendations, the State Department declined to issue visas due to the risk of diversion.

Significant Commerce Export Enforcement Cases

Yuchai America Corporation Penalized \$200,000 for Export Control Violations Involving the PRC

On October 2, 1996, the Commerce Department imposed a \$200,000 civil penalty on Yuchai America Corporation of Cleveland, Ohio for alleged violations of the Export Administration Act and Regulations. The Department alleged that in May, 1994, Yuchai America attempted to export from the United States to the People's Republic of China (PRC) two 5-axis CNC machining centers without the required validated U.S. export license. In addition, the Department alleged that the company made false or misleading statements of material fact, directly or indirectly, to a U.S. government agency in connection with the preparation, submission, issuance, use or maintenance of an export control document. These machines exceeded the technology limits permitted to be exported to the PRC without a validated license. Yuchai America agreed to pay the \$200,000 civil penalty to settle the allegations.

May National Associates, Inc. Penalized \$25,000 for Illegal Chemicals Exports

On December 16, 1996, the Commerce Department imposed a \$25,000 civil penalty on May National Associates, Inc. (May National) of Clifton, New Jersey for alleged violations of the Export Administration Act and Regulations. The Department alleged that, in December 1992, May National exported U.S.-origin hydroxy-terminated polybutadiene to France without obtaining the required validated export license and that the company made false and misleading statements of material fact on the Shipper's Export Declaration filed with the U.S. Government in connection with the export. The chemical is controlled by the Department to prevent the proliferation of ballistic missile systems and is commonly used in rocket engines, among other uses. The Department also alleged that, in September, 1993, May National attempted to export U.S.-origin hydroxy-terminated polybutadiene through Belgium to France without the required validated export license that the company knew or had reason to know was required. To settle the allegations, May National agreed to pay the \$25,000 civil penalty imposed by the Commerce Department.

New World Transtechnology Convicted for Illegal Export of Computers to a Nuclear Equipment Factory in China

On December 20, 1996, New World Transtechnology of Galveston, Texas, pleaded guilty to charges that it violated IEEPA and the false statements statute by illegally exporting computers to a nuclear equipment factory in the People's Republic of China (PRC) in August 1992. The company was also charged with attempting to illegally export another computer to the PRC through Hong Kong in October 1992. New World Transtechnology was sentenced to pay a \$10,000 criminal fine and a \$600 special assessment fee.

RMI Titanium Penalized \$160,000 for Illegal Exports to France and Israel

On January 8, 1997, the Commerce Department imposed a \$160,000 civil penalty on RMI Titanium of Niles, Ohio, to settle allegations that the company made six shipments of titanium alloy products to France and Israel without obtaining the required U.S. export licenses. The Department also alleged that RMI made false and misleading statements of material fact on export control documents. The export of these titanium alloy products from the United States is controlled for nuclear nonproliferation purposes. To settle the allegations, RMI agreed to pay the \$160,000 civil penalty.

Allvac Penalized \$122,500 for Illegal Exports

On January 22, 1997, the Commerce Department imposed a \$122,500 civil penalty on Allvac, a Monroe, North Carolina, manufacturer, for 49 alleged violations of the Export Administration

Regulations. The Department alleged that, between September 1991 and June 1993, Allvac made 48 shipments of titanium alloy products from the United States to Australia, China, France, Ireland, Israel, Italy, Japan, Germany, Switzerland, Taiwan, and United Kingdom and one shipment of a maraging steel product from the United States to Germany, all without the required U.S. export licenses. The export of these titanium products and the maraging steel product from the United States are controlled for nuclear nonproliferation reasons.

To settle the allegations, Allvac agreed to pay \$75,000 of the \$122,500 civil penalty the Department imposed. Payment of the remaining \$47,500 was suspended for a period of one year and will be waived, if, during the period of suspension, Allvac does not violate the Export Administration Act or Regulations, or any conditions of the Department's Order.

Martin Kaufman, Individually and as an Agent for Tourism Consultants International,
Penalized \$10,000 for Illegal Computer Exports to Cuba

On April 10, 1997, the Commerce Department imposed a \$10,000 civil penalty on Martin Kaufman of Orleans, Ontario, Canada, individually and acting as agent for Tourism Consultants International of the British West Indies for alleged violations of the Export Administration Regulations. The Department alleged that, between March 26, 1991, and September 12, 1992, Kaufman, individually and doing business as Tourism Consultants International, caused, aided, and abetted the export of U.S.-origin computer equipment and related peripherals from the United States through Jamaica to Cuba without the required export license. To settle the allegations, Kaufman, individually and as agent for Tourism Consultants International, agreed to pay the \$10,000 civil penalty.

Compaq Computer Corporation Penalized \$55,000 for Export Violation

On April 18, 1997, the Commerce Department imposed a \$55,000 civil penalty on computer manufacturer Compaq Computer Corporation (Compaq) of Houston, Texas, for alleged violations of the Export Administration Regulations. The Department alleged that, on three separate occasions between September 17, 1992, and June 11, 1993, Compaq exported computer equipment from the United States to Venezuela, Chile, and the People's Republic of China without obtaining the required export licenses. To settle the allegations, Compaq agreed to pay the \$55,000 civil penalty.

Advanced Vacuum Systems Penalized \$5,000 for Exports to the People's Republic of China

On May 1, 1997, the Commerce Department imposed a \$5,000 civil penalty on Advanced Vacuum Systems, Inc. (AVS), of Ayer, Massachusetts, for allegedly exporting commodities to the People's Republic of China (PRC) without obtaining the required export license. The

Department alleged that AVS exported a low pressure sintering furnace and spare parts valued at over \$600,000 to the PRC, without the required license. At the time of the export, the furnace was controlled worldwide for reasons of nuclear nonproliferation. Because the company disclosed the alleged violation to the Department and took effective action to resolve the problem, \$2,000 of the \$5,000 penalty was suspended for three years. The suspended portion of the penalty will be waived after three years as long as there are no further violations.

President Titanium and Four Freight Forwarders Penalized for Roles in Illegal Exports of Titanium Bars

On May 29, 1997, the Commerce Department imposed a \$125,000 civil penalty on President Titanium of Hanson, Massachusetts, for allegedly exporting, on 25 separate occasions, titanium bars to England, France, Germany, South Africa, Sweden, Switzerland and the Netherlands without the required validated licenses. To settle the allegations, President Titanium agreed to pay \$75,000 in four quarterly installments. Payment of the remaining \$50,000 was suspended for one year and will thereafter be waived provided that, during the suspension period, President Titanium commits no violations of the Export Administration Act or any regulation, order or license issued thereunder.

In connection with this case, four related cases, detailed below, involving freight forwarders hired by President Titanium, resulted in civil penalties totaling \$65,000 for allegedly making false statements on export control documents.

On May 1, 1997, the Commerce Department imposed a \$15,000 civil penalty on Hellmann International Forwarders, Inc. (Hellmann) of Miami, Florida, for allegedly preparing Shipper's Export Declarations that contained false information. The Department alleged that on three occasions, the Chelsea, Massachusetts, branch of Hellmann prepared and used export control documents for the purpose of exporting titanium bars from the United States to Sweden. These documents represented that the shipments qualified for export under General License G-DEST, when, in fact, a validated license was required.

On April 2, 1997, the Commerce Department imposed a \$30,000 civil penalty on Thyssen Haniel Logistics, Inc., of Atlanta, Georgia (Thyssen), formerly known as Amerford International Corporation, for allegedly preparing Shipper's Export Declarations that contained false information. The Department alleged that, on six occasions, the East Boston, Massachusetts, branch of Thyssen prepared and used export control documents for the purpose of exporting titanium bars from the United States to Germany, representing that the exports qualified for export under General License G-DEST when, in fact, a validated license was required.

On March 26, 1997, the Commerce Department imposed a \$15,000 civil penalty on JML Freight Forwarding, Inc. (JML) of Kearny, New Jersey, formerly known as Jacky Maeder, Ltd., for allegedly preparing Shipper's Export Declarations that contained false information. The Department alleged that, on three occasions, the East Boston, Massachusetts, branch of JML prepared and used export control documents for the purpose of effecting exports of titanium bars from the United States to Switzerland, representing that the exports qualified for export under General License G-DEST when, in fact, a validated license was required.

On February 26, 1997, the Commerce Department imposed a \$5,000 civil penalty on Morrison Express Corporation (Morrison), of Chelsea, Massachusetts, for allegedly representing on a shipping document that titanium bars could be exported under General License G-DEST when, in fact, a validated license was required.

All four freight forwarders agreed to pay the civil penalties imposed by the Department to settle the allegations.

Lasertechnics, Inc. Penalized \$180,000 for Illegal Exports

On May 30, 1997, the Commerce Department imposed a \$180,000 civil penalty on Lasertechnics, Inc. of Albuquerque, New Mexico, for allegedly exporting, on 36 separate occasions from November 1991 through March 1994, U.S.-origin thyratrons from the United States to Hong Kong, Ireland, Malaysia and Singapore without obtaining the required export licenses. Thyratrons send a high-voltage current through a device and can be used as a nuclear triggering device, but can also be used for medical and scientific purposes. Hydrogen thyratrons were controlled at the time of the violations for nuclear nonproliferation reasons and are currently controlled for anti-terrorism reasons.

Payment of \$80,000 of the civil penalty was suspended for three years, and will thereafter be waived provided that Lasertechnics, Inc. commits no violations of the Export Administration Act or Export Administration Regulations during the suspension period.

Karl Cording and Ian Ace Denied Export Privileges for Illegal Exports of Shotguns to Namibia and South Africa

On June 6, 1997, and August 13, 1997, the Commerce Department imposed 20-year denials of all U.S. export privileges on Karl Cording, co-owner and managing director of A. Rosenthal (PTY) Ltd., Windhoek, Namibia, and Ian Ace, manager of A. Rosenthal (PTY) Ltd., Cape Town, South Africa, respectively, for illegal exports of U.S.-origin shotguns to Namibia and South Africa.

The Department's Under Secretary for Export Administration affirmed orders of an Administrative Law Judge finding that between 1990 and 1992, Cording and Ace conspired with James L. Stephens, president and co-owner of Weisser's Sporting Goods (Weisser's), National City, California, to export, and on two occasions, actually exported, U.S.-origin shotguns with barrel lengths of 18 inches and over to Namibia and South Africa, without applying for and obtaining from the Department the required licenses. In addition, the Undersecretary found that, in furtherance of the conspiracy, and in connection with each of these exports, Cording and Ace made false and misleading representations of material fact to a U.S. agency in connection with the preparation, submission, or use of export control documents.

Cording's and Ace's co-conspirator, James Stephens, is also subject to a denial order. On November 28, 1995, The Commerce Department denied all of Stephens's U.S. export privileges for 15 years and fined him \$60,000. In a separate criminal proceeding, Weisser's plead guilty to violating U.S. export control laws in connection with the illegal export of shotguns to South Africa. Weisser's was sentenced to three years probation and received a \$30,000 criminal fine.

Digital Creations Sentenced to an \$800,000 Criminal Fine for Illegal Computer Exports to China

On June 12, 1997, Digital Creations Corporation, a Closter, New Jersey computer company, was sentenced to pay an \$800,000 criminal fine for violating the Export Administration Act and Regulations. In December 1994, Digital Creations Corporation pled guilty in the U.S. District Court in New Jersey to charges that it had violated the Export Administration Act by illegally exporting a Digital Equipment Corporation computer to the People's Republic of China without first having obtained the required export license from the Department of Commerce.

Delft Instruments, N.V. Penalized \$50,000 for Making False Statements in Connection with an Enforcement Action

On June 16, 1997, the Commerce Department imposed a \$50,000 civil penalty on Delft Instruments, N.V., a firm located in the Netherlands, to settle allegations that Delft made false statements to the Department in connection with an enforcement action. The Department alleged that, on five separate occasions between August 2, 1991, and February 10, 1992, Delft made false and misleading statements of material fact to the Department when Delft opposed the renewal of a 1991 temporary denial order. The alleged false statements related to representations Delft made to the Department concerning whether members of its Executive Board knew that Delft had exported thermal imaging prototypes to Iraq and Jordan without the required U.S. export licenses. In 1992, Delft pled guilty to charges that it had violated the Arms Export Control Act by exporting U.S.-origin thermal imaging prototypes to Iraq without the required export license.

Lansing Technologies Corporation Pleads Guilty to Illegal Export to the People's Republic of China

On June 17, 1997, Lansing Technologies Corporation, represented by its president, Red-Chin Yang, pled guilty in the U.S. District Court for the Eastern District of New York to charges that Lansing Technologies Corporation, located in Flushing, New York, violated the Export Administration Regulations during 1992 by exporting a Digital Equipment Corporation computer vector processor and a data acquisition control system to the People's Republic of China without obtaining the required export licenses from the Commerce Department.

Dell Computer Corporation Penalized \$50,000 for Illegal Exports to Iran

On June 17, 1997, the Commerce Department imposed a \$50,000 civil penalty on Dell Computer Corporation of Austin, Texas, for allegedly violating the Export Administration Regulations by making three shipments of U.S.-origin computer equipment from the United States to Iran without the required U.S. export licenses between March 1992 and June 1992. In connection with the exports, the Department also alleged that the company made false and misleading statements of material fact on export control documents. Dell agreed to pay the \$50,000 civil penalty to settle the allegations.

Lockheed Martin Corporation Penalized \$45,000 for Illegal Exports to South Korea

On September 30, 1997, the Commerce Department imposed a \$45,000 civil penalty on Lockheed Martin Corporation (formerly Martin Marietta Corporation) for alleged violations of the Export Administration Regulations. The Department alleged that on nine occasions between March 11, 1992 and June 3, 1994, Martin Marietta Corporation exported graphite/epoxy prepreg material from the United States to South Korea without obtaining the required validated export licenses from the Commerce Department. Prepreg material can be used, among other things, in missile delivery/reentry systems and is controlled for reasons of national security and nuclear nonproliferation. To settle the allegations, Lockheed agreed to pay the \$45,000 civil penalty.

Significant Joint Commerce-Customs Cases

Doornbos GmbH and Helmut Korelski Denied Export Privileges for Illegal Shipments to Libya

On December 18, 1996, the Commerce Department imposed four-year denials of U.S. export privileges on Doornbos GmbH of Solingen, Germany, and its general manager, Helmut Korelski, for allegations that they conspired to evade export laws which restrict shipments of U.S.-origin equipment to Libya. The Department alleged that Doornbos and Korelski acquired U.S.-made machine parts and construction equipment by claiming that the ultimate destination was

Germany, when, in fact, the goods were sold to the Dong Ah Consortium for use in the Great Man-made River Project in Libya. To settle the allegations, Doornbos and Korelski agreed to four-year denial periods. In a separate criminal action, Doornbos and Korelski also pled guilty to one-count of conspiracy and paid a criminal fine of \$500,000 in U.S. District Court in Ohio.

The case resulted from an investigation by the U.S. Customs Service, joined by the Office of Export Enforcement's Washington Field Office.

Ten-Year Denial Orders for Illegal Reexport of U.S.-Origin Commodities to Libya

On March 10, 1997, the Commerce Department issued denial orders, pursuant to Section 11(h) of the Export Administration Act, denying the export privileges of Thomas Doyle, former President of International Spare Parts, Cheshire, Connecticut, and Robert Vance, the firm's Vice President, until July 31, 2006. In July 1996, Doyle and Vance were convicted in the U.S. District Court for the District of Connecticut for illegally exporting and diverting U.S.-origin commodities, such as fuel pumps, to Libya through Germany and Malta. Doyle was sentenced to a fifteen month term of imprisonment, three years probation and a \$5,000 criminal fine. Vance was sentenced to a five month term of imprisonment, five months home confinement, and three years probation. In addition, International Spare Parts GmbH, the German firm involved in the diversion scheme, and its president, Wolfgang Nothacker, were also subjected to criminal and civil sanctions in subsequent proceedings. The investigation was conducted jointly by the Office of Export Enforcement and the U.S. Customs Service.

Ronald Vaught and Larry Vaught Sentenced for Illegal Exports of Aircraft Parts to Iran

On March 14, 1997, the Chief Judge for the Northern District of Texas in Dallas sentenced Ronald Lee Vaught and Larry Don Vaught, who had earlier pled guilty to conspiracy to export aircraft parts to Iran, to three years probation, a \$100 special assessment fee, and a criminal fine of \$10,000. Previously, the Chief Judge had sentenced co-conspirator Peter Harms to 57 months in federal prison and a \$100,000 criminal fine and co-conspirator William Dias to three years probation and a \$20,000 criminal fine. This action concluded the successful prosecution of all four defendants in this investigation, which was jointly conducted by the Office of Export Enforcement and the U.S. Customs Service, Dallas, Texas.

Texas Company, Officers, and Affiliates Temporarily Denied Export Privileges for Alleged Export Violations

On May 5, 1997, the Commerce Department imposed a Temporary Denial Order (TDO), denying all U.S. export privileges of Thane-Coat, Inc., Stafford, Texas; its president, Jerry Vernon Ford; its vice-president, Preston John Engebretson; and two affiliates, Export Materials

Inc., Stafford, Texas, and Thane International Corporation (TIC), Ltd., Freeport, The Bahamas for a period of 180 days.

The TDO was issued on the Department's reason to believe that, between 1994 and 1996, Thane-Coat Inc., through Ford and Engebretson, and using Export Materials, Inc. and TIC, Ltd., made approximately 100 shipments of U.S.-origin pipe coating materials, machines and parts valued at \$35 million to Libya via the United Kingdom and Italy without authorization required under the Export Administration Regulations. The U.S.-origin commodities were for coating the internal surface of prestressed concrete cylinder pipe for use in the second phase of the Government of Libya's Great Man-made River Project. This is a multiphase, multibillion dollar engineering endeavor designed to bring fresh water from wells drilled in southeast and southwest Libya to its coastal cities.

The U.S. Government maintains a comprehensive economic sanctions program against the Government of Libya, which prohibits virtually all commercial transactions involving U.S.-origin goods or U.S. persons, or both, with the Government of Libya, unless specifically authorized. The investigation is being conducted jointly by OEE's Dallas Field Office, the U.S. Customs Service, and the U.S. Attorney's Office, Houston, Texas.

Conviction for Illegal Exports of Aircraft Components to Iran

On June 13, 1997, Sanford Groetzinger, President of Summit Marketing, Inc. (SMI) and SMI's Corporate Counsel plead guilty in the United States District Court for Boston, Massachusetts, to charges related to the export of numerous civilian and military aircraft components to Iran via Germany and France during 1992 and 1993 without having obtained the required export licenses from the Commerce and State Departments.

Groetzinger was sentenced to a 30 month term of imprisonment with 24 months of supervised release, a \$6,000 criminal fine, and a special assessment fee of \$300. SMI received a \$12,000 criminal fine, a special assessment fee of \$1,200, and a three year term of probation for the same violations.

Tex-Co International, Inc. Denied Export Privileges for Ten Years

On July 15, 1997, Tex-Co International, Inc. (Tex-Co), Houston, Texas, was denied export privileges for a period of 10 years pursuant to Section 11(h) of the Export Administration Act. Tex-Co had been convicted in the U.S. District Court for the Southern District of Texas, Houston Division, as a result of a U.S. Customs Service criminal investigation, on charges that it violated IEEPA by knowingly and willfully exporting oil field equipment to an intermediary for ultimate delivery to Umm Al-Jawaby Oil Service Company, Ltd., a specially designated national

(SDN) of the Government of Libya, located in London, United Kingdom, without written authorization from the U.S. government. The intermediary, a London company, was created as a shell company by Tex-Co officials and was used in this case for the purpose of transshipping U.S.-origin oil field equipment from the U.K. to a SDN of Libya. Having received notice of Tex-Co's conviction for violating IEEPA and following consultations at the Commerce Department, Tex-Co was denied privileges to apply for or use any license, including any License Exception, issued pursuant to, or provided by, the Export Administration Act and Regulations, for a 10-year period ending on June 24, 2006.

I.G.G. Corporation Penalized for Illegal Exports to Indian Space Research Organization

On July 17, 1997, I.G.G. Corporation (I.G.G.), King of Prussia, Pennsylvania, a wholly-owned subsidiary of IGG Component Technology, Ltd., Portsmouth, England, pled guilty in the U.S. District Court for the Eastern District of Pennsylvania to charges that the company knowingly exported electronic components valued in excess of \$461,000 from the United States to the Indian Space Research Organization (ISRO) without the required export licenses. I.G.G. was assessed a \$50,000 criminal fine, a special assessment fee of \$200 and was placed on probation for five years.

In addition, on July 17, the Commerce Department ordered I.G.G. to pay a \$400,000 civil penalty and denied I.G.G.'s export privileges for a period of seven years. The denial period was suspended in its entirety, and will be waived if the company does not violate U.S. export control laws during the suspension period. The Department alleged that, on 40 separate occasions between September 1992 and July 1993, after receiving notice from Commerce advising it that an individual validated export license or reexport authorization was required for all shipments to ISRO, I.G.G. exported U.S.-origin electronic equipment from the United States to the United Kingdom, knowing that the goods were intended for ultimate end-use by ISRO, without obtaining the required individual validated export licenses. I.G.G. agreed to pay the \$400,000 civil penalty to settle the allegations.

This case involved violations of the Commerce Department regulation that implements the Enhanced Proliferation Control Initiative (EPCI), which was established in 1991 to prevent any exports of products to end-users which are known or believed to be involved with the development of weapons of mass destruction. In May 1992, the U.S. Department of State imposed trade sanctions against ISRO based on its missile proliferation activities. The case was investigated jointly by OEE's New York Field Office and the U.S. Customs Service, Philadelphia, Pennsylvania.

Suburban Guns (PTY) Ltd. Sentenced for Export Violations Involving South Africa

On July 25, 1997, the United States District Court for the Southern District of New York, sentenced Suburban Guns (Pty) Ltd. of Capetown, South Africa, to a two years probation, a \$10,000 criminal fine and a \$600 special assessment fee for violations of the Export Administration Act, IEEPA, and the Comprehensive Anti-Apartheid Act. Criminal penalties were imposed after Managing Director Phaedon Nicholas Criton Constan-Tatos, also known as “Fred” Tatos, pled guilty on behalf of Suburban Guns on February 10, 1997, to charges that the company exported shotguns, rifles, and ammunition to South Africa without obtaining the required export licenses from the Commerce and State Departments. This investigation was conducted jointly by BXA’s Office of Export Enforcement and the U.S. Customs Service offices in New York.

Elham Abrishami Sentenced for Illegal Exports to Iran

On August 20, 1997, Elham Abrishami, of Dublin, Ohio, was sentenced to two terms of five months to run consecutively following a guilty plea on January 13, 1997, at the U.S. District Court for the Southern District of Ohio, to charges of violating provisions of the Commerce Department’s Export Administration Regulations.

Abrishami’s conviction resulted from an investigation that disclosed that Abrishami knowingly and willfully exported and caused to be exported items on the U.S. Department of Commerce’s Control List, consisting of radio communications equipment valued at \$9,660, from the United States to the United Arab Emirates for transshipment to Iran without authorization from the Department, and with knowledge that the radio equipment was destined for Iran, a country to which exports are controlled for foreign policy purposes. Abrishami also plead guilty to attempting to export defense articles, 100 Sectrone ST-25 Mobilcall Encryption Modules, from the United States to the United Arab Emirates for transshipment to Iran without first having obtained the required U.S. Department of State license. This investigation was conducted jointly by OEE’s Washington Field Office and the U.S. Customs Service.

Guilty Pleas on Charges Related to an Illegal Exports to Cuba

On September 18, 19, and 25, 1997, Francisco Ferreiro-Parga, Carlos Fernandez, and Kenneth Broder respectively, pled guilty to criminal charges related to the illegal export of commercial foodstuffs and restaurant supplies to Cuba. The pleas were the result of a nine-month investigation by OEE’s Miami Field Office, the U.S. Customs Service, and the U.S. Attorney’s Office in Miami.

Ferreiro-Parga and Broder pled guilty in U.S. District Court for the Southern District of Florida to charges that they violated IEEPA, the Trading with the Enemy Act, as well as criminal conspiracy. Fernandez pled guilty to charges that he violated the Trading with the Enemy Act and the criminal conspiracy statute. An indictment filed in May of 1997 charged that, from September 1993 through April 1997, Ferreiro, Fernandez, Broder, and co-defendants Juan Torres Manzano and Pedro Borges, illegally exported 38 container loads of commercial foodstuffs and restaurant supplies from South Florida to Cuba by falsely claiming the shipments were destined for the Dominican Republic, Netherlands Antilles, and Mexico. Borges remains a fugitive in the case.

**TABLE II.6 -1 - FY 1997 Criminal Indictments/Informations For
Export Administration Act Violations**

Indictment/Information Date	Defendant	Violation	Enforcement Organization	Sanction
10/1/96 10/1/96 8/20/96 8/20/96	Larry D. Vaught, Ronald Vaught, Alfred Peter Harms, William Dias ¹	Conspiracy to divert aircraft parts to Iran	Commerce	Larry Vaught, Ronald Vaught and Harms were convicted on 10/25/96. Larry and Ronald Vaught each received a \$10,000 fine and 3 years probation. Harms received a \$100,000 fine and a 57 month term of imprisonment. Dias was sentenced on 2/4/97 and received a \$20,000 fine and 3 years probation.

¹Harms and Dias were indicted in FY96. They were sentenced in FY97.

Indictment/Information Date	Defendant	Violation	Enforcement Organization	Sanction
12/11/96	New World Transtechnology	Illegally exported computers to a nuclear equipment factory in the People's Republic of China (PRC). Attempted illegal export of another computer to the PRC through Hong Kong.	Commerce	Convicted on 12/20/96 - received a \$10,000 fine
12/11/96	Summit Marketing, Incorporated and Sanford B. Groetzinger	Illegal export of civilian and military aircraft components to Iran through Germany and France.	Commerce/ Customs	Summit and Groetzinger were convicted 6/13/97. Summit received a \$12,000 fine and 3 years probation. Groetzinger received a \$6,000 fine, a 6 month term of imprisonment and 24 months supervised release.
1/22/97	Addol Hamid Rashidian, a.k.a. David Rashidian, and Henry Joseph Trojack	Conspiracy to procure and export alumina impregnated with a copper catalyst and General Electric gas turbine parts to Iran through the United Arab Emirates.	Commerce/ Customs	Trial pending
2/10/97	Suburban Guns (PTY) Ltd.	Illegal export of shotguns, rifles, and ammunition to South Africa.	Commerce/ Customs	Convicted on 7/25/97 Received a \$10,000 fine and 24 months probation
5/8/97	Edvaldo Sales	Conspiracy to attempt to illegally export shotguns with 20 inch barrels to Brazil.	Commerce	Awaiting Sentencing

Indictment/Information Date	Defendant	Violation	Enforcement Organization	Sanction
5/20/97	Carlos C. Fernandez, Francisco Javier Ferreiro-Parga, Kenneth Broder and Juan Manuel	Illegal export of commercial foodstuffs and restaurant supplies to Cuba.	Commerce/ Customs	Guilty Pleas - Fernandez, Ferreiro-Parga and Broder. Awaiting Sentencing
6/3/97	S & J Products and Services, Jack Baugher and Adam Grant	Conspiracy to illegally export electronic stun guns to the Philippines, Mexico, Guatemala, Indonesia, Papua New Guinea, and other sovereign nations.	Commerce/ Customs	Awaiting Sentencing
6/17/97	Lansing Technologies	Illegal export of a Digital Equipment Corporation vector computer processor and a data acquisition control system to the People's Republic of China.	Commerce	Guilty Plea- Awaiting Sentencing
6/27/97	I.G.G. Corporation	Illegal export of electronic components to the Indian Space Research Organization (ISRO).	Commerce/ Customs	Convicted 7/17/97 - received a \$50,000 fine and 5 years probation
8/14/97	Sport Cars Center, Alan Odeh, Ali Odeh, Jamal Odeh, Nael Odeh and Osama Odeh	Conspiracy to prepare false documentation to export vehicles to various end-users.	Commerce/ Customs	Awaiting Sentencing

Indictment/Information Date	Defendant	Violation	Enforcement Organization	Sanction
8/29/97	Avitor Corporation, Inc. and Mehdi Hobby Moghadam a.k.a. Mike Hobby	Conspiracy to illegally export and reexport aircraft parts to Iran through Germany.	Commerce/ Customs	Awaiting Sentencing
9/5/97	Marc Andre Leveille	Illegal export of aircraft parts to Iran Air.	Commerce/ Customs	Trial pending

For a list of additional Commerce Department Export Enforcement cases you may go to:

<http://www.bxa.doc.gov/PDF/oecases.pdf>

on the BXA Website.

7. Office of Antiboycott Compliance

The Office of Antiboycott Compliance (OAC) is responsible for implementing the antiboycott provisions of the Export Administration Act and Regulations. The Office performs three main functions: enforcing the Regulations, assisting the public in complying with the Regulations, and compiling and analyzing information regarding international boycotts. Compliance officers enforce the Regulations through investigations and audits. The Compliance Policy Division provides advice and guidance to the public concerning application of the Regulations and analyzes information about boycotts.

Enforcement Division

The investigative teams of the Enforcement Division implement the investigative and enforcement functions of the Office, including: conducting compliance reviews; investigating potential violations; issuing pre-charging letters for alleged violations; negotiating settlements where violations are alleged; preparing settlement documents or charging letters initiating administrative proceedings; preparing cases for referral to the Office of the Chief Counsel for Export Administration for litigation; assisting the Office of the Chief Counsel for Export Administration in litigation of charges brought under the antiboycott provisions of the Act; and preparing cases for referral to the Department of Justice for criminal prosecution.

Compliance Policy Division

The Compliance Policy Division is responsible for developing and coordinating policies and initiatives to promote compliance with the antiboycott policies and requirements of the Act. This includes: preparing amendments, interpretations, and clarifications of the Regulations; reviewing international boycott activity through communication with diplomatic posts; analyzing reports received by OAC and reviewing information from other sources; preparing reports on boycott activity for use by U.S. embassies and others in efforts to bring an end to the boycott; developing public education programs to assist U.S. companies in complying with the Regulations; counseling parties on requirements of the law and compliance practices; reviewing enforcement actions to ensure consistency with policy guidelines; processing all boycott reports filed with the Department; and supervising the informal telephone advice provided by OAC professionals to members of the public.

Enforcement Activities

During the fiscal year, OAC continued to pursue more serious violations of the Regulations, such as discrimination based on religion, refusals to do business with other companies for boycott reasons and furnishing prohibited information. More than one-half of the settlements reached in

FY 1997 involved alleged violations of the prohibition against discrimination based on religion and the prohibition against knowingly agreeing to refuse to do business with other companies for boycott reasons. Others involved furnishing information about business relationships and failure to report as required by the regulations. Almost one-half of the settlements involved alleged violations of two or more sections of the regulations.

Cases Completed

A total of 20 enforcement matters were completed in FY 1997. Of that total, 15 resulted in settlement agreements. Civil penalties imposed totaled \$226,000 in FY 1997. The Office closed five cases with warning letters for minor violations. Additionally, 17 investigative cases were closed because violations were not found. Therefore, the total number of investigations closed in FY 1997 was 37.

Settlement Agreements and Penalties Imposed

All of the OAC investigations which involved allegations of serious violations were resolved through settlement. Historically, an overwhelming majority of cases brought by OAC have been settled in this way. These settlements may provide for payment of civil penalties, denial of export privileges and, occasionally, for the establishment of compliance programs.

Major cases included:

The United States Air Force and the U. S. Department of Justice settled allegations investigated by OAC and agreed to institute measures to prevent similar events from ever happening again. Civil penalties were not imposed on the Justice Department or the U.S. Air Force based on constitutional considerations.

United States Air Force Col. Michael J. Hoover, agreed to the imposition of a \$20,000 civil penalty to settle allegations that he required or knowingly agreed to require the Department of Justice and CACI Inc. - Commercial to discriminate against individuals based on religion. The Department suspended payment of the civil penalty due to financial hardship.

Jane Hadden Alperson, Office of Litigation Support, Civil Division, United States Department of Justice, agreed to the imposition of a \$20,000 civil penalty to settle allegations that she knowingly agreed to discriminate against individuals based on religion or national origin and took boycott-based discriminatory actions against a U.S. person on the basis of religion. The Department suspended payment of the civil penalty due to financial hardship.

CACI Inc. - Commercial, of Arlington, Virginia paid a \$15,000 civil penalty to settle allegations that CACI knowingly agreed to discriminate against individuals based on religion or national origin, took a boycott-based discriminatory action against a U.S. person on the basis of religion, and discriminated against one individual based on religion or national origin.

David Andrew, the CACI document center manager, agreed to the imposition of a \$15,000 civil penalty to settle allegations that he knowingly agreed to discriminate against individuals based on religion or national origin, took a boycott-based discriminatory action against a U.S. person on the basis of religion, and discriminated against one individual based on religion or national origin. The Department suspended payment of the civil penalty due to financial hardship.

Bank Saderat Iran, the New York Representative Office, agreed to the imposition of a \$36,000 civil penalty to settle allegations that it implemented two letters of credit that contained requirements prohibited by the antiboycott regulations, furnished two items of information about companies' business relations with Israel and, on four occasions, failed to report, as required by the Regulations, its receipt of boycott-related requests from Dubai.

The Samsonite Corporation, of Denver, Colorado, paid a \$25,000 civil penalty to settle allegations that it failed to report, on ten occasions, its receipt of boycott-related requests from Kuwait and Pakistan, as required by the Regulations.

Hongkong and Shanghai Banking Corporation Limited, the New York branch, paid a \$23,000 civil penalty to settle allegations that, on three occasions the bank agreed to refuse to do business with blacklisted persons in connection with boycott-related requests from Qatar; on one occasion the bank confirmed a letter of credit from the United Arab Emirates that contained a prohibited boycott-related request; and on nine occasions the bank failed to report, or failed to report in a timely manner, receipt of boycott-related requests from Jordan, Oman, Qatar and the United Arab Emirates, as required by the Regulations.

Merrill Lynch, Pierce, Fenner & Smith, Incorporated and Merrill Lynch Asset Management, Inc. paid civil penalties totaling \$10,000 to settle allegations that each company, on one occasion, agreed to refuse to do business with companies on the Arab boycott lists. The Department also alleged that Merrill Lynch Asset Management, Inc. furnished information about its proposed business relationships with companies on the Arab boycott lists. Additionally, the Commerce Department alleged that each of the Merrill Lynch companies failed to report promptly its receipt of a request to engage in restrictive trade practices or boycotts as required by the Regulations.

Charging Letters

Once allegations of violations are made to a respondent, OAC offers the respondent the opportunity to discuss the alleged violations. If the company and OAC cannot reach a mutually satisfactory resolution of the matter, a charging letter is issued. The case is then referred to an administrative law judge ("ALJ") for formal adjudication. The Office of the Chief Counsel for Export Administration represents OAC before the ALJ, who decides the case and may impose a civil penalty of not more than \$10,000 per violation or a period of denial of export privileges or both. Either party may appeal the decision of the ALJ to the Under Secretary for Export Administration. If neither party appeals, the decision of the ALJ becomes the final agency decision. OAC did not issue any charging letters in FY 1997.

Previously Issued Charging Letters

All of the cases completed (excluding those closed with the issuance of warning letters) issued during FY 1997, including those imposing civil penalties, resulting from OAC investigations are summarized in the following table:

Table 7-1 Summary of Cases Completed in Fiscal Year 1997			
COMPANY NAME & LOCATION	DATE CASE COMPLETED	ALLEGED VIOLATIONS	PENALTY AMOUNT
Fluke Europe, B.V. Eindhoven, Netherlands	10/24/96	12 violations: 2-769.2(d) [Furnished prohibited business information]; 10-769.6 [Failed to report].	\$14,000
Aurora Pump North Aurora, IL	12/30/96	7 violations: 1-769.2(d) [Furnished prohibited business information]; 6-769.6 [Failed to report].	\$18,000
U.S. Department of Justice Washington, D.C.	2/26/97	2 violations of 769.2(b): 1 agreement of discriminate; 1 took discriminatory action.	No Civil Penalty

Jane Hadden Alperson Washington, D.C.	2/26/97	2 violations of 769.2(b): 1 agreement of discriminate; 1 took discriminatory action.	\$20,000 [Suspended]
U.S. Department of the Air Force	N/A	2 violations of 769.2(b): Required others to discriminate	No Civil Penalty
Col. Michael J. Hoover Wright Patterson AFB., Ohio	2/26/97	2 violations of 769.2(b): Required others to discriminate	\$20,000 [Suspended]
CACI Inc. - Commercial Arlington, VA	2/26/97	3 violations of 769.2(b): 1 agreement of discriminate; 2 took discriminatory actions	\$15,000
David Andrew Arlington, VA	2/26/97	3 violations of 769.2(b): 1 agreement of discriminate; 2 took discriminatory actions	\$15,000 [Suspended]
Bank Saderat Iran - New York Representative Office New York, NY	3/12/97	8 violations: 2 - 769.2(d) [Furnished prohibited business information]; 2 - 769.2(f) [Implemented letters of credit containing prohibited conditions]; and 4 - 769.6 [Failed to report]	\$36,000 [Suspended]
Samsonite Corporation Denver, CO	6/27/97	10 violations of 769.6 [Failed to report].	\$25,000
Fisher Scientific Worldwide Inc. Hampton, NH	7/17/97	5 violations of 769.6 [Failed to report].	\$10,000

The Hong Kong & Shanghai Banking Corporation Limited New York, NY	7/24/97	13 Violations: 1 - 760.2(f) [Implemented a letter of credit containing a prohibited condition]; 3 - 769.2(a) [Agreed to refuse to do business]; 8 - 769.6 [Failed to report]; and 1- 760.5 [Failed to report]	\$23,000
Coleman Deutschland, GmbH Hungen, Germany	8/13/97	10 violations of 769.2(d) [Furnished prohibited business information]	\$20,000
Merrill Lynch Asset Management, Inc. Plainsboro, NJ	9/20/97	1 - 769.2(a) [Agreed to refuse to do business]; 1- 769.2(d) [Furnished prohibited business information]; and 1 - 769.6 [Failed to report].	\$3,500

Merrill Lynch, Pierce, Fenner & Smith Incorporated New York, NY	9/29/97	1 - 769.2(a) [Agreed to refuse to do business]; and 1 - 769.6 [Failed to report].	\$6,500
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**For additional Office of Antiboycott Compliance statistics
you may go to:
<http://www.bxa.doc.gov/PDF/oacrpts.pdf>
on the BXA Website.**

8. NONPROLIFERATION AND EXPORT CONTROL COOPERATION

BXA established the Nonproliferation and Export Control Cooperation (NEC) team in early 1994 to coordinate BXA's activities in support of U.S. export control cooperation programs with Russia, Ukraine, Kazakhstan, Belarus, other new states in the Central Asian and Caucasian regions, and the Baltic and Central European states. In 1997, the program made major strides in helping to develop national export control systems in many of these states.

The NEC mission is to strengthen foreign national export control systems in order to keep nuclear, biological, and chemical weapons, delivery systems and other sensitive materials out of the hands of terrorists and rogue states.

During FY 1997, the NEC team, in conjunction with other BXA organizations and with representatives from the Departments of State, Defense, Energy, and U.S. Customs Service, hosted, coordinated or participated in a number of cooperative activities with Belarus, Russia, Ukraine, Kazakhstan, Armenia, Georgia, Kryrgystan, Uzbekistan, Estonia, Latvia, Lithuania, Bulgaria, Moldova, Romania, and Slovenia.

The central theme of these technical exchange programs was to familiarize the countries with the elements that constitute an effective export control system and assist them in developing their own export control systems. Discussions included the necessary legal basis and framework, licensing procedures and processes, preventive enforcement techniques, the need for government and industry cooperation on export control matters, and automation program techniques in simplifying a country's national export control system. The NEC team coordinates its technical exchanges with these countries with its counterparts in the Departments of State, Defense, Energy, and the U.S. Customs Service. These programs have reduced the proliferation threat from and through the participating countries.

The NEC team is also assisting in the demonstration and installation of application software called TRACKER, which assists in automation of licensing administration functions and allows for smoother licensing.

In 1997, the National Academy of Science published a book entitled *Proliferation Concerns: Assessing U.S. efforts to help contain nuclear and other dangerous technologies in the Former Soviet Union (FSU)*. The book offers a favorable summary of NEC's efforts involving its cooperative efforts in establishing export control systems in the Republics of the FSU, and cites the important results accomplished by American specialists and their counterparts in FSU states, particularly in developing the legal bases for export control, training, and installing efficient license processing systems.

BXA, through the NEC team, leads the U.S. interagency program of cooperative export control exchanges and technical level programs which include:

Legal Foundations

Under this program, legal experts focus on the legal foundation for a comprehensive, effective export control system, including the statutory authorities needed for an export control law.

Licensing Procedures and Practices

Workshops focus on dual-use license application processing, the purpose and guiding philosophy of the U.S. control list and its international development, legal foundations and regulatory framework for U.S. controls, and the techniques and procedures for obtaining commodity classifications. The procedure for resolving interagency disputes among U.S. Government agencies is also reviewed.

Export Enforcement Activities

The workshops emphasize enforcement techniques, including pre-license checks, post-shipment verifications, safeguard programs, and the use of criminal and administrative sanctions to deter potential illegal exports. The presentations occur in the context of the global problem of proliferation of weapons of mass destruction, including missiles, nuclear, chemical, and biological threats.

Government-Industry Relations

Government officials and industry representatives discuss mutual cooperation in controlling exports of targeted commodities. This cooperation between government and business demonstrates that they can work together in achieving common goals objectives. These exchanges provide a business perspective on export controls and examine the importance of voluntary industry compliance with export controls and the need for technical expertise via Technical Advisory Committees to government agencies.

Systems Automation

In FY 1997, the NEC team assisted the Newly Independent States (NIS) in the automation of their export licensing systems. BXA representatives assessed, designed, and developed comprehensive licensing systems in cooperation with a country's export control senior officials.

During the visits of the delegations from the NIS to the BXA, the NEC team included discussions and demonstrations of BXA's automation system and its interagency review features.

Activities in the NIS Countries

Kazakhstan

United States Kazakhstan Legal and Regulatory Technical Forum III: Partnership and Cooperation in Export Control, WASHINGTON, D.C., September 30-October 11, 1996.

This forum assisted the Kazakhstan government in drafting documents to implement its export control law. Briefings focused on executive orders, interagency agreements, and regulations that implement statutory authority for controlling the export of dual-use, munitions, and other sensitive goods and technology.

Export Control System Development Automation Dedication, Almaty, April 21-25, 1997.

BXA's continuing efforts resulted in Kazakhstan's official dedication of its automated license processing system. BXA experts completed the transfer of export control automation equipment to Kazakhstan under the Cooperative Threat Reduction (CTR) program.

Technical Exchange Workshop and Training on Export Control Lists, Washington, D.C., July 28-August 1, 1997

BXA conducted a technical workshop for five licensing officials with material on multilateral regime control lists and commodity classifications. Participants developed a better understanding of the control list's use in license administration and its application to the Kazakhstani system.

Export Control Cooperation Executive Exchange, Washington, D.C., September 28 to October 3, 1997

A seven-person delegation of high-level officials responsible for export controls in Kazakhstan attended a Commerce forum designed to familiarize them with the U.S. export control system. The forum focused on interagency coordination, legal elements, export control administration, licensing practices, export enforcement, industry-government relations and customs techniques.

Ukraine

United States-Ukraine Export Control Cooperation Executive Exchange, Washington, D.C., October 16-18, 1996.

The central theme of the three-day conference was to familiarize the Ukrainian delegation, led by Victor P. Vashchilin, Chairman of the Expert-Technical Committee of State Export Control Council, with the elements that constitute the U.S. export control system to help ensure Ukraine's export system will contain the necessary elements.

United States-Ukraine Technical Exchange on Control Lists, Licensing Procedure and Law Development, Washington, D.C., January 13-17, 1997.

BXA held a technical exchange forum with a Ukrainian delegation from the Export-Technical Committee of the State Export Control Commission, the Ukraine Parliament, and the Office of the Prime Minister. Sessions covered the elements necessary for an effective national control list, licensing procedures, obligations under the various international licensing control regimes, and legal issues.

Export Control Legal Forum, Washington, D.C., March 24-28, 1997.

Eight members of the Ukrainian Parliament who are responsible for developing that country's export control laws attended a BXA forum that covered the essential authorities needed in an export control law, illustrated by examples from U.S. laws.

Industry-Government Relations Executive Forum "Partnership and Cooperation in Export Control," Boston, Mass., April 28-29, 1997 and April 30-May 1-2, 1997, Washington, D.C.

BXA conducted a series of workshops with government officials and industry representatives from the Ukraine to emphasize that industry-government cooperation and voluntary industry compliance are essential for effective export controls. Several industries were visited to familiarize Ukrainian business representatives with the range of actions American businesses take to comply with nonproliferation export controls.

Ukraine State Export Control Services (SECS) and Customs Automation Finalization, Kiev, June 23-27, 1997.

The NEC team in conjunction with US Custom Service and Defense Special Weapons Agency (DSWA) took part in a series of meetings to finalize work that will electronically connect Ukrainian's Customs and SECS equipment.

Belarus

U.S.-Belarus Preventive Export Enforcement Technical Workshop, Washington, DC/Dallas, Texas, October 21-25, 1996.

The workshop focused on preventive enforcement techniques such as pre-license checks, post-shipment verifications, safeguards programs, and the use of criminal and administrative sanctions to deter potential illegal exports.

Uzbekistan

Export Control and Nonproliferation Assessment, December 2-6, 1996.

A U.S. interagency team conducted an assessment of the Republic of Uzbekistan's export control system, focusing on political commitment to effective export controls, legal and regulatory infrastructure, interagency coordination, licensing procedures, enforcement, industry-government relations, and automation requirements. The team also conducted a one-day export control nonproliferation seminars for Uzbek officials.

United States - Uzbekistan Export Control Legal Technical Forum, Washington, D.C., June 16-20, 1997.

The forum provided the Uzbek delegation with information on the legal basis for a comprehensive and effective export control system. The delegation included officials from the Ministries of Foreign Economic Relations, Foreign Affairs, Defense, Academy of Sciences and the State Committee for Science and Technology.

Georgia

Export Control and Nonproliferation Assessment, Tbilisi, December 7-14, 1996.

A U.S. interagency team assessed the export control system of the Republic of Georgia and held several high-level meetings with officials of the executive and parliament. The team also visited several Black Sea and border ports and conducted a one-day export control/nonproliferation seminar for Georgian export control officials.

U.S.- Georgia Export Control Technical Legal Forum, Washington, D.C., 1997, May 12-16, 1997.

A delegation from Georgia attended a five-day bilateral technical exchange with U.S. officials focusing on the legal basis for a comprehensive and effective export control system, illustrated by examples from U.S. law.

Russia

Industry-Government Relations in Export Control Conference and Exchange, December 16-21, 1996, Moscow.

A delegation of U.S. and Russian government officials and representatives from 60 of Russia's largest enterprises participated in a conference on industry-government relations in export control. Russian government officials gave an overview of their agencies' responsibilities and spoke about the importance of export controls in fulfilling Russia's international obligations and national interests. The industry representatives discussed the challenges of conducting international business in the current economic climate. The U.S. delegation also visited two plants and met separately with officials from the Ministry of Defense Industries, the State Customs Committee, and the Russian Space Agency.

Export Licensing Procedures and Practices Technical Exchange Workshop, Washington, D.C., September 15-19, 1997.

The course presented the standards, practices, and procedures in export licensing for Russian license officials responsible for interpreting and implementing export control laws and decrees.

The Baltics and Central Europe. (Latvia, Lithuania, Estonia)

Licensing Practice and Procedures, Washington, D.C., February 17-22, 1997.

The workshop on export licensing for delegates from Estonia, Latvia, and Lithuania focused on the development of the U.S. national control list, the elements that compose the list, and how items and technology are incorporated in the list.

Enforcement Technical Workshop, Washington, D.C., June 9-11, 1997; Boston, Ma, June 12-13.

An export control enforcement technical workshop for Estonia, Latvia, and Lithuania focused on preventive techniques. In Boston, the delegation visited Commerce's Office of Export Enforcement field office and had discussions with the field agents from the Export Enforcement field office, the U.S. Custom Service and federal prosecutors of the Department of Justice.

The Kyrgyz Republic

Export Control Assessment, Bishkek, March 10-15, 1997.

A U.S. interagency team conducted an assessment of the Kyrgyz Republic's export control system, focusing on political commitment to effective export controls, legal and regulatory infrastructure, interagency coordination, licensing procedures, enforcement, industry-government relations, and automation requirements.

U.S.- Kyrgyz Republic Export Control Legal Technical Forum, Washington, D.C., July 21-25, 1997.

This program provided the Kyrgyz delegation information needed to draft an export control law. The six-person delegation received presentations on the essential authorities needed in an export control law, illustrated by examples from U.S. laws.

Turkmenistan

Export Control and Proliferation Assessment, Ashgabat, April 15-21, 1997.

A four-person U.S. interagency delegation assessed the Turkmen export control framework with a focus on the political commitment to export controls, legal and regulatory infrastructure, interagency coordination, licensing procedures, enforcement, industry-government relations, and automation requirements.

South Central European States (Bulgaria, Moldova, Romania, and Slovenia)

South Central European Control Licensign Workshop: Practices and Procedures, Washington, D. C., April 21-25, 1997.

BXA conducted technical exchanges with participants from Bulgaria, Moldova, Romania, and Slovenia concerning export control laws, licensing control lists, the interagency process, and enforcement. The delegation also discussed the current state of their license process and procedures.

Export Enforcement Technical Workshop: Partnership and Cooperation in Export Controls, Washington, D.C. and New York, NY, July 14-18, 1997.

BXA hosted senior representatives of Bulgaria, Moldova, Romania, and Slovenia in a workshop to build effective enforcement techniques. The delegation visited New York City and observed enforcement operations of field offices of the Commerce's Office of Export Enforcement, the U.S. Customs Service, and the U.S. Attorney.

Armenia

Export Control and Nonproliferation Assessment, Yerevan, June 9-16, 1997.

A U.S. interagency team conducted an assessment of Armenia's export control system, focusing on political commitment to effective export controls, legal and regulatory infrastructure, interagency coordination, licensing procedures, enforcement, industry-government relations, and automation requirements.

U.S.-Armenia Nonproliferation and Export Control Cooperation Legal Forum, Washington, D.C., Sept. 8-12, 1997.

A five-person Armenian delegation of export and arms control officials attended a forum designed to provide information needed for Armenia to draft its own export control law. The forum was a follow-up to the June, 1997, export assessment.

Azerbaijan

Export Control and Nonproliferation Assessment, Baku, June 16-21, 1997.

A U.S. interagency team conducted an assessment of the Azerbaijani export control system, focusing on political commitment to effective export controls, legal and regulatory infrastructure, interagency coordination, licensing procedures, enforcement, industry-government relations, and automation requirements.

Monterrey Institute of International Studies, Nonproliferation Seminar, Washington D.C., June 30, 1997.

Conference participants discussed nonproliferation and arms control issues and challenges. Senior officials and scholars from 12 countries studied the legal and legislative basis of U.S. control of dual-use items, policy formulation and implementation in enforcement with a focus on strengthening their own export control systems.

At the request of the Monterrey Institute, BXA officials met with Russian, Georgian and Ukrainian officials during the seminar.

1997 BXA Update Symposium, Washington, D.C., July 7-11, 1997.

The Symposium brought together 40 foreign export control officials from 16 countries with their U.S. counterparts and U.S. business representatives in a symposium that addressed the threat to regional and world security from the proliferation of weapons of mass destruction. This year's Symposium focused on enforcement and enforcement controls.

TABLE 8-1 Commerce Activities for FY 1997

The following NEC technical exchanges took place in FY'97. The programs centered on the major elements that constitute an effective national export control system.

COUNT RY	Legal Foundation	Licensin g Procedures and Practices	Export Control Administra tion	Export Enforcement Activities	Systems Automation	Govt. Industry Relations
Kazakhsta n	Oct. '96	July '97	Sept. '97		April '97	
Ukraine	March '97	Jan. '97	Oct. '97		June '97	April '97
Belarus				Oct. '96		
Uzbekista n	June '97		Dec. '96			
Georgia	May '97		Dec. '96			
Russia		Sept. '97				Dec. '96
Baltic States		Feb. '97		June '97		
Kyrgystan	July '97		March '97			
COUNT RY	Legal Foundation	Licensin g Procedures and Practices	Export Control Administra tion	Export Enforcement Activities	Systems Automation	Govt. Industry Relations
Turkmenis tan			April '97			
South Central European States		April '97		July '97		

Armenia	Sept. '97		June '97			
Azerbaijan			June '97			

This table covers the period October 1, 1996 through September 30, 1997.

FOREIGN POLICY EXPORT CONTROLS

1. Introduction

Export controls maintained for foreign policy purposes require annual extension according to Section 6 of the Export Administration Act of 1979, as amended (the Act). Section 6(f) of the Act requires the Secretary of Commerce, through authority delegated by the President, to submit a report to Congress to extend the controls. Sections 6(b) and 6(f) of the Act require the report to include certain considerations¹ and determinations² on the criteria established in that section. This report complies with all the requirements set out in the Act for extending, amending or imposing foreign policy controls.

The Department of Commerce is acting under the authority conferred by Executive Order No. 12924 of August 19, 1994, and continued by notices of August 15, 1995, August 14, 1996, and August 13, 1997. Therein, the President, by reason of the lapse of the Act, invoked his authority, including authority under the International Emergency Economic Powers Act, to continue in effect the system of controls that had been maintained under the Act. Under a policy of conforming actions under the Executive Order to those under the Act, the Department of Commerce, insofar as appropriate, is following the provisions of Section 6 of the Act with regard to extending foreign policy controls.

With this report, the United States is extending all foreign policy controls in effect on December 31, 1997. The Department of Commerce is taking this action at the recommendation of the Secretary of State. As further provided by the Act, foreign policy controls remain in effect for replacement parts and for parts contained in goods subject to such controls. The controls administered in accordance with procedures established pursuant to Section 309(c) of the Nuclear Non-Proliferation Act of 1978 likewise remain in effect.

Each chapter that follows describes a particular category of foreign policy controls and delineates modifications that have taken place over the past year.

Most of the statistical data presented in the report are based on fiscal year export licensing statistics, unless otherwise noted. Commerce generates that data from the computer automated system it uses to process and track export license activity. Due to the tabulating procedures used by the system in accounting for occasional license applications that list more than one country or destination, or are amendments to approved applications, the system has certain limitations as a means of gathering data. In addition, Commerce based the data in the report on values contained in export licenses it issued. Such values may not represent the values of actual shipments made against those licenses, because in some cases an exporter may ship only a portion of the value of an approved license.

Highlights of 1997

Embargoed Countries and Entities: Cuba. On March 3, 1997, Commerce published a rule in the *Federal Register* that implements changes in U.S. export control policy toward Cuba, announced by President Clinton in October 1995. These changes are based on the “Support for the Cuban People” section of the Cuban Democracy Act of 1992 and are consistent with the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996. This rule amends licensing policy to allow the approval, on a case-by-case basis, of certain exports to human rights organizations, news bureaus, and individuals and non-governmental organizations engaged in activities that promote democracy in Cuba. However, the ban on all U.S. direct flights to Cuba (announced by the President in February 1996) still applies. The Administration considers exceptions to the ban on a case-by-case basis.

Of particular note in the latter part of the year, the Bureau of Export Administration (BXA) and other agencies formed an interagency group to consider export requests made in conjunction with the awaited visit to Cuba of Pope John Paul II in January of 1998. Such license requests were considered on a case-by-case basis, consistent with existing regulations and the humanitarian needs of the Cuban people. Exceptions to the Presidential ban on direct flights from the United States to Cuba were also considered on a case-by-case basis if in conjunction with the Pope's visit.

Iran. On August 19, 1997, the President issued Executive Order 13059 to confirm that the embargo on Iran prohibits all trade and investment activities by United States persons, wherever located, and to consolidate in one Order the various prohibitions previously imposed to deal with the national emergency declared on March 15, 1995. Executive Order 12957 of March 5, 1995, prohibits U.S. persons from entering into contracts for the financing or the overall management or supervision of the development of petroleum resources located in Iran or over which Iran claims jurisdiction. Executive Order 12959 of May 6, 1995, imposed a comprehensive trade and investment embargo on Iran.

Sudan. On November 3, 1997, President Clinton signed Executive Order 13067, which imposed a trade and investment embargo on Sudan, effective November 4, 1997. This Executive Order expands existing prohibitions imposed as a result of the Secretary of State's designation of Sudan as a state sponsor of international terrorism. The new sanctions block Sudanese assets in the United States, and prohibit a wide range of transactions between the United States and Sudan, including, *inter alia*, the export to Sudan of any goods, technology, or services from the United States or by a U.S. person, and the facilitation by any U.S. person of the export of goods, technology or services to Sudan from any destination, or from Sudan to any destination.³ The Department of the Treasury's Office of Foreign Assets Control (OFAC) is implementing the Executive Order and exercises licensing responsibility for exports to Sudan.

North Korea. In FY 1997 BXA approved, with the support of the Departments of State and Defense, 45 licenses for humanitarian aid to famine victims in North Korea. These licenses

allowed for the export of \$38 million in food supplies donated by the U.S. Government via private voluntary organizations and a large part of the \$52 million in food assistance donated by the U.S. government during the year.

UNITA. On December 12, 1997, President Clinton signed Executive Order 13069, which imposed additional sanctions (effective December 15, 1997) against the National Union for the Total Independence of Angola (UNITA), an armed movement in Angola which has not complied fully with the provisions of the Lusaka Peace Accords, which it signed with the Angolan government in 1994. This Executive Order implements the economic elements of the sanctions included in the 1997 United Nations Security Council Resolution 1127, by closing all UNITA offices in the United States and prohibiting the provision of aircraft, aircraft components and aircraft services to UNITA and the territory it controls inside Angola. Aircraft services, including, *inter alia*, maintenance, certificates of airworthiness, payment of insurance on new claims and the writing of new insurance contracts, are also prohibited to any aircraft known to have entered Angola through any unauthorized airport subsequent to the effective date of this Executive Order. Treasury is responsible for implementing the sanctions against UNITA and will consider exemptions for flights for humanitarian aid and diplomatic purposes on a case-by-case basis. The sanctions originally imposed against UNITA on September 26, 1993, prohibiting the sale or provision of weapons, military materiel and petroleum products, remain in effect. No general or limited embargo exists against the country or government of Angola.

Multilateral Efforts: The United States ratified the Chemical Weapons Convention (CWC) on April 25, 1997, and the CWC entered into force on April 29, 1997. The CWC imposes a global ban on the development, production, stockpiling, retention and use of chemical weapons and prohibits the direct or indirect transfers of chemical weapons. In negotiating the CWC, the Administration worked closely with industry, and sought to negotiate positions which minimize burdens and maximize protections to U.S. industry. Both houses of Congress have passed CWC implementing legislation, and a law is expected to be enacted in early 1998. Implementation of the CWC will require Commerce to revise the Export Administration Regulations (EAR) accordingly.

Non-Proliferation Initiatives: At the recommendation of the Trade Promotion Coordinating Committee, BXA published an "Entity List" identifying specific end-users who pose an unacceptable risk of diversion to proliferation activities. BXA first published this list on February 3, 1997, advising that shipments of computers with a composite theoretical performance between 2,000 and 7,000 million theoretical operations per second (MTOPS) require a license when exported to Ben Gurion University, Israel. Bharat Electronics Limited, India, was added to the Entity List on May 16, 1997, imposing a license requirement for exports or reexports of all items subject to the EAR to that entity. Several additions to the list were made on June 30 that included entities located in Russia, China, India, Pakistan and Israel for the export of all items subject to the EAR. On October 1, the Bharat Electronics entry on the Entity List was revised by listing the specific Bharat Electronics facilities affected, and narrowing the scope of the items subject to the end-user license requirement. (See Appendix III for the complete Entity List.)

Encryption: On December 30, 1996, BXA issued a regulation implementing the Clinton Administration's encryption policy that was announced by the Vice President on October 1, 1996. A Presidential Memorandum and Executive Order dated November 15, 1996, fully outlined the Administration's policy. The Administration is implementing its policy in several parts, including maintaining export controls, developing standards, and promoting international cooperation. The encryption policy aims to promote the growth of electronic commerce and secure communications worldwide while protecting the public safety and national security.

Beginning on January 1, 1997, nonrecoverable 56-bit DES or equivalent strength encryption products are exportable under a special license exception, which a company can renew every six months during a two-year transition period. The transition period began on January 1, 1997, and will end on December 31, 1998. This special license exception requires a one-time review of the product and submission of a satisfactory business and marketing plan to build and market recoverable encryption products. Renewal of the license exception requires the exporter to submit a report to Commerce, showing that the company has made progress on the recovery product.

On April 24, 1997, the Secretary of Commerce established the President's Export Council Subcommittee on Encryption, comprising forty members from the exporting community, manufacturers and law enforcement officials interested in encryption policy. The Subcommittee will advise the President, through the President's Export Council, and the Secretary on matters pertinent to implementing an encryption policy that will support the growth of electronic commerce while protecting the public safety and national security.

In May 1997, the Department of Commerce announced that it would allow the export of the strongest available data encryption products to support electronic commerce around the world. These products include direct home banking software of any key length offered by banks to their customers worldwide. The Clinton Administration took this step as part of its overall initiative to promote the development of a secure and trusted environment for electronic commerce. The products and institutions that will together make up a robust security infrastructure will permit users from homes and businesses to perform all types of commercial data transactions, ranging from managing investment transactions to purchasing goods and services. That infrastructure will manage encryption to provide privacy, message integrity, user authentication, and recovery services. The policy will not require key recovery for certain financial-specific products since banks and other financial institutions are subject to explicit legal requirements and have shown a consistent ability to provide appropriate access to transaction information in response to authorized law enforcement requests.

Commerce Control List: The Department of Commerce made a major change to the Commerce Control List (CCL) in 1997, which reduces the licensing requirements for exporters. On August 6, 1997, Commerce liberalized export controls on oscilloscopes. The rule created new Export Control Classification Numbers (ECCNs) for oscilloscopes and related technology (3A292 and 3E292), which are controlled only to countries that pose nuclear proliferation concerns and designated terrorism-supporting countries.

In 1997, the Departments of Commerce, State and Defense decided to elaborate further those U.S. Munitions List (USML) items that may be included in a commercial communications satellite licensed by the Department of Commerce by including satellite fuel, ground support equipment and other specified USML items. This change is accomplished by amending the EAR and the International Traffic in Arms Regulations (under the jurisdiction of the Department of State), with formal notification of Congress. On September 29, 1997, Commerce published its corresponding regulation for the EAR by amending the Commerce Control List entry for ECCN 9A004.

Legislative Events: Congress added provisions to the FY 1998 National Defense Authorization Act to require exporters to notify BXA of their intent to export and reexport high performance computers (HPCs) with a performance capability between 2,000 and 7,000 MTOPS to end-users in specified countries (known in the EAR as Tier 3 countries). Under the new law, pursuant to specific objections within ten days by the Secretary of Commerce, Defense, Energy or State, or the Director of the Arms Control and Disarmament Agency, Commerce would require the exporter to apply for a license. The provisions will take effect when the Department of Commerce revises the EAR accordingly in 1998. Current regulations allow exports of HPCs up to 7,000 MTOPS without a license to civil end-users in Tier 3 countries. The legislation also requires the Department of Commerce to perform post-shipment verifications on exports of HPCs over 2,000 MTOPS to Tier 3 countries, whether or not Commerce required a license for the export.

China: In October 1997, the Secretary and BXA representatives met their Chinese counterparts in Beijing for the eleventh annual meeting of the Joint Commission on Commerce and Trade. The two countries agreed to begin holding bilateral export control seminars, with the first one in early 1998. These seminars will provide opportunities to discuss issues of concern, promote mutual understanding of the respective export control systems, and enhance future cooperation.

Hong Kong: In October 1997, the United States and Hong Kong signed an agreement establishing regular discussions on export controls, and scheduled the first meeting for January 1998. This was the first meeting on export controls since Hong Kong's return to Chinese sovereignty, and the United States reaffirmed its commitment to maintain its export control policy for Hong Kong. Hong Kong authorities have committed to continue adhering to various multilateral export control regimes and to maintain an effective export control system.

Export Control Program Description and Licensing Policy

This part defines the export controls maintained for a particular foreign policy purpose that are imposed or extended for the year 1998. The licensing requirements and policy applicable to a particular control are described in this section.

Analysis of Control as Required by Section 6(f) of the Act

This part outlines the considerations or determinations, as required by Section 6(f)(2) of the Act, on the purpose of the control, criteria, alternative means, consultation efforts, and foreign availability. For each control program, the Department's conclusions are based on the following required criteria:

A. The Purpose of the Control

This section provides the foreign policy purpose and rationale for each particular control.

B. Considerations and/or Determinations of the Secretary of Commerce

1. **Probability of Achieving the Intended Foreign Policy Purpose.** This section considers or determines whether such controls are likely to achieve the intended foreign policy purpose, in light of other factors, including the availability from other countries of the goods or technology subject to control, and whether the foreign policy purpose can not be achieved through negotiations or other alternative means.
2. **Compatibility with Foreign Policy Objectives.** This section considers or determines whether the controls are compatible with foreign policy objectives of the United States and with overall U.S. policy toward the country or the proscribed end-use subject to the controls.
3. **Reaction of Other Countries.** This section considers or determines whether the reaction of other countries to the extension of such export controls by the United States is likely to render the controls ineffective in achieving the intended foreign policy purpose or to be counterproductive to other U.S. foreign policy interests.
4. **Economic Impact on United States Industry.** This section considers or determines if the effect of the controls on the export performance of the United States, its competitive position in the international economy, the international reputation of the United States as a reliable supplier of goods and technology, or the economic well-being of individual U.S. companies and their employees and communities exceeds the benefit to U.S. foreign policy objectives.⁴
5. **Enforcement of Control.** This section considers or determines the ability of the United States to enforce the controls. Some enforcement problems are common to all foreign policy controls.⁵ Others are associated with only one or a few controls. Each individual control has been assessed to determine if it has presented, or is expected to present, an uncharacteristic enforcement problem.

C. Consultation with Industry

This section discusses the results of consultations with industry leading up to the extension or imposition of controls. It also includes comments provided to BXA by the Technical Advisory Committees (TACs); such comments are attributed to the TAC unless otherwise indicated.

D. Consultation with Other Countries

This section reflects consultations on the controls with countries that cooperate with the United States on multilateral controls, as well as with other countries as appropriate.

E. Alternative Means

This section specifies the nature and results of any alternative means attempted to accomplish the foreign policy purpose, or the reasons for extending the controls without attempting any such alternative means.

F. Foreign Availability

This section considers the availability from other countries of goods or technology comparable to those subject to the proposed export control. It also describes the nature and results of the efforts made pursuant to Section 6(h) of the Act to secure the cooperation of foreign governments in controlling the foreign availability of such comparable goods or technology. In accordance with the Act, foreign availability considerations do not apply to export controls in effect prior to June 12, 1985, to controls maintained for human rights and anti-terrorism reasons, or to controls in support of the international obligations of the United States.

General Comments from Industry

The Department of Commerce published a notice in the *Federal Register* on October 8, 1997, requesting public comments on its foreign policy-based export controls. BXA received three responses from industry to this request. Appendix I of this report summarizes them in further detail. The responses varied in nature, yet all called for the revision or elimination of certain licensing requirements specific to their industries. Specifically, the Regulations and Procedures Technical Advisory Committee commented on what it sees as an expansion of unilateral foreign policy controls; one computer manufacturer called for further analysis of the efficacy of the “Catch-All” provisions of the Enhanced Proliferation Control Initiative, and for revisions to the controls on high-performance computers and encryption items; another manufacturer called for BXA to liberalize controls on a particular titanium alloy.

In 1997, two Executive Branch advisory groups and several industry and think-tank organizations published reports on the effects of U.S. unilateral sanctions in response to the perceived recent rise in their use by Congress and the Administration as a foreign policy tool. Appendix I includes summaries of the recommendations of these studies. In general, these reports catalogued existing sanctions, estimated their economic effects on the U.S. economy, and

evaluated their success in effecting the desired foreign policy outcomes. Almost unanimously, the studies recommended establishing guidelines for implementing sanctions and employing multilateral rather than unilateral measures whenever possible.

Sanctions reform legislation was introduced in both houses of Congress in October 1997, which sought to establish a framework for the consideration of legislative and executive branch proposals to impose unilateral economic sanctions. The measures were referred to the relevant Committees, but have yet to come to a vote in either house.

ENDNOTES

1. *Section 6(b)(2) requires the Department to consider the criteria set forth in Section 6(b)(1) when extending controls in effect prior to July 12, 1985. In addition, the report must include the elements set forth in Sections 6(f)(2)(A) (purpose of the controls); 6(f)(2)(C) (consultation with industry and other countries); 6(f)(2)(D) (alternative means attempted); and 6(f)(2)(E) (foreign availability).*
2. *Section 6(b)(1) requires the Department to make determinations regarding the criteria set forth therein when extending controls in effect after July 12, 1985. The report must also contain the additional information required in Section 6(f)(2)(A), (C)-(E) (as set forth in endnote 1, supra.)*
3. *The scope of the embargo as pertains to reexports to Sudan has not been determined as of the submission of this report.*
4. *Limitations exist when assessing the economic impact of certain controls because of the unavailability of data or because of the prevalence of other factors, e.g., currency values, foreign economic activity, or foreign political regimes, which may restrict imports of U.S. products more stringently than the United States restricts exports.*
5. *When controls are implemented without the imposition of corresponding restrictions by other countries, it is difficult to guard against reexports from third countries to the target country, to secure third country cooperation in enforcement efforts, and to detect violations abroad and initiate proper enforcement action. The relative ease or difficulty of identifying the movement of controlled goods or technical data is also a factor. Controls on items that are small, inexpensive, easy to transport or conceal, or that have many producers and end-users, are harder to enforce.*

2. Crime Control/Human Rights (Sections 742.7)^{1 2}

Export Control Program Description and Licensing Policy

The United States maintains export controls on crime control items, which Section 6(n) of the Act requires, to reflect its concerns about the human rights situation in various parts of the world.

A. Crime Control Items. The Department of Commerce requires a license to export crime control and detection instruments and equipment and related technology and software to any destination, except members of the North Atlantic Treaty Organization, Australia, Japan and New Zealand.

Implements of Torture. Commerce requires a license to export specially designed implements of torture and thumbscrews to any destination, with a presumption of denial of all license applications.

B. Crime Control Items. In general, Commerce will favorably consider applications for licenses on a case-by-case basis, unless evidence exists that the government of the importing country may have violated internationally recognized human rights and that the judicious use of export controls would help to deter the development of a consistent pattern of violations or the association of the United States with such violations.

Implements of Torture. Commerce will generally deny these applications for licenses.

C. Following the military assault on demonstrators by the People's Republic of China (PRC) in Tiananmen Square in June 1989, the United States imposed constraints on the export of certain items on the Commerce Control List (CCL). Section 902(a)(4) of the Foreign Relations Authorization Act for FY 1990-1991, Public Law 101-246, suspends the issuance of licenses under Section 6(n) of the Act for the export of any crime control or detection instruments or equipment to the PRC. The President may terminate the suspension by reporting to Congress that China has made progress on political reform or that it is in the national interest of the United States to terminate the suspension.

D. Commerce denies applications for licenses for those small and light arms and crowd control items under its jurisdiction to Indonesia, consistent with Section 582 of the Foreign Operations, Export Financing and Related Programs 1995 Appropriations and 1994 Supplemental Appropriations Act (Public Law 103-306) and Administration policy.

E. The Department of State annually compiles a volume of *Country Reports on Human Rights Practices*. The Department of State prepares this report in accordance with Sections 116(d) and 502B(b) of the Foreign Assistance Act of 1961, as amended, and submits it to

Congress. The factual situation presented in this report is a significant element in licensing recommendations made by the Department of State.

Analysis of Control as Required by Section 6(f) of the Act

A. The Purpose of the Control

Crime Control Items. These controls aim to ensure that U.S.-origin police equipment is not exported to countries whose governments do not respect internationally recognized human rights. Denial of export license applications to such countries helps to prevent the United States from being associated with other countries' human rights violations and sends a clear signal about U.S. human rights concerns to the governments of the importing countries.

Implements of Torture. The purposes of this control are as follows: 1) to reduce the possibility of any nation using U.S.-origin products for torture; 2) to distance the United States from human rights violations; 3) to send a concrete signal about U.S. human rights concerns to the international community.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving the Intended Foreign Policy Purpose. Because of the lack of complementary controls on the part of other producer nations, these controls have limited effectiveness in altering foreign government conduct when the item is available outside the United States. Nevertheless, the control does restrict human rights violators' access to U.S.-origin goods and has symbolic importance as evidence of the U.S. support for the principles of human rights.
2. Compatibility with Foreign Policy Objectives. This control program is fully consistent with U.S. policy in support of internationally recognized human rights, as expressed by successive Administrations and by Congress.
3. Reaction of Other Countries. These controls are unique, serve a distinct foreign policy purpose, and arise out of deeply held human rights convictions. Reactions of other countries do not render them ineffective.
4. Economic Impact on United States Industry. In FY 1997, Commerce approved 1,859 export license applications, worth \$149,524,378, for crime control items to all destinations. Police-model infrared viewers controlled by Export Control Classification Number (ECCN) 6A002.c (previously 6A02.c) are not included in these totals because, in some cases, these infrared viewers are almost technically indistinguishable from other direct view imaging equipment controlled by 6A002 (6A02). Commerce approved 42 applications, worth \$256,645, in FY 1997 for all direct view imaging equipment (including police-model infrared viewers) controlled by ECCN 6A002.c (6A02.c).

Table 1. CRIME CONTROL APPLICATIONS APPROVED (FY 1997)

ECCN	Items Controlled	Applications Approved	\$ Value
0A982 (0A82)*	Saps, handcuffs, police helmets & shields	272	\$12,786,787
0A983 (0A82)*	Specially designed instruments of torture	0	\$0
0A984 (0A84)*	Shotguns and shotgun shells	815	\$35,333,348
0A985 (0A84)*	Optical sighting devices, stun guns, & shock batons	433	\$23,630,565
0E984 (0E84)	Technology for "development" or "production" of shotguns	0	\$0
1A984 (1A84)	Chemical agents (including tear gas); fingerprint powders, dyes, & inks	177	\$7,358,131
3A980 (3A80)	Voice print identification & analysis equipment	1	\$50,000
3A981 (3A81)	Polygraphs, fingerprint analyzers, cameras, & equipment	133	\$16,297,734
3D980 (3D80)	Software specially designed for the "development," "production," or "use" of items in 3A980 or 3A981	20	\$53,367,811
3E980 (3E80)	Technology for the "development," "production," or "use" of items in 3A980 or 3A981	2	\$0
4A003 (4A03)	Computers for computerized fingerprint equipment	0	\$0

Table 1. CRIME CONTROL APPLICATIONS APPROVED (FY 1997), continued

ECCN	Items Controlled	Applications Approved	\$ Value
4A980 (4A80)	Computers for computerized fingerprint equipment	4	\$700,000
4D001 (4D01)	Software specially designed for the "development," "production," or "use" of computers in 4A003 for computerized fingerprint equipment	0	\$0
4D980 (4D80)	Software specially designed for the "development," "production," or "use" of items in 4A980	2	\$2
4E001 (4E01)	Technology for the "development," "production," or "use" of computers in 4A003 for computerized fingerprint equipment	0	\$0
4E980 (4E80)	Technology for the "development," "production," or "use" of items in 4A980	0	\$0
6A002.c (6A02.c)	Police-model infrared viewers	42	\$256,645
6E001 (6E01)	Technology for the "development" of police-model infrared viewers in 6A002.c	0	\$0
6E002 (6E02)	Technology for the "production" of police-model infrared viewers in 6A002.c	0	\$0
9A980 (9A80)	Nonmilitary mobile crime science laboratories and parts & accessories	0	\$0

***NOTE 1:** Former ECCN 0A82 (which controlled police helmets and shields, leg irons, shackles, handcuffs, straight jackets, and specially designed implements of torture and thumbscrews) was divided into two separate ECCNs in 1995. These items are now controlled by ECCNs 0A982 and 0A983.

***NOTE 2:** Former ECCN 0A84 (which controlled shotguns, stun guns, shock batons, and optical sighting devices for firearms) was divided into new ECCNs 0A984 and 0A985 in 1996.

In FY 1997, Commerce denied 60 applications for crime control items, worth \$16,116,312. Applications for stun guns, shock batons, shotguns, handcuffs, polygraphs, and fingerprint analyzers comprised the bulk of the denials (i.e., 49 applications valued at \$14,221,952). The denied applications were destined for a variety of countries, including Cambodia, China, Indonesia, South Africa and several other African, Asian, Eastern European, and Central and South American destinations.

Table 2. CRIME CONTROL APPLICATIONS DENIED (FY 1997)

ECCN	Description	Applications Denied	\$ Value
0A982 (0A82)	Handcuffs, police helmets & shields	11	\$3,080,200
0A984 (0A84)	Shotguns and shotgun shells	11	\$3,605,328
0A985 (0A84)	Optical sighting devices, stun guns, & shock batons	21	\$4,998,169
1A984 (1A84)	Fingerprint inks, dyes, & powders	3	\$222,715
3A981 (3A81)	Fingerprint analyzers; polygraphs	6	\$2,538,255
3D980 (3D80)	Lie detection software	2	\$220,000
6A002.c (6A02.c)	Direct view imaging equipment, including police-model infrared viewers	6	\$1,451,645

5. Enforcement of Control. Commerce has not identified any specific enforcement problems in connection with crime control items or implements of torture. For the most part, the affected commodities are readily recognizable. In the case of items controlled unilaterally, enforcement cooperation from other countries and control over reexports is difficult.

C. Consultation with Industry

The Department of Commerce published a notice in the *Federal Register* on October 8, 1997, requesting public comments on its foreign policy-based export controls. As of the date of publication of this report, the Department had not received any comments on its export policy for crime control items. However, throughout 1997, the Department received several requests for information about Commerce licensing policy and statistics for crime control items under the Freedom of Information Act. Commerce provided information in response to these requests to the fullest extent possible under the proprietary information protection provisions in Section 12(c) of the Act.

D. Consultation with Other Countries

Many other supplier countries have not placed similar controls on their exports of crime control and detection equipment. The United Kingdom and Canada maintain controls on crime control commodities that are similar to U.S. controls.

E. Alternative Means

Section 6(n) of the Act requires export controls on crime control and detection equipment. Alternative means do not satisfy this statutory requirement. The United States does, however, use diplomatic demarches, sanctions, and other means to convey its concerns about the human rights situation in various countries.

F. Foreign Availability

The foreign availability provision does not apply to Section 6(n) of the Act.³ Congress has recognized the usefulness of these controls in supporting United States policy on human rights issues, foreign availability notwithstanding.

ENDNOTES

1. *Certain goods, technology and software described in this report, whether or not subject to foreign policy controls, may also require a license for export to certain destinations for national security purposes in accordance with Section 5 of the Act.*
2. *Citations following each of the foreign policy control programs refer to those sections of the Export Administration Regulations (EAR), 15 CFR Parts 730-774, which describe the*

control program.

3. *Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under Sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, Section 108(g)(2), 99 Stat. 120, 134-35. Moreover, Sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability.*

3. Regional Stability (Section 742.6)

Export Control Program Description and Licensing Policy

This control has traditionally covered vehicles specially designed or modified for military purposes and certain dual-use commodities that can be used to manufacture military equipment. In 1993, the President transferred certain goods and technologies to the Commerce Control List (CCL) from the Department of State's United States Munitions List (USML), which the United States controls for regional stability reasons. This process of transferring items from State Department licensing jurisdiction to Commerce Department licensing jurisdiction is continuing.

A. Commerce requires a license for foreign policy purposes to export military vehicles and certain commodities used to manufacture military equipment to all destinations except member nations of the North Atlantic Treaty Organization (NATO), Australia, Japan and New Zealand. The Bureau of Export Administration (BXA) will generally consider applications for such licenses favorably, on a case-by-case basis, unless the export would contribute significantly to the destabilization of any region.

B. Items formerly on the USML transferred to the Commerce Control List include certain image intensifier tubes, infrared focal plane arrays, certain navigation systems technology for inertial navigation systems, gyroscopes and accelerometers. Commerce requires a license for export to all destinations except Canada. BXA will review all license applications for these items on a case-by-case basis to determine whether the export could contribute, directly or indirectly, to a country's military capabilities in a manner that would destabilize or alter a region's military balance contrary to the foreign policy interests of the United States.

Analysis of Control as Required by Section 6(f) of the Act

A. The Purpose of the Control

This control provides an effective mechanism for the United States to monitor the export of the noted items to restrict their use in instances that would adversely affect regional stability or the military balance.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving the Intended Foreign Policy Purpose. This control contributes to U.S. foreign policy purposes by enabling the United States to restrict the use or availability of certain U.S.-origin sensitive goods and technologies that would adversely affect regional stability or the military balance in certain areas.

2. Compatibility with Foreign Policy Objectives. This control is consistent with U.S. foreign policy goals, including promoting peace and stability and preventing U.S. exports that might contribute to weapons production or military capabilities in areas of concern.
3. Reaction of Other Countries. A number of other countries limit exports of items and technologies with military applications to areas of concern, recognizing that such equipment could adversely affect regional stability and the military balance.
4. Economic Impact on United States Industry. In FY 1997, Commerce processed more licenses for those regional stability items transferred to its licensing jurisdiction from the Department of State than for those not previously controlled by State. In FY 1997, BXA approved 492 license applications, with a total value of \$26,724,044, for these regional stability items. Almost all of these applications (490 out of the 492 approvals mentioned above, valued at \$26,724,042) were for items controlled by Export Control Classification Number (ECCN) 6A002 (optical sensors) or ECCN 6A003 (imaging cameras). Commerce denied sixteen applications for these items, worth \$2,354,588: seven for items controlled by ECCN 6A002 (totaling \$1,464,120) and nine for items controlled by ECCN 6A003 (totaling \$890,468). Of the sixteen denied applications, five listed Japan as the country of ultimate destination, four listed various NATO countries, and two listed China. The remaining denials were for exports to Croatia, Finland, India, Russia, and the United Arab Emirates.

In addition, Commerce returned 72 applications for these regional stability items (having a total value of \$6,528,729) without action: 35 applications were for items controlled by ECCN 6A002 (valued at \$2,557,975) and 37 were for items controlled by ECCN 6A003 (valued at \$3,970,754). Among the reasons Commerce returned these licenses without action, four of the ECCN 6A002 applications (valued at \$1,804,665) were for bulk sales (i.e., resale to unknown end-users), and another 22 (valued at \$99,980) involved Generation III night vision equipment. BXA returned six applications for ECCN 6A003 regional stability items (valued at \$1,141,140) without action because they involved resale to unknown end-users.

The effects of regional stability export controls on those items traditionally controlled by Commerce were much smaller, if measured only in terms of the number of license applications submitted. However, the total value of the export licenses that BXA issued for these traditional regional stability items in FY 1997 (\$109,302,935) was significantly higher than the total for those regional stability items that were transferred from the Department of State's USML (\$26,724,044). The regional stability items traditionally controlled by Commerce generally require a validated license for export to all destinations except NATO countries, Australia, Japan, and New Zealand, although certain regional stability items in this category (see ECCNs 1B018.a and 2B018, which include materials and materials processing equipment, respectively, on the International Munitions List) are also controlled for missile technology reasons, and thus require a validated license to all destinations except Canada (i.e., the more stringent missile technology validated license requirements apply to these items). In FY 1997, BXA approved 123 applications for these regional stability items, valued at \$109,302,935. Almost all of these approvals were for items controlled by ECCN 9A018 (which includes certain military trainer

aircraft, flight trainers, parachutes and related equipment) or ECCN 2B018 (122 out of the 123 approvals mentioned above, worth \$109,302,860). BXA denied no applications for items in this category. Commerce returned only eight applications for these items (having a total value of \$1,343,220) without action: five for items controlled by ECCN 2B018 (totaling \$880,000) and three for items controlled by ECCN 9A018 (totaling \$463,220).

In summary, BXA processed a total of 711 applications for all regional stability items in FY 1997. Of this total, BXA approved 615 (86.5 percent), denied 16 (2.25 percent), and returned 80 (11.25 percent) without action. The bulk of export licenses issued for regional stability items were for imaging cameras controlled by ECCN 6A003.b.3 or .b.4 (410 applications, valued at \$21,157,818); vehicles controlled by ECCN 9A018.b that were specially designed or modified for military purposes (120 applications, valued at \$108,102,860); and solid state detectors, image intensifier tubes, focal plane arrays, and direct-view imaging equipment controlled by ECCN 6A002.a.1, a.2, a.3, or .c (80 applications, worth \$5,566,224). All sixteen of the denied regional stability applications, and 75 of the 80 applications returned without action, were for items controlled by ECCNs 6A002, 6A003, or 9A018. As these licensing data clearly demonstrate, the burden of the regional stability validated license requirements has fallen primarily upon domestic suppliers of those items in ECCNs 6A002, 6A003, and 9A018, as described above.

5. Enforcement of Control. Nearly all commodities and related software and technology subject to controls for regional stability purposes are also subject to multilateral controls for either national security or missile technology reasons. This coincidence of control facilitates the ability to detect direct exports because enforcement personnel do not require additional training to distinguish national security or missile technology controlled items from those controlled for foreign policy purposes.

C. Consultation with Industry

The Department of Commerce published a notice in the *Federal Register* on October 8, 1997, requesting public comments on its foreign policy-based export controls. As of the date of publication of this report, the Department had received no public comments on its regional stability controls. However, Commerce consults with various elements in industry during the ongoing transfer of USML items from State to Commerce licensing jurisdiction. Most industry input received during this process supports the transfer of these items to Commerce control, and encourages more such transfers.

D. Consultation with Other Countries

The Wassenaar Arrangement on Conventional Arms and Dual-Use Goods and Technologies, signed by the United States and thirty-two other countries in 1996, controls certain items the United States also controls for regional stability purposes. Each member state has agreed to incorporate the Wassenaar Dual-Use Control List into its own national control lists. (See Appendix II for complete list of regime members.)

E. Alternative Means

The United States has undertaken a wide range of actions to support and encourage regional stability. The United States has used bilateral and multilateral diplomatic means to discourage actions that promote regional instability. The United States has specifically encouraged efforts to limit the flow of arms and militarily useful goods to regions of conflict and tension.

F. Foreign Availability

The military vehicles and other military-type equipment long controlled for regional stability purposes may be obtained from numerous foreign sources. A considerable number of items previously controlled by the State Department, but now under Commerce jurisdiction, are also available from foreign sources. However, nearly all commodities and related software and technology controlled for regional stability purposes are also subject to multilateral controls for either national security or missile technology reasons.

4. Anti-Terrorism Controls (Section 742.8, 742.9, 742.10, 744.10)

Export Control Program Description and Licensing Policy

These controls reflect U.S. opposition to acts of international terrorism supported by a foreign government.

Pursuant to Section 6(j) of the Export Administration Act, the Secretary of State has designated seven countries--Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria--as nations whose governments have repeatedly provided support for acts of international terrorism or terrorist groups. In addition to the controls Commerce maintains on exports to all seven countries under Section 6(j) of the Act for anti-terrorism reasons, the United States maintains comprehensive trade embargoes on six of these countries: Cuba, Iran, Iraq, Libya, North Korea and Sudan.

On August 19, 1997, the President issued Executive Order 13059 to confirm that the embargo on Iran prohibits all trade and investment activities by United States persons, wherever located, and to consolidate in one Order the various prohibitions previously imposed to deal with the national emergency declared on March 15, 1995. Executive Order 12957 of March 5, 1995, prohibits U.S. persons from entering into contracts for the financing or the overall management or supervision of the development of petroleum resources located in Iran or over which Iran claims jurisdiction. Executive Order 12959 of May 6, 1995, imposed a comprehensive trade and investment embargo on Iran.

On November 3, 1997, the President issued Executive Order 13067, which imposed an embargo on Sudan, effective November 4, 1997. The President delegated to the Treasury Department the authority to promulgate regulations to administer the embargo on Sudan.

The Department of the Treasury administers the comprehensive U.S. trade and investment embargo against Iran under the International Emergency Economic Powers Act (IEEPA) and the United Nations Security Council mandated embargo against Iraq under IEEPA and the United Nations Participation Act. Treasury also maintains embargoes against Cuba and North Korea under the Trading with the Enemy Act and against Libya under IEEPA and other authorities.

Both the Department of Commerce and the Department of the Treasury thus have authority to regulate exports from the United States to Cuba, Iran, Iraq, Libya, North Korea and Sudan. To avoid duplication in the exercise of licensing authority, Treasury and Commerce have allocated licensing responsibility for many export transactions. For example, Commerce exercises licensing responsibility for exports to Cuba and North Korea. Treasury exercises licensing responsibility for exports to Iran and Iraq.

This report does not discuss the comprehensive embargoes against Iran and Iraq because

they are maintained by Treasury. Chapter 5 sets forth the export controls maintained against Cuba and North Korea. Chapter 6 discusses the export controls maintained against Libya. This chapter discusses the anti-terrorism controls on exports to Iran, Syria and Sudan.

Effective December 28, 1993, the Acting Secretary of State determined the United States would control five categories of dual-use items subject to multilateral controls to certain sensitive government end-users under Section 6(j) of the Act, since these items meet the criteria set forth in Section 6(j)(1)(B). Specifically, the Acting Secretary determined that these items, when exported to military or other sensitive end-users in a terrorist-designated country, could make a significant contribution to that country's military potential or could enhance its ability to support acts of international terrorism. These anti-terrorism controls apply to all designated terrorist-list countries.

The Acting Secretary also directed that the United States should continue to control other items not specifically controlled under Section 6(j) for general foreign policy purposes under Section 6(a) to terrorist-list countries, and that the United States will continue to review the export of such items prior to approval to evaluate whether, under the circumstances of the application, the requirements of Section 6(j) apply. These measures are described in detail below.

Paragraph A below reflects the Section 6(j) controls; paragraph B reflects the Section 6(a) controls on Iran, Sudan, and Syria.

A. The Acting Secretary of State determined, effective December 28, 1993, that the export of certain categories of goods and technologies when destined to military, police, intelligence entities and other sensitive end-users, as determined by the Department of State, in any country designated under Section 6(j) of the Act as a country that has repeatedly provided support for acts of international terrorism, "could make a significant contribution to the military potential of such country, including its military logistics capability, or could enhance the ability of such country to support acts of international terrorism." As a result of this determination, the Secretaries of State and Commerce will notify Congress thirty days prior to the issuance of any license for the export of any item from the five categories listed below to sensitive end-users in the terrorist countries.

Pursuant to Section 6(j) of the Act, Commerce requires a license for the export of the following items to military or other sensitive end-users in terrorist-designated countries:

- 1) All items subject to national security controls, except computers with a performance level of less than 500 million theoretical operations per second (MTOPS) (Wassenaar Arrangement);¹
- 2) All items subject to chemical and biological weapons proliferation controls (Australia Group);
- 3) All dual-use items subject to missile-proliferation controls (Missile Technology Control Regime);

- 4) All items subject to nuclear weapons-proliferation controls (Nuclear Referral List); and
- 5) All military-related items (items controlled by Commerce Control List (CCL) entries ending with the number 18).

B. Pursuant to Section 6(a) of the Act, the United States requires a license for the categories of items listed below for Iran, Sudan, and Syria to promote U.S. foreign policy goals. Sudan (as of November 4, 1997) and Iran are also subject to comprehensive trade and investment embargoes administered by the Department of the Treasury under the authority granted by the President under IEEPA.² The Department of State reviews license applications for items controlled under Section 6(a) of the Act before approval to determine whether the requirements of Section 6(j) apply. If the Secretary of State determines that the export "could make a significant contribution to the military potential of such country, including its military logistics capability, or could enhance the ability of such country to support acts of international terrorism," Commerce and State will notify the appropriate congressional committees thirty days before issuing a license. The categories of items controlled under Section 6(a) are as follows:

- o Categories of items listed in paragraph A to non-military or non-sensitive end-users
- o Aircraft, Including Helicopters, Engines and Parts
- o Heavy Duty On-Highway Tractors
- o Off-Highway Wheel Tractors (>10 tons)
- o Cryptographic, Cryptoanalytic and Cryptologic Equipment
- o Navigation, Direction Finding and Radar Equipment
- o Electronic Test Equipment
- o Mobile Communications Equipment
- o Acoustic Underwater Detection Equipment
- o Vessels and Boats (Including Inflatable Boats)
- o Marine and Submarine Engines
- o Underwater Photographic Equipment
- o Submersible Systems
- o CNC Machine Tools
- o Vibration Test Equipment
- o Certain Digital Computers (CTP \geq 6)
- o Certain Telecommunications Transmission Equipment
- o Certain Microprocessors (Clock Speed >25 Mhz)
- o Certain Semiconductor Manufacturing Equipment
- o Software Specially Designed for CAD/CAM IC Production
- o Packet Switches
- o Software Specially Designed for Air Traffic Control Applications
- o Gravity Meters (Static Accuracy <100 Microgal or with Quartz Element)
- o Certain Magnetometers with Sensitivity <1.0 nt rms per root Hertz
- o Certain Fluorocarbon Compounds for Cooling Fluids for Radar and Supercomputers

- o High-Strength Organic and Inorganic Fibers
 - o Certain Machines for Gear-Cutting (Up to 1.25 Meters)
 - o Certain Aircraft Skin and Spar Milling Machines
 - o Certain Manual Dimensional Inspection Machines (Linear Positioning Accuracy $\pm 3+L/300$)
 - o Robots Employing Feedback Information in Real Time
 - o Explosive device detectors, used in airports
- C. Exports of the following additional items to Iran and Sudan are subject to a license requirement under the Export Administration Regulations (EAR) for foreign policy reasons:
- o Large Diesel Engines (>400 hp)
 - o Scuba Gear
 - o Pressurized Aircraft Breathing Equipment
- D. Exports of the following additional items to Iran are subject to a license requirement under the EAR for foreign policy reasons:
- o Portable Electric Power Generators
- E. Licensing Policy
1. The United States has a policy of denial for all items controlled for national security or foreign policy reasons that require a license for export to Iran. All exports and certain specified reexports are also subject to the comprehensive trade and investment embargo, which the Department of the Treasury administers.
 2. Pursuant to Executive Order 13067 of November 3, 1997 (effective November 4, 1997), exports from the United States or by U.S. persons to Sudan are subject to comprehensive trade restrictions administered by the Department of the Treasury. Commerce maintains in effect all restrictions on exports controlled to Sudan for national security, foreign policy or short supply reasons.³
 3. Commerce will generally deny applications for export to Syria of national security-controlled items if the export is destined to a military or other sensitive end-user or end-use. Commerce will consider applications for other end-users or end-uses in Syria on a case-by-case basis.
 4. Commerce will generally deny all items subject to chemical and biological weapons (CBW) proliferation controls proposed for export to Syria.
 5. Commerce will generally deny all items subject to missile technology controls proposed

for export to Syria.

6. Commerce will generally deny applications for export to Syria of military-related items (CCL entries ending in the number 18).

7. Commerce will generally deny applications to export Nuclear Referral List items to Syria. Commerce will consider application for export to civilian end-users on a case-by-case basis.

8. There is a presumption of denial for applications for export to military end-users and end-users in Syria of other items. For other end-users and end-uses in Syria, Commerce will review license applications on a case-by-case basis.

9. Commerce will consider applications for export and reexport to Syria on a case-by-case basis if they meet the following conditions:

a. the transaction involves the reexport to Syria of items where Syria was not the intended ultimate destination at the time of original export from the United States, provided that the export from the United States occurred prior to the applicable contract sanctity date;

b. the U.S. content value of foreign-produced commodities is 20 percent or less; or

c. the commodities are medical equipment.

10. Applicants wishing to have contract sanctity considered in reviewing their applications must submit adequate documentation demonstrating the existence of a contract that predates the imposition or expansion of controls on the item(s) intended for export.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The controls effectively distance the United States from nations that have repeatedly supported acts of international terrorism. The controls enable the Department of Commerce to use its enforcement mechanisms and resources to further the U.S. policy of counterterrorism. Further, the controls demonstrate the firm resolve of the United States not to conduct unrestricted export trade with nations that do not adhere to acceptable norms of international behavior. The licensing mechanism provides the Department with the means to control any U.S. goods or services that might significantly contribute to the military potential of designated countries and to limit the availability of such goods for use in support of international terrorism.

Iran. These controls respond to continued Iranian sponsorship of terrorism. The purposes of the controls are to restrict equipment that would be useful in enhancing Iran's military or

terrorist-supporting capabilities, and to address other U.S. foreign policy concerns, including human rights, non-proliferation and regional stability.

The controls also allow the United States to prevent shipments of U.S.-origin equipment for uses that could pose a direct threat to U.S. interests. Iran continues to support groups that practice terrorism, including terrorism to disrupt the Middle East Peace Process, and it continues to kill Iranian dissidents abroad. By restricting items with military use, the controls demonstrate the resolve of the United States not to provide any direct or indirect military support for Iran and support other U.S. foreign policy concerns.

Syria. Although there is no evidence of direct Syrian Government involvement in the planning or implementing of terrorist acts since 1986, Syria continues to provide support and safe haven to groups that engage in terrorism. The groups include the Popular Front for the Liberation of Palestine General Command; Hamas; Hizballah; the Abu Nidal Organization; the Popular Front for the Liberation of Palestine; the Democratic Front for the Liberation of Palestine; the Japanese Red Army; the Kurdistan Workers Party (PKK); DHKP/C (formerly known as Dev Sol); and the Palestinian Islamic Jihad. The trade controls reflect U.S. opposition to Syria's support and safe-haven to terrorist groups and prevent a significant U.S. contribution to Syria's military capabilities.

Sudan. Evidence indicates that Sudan allows the use of its territory as sanctuary for terrorists including the Abu Nidal Organization, Hizballah, Hamas and Palestinian Islamic Jihad. Safe houses and other facilities used to support radical groups are allowed to exist in Sudan with the apparent approval of the Sudanese Government's leadership. Further, some military extremists who commit acts of sabotage in neighboring countries receive training in Sudan. The new embargo and the export controls demonstrate U.S. opposition to Sudan's support for international terrorism, while restricting access to items that could make a significant contribution to Sudan's military capability or ability to support international terrorism.

B. Considerations and/or Determinations of the Secretary of Commerce⁴

1. Probability of Achieving the Intended Foreign Policy Purpose. Although foreign availability of comparable goods limits the economic effects of these controls, they do restrict access by these countries and persons to U.S.-origin commodities, technology and software, and demonstrate the determination of the United States to oppose and distance itself from acts of international terrorism. Judicious application of export controls in conjunction with other efforts serves to enhance the overall U.S. effort to combat international terrorism.

In extending controls toward Iran, Syria and Sudan, the Secretary has determined that they are likely to achieve the intended foreign policy purpose, despite such other factors as the foreign availability of comparable items.

Iran. The controls on Iran restrict its access to specified items of U.S.-origin that could

be used to threaten U.S. interests. The United States has sought, and will continue to seek, the cooperation of other countries in cutting off the flow of military and military-related equipment to Iran.

Sudan. The embargo and controls on Sudan affirm the commitment of the United States to oppose international terrorism by limiting Sudan's ability to obtain and use U.S.-origin items in support of terrorist or military activity. These controls send a clear message to Sudan of strong U.S. opposition to its support for terrorist groups.

Syria. These controls are an important means of demonstrating U.S. resolve by limiting Syria's ability to obtain U.S.-origin items that could be used to support terrorist activities or contribute significantly to Syria's military potential. Although other nations produce many of the items subject to U.S. anti-terrorism controls, this does not obviate the need to send a strong signal to the Syrian Government of U.S. disapproval of its support for groups involved in terrorism.

2. Compatibility with Foreign Policy Objectives. In extending these controls, the Secretary determined that they are compatible with the foreign policy objectives of the United States toward nations and persons who support terrorism. They are also compatible with overall U.S. policy toward Iran, Sudan and Syria. In addition, the controls are consistent with U.S. efforts to restrict the flow of items that could be used for military or terrorist purposes.

3. Reaction of Other Countries. Some nations have raised objections to the perceived extra-territorial reach of U.S. foreign policy export controls. However, the United States seeks to limit the extraterritorial effects of these controls to minimize frictions with friendly countries. The Department of State revises the list of countries designated as supporters of international terrorism whenever a country's record warrants its removal from, or addition to, the list. In 1982, Iraq was removed while Cuba was added. Iran was added in 1984 and North Korea in 1988. In 1990, Iraq was returned to the list and the former People's Democratic Republic of Yemen (PDRY) was removed following its unification with the Yemen Arab Republic. Sudan was added in 1993. The United States applies controls after a careful review of each country's record regarding support for repeated acts of international terrorism.

The reaction of other countries to the extension of the controls on Iran, Syria and Sudan is not likely to render the controls ineffective in achieving their intended foreign policy purpose, or to be counterproductive to U.S. foreign policy interests.

Iran. Regarding the controls on specific product categories, other countries share the U.S. concern over Iran's support of terrorism, human rights abuses, attempts to acquire weapons of mass destruction, and the need to deny Iran access to equipment that it could use to threaten neutral shipping. The thirty-three members of the Wassenaar Arrangement on Conventional Arms and Dual-Use Goods and Technologies (including the United States) have recognized Iran as a country whose behavior is a cause of concern.

Sudan. The United States imposed these controls (and the subsequent embargo) in response to credible evidence that Sudan assists international terrorist groups. The U.S. decision to designate Sudan a state sponsor of terrorism reflects an assessment of the facts and U.S. law. The President imposed the embargo after finding that Sudan continues to support international terrorism, destabilize neighboring governments and violate human rights. The United States has consulted with key allies and urged them to take all possible measures to convince Sudan to halt its support for terrorism. Some countries show their disapproval of Sudan's support for terrorism in other ways. For example, the Organization of African Unity (OAU), in an unprecedented action criticizing a member, passed a resolution in September 1995 calling on Sudan to extradite to Ethiopia three suspects charged with the June 1995 assassination attempt against President Mubarak of Egypt. In 1996, the United Nations Security Council adopted three resolutions reaffirming the OAU resolution, calling on Sudan to desist from supporting terrorism, and imposing diplomatic and travel sanctions.

Syria. The United States maintains controls in response to Syria's lack of concrete steps against international terrorist groups that maintain a presence in Syria and Syrian-controlled areas of Lebanon. Some countries have objected to the perceived extraterritorial effects inherent in reexport controls.

The United States instituted controls against Syria after the Secretary of State designated it as a state sponsor of terrorism in December 1979. The United States imposed additional export controls along with other sanctions in November 1986, following findings of British courts that Syrian officials in London and Damascus aided and abetted a terrorist, Nizar Hindawi, in his attempt to place a bomb on an El Al civilian aircraft at London's Heathrow Airport. In November 1986, in reaction to the same court findings, the European Union (EU), with the exception of Greece, imposed a number of diplomatic and security sanctions against Syria. The United Kingdom also broke diplomatic relations with Syria at that time, but reestablished relations in November 1990. The United States has provided EU countries with specific information on the purpose and scope of U.S. economic sanctions.

4. Economic Impact on United States Industry.

Iran. The U.S. policy to deny dual-use licenses for Iran, as mandated by the National Defense Authorization Act (NDAA) of FY1993, and the U.S. embargo of 1995, have caused U.S. exports to Iran to drop sharply, although the United States had only a small share of Iran's import market in prior years. From 1991 through 1994, U.S. exports to Iran totaled close to \$2.2 billion (total derived from U.S. Census data), making the United States the sixth largest exporter (by dollar value) to Iran during this period. U.S. exports to Iran rose sharply in the early 1990s after Iran lifted certain import restrictions. From a total of only \$166 million in 1990, U.S. exports to Iran increased to \$522 million in 1991 and rose to \$744 million in 1992. U.S. exports to Iran during 1993 dropped slightly to \$613 million. After enactment of the NDAA, however, U.S. exports to Iran declined to \$326 million in 1994. However, even in 1992 when exports to Iran were high, these exports comprised only 0.175% of total U.S. exports worldwide. In 1995, that

percentage dropped to 0.05%. By 1996, the first full year of the embargo, U.S. exports to Iran totaled only \$345,000. Although exports to Iran had never represented a significant share of total U.S. exports, by 1996 U.S. exports to Iran had declined by more than 99.95% from 1992 levels.

The denial policy of the NDAA of FY 1993 appears to have reduced U.S. exports to Iran by between \$200 million and \$300 million per year. Total U.S. exports to Iran averaged \$626 million per year from 1991 through 1993, but only \$302 million per year for 1994 and 1995. This decline reflects the fact that Commerce approved no applications for exports to Iran in FY 1995 or FY 1996. Even the five applications for Iran that Commerce approved in FY 1997 were not for actual exports to Iran, but involved “deemed exports” (i.e., transfers of controlled U.S. technology to Iranian nationals working in the United States). In contrast, during the four fiscal years prior to FY 1995 (i.e., FY 1991-94), Commerce approved an average of \$177 million in applications to Iran each year. Table 1 shows the impact of the NDAA of FY 1993.

Table 1: Approved Applications to Iran (FY 1991-97)

Fiscal Year	Number of Applications	Total Value in U.S. Dollars
1991	89	\$ 60,149,182
1992	131	\$567,559,528
1993	44	\$ 63,834,952
1994	10	\$ 16,774,377
1995	0	\$0
1996	0	\$0
1997	5	\$19

By 1996, U.S. exports to Iran had fallen to only \$345,000. During that year, the top U.S. exports to Iran were completely different from the top export categories of previous years (see Table 2). Most of the items the United States exported to Iran in 1996 were humanitarian goods. The trade embargo radically transformed the nature, as well as the volume, of U.S. trade with Iran. The items the United States now exports to Iran closely resemble those exported to other embargoed countries such as Cuba and North Korea.

Table 2: Top U.S. Exports to Iran (1996)

S.I.C. Number	Description of Goods	Total Value (U.S. dollars)
2731	Books and pamphlets	\$272,000
2834	Pharmaceutical preparations	\$19,000
3089	Plastics products	\$14,000
3523	Farm machinery and equipment	\$13,000
2752	Printed matter, lithographic	\$12,000
2835	Prepared diagnostic substances	\$11,000
2676	Sanitary paper products	\$5,000

The humanitarian items listed in Table 2 (above) also constitute nearly 100% of total U.S. exports to Iran during 1996. This lack of diversity sharply contrasts with previous U.S. trade with Iran, where the leading U.S. export categories in the years from 1991 through 1995 represented 61.3% of total U.S. exports to Iran.

According to foreign trade statistics available from the United Nations, the leading exporters to Iran among the world's major industrial nations from 1990 through 1995 (the most recent period for which such data are available) include the following countries (listed in descending order according to their total exports to Iran from 1990-95): Germany, Japan, Italy, France, the United Kingdom, the United States, Turkey, the Netherlands, Belgium/Luxembourg, South Korea and Sweden. During this period, the United States exported nearly \$2.6 billion to Iran, which represented only 5% of Iran's imports. The other ten countries exported more than \$52 billion in goods to Iran from 1990 through 1995. Table 3 lists the leading categories of goods exported to Iran by the other major industrial nations (excluding the United States). These categories contain roughly 70 percent of the goods exported from the major industrial nations (excluding the United States) to Iran during this period.

Table 3: Top Exports to Iran by Major Industrial Nations (1990-95)

S.I.T.C.	Description of Goods	Total Value (U.S. dollars)
74	General industrial machinery & equipment	\$6.29 billion
78	Road vehicles	\$5.55 billion

S.I.T.C.	Description of Goods	Total Value (U.S. dollars)
72	Machinery specialized for particular applications	\$5.23 billion
67	Iron & steel	\$4.70 billion
77	Electrical machinery	\$3.99 billion
71	Power generating machinery	\$3.33 billion
76	Telecommunications, sound recording & reproduction equipment	\$2.27 billion
69	Manufactures of metals	\$1.63 billion
73	Metalworking machinery	\$1.62 billion
87	Professional scientific & control instruments	\$1.52 billion
75	Office & automated data processing machines	\$0.53 billion

(NOTE: Table 3 does not include 1995 U.N. foreign trade statistics for exports to Iran from South Korea and Sweden. These data were not available at the time of publication.)

Prior to the U.S. embargo on Iran, the United States directly competed with Iran's other major trading partners in such areas as general industrial machinery, motor vehicles and motor vehicle parts, power generating machinery, measuring and controlling devices, and electronic computers. This was also true of other categories of items not listed in Table 3, such as plastics and resins, transportation equipment, and industrial organic chemicals. By 1996, the first full year of the U.S. trade embargo on Iran, U.S. exports to Iran in nearly all of these categories had fallen to virtually zero.

Syria. U.S. controls on exports to Syria have had limited effect on U.S. industry, since the United States does not require a license for the export of most items in Syria's leading import sectors. Despite recent setbacks to Syria's economy, including reduced oil revenues, a heavy public debt burden, and domestic financial and economic difficulties, the government's limited economic reforms and infrastructure improvements of the early 1990s have enhanced the country's potential as a market for U.S. exports. Exports to Syria of agricultural products, various goods and services related to the development of Syria's oil fields, capital goods to rehabilitate its public utilities and state enterprises, light industrial equipment, transportation equipment, and computers offer the most potential to exporters..

Most of the leading U.S. exports to Syria (by dollar value) are concentrated in certain low technology areas (e.g., agricultural products and cigarettes) that are not affected by U.S. foreign policy controls and do not require a license for export or reexport to Syria, or are in areas where the United States has historically dominated the world market (e.g., oil and gas field equipment). Table 4 lists the U.S. exports to Syria that exceeded \$10 million during the period from 1991 through 1996.

Table 4: Top U.S. Exports to Syria (1991-1996)

S.I.C. Number	Description of Goods	Total Value (U.S. dollars)
3533	Oil & gas field equipment	\$264.8 million
0115	Corn	\$118.2 million
2111	Cigarettes	\$81.4 million
3569	General industrial machinery and equipment	\$38.4 million
3511	Turbine & turbine generator sets	\$35.9 million
2075	Soybean oil & byproducts	\$29.9 million
3711	Motor vehicles & passenger car bodies	\$29.6 million
2284	Thread & handwork yarns	\$24.7 million
2824	Manmade fibers (noncellulosic)	\$24.6 million
3312	Blast furnace, steel works, & rolling mill products	\$21.4 million
3531	Construction machinery and parts therefor	\$17.1 million
3714	Motor vehicle parts & accessories	\$15.2 million
3561	Pumps & pumping equipment (except fluid power pumps)	\$13.2 million
3357	Nonferrous metal wire & cable (drawn & insulated)	\$12.9 million

S.I.C. Number	Description of Goods	Total Value (U.S. dollars)
0181	Ornamental floriculture & nursery products	\$11.9 million
3829	Measuring & controlling devices	\$11.6 million
3532	Mining machinery & equipment	\$11.2 million

From 1991 through 1996, U.S. exports to Syria totaled \$1.2 billion (total derived from U.S. Census data), averaging roughly \$199.8 million per year and falling within a range between \$166 million and \$223 million per year. While total U.S. exports to Syria have remained relatively stable in recent years, with only incremental increases in total exports to Syria for every year following 1992, the value of licensed exports to Syria has increased significantly during the last three years. In FY 1997, Commerce approved 100 licenses for Syria, totaling \$107,003,346. As shown in Table 5, these figures represent a significant increase over FY 1991, when only eight licenses were approved with a total value of \$1,041,504.

Table 5: Approved Licenses for Syria (FY 1991 to FY 1997)

Fiscal Year	Total Applications Approved	Total Value (in U.S. dollars)
1991	8	\$1,041,504
1992	31	\$46,366,527
1993	106	\$42,896,103
1994	167	\$76,379,096
1995	139	\$68,298,135
1996	80	\$81,006,877
1997	100	\$107,003,346

The majority of items that the Bureau of Export Administration (BXA) licensed for export to Syria during the period covered by Table 4 fall within the categories of aircraft parts and components, digital computers, and certain electronic devices controlled only for foreign policy reasons. BXA denied 50 applications for Syria from FY 1991 through FY 1997; these applica-

tions had a total value of \$29.76 million.

The U.S. decision to grant export licenses for the export of aircraft parts and components and aircraft engine parts and components to Syria for air safety and humanitarian reasons has led to an increase in U.S. aerospace exports to Syria. Aerospace exports to Syria rose steadily from 1991 through 1995 (from \$834,351 in 1991 to more than \$3.7 million in 1995). The majority of these exports (70.9%) consisted of miscellaneous aircraft parts and equipment. U.S. exports of aircraft engine parts to Syria from 1991 through 1995 totaled almost \$2.5 million, or slightly more than 27% of total U.S. aerospace exports to Syria during this period, while exports of avionics equipment totaled only \$194,307 (just 2.1% of total U.S. aerospace exports to Syria). However, U.S. Census data indicate that total U.S. aerospace exports to Syria declined from more than \$3.7 million in 1995 to only \$2.35 million in 1996. In 1996, miscellaneous aircraft parts and equipment dominated U.S. aerospace exports to Syria (\$2.14 million, or 90.8% of total U.S. aerospace exports to Syria), while exports of aircraft engine parts totaled \$134,000 (5.7% of total U.S. aerospace exports to Syria) and exports of avionics equipment totaled only \$81,000 (3.4% of total U.S. aerospace exports to Syria).

Sudan. Given the desperate state of Sudan's economy, U.S. unilateral export sanctions on Sudan will have minor effects on U.S. industry. Sudan's poor economic performance over the past decade, resulting from civil war, adverse weather and a ban on International Monetary Fund assistance, prevents the country from importing a significant amount of goods from any supplier, including the United States. Before the President imposed the U.S. embargo on Sudan, effective November 4, 1997, the little amount that Sudan imported from the United States generally did not require export licenses and thus was hardly affected by the export controls.

Table 6, below, lists the top categories of U.S. exports to Sudan (those exceeding \$6 million during the period from 1991 through 1996). Most leading U.S. exports to Sudan (by dollar value) were low technology items, such as agricultural products, which U.S. foreign policy controls do not cover, and thus did not require a license for export or reexport to Sudan.

Table 6: Top U.S. Exports to Sudan (1991-1996)

S.I.C. Number	Description of Goods	Total Value (U.S. dollars)
0119	Cash grains (unspecified)	\$59.8 million
0111	Wheat	\$41.8 million
2041	Flour & other grain mill products	\$23.8 million
3523	Farm machinery & equipment	\$19.3 million
3533	Oil & gas field equipment	\$15.1 million

S.I.C. Number	Description of Goods	Total Value (U.S. dollars)
3743	Railroad equipment	\$15.0 million
3531	Construction machinery	\$14.4 million
2079	Shortening, table oils, etc.	\$13.5 million
3585	Refrigeration & heating equipment	\$11.2 million
3711	Motor vehicles & passenger car bodies	\$9.5 million
3621	Electric motors, generators, generator sets, etc.	\$8.4 million
3661	Telephone & telegraph apparatus & parts	\$7.2 million
3663	Radio, television, broadcast & studio equipment	\$7.1 million
3519	Internal combustion engines	\$7.0 million
3571	Electronic computers	\$6.3 million

U.S. exports to Sudan from 1991 through 1996 totaled \$343.8 million, accounting for only 0.01% of total U.S. exports during this period. Because most U.S. exports to Sudan are not high technology items, the implementation of anti-terrorism controls on exports to Sudan in 1996 did not significantly affect the volume of exports. Total U.S. exports to Sudan have, in fact, remained fairly stable since 1992, averaging a little over \$50 million per year and remaining within a range of \$43 million to \$54 million per year. The United States was the fifth largest exporter to Sudan in the first half of the 1990s.

The total number of export licenses issued for Sudan has been practically negligible during the past several years, since low technology items which did not require export licenses prior to the issuance of Executive Order 13067 on November 3, 1997, constituted the bulk of U.S. exports to Sudan. BXA issued as many export licenses for Sudan during FY 1997 (10 licenses, worth \$7,095,973) as it did during the previous five fiscal years (FY 1992 through 1996), when it approved ten licenses, worth \$5,976,017.

Table 7: Approved Licenses for Sudan (FY 1992 to FY 1997)

Fiscal Year	Total Applications Approved	Total Value (in U.S. dollars)
1992	1	\$25
1993	2	\$5,404,000
1994	0	\$0
1995	0	\$0
1996	7	\$571,992
1997	10	\$7,095,973

BXA issued twenty export licenses for Sudan (worth \$13,071,990) from 1992 to 1997. The majority of these licenses were for computers, computer software, mobile communications equipment, and diesel engines. During the same period, BXA rejected 13 export license applications for Sudan, worth more than \$4.3 million. Most of these denials occurred in FY 1997, when BXA rejected nine export license applications for Sudan, having a total value of almost \$3.2 million. The majority of the denied items were oil well perforators, computers, mobile communications equipment, or diesel engines.

With the imposition of the U.S. embargo on Sudan, effective November 4, 1997, future U.S. exports to Sudan will likely consist of the kinds of humanitarian goods that currently comprise the bulk of U.S. exports to Cuba and North Korea.

5. Enforcement of Control. In extending these anti-terrorism controls on Iran, Sudan and Syria, the Secretary has determined that the United States has the ability to enforce the controls. Specific enforcement problems with these controls involve exports and reexports of aircraft and parts. The fact that aircraft and parts are not controlled to most other countries, including to many in the region, creates the potential of shipments from other sources by means of reexport.

Iran. The expansion of controls on exports to Iran in 1987 imposed new licensing requirements on a large number of items that may be sent to most other destinations without a license or using a licensing exception, including some aircraft items and "consumer" goods that have many producers and end-users around the world. Detection and enforcement cooperation and control of reexports may be particularly difficult with respect to these items. However, enforcement of the controls on direct exports to Iran is aided by the general negative public perception of Iran.

Sudan. Controls on Sudan have not caused major enforcement problems. The United States has a limited number of direct exports and reexports of controlled items to Sudan. Any enforcement problems would likely be in the area of enforcement cooperation and control over

reexports since most other countries have not imposed controls comparable to those imposed by the United States.

Syria. Few enforcement problems have been identified for the direct export of controlled items to Syria. The problems that are most likely to occur will be in the area of enforcement cooperation and control over reexports, particularly for items that are available to many destinations under a general license.

C. Consultation with Industry

The Commerce Department received no specific responses on anti-terrorism controls to its request for public comments published in the *Federal Register*.

However, Commerce has received comments from the President's Export Council and the Regulations and Procedures Technical Advisory Committee regarding streamlining the Commerce Control List unilateral anti-terrorism entries.

D. Consultation with Other Countries

The United States continues to consult with the international community, particularly key allies, regarding Syria's support for terrorism.

The United States has also consulted with other nations regarding Sudan's support for terrorism, as well as its dismal human rights record and the need for better Sudanese cooperation on humanitarian relief efforts by international organizations operating within Sudan. Specific information has been provided to interested countries on the justification for designating Sudan a state sponsor of terrorism while urging them to do what they can to influence Sudan's behavior favorably.

E. Alternative Means

In efforts to persuade countries supporting terrorism to drop their backing for terrorist activities, the United States has taken a wide range of diplomatic, political, and security-related steps, in addition to economic measures such as export controls. The exact combination has varied according to circumstances and judgments as to the best approaches at a particular time.

The President imposed the November 4, 1997, embargo on Sudan after finding that Sudan continues to support international terrorism, destabilize neighboring governments and violate human rights. The prior anti-terrorism controls on Sudan generally reflected the concerns that led to the U.S. decision to place it on the terrorism list, including the use of Sudanese territory as a sanctuary for terrorist organizations and the training in Sudan of militant extremists who commit hostile acts in neighboring countries. Those controls made allowances for Sudan's humanitarian needs and generally focussed on items that could reasonably make a significant contribution to

Sudan's military capability or ability to support terrorism.

The Syrian Government consistently disavows any involvement with acts of international terrorism, despite evidence of direct past Syrian involvement. There is no evidence that Syrian officials have been directly involved in planning or executing terrorist attacks since 1986. Syria's involvement centers on its support for, and its providing safe haven to, groups which engage in terrorism. Maintaining these controls is an appropriate way to remind Syria of its obligations to act against terrorist elements whenever it has the capability to do so.

F. Foreign Availability

The foreign availability provision does not apply to items determined by the Secretary of State to require control under Section 6(j) of the Act.⁵ Cognizant of the value of such controls in emphasizing the U.S. position toward countries supporting international terrorism, Congress specifically excluded them from foreign availability assessments otherwise required by the Act. However, the Department has considered the foreign availability of the items controlled to terrorist-designated countries under Section 6(a). For Syria and Iran, there are numerous foreign sources for commodities similar to those subject to these controls. While most of Sudan's imports are low-technology items for which foreign sources exist, the poor health of Sudan's economy--and thus its inability to import these goods--makes foreign availability less of an issue.

ENDNOTES

1. *The Department of Commerce requires a license under Section 6(a) of the Act for all computers going to Iran, Sudan or Syria with a CTP of 6 MTOPS or above.*
2. *The scope of the embargo as pertains to reexports to Sudan has not been determined as of the submission of this report.*
3. *Until the President issued Executive Order 13067, which imposed an embargo on Sudan as of November 4, 1997, the licensing policy outlined in items 4 through 10 also applied to Sudan.*
4. *See endnotes 1 and 2 in Chapter 1 of this report.*
5. *Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, section 108(g)(2), 99 Stat. 120, 134-35. Moreover, sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability..*

5. Embargoed Countries and Entities (Section 746)

Export Control Program Description and Licensing Policy

The United States maintains comprehensive economic embargoes against Cuba, Iran, Iraq, Libya, North Korea and Sudan. (These are six of the seven countries designated by the Secretary of State as state sponsors of international terrorism.) The President imposed the embargo on Sudan in an Executive Order effective on November 4, 1997. The United States also maintains arms embargoes on Liberia, Rwanda, Somalia and UNITA (in Angola), as well as an embargo on petroleum products to UNITA. The United States will implement a United Nations-mandated embargo on arms and petroleum items to Sierra Leone in early 1998.

The Department of Commerce and the Department of the Treasury jointly administer the trade embargoes against Cuba and North Korea, under the Trading With the Enemy Act of 1917, the Cuban Democracy Act of 1992, the Export Administration Act, and other statutes that will be discussed in this chapter. The Department of Commerce licenses U.S. exports and reexports to both countries; Treasury grants general and/or specific licenses for travel by U.S. persons to Cuba and North Korea, and financial transactions by U.S. persons with those countries.

Treasury's Office of Foreign Assets Control (OFAC) administers the embargoes against Iran, Iraq, Libya, Sudan and UNITA under the International Emergency Economic Powers Act (IEEPA) and, in some cases, the United Nations Participation Act. The President has directed the Department of the Treasury to promulgate implementing regulations to administer the embargo on Sudan. This report does not discuss the provisions of the embargoes against Iran, Iraq, Libya, Sudan and UNITA. Commerce maintains comprehensive export and reexport controls against Libya and exercises licensing responsibility for reexports to Libya. Chapter 6 of this report discusses controls on Libya.

The United States maintains an embargo, administered by the Department of Commerce (Bureau of Export Administration) and the Department of State (Office of Defense Trade Controls) under the United Nations Participation Act and other authorities, on the sale or supply to Rwanda by United States persons or from the United States (including the use of U.S.-registered vessels or aircraft) of arms and related materiel of all types, including weapons and ammunition, military vehicles and equipment, paramilitary police equipment, and spare parts for the aforementioned, regardless of origin. (See 15 CFR 746.8 and 22 CFR 126.1(c).)

The United Nations Security Council imposed an arms embargo on Rwanda on May 17, 1994. In 1995, the Security Council suspended the application of the embargo to the Government of Rwanda through specified points of entry and later terminated, effective September 1, 1996, the application of restrictions on sales or supplies to the Government of Rwanda. The sale or supply of such arms and related materiel to non-governmental forces for use in Rwanda remains prohibited.

In 1992 the United Nations imposed an embargo “on all deliveries of weapons and military equipment to Liberia.” The Department of State implements this embargo under the authority of the Arms Export Control Act. (See Department of State regulations, 22 CFR 126.1(c).) In 1992 the United Nations Security Council imposed an embargo on all deliveries of weapons and military equipment to Somalia. The Department of State implements this embargo under the Arms Export Control Act. (See Department of State regulations, 22 CFR 126.1(c).) These arms embargoes are not further discussed in this report.

On March 3, 1997, Commerce published a rule in the *Federal Register* that implements changes in U.S. export control policy toward Cuba, which President Clinton announced in October 1995. The “Support for the Cuban People” section of the Cuban Democracy Act of 1992 (CDA) serves as the basis for these changes, which are consistent with the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996, also known as the Helms-Burton Act. This rule amends licensing policy to allow the approval, on a case-by-case basis, of certain exports to human rights organizations, news bureaus, and individuals and non-governmental organizations engaged in activities that promote democracy in Cuba. However, the ban on all U.S. direct flights to Cuba (which President Clinton announced in February 1996) continues to apply. The United States considers exceptions to the ban on a case-by-case basis.

The Bureau of Export Administration (BXA) and other agencies formed an interagency group to consider export requests made in conjunction with the awaited visit to Cuba of Pope John Paul II in January of 1998. Such license requests were considered on a case-by-case basis, consistent with existing regulations and the humanitarian needs of the Cuban people. Exceptions to the Presidential ban on direct flights from the United States to Cuba were also considered on a case-by-case basis if in conjunction with the Pope's visit.

The Libertad Act (also known as the “Helms-Burton Act”) was signed by the President in March 1996, after Cuba shot down two U.S. civilian aircraft in February 1996. The Act codifies the embargo against Cuba, including the Export Administration Regulations that provide for the denial of most exports to Cuba. The Act does not prohibit Commerce licensing of humanitarian aid--including medicines and medical supplies--to Cuba as authorized under the CDA.

The following paragraphs outline the licensing policies for Cuba and North Korea:

A. The Department of Commerce requires a license for the export to Cuba and North Korea of virtually all commodities, technology and software, except:

- 1) technology generally available to the public and informational materials;
- 2) some types of personal baggage, crew baggage, vessels and certain aircraft on temporary sojourn, ship stores (except as prohibited by the CDA to Cuba) and plane stores under certain circumstances;
- 3) certain foreign-origin items in transit through the United States;
- 4) shipments for U.S. Government personnel and agencies;

- 5) gift parcels not exceeding \$400 for North Korea of commodities such as food, clothing (non-military), medicines, and other items normally given as gifts by an individual; and
- 6) gift parcels not exceeding \$200 for Cuba limited to food, clothing (non-military), vitamins, seeds, medicines, medical supplies and devices, hospital supplies and equipment, equipment for the handicapped, personal hygiene items, veterinary medicines and supplies, fishing equipment and supplies, soap-making equipment, certain radio equipment, and batteries for such equipment. There are no frequency or dollar value limits on food contained in gift parcels to Cuba.

(NOTE: OFAC licenses cash donations from U.S. citizens for humanitarian assistance, channeled through UN agencies, the International Federation of the Red Cross (IFRC) and U.S. non-governmental organizations; and humanitarian related commodities sourced in third countries and donated to North Korea through the above organizations.)

B. Commerce will generally deny export license applications for exports to Cuba and North Korea; however, Commerce will consider applications for the following on a case-by-case basis:

- 1) non-commercial and commercial exports to meet basic human needs;
- 2) exports to Cuba from foreign countries of non-strategic foreign-made products containing 20 percent or less United States-origin parts, components or materials, provided the exporter is not a United States-owned or controlled subsidiary in a third country;
- 3) exports to Cuba of telecommunications equipment, to the extent permitted as part of a telecommunications project approved by the Federal Communications Commission, necessary to deliver a signal to an international telecommunications gateway in Cuba;
- 4) exports to support projects under the U.S.-North Korea Agreed Framework of 1994 (including Korean Energy Development Organization initiatives).

C. Commerce will review applications for exports of donated and commercially-supplied medicine or medical items to Cuba on a case-by-case basis. The United States will not restrict exports of these items, except in the following cases:

- 1) to the extent Section 5(m) of the Export Administration Act of 1979 or Section 203(b)(2) of the IEEPA would permit such restrictions;
- 2) in a case in which there is a reasonable likelihood that the item to be exported will be used for purposes of torture or other human rights abuses;
- 3) in a case in which there is a reasonable likelihood that the item to be exported will be reexported; or
- 4) in a case in which the item to be exported could be used in the production of any biotechnological product; and
- 5) in a case where the U.S. Government determines that it would be unable to verify, by on-site inspection and other appropriate means, that the item to be exported will

be used for the purpose for which it was intended and only for the use and benefit of the Cuban people. This exception does not apply to donations of medicine for humanitarian purposes to a nongovernmental organization in Cuba.

The following paragraphs outline the licensing policy for Rwanda:

A. The United States requires a license for foreign policy purposes for export to non-governmental forces for use in Rwanda of all arms and related materiel of all types, regardless of origin, including weapons and ammunition, military vehicles and equipment, paramilitary police equipment, and spare parts for these items. This requirement applies to export by any person from U.S. territory or by any U.S. person in any foreign country or other location to Rwanda. The United States also requires a license for the use of any U.S. aircraft or vessel to supply or transport any such items to non-governmental forces for use in Rwanda.

B. Commerce will generally deny applications for export or reexport to Rwanda of crime control and detection commodities.

1. Commerce will generally deny applications for export or reexport to Rwanda of any item with an Export Control Classification Number (ECCN) ending in "18."¹

2. Commerce will generally deny the export of other listed items.²

Analysis of Control as Required by Section 6(f) of The Act

The United States has administered the embargoes on exports to Cuba and North Korea under the Act and other statutes, in a manner consistent with Treasury sanctions adopted under the Trading with the Enemy Act, as amended. The latter authority continues in effect by virtue of Sections 101(b) and (c), and 207, of Public Law 95-223, which the President has extended annually, pursuant to national interest determinations.

A. The Purpose of the Control

Originally, the United States imposed embargoes on each of these countries for foreign policy purposes, among other reasons. Although the original circumstances that prompted the United States to impose controls have changed, the present situation requires that these controls continue. These embargoes demonstrate the unwillingness of the United States to maintain normal trade with these countries until they take steps to change their policies to conform to recognized international standards of human rights, thereby changing their relations with the United States.

Cuba. This embargo came at a time when Cuban actions seriously threatened the stability of the Western hemisphere, and the Cuban Government had expropriated property from U.S. citizens without compensation. Because of its support for insurgent groups that have engaged in

terrorism, the Secretary of State designated Cuba as a state sponsor of terrorism under Section 6(j) of the Act in March 1982. The United States would only reduce sanctions against Cuba in carefully calibrated ways in response to positive steps by Cuba toward political and economic reform.

North Korea. North Korea continues to maintain an offensive military capability and to suppress human rights. The planting of a bomb aboard a South Korean airliner by North Korean agents in November 1987 prompted the Secretary of State to designate North Korea as a state sponsor of international terrorism, under Section 6(j) of the Act, in January 1988. This designation has not been revoked.

Rwanda. The controls remain in place to prevent any U.S. contribution to potential conflict in that country and to conform to United Nations-mandated sanctions.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving Intended Foreign Policy Purpose. The embargoes have denied these nations the substantial benefits of normal trade relations with the United States. The controls continue to put pressure on the governments of these countries to modify their policies, since the United States will not lift these embargoes without a general improvement in relations. For Rwanda, the applicable controls serve to reduce the potential for conflict.
2. Compatibility with Foreign Policy Objectives. The controls complement U.S. foreign policy in other aspects of U.S. relations with these countries. They encourage the governments to modify their policies, thereby improving their relations with the United States. For Rwanda, these controls are consistent with U.S. foreign policy goals of promoting peace and stability and preventing human rights abuses.
3. Reaction of Other Countries. Although most countries recognize the right of the United States to determine its own foreign policy and security concerns, many countries, particularly the European Union, Canada and Mexico opposed the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996 (Helms-Burton). Most countries respect U.S. unilateral controls toward North Korea in light of the unresolved situation on the Korean peninsula and the aggressive nature of North Korean support for international terrorism and the proliferation of weapons of mass destruction. The U.S. arms embargo to non-governmental forces for use in Rwanda is consistent with the objectives of the United Nations; the United States has received no significant objections to these controls.
4. Economic Impact on United States Industry.

Cuba. Commerce requires a license for the export and reexport of virtually all U.S.-origin commodities, technology and software to Cuba. In FY1997 the Bureau of Export Administration (BXA) approved 87 license applications (85 exports and 2 reexports), worth over \$493 million. Excluding licenses for certain aircraft on temporary sojourn to Cuba (which require export

licenses), BXA approved licenses for shipments to Cuba totaling almost \$483 million for humanitarian aid in the form of food, medicine, and medical supplies (82 licenses) and three consolidated shipments of gift parcels.

BXA returned two export applications and six reexport applications, worth \$43.6 million, without action. BXA denied five export license applications worth \$2.5 million.

Table 1. Export License Applications Approved for Cuba, FY 1997

Type of Export	No. of Applications	Dollar Value
Humanitarian Aid	68	\$452,435,328
Gift parcels	3	30,000,000
Aircraft and turbine engines on temporary sojourn in Cuba	1	10,617,906
Other	13	361,585
Total:	85	\$493,414,819

Cuba's economy remains in a severe depression as a result of the loss of economic aid from the former Soviet Bloc. In 1989-93, GDP declined by about 35 percent and imports fell by about 80 percent. However, this slide seems to have halted in 1994, as Cuban officials claim that GDP actually increased by 2.5 percent in 1995.

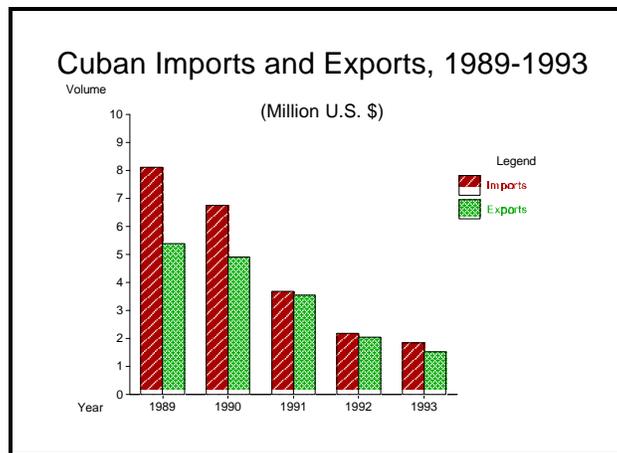


Figure 1

Source: The World Factbook 1994, Central Intelligence Agency

Cuba's leaders pin their hopes for economic recovery on generating foreign investment, which Cuba actively courts, with the goal of developing indigenous production of as many

import-substituting products as possible. As such, Cuba liberalized foreign investment laws in September 1995 and has signed investment guarantee treaties with a number of countries, including Mexico, Canada, Spain, Italy, Britain, and Russia. Cuba plans to sign agreements with France and the 13-member Caribbean Community (Caricom). According to Cuban government figures, there are 212 joint ventures underway, worth about \$2 billion. U.S. sources estimate that Cuba has announced \$4.9 billion in foreign investment, of which \$556 million has been formally committed.³ Much of this investment is in long-term infrastructure projects that commit Cuba to import supporting equipment and supplies from the foreign partners for years to come.

Cuban imports from most major exporting nations have declined in recent years because of the Cuban economy's declining ability to produce goods for export and generate foreign exchange reserves. Among major trading partners, only Mexico, Spain and France exported more to Cuba in 1994 than in 1989. Canadian and Chinese exports rose sharply in 1990 but have since declined steadily. However, French exports to Cuba have more than doubled since 1989. Since 1992, French exports to Cuba have consisted primarily of foodstuffs, which comprised 83 percent of total French exports to Cuba in 1993. Grains alone comprised 62 percent of the 1993 total.

Cuba's steadily decreasing import potential diminishes the effects of the U.S. embargo. A chronically depressed economy, limited currency reserves, and a limited capacity to generate hard currency severely curtail Cuba's ability to import foreign products.

In general, the U.S. regions and economic sectors most affected by the trade embargo are southern Florida (particularly the port area of Tampa), producers of agricultural products and exports of other products that benefit from the cost advantages of U.S.-Cuba proximity (e.g., perishable agricultural products).

North Korea. U.S. export sanctions have had a minimal effect on U.S. industry. North Korea remains a rigid socialized economy, with a strong emphasis on self-reliance. The agricultural land is collectivized, and state-owned industry produces 95% of the manufactured goods. North Korea emphasizes the manufacture of heavy industry, including arms production, at the expense of consumer goods. North Korea is not self-sufficient in food production; indeed, various factors have resulted in a food crisis. Increasing shortages of fuels and electric power have resulted in idle factories, fewer exportable items, and less hard currency to buy food and other critical items.

The political ideology of national self-reliance and independence has resulted in an international trade share (exports plus imports) of only 10 percent of the GDP, well below the figure of 50 to 55 percent observed in neighboring South Korea. Traditionally, North Korea has conducted foreign trade mainly to obtain essential imports, not for economic gains in employment or income.⁴ North Korea's total imports average about \$1-2 billion per year.

In FY 1997, Commerce approved 47 validated licenses for exports to North Korea, totaling \$393,281,396. (Commerce denied four licenses, worth \$85,342.) This is an increase of about \$100 million over FY 1996, but still more than one billion dollars less than FY 1995. In FY

1995, BXA approved licenses for larger grain shipments of \$1 billion or more. Such large grain and seed shipments--which have been replaced by smaller, more numerous shipments--skewed the trade data for FY 1994 and FY 1995. The commodities involved are almost entirely humanitarian items, such as milk and grains, for use in relieving increasing famine; and assorted medicinal supplies to aid victims from widespread flood damage.

Because of North Korea's strong political ideology emphasizing self-reliance, U.S. export sanctions have generally had a minimal effect on U.S. exports. In the absence of the U.S. embargo, some U.S. industries (vehicles, machinery, chemicals) could have potential export sales of up to \$50 million per year, inferring from North Korea's current trade with European suppliers. Following the signing of the October 21, 1994, U.S.-North Korean Agreed Framework, some opportunities for limited economic activity by some U.S. companies might have occurred. However, in 1996 and 1997, provocative North Korean military activity, including border incursions, and its reluctance to participate in Four-Power talks aimed at formally ending the Korean War, reduced prospects for these activities. The United States has liberalized restrictions on travel to North Korea and per diem expenditure limits. The United States has granted permission to purchase certain strategic minerals from North Korea, and will grant special licenses in connection with the light water reactor project, ranging from technology and equipment for the reactors to the sale and transportation of oil on an interim basis. The potential for some profit exists, but the sanctions regime and the inherent risks of doing business with a government in default to major creditors have discouraged most U.S. firms from doing business there.

Full implementation of the Agreed Framework would facilitate a possible broadening of bilateral relationships, possibly leading to a reduction in current restrictions on U.S. trade with North Korea. In addition, the U.S. role as a founding member of the Korean Peninsula Energy Development Organization (KEDO) could foreshadow increasing trade with North Korea. KEDO is the international organization established in March 1995 to implement the Agreed Framework. Under the Agreed Framework, North Korea agreed to freeze and eventually dismantle its existing graphite-moderated nuclear program. In return, KEDO will provide North Korea with two light water reactors (LWRs) developed from U.S. technology and supplied by foreign sources. In addition, KEDO is providing 500,000 metric tons of heavy fuel oil to North Korea annually until the first LWR plant goes on line. Further implementation of the provisions of the Agreed Framework should also broaden North Korea's economic contacts with the international community in general.

In a limited effort to tap world markets to satisfy critical economic needs, North Korea established the Rajin-Sonbong Free Trade zone to promote trade with other countries. However, the trade zone has too little infrastructure and remains in a high-security area, limiting its effectiveness. At present, the United States does not recognize this zone. However, if the trade zone is at all successful, U.S. firms could be at a disadvantage vis-à-vis other nations due to U.S. economic sanctions.

North Korea's primary imports include petroleum, grain, coking coal, machinery and equipment, and consumer goods. As reported by the Korea Trade Promotion Corporation

(KOTRA), North Korea's four major trading partners are China, Russia, Japan and South Korea, which account for almost 70 percent of its total trade (exports plus imports). Other sources (1992 World Trade Database, Major Economic Indicators for North Korea, 1993) indicate Iran and Hong Kong are also major contributors in import trade. Russian imports, once a large portion of North Korean trade, have continued to decline as Russia focuses on its own economic difficulties, and China has supplanted Russia as North Korea's economic lifeline. China's importance in North Korea's trade is probably underestimated in available statistics, as observers note that a high volume (\$100 millions) of smuggling occurs between the two countries.⁵

Table 2 illustrates the most current trade figures available:⁶

Table 2. North Korean Trade 1994
(in US\$ millions)

Country	Imports	Exports	Total
China	\$425	\$199	\$624
Japan	\$170	\$323	\$493
South Korea	\$174*	\$ 21*	\$195
Russia	\$115*	\$ 15*	\$140
World Totals	\$1,269	\$ 839	\$2,108

(* KOTRA trade figures at this time do not give import/export values for these countries. These figures are derived from other sources)

Trade statistics from the United Nations provide more detailed information on North Korean imports from many developed countries (unfortunately many countries, including Russia, do not report trade to the United Nations). The top five exporters to North Korea in 1993 (the most recent available year) according to U.N. data were China (\$602 million), Japan (\$217 million), India (\$61 million), Germany (\$47 million), and Singapore (\$38 million). Other major exporters were Italy, Ireland, the Netherlands, Brazil, and Thailand. China supplies most of North Korea's needs for grains and petroleum, while North Korea's imports from European countries predominantly consist of chemicals and machinery, and, in the case of Germany, motor vehicles. From Japan, North Korea imported mostly textile goods and vehicles; many of the textiles were apparently re-exported back to Japan in the form of finished goods. Many Japanese companies maintain a presence in North Korea awaiting the possibility of a normalization in North Korean-Japanese relations, which is dependent on the payment of war reparations.

Rwanda. The arms embargo has had very little impact on U.S. industries.

5. Enforcement of Control. Detecting unauthorized exports to embargoed countries is more difficult than with other export controls, because the controls on exports to embargoed countries

cover virtually all U.S.-origin goods, including consumer items that do not attract enforcement attention, either in the United States or overseas. However, in the case of direct exports, an embargo against a small number of countries is easier to enforce, because the concept of a total embargo is generally understood and supported by the public. BXA can count on voluntary cooperation from most U.S. exporters. Further, a total embargo requires little expertise to differentiate between those goods that are and those that are not subject to control.

Controls on exports under the Cuban Democracy Act (CDA) of non-U.S.-origin goods from foreign subsidiaries of U.S. firms present certain enforcement difficulties. Foreign governments have shown little inclination to cooperate with, and indeed some hostility to, U.S. enforcement efforts. On the other hand, the Department has the authority to deny export privileges of firms and individuals overseas who violate U.S. controls. While a denial order can prove very effective, use of that enforcement tool against a violator of CDA-based controls may provoke strong reaction from the home country of the firm or individual who is the object of the order.

Commerce has experienced no significant problems enforcing the export controls on Rwanda, nor does it foresee any.

C. Consultation with Industry

The Department of Commerce received no specific comments on its licensing policies toward Cuba and North Korea from its request in the *Federal Register* on October 8, 1997. However, several reports published in 1997 (summarized in Appendix I) examined the issues of whether U.S. unilateral sanctions weaken U.S. competitiveness or achieve their desired outcome.

In 1997, Commerce approved its first license for the temporary export of medical items to Cuba for demonstration and sales purposes, which is permitted under the humanitarian exceptions to the embargo. The U.S.-Cuba Trade and Economic Council has expressed that some of its member companies are interested in exploring this option as a way to conduct business in Cuba. The Department of Commerce has made fact sheets on exporting medical items to Cuba available on its Internet site.

D. Consultation with Other Countries

The Administration has worked hard to garner support from other countries for the objectives of the Libertad Act and resolve any disputes that arise from its implementation.

Friction between the United States and the European Union (EU) over policy toward Cuba has diminished substantially with adoption by the Europeans of a binding policy that links expanded ties to Cuba to improvements in human rights conditions and advances toward democracy by President Fidel Castro's communist government. The United States viewed the announcement that EU members would evaluate future relations with Cuba according to the

ratification and observance of international human rights conventions as an affirmation of the international community's commitment to fostering human rights and democracy in Cuba.

E. Alternative Means

The United States imposes comprehensive embargoes only in an effort to make the strongest possible statement against a particular country's policies by imposing the harshest trade conditions available.

Restrictions on exports supplement other actions that the United States has taken to change the behavior of the target countries. Among the more prominent other actions that the United States can and has taken include the severing of diplomatic relations, banning imports into the United States, seeking United Nations denunciations and curtailing or discouraging bilateral educational, scientific, or cultural exchanges.

F. Foreign Availability

Since Cuba and North Korea are also designated terrorism-supporting countries, as well as embargoed destinations, the foreign availability provision does not apply to items determined by the Secretary of State to require control under Section 6(j) of the Act.⁷ Cognizant of the value of such controls in emphasizing the U.S. position toward countries supporting international terrorism, Congress specifically excluded them from foreign availability assessments otherwise required by the Act.

For Rwanda, the U.S. human rights policies and concerns about the situation in that country outweigh foreign availability considerations.

ENDNOTES

- 1. Items on the Commerce Control List with Export Control Classification Numbers (ECCNs) ending in "18" are those items on the International Munitions List that the Department of State previously controlled on the U.S. Munitions List, but now fall under the licensing jurisdiction of the Department of Commerce.*
- 2. Section 746.8(b)(1)(ii) of the Export Administration Regulations lists these items as those on the Commerce Control List with the following ECCNs: 1A988; 2B985; 5A980; 6A002.a1, .a2, .a3; 6A002.c; 6A003.b3 and b.4; 6D102; 6E001; 6E002; 9A115; 9A991.a; 0A984; 0A986; and 0A988.*
- 3. "Foreign Investors Finding Cuba More Comfortable--with U.S. Away," The Washington Post, September 12, 1995.*

4. *Hohn, Y.T. Kuark, "A Comparative Study of Foreign Trade in North and South Korea," University of Denver, March 1992, p. 21.*
5. *Noland, Marcus, "The North Korean Economy," Institute for International Economics, July 1995, p. 26.*
6. *Flake, L. Gordon, "International Economic Linkages of North Korea," Korea Economic Institute of America, May 26, 1995, p. 2.*
7. *Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, section 108(g)(2), 99 Stat. 120, 134-35. Moreover, sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability.*

6. Libya (Section 746.4)

Export Control Program Description And Licensing Policy

On August 5, 1996, the President signed into law the Iran and Libya Sanctions Act (ILSA). The Department of State implements this law. ILSA aims to induce Iran and Libya to change their behavior by limiting their ability to develop their petroleum resources, thus restricting their access to the finances they need to develop and acquire weapons of mass destruction and to support terrorism. ILSA requires the imposition of at least two sanctions from six available sanctions categories (one of which is an export sanction) against an entity determined to be engaged in sanctionable activity described in ILSA.

ILSA is the most recent action in a long history of difficult U.S. relations with Libya. Libya is one of the countries designated by the Secretary of State as a repeated state sponsor of acts of international terrorism. In January 1986, the President imposed sanctions against Libya under the authority of the International Emergency Economic Powers Act (IEEPA). The Department of the Treasury administers the export restrictions under the Libyan Sanctions Regulations (31 CFR Part 550). Since February 1, 1986, exports from the United States and transshipments via third countries to Libya require authorization in the form of a general or specific license from that Department.¹

On November 14, 1991, a grand jury in the U.S. District Court for the District of Columbia returned an indictment against two Libyan nationals accused of bombing Pan Am 103. On the same day, Scottish authorities obtained a petition warrant for the two Libyans on similar charges.

On January 21, 1992, the United Nations Security Council (UNSC) adopted Resolution 731, which condemned the bombings and urged Libya to fully and effectively respond to requests that the United States, the United Kingdom, and France had made upon it in connection with the investigation, apprehension, and prosecution of those responsible for the bombings. On March 31, 1992, after concluding that Libya had not made satisfactory responses to such requests, the UNSC adopted Resolution 748, which imposed mandatory sanctions on Libya, effective April 15, 1992, until such time as the Security Council determined that Libya had complied with the requests made by the United States, the United Kingdom, and France, and renounced terrorism. Resolution 748 requires U.N. member states to prohibit, by their nationals or from their territory, *inter alia*, the supply of any aircraft or aircraft components to Libya or the provision of engineering and maintenance servicing of Libyan aircraft. Resolution 748 also requires member states to prohibit, by their nationals or from their territory, the provision of arms and related material of all types, including the sale or transfer of weapons and ammunition, military vehicles and equipment, paramilitary police equipment and spare parts for such equipment. Finally, Resolution 748 requires member states to deny any flight in their airspace, or landing or taking off in their territory, by aircraft which are flying to or from Libya, to prevent operation of Libyan Arab

Airlines and to reduce significantly Libyan diplomatic representation abroad.

Continued Libyan non-compliance with UNSC demands resulted in the adoption by the UNSC of Resolution 883 on November 11, 1993, which imposed additional sanctions, including a limited assets freeze, and provisions closing certain gaps in the civil aviation sanctions provided for in Resolution 748. Resolution 883 requires States to freeze any funds or financial resources owned or controlled by the Government of Libya or a Libyan undertaking and ensure that such funds, or any other funds or financial resources, are not made available to the Government of Libya or any Libyan undertaking. Also, the Resolution requires member states to prohibit the provision to Libya, by their nationals or from their territory of materials destined for the construction, improvement or maintenance of Libyan civilian or military airfields and associated facilities and equipment, of any engineering or other services or components destined for the maintenance of any Libyan civil or military airfields, with certain exceptions, and of certain oil terminal and refining equipment, as listed in the Addendum to this chapter. Furthermore, Resolution 883 required that States immediately close all Libyan Arab Airlines offices, and prohibit any commercial transactions with Libyan Arab Airlines, and prohibit, by their nationals or from their territory, the entering into or renewal of arrangements for the making available for operation within Libya of any aircraft or aircraft components.

There were no major changes to the licensing policy toward Libya in 1997; however, the Commerce Department has maintained foreign policy controls on exports and reexports to Libya from third countries of items subject to the Export Administration Regulations (EAR) since 1979. While the controls on exports to Libya under the EAR remain in effect, the Department has determined, to avoid duplicate licensing requirements, that licenses issued by the Treasury Department for direct exports and transshipments to Libya constitute authorization under the EAR. However, exports or reexports to Libya not covered by Treasury regulations continue to require Commerce authorization. Requests for such authorization are reviewed under the policies set forth in sections A through E below.

In December 1993, the President instructed the Commerce Department to reinforce the trade embargo on the reexport to Libya of U.S.-origin items. The Commerce Department thereupon tightened licensing policy on the reexport of items covered by UNSC Resolutions 748 and 883.

A. Reexport authorization is required for foreign policy purposes for export from third countries to Libya of all U.S.-origin goods, technology or software, except for the following:

- 1) medicine and medical supplies;
- 2) food and agricultural commodities;
- 3) items permitted under certain license exceptions; and
- 4) the foreign non-strategic products of U.S.-origin technology or software; or
- 5) the foreign strategic products of U.S.-origin technology or software exported from the United States before March 12, 1982.

- B. Applications for reexport authorization will generally be denied for the following:
- 1) off-highway wheel tractors with carriage capacity of 10 tons or more, except for exports of such tractors in reasonable quantities for civil use, to the extent consistent with U.N. Resolution 883;
 - 2) aircraft (including helicopters), and specified parts and accessories;
 - 3) other commodities and related technology and software controlled for national security purposes, including controlled foreign-produced products of United States technology and software exported from the United States after March 12, 1982, and oil and gas equipment and related technology and software not readily available from non-United States sources;
 - 4) commodities, software, and technology destined for the Ras Lanuf Petrochemical Processing Complex, except for (a) exports or reexports pursuant to a contractual arrangement in effect prior to December 20, 1983; and (b) the reexport of goods or technology already outside the United States on December 20, 1983, for which license applications will be reviewed on a case by case basis; and
 - 5) items subject to UNSC Resolution 748 of March 30, 1992 (effective April 5, 1992) and Resolution 883 of November 11, 1993 (effective December 1, 1993);
 - 6) those items listed in the Addendum to this chapter.²
- C. Exceptions are considered on a case-by-case basis for the following:
- 1) reexports of commodities or technology and software involving a contract in effect prior to March 12, 1982, where failure to obtain an authorization would not excuse performance of the contract;
 - 2) the reexport of goods or technology subject to national security controls already outside the United States on March 12, 1982, or the export of foreign products incorporating such items as components; or
 - 3) the use of U.S.-origin components incorporated in foreign origin equipment and constituting 20 percent or less by value of that equipment.
- D. All other reexports will generally be approved, subject to any other licensing policies applicable to a particular transaction and subject to U.N. Resolutions.

Analysis Of Control As Required By Section 6(f) Of The Act

A. The Purpose of the Control

The purpose of export and reexport controls toward Libya is to demonstrate United States opposition to, and to distance the United States from, that nation's support for acts of international terrorism, international subversive activities, and intervention in the affairs of neighboring states. The controls also reinforce implementation of UNSC resolutions.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving Intended Foreign Policy Purpose. The controls deny Libya U.S.-origin national security-controlled items, oil and gas equipment unavailable from outside sources, and items for the Ras Lanuf Petrochemical complex. The controls restrict Libyan capability to use U.S.-origin aircraft, aircraft components and accessories, and off-highway tractors in military ventures, or in its efforts to destabilize nations friendly to the United States. Most recently, reexport prohibitions were reinforced for certain oil terminal and refining equipment, plus items used to service or maintain Libyan aircraft and airfields. The combined effect of these controls has been to prevent a United States contribution to Libya's ability to engage in activities detrimental to United States foreign policy. Furthermore, they send a clear signal that the United States is unwilling to permit trade in light of Libya's behavior.
2. Compatibility with Foreign Policy Objectives. Because these controls are intended to prevent a U.S. contribution to Libyan economic activities, force Libya to abide by international law, and thereby diminish Libya's ability to undermine regional stability and support international terrorism, they are consistent with U.S. foreign policy goals and with policies on sales to Libya.
3. Reaction of Other Countries. As indicated by the adoption of UNSC Resolutions 731, 748 and 883, there is a general understanding by other countries of the threat posed by Libya's policies of subversion, terrorism, and military aggression. When the bulk of U.S. controls were imposed in 1986, the United States explained its policies to other governments and urged them to adopt comparable policies. There was some favorable response, but no country has matched the extent of U.S. controls. The European Union and the Group of Seven in 1986 approved unanimous steps against Libya including restrictions on Libyan officials in Europe and a ban on new arms sales. There has generally been effective implementation by the international community of the sanctions imposed by the UN Security Council. The United States closely monitors all trade with Libya and swiftly brings any noncompliance with the most recent UN resolutions to the attention of appropriate foreign authorities.
4. Economic Impact on United States Industry. In FY1997 Commerce did not approve any applications for exports or reexports to Libya. In fact, there were no applications for exports submitted to the Bureau of Export Administration (BXA) for consideration. However, Commerce denied applications for 13 reexport authorizations for commodities valued at \$12.5 million. One other reexport application worth \$3.5 million was returned without action. Consequently, U.S.-origin products comprised a negligible percentage of Libyan imports in FY 1997; as opposed to FY 1985 when U.S. exports to Libya totaled about \$310.2 million.

U.S. exports to Libya have declined steadily since 1979, when export controls were first tightened. Since then, export authorizations have, for the most part, been issued only for shipments required to fulfill pre-1982 contractual obligations. Annual U.S. exports and reexports to Libya fell from \$860 million in 1979 to less than \$1 million annually from 1987 through 1994.

The Libyan economy depends primarily upon revenues from the oil sector, which contributes practically all export earnings and about one-third of GDP.³ Windfall revenues from the rise in world oil prices in late 1990 improved Libya's foreign payments position and resulted in a current account surplus. The non-oil manufacturing and construction sectors, which account for about 20 percent of GDP, have expanded from processing mostly agricultural products to include petrochemicals, iron, steel, and aluminum. Although agriculture accounts for only five percent of GDP, it employs about 18 percent of the labor force. Climatic conditions and poor soils severely limit farm output, and Libya imports about 75 percent of its food requirements.

UN sanctions imposed in April 1992 have not yet had a major impact on the economy because Libya's oil revenues generate sufficient foreign exchange that, along with Libya's large currency reserves, sustain food and consumer goods imports as well as equipment for the oil industry and ongoing development projects. In 1994, Libyan imports totaled \$6.9 billion (f.o.b., estimated), compared to exports of \$7.2 billion (f.o.b., estimated). The sanctions have, however, had an effect in painting Libya as a rogue nation.

Libya's leading trading partners in 1995 were Italy and Germany, which were Libya's largest suppliers of imported goods as well as Libya's leading export markets. Nearly all of Libya's exports to these two countries are crude oil. Germany and Italy in turn have invested heavily in Libyan oil production, and German firms plan major new investment. Germany's exports to Libya consist mainly of machinery (30 percent of total export value) and agriculture-related goods (19 percent). The remainder are largely vehicles, electrical and electronic equipment, metal stock, and chemical processing equipment. Italy primarily exports refined petroleum products, cereal products, and animal feed.

Libya's principal imports, in dollar value, from all major industrialized nations include: cereals and cereal products (France, Canada), iron and steel (Japan, France, Italy), road vehicles (Germany, Japan), general industrial machinery and equipment (Germany, U.K.), specialized machinery (Germany, Italy), power generating machinery (Germany), chemical materials and products (U.K.), and animal feed (Italy).

Table 1. Libyan Imports from Selected Countries, 1990-95 (million U.S. \$)

Country	1990	1991	1992	1993	1994	1995**
Leading Industrialized Nations						
Canada	45.43	49.60	66.85	69.70	48.61	n.a.
France	378.18	334.01	322.28	362.26	255.70	214
Germany*	751.18	691.43	609.22	761.85	638.48	466
Italy	1,060.54	1,363.76	1,074.23	1,189.30	n.a.	719
Japan	137.05	138.53	140.15	152.06	n.a.	n.a.
U.K.	438.22	451.47	400.72	411.42	295.44	n.a.

Country	1990	1991	1992	1993	1994	1995**
Leading Industrialized Nations						
U.S.	n.a.	1.2	1.2	1.1	2.5	n.a.
Other Nations						
Belgium/Luxemburg	148.25	153.05	96.58	151.68	n.a.	n.a.
China	n.a.	n.a.	86.62	45.24	29.51	23
Denmark	36.15	24.44	17.89	20.72	n.a.	n.a.
Greece	67.02	68.49	62.11	64.87	n.a.	n.a.
Ireland	49.19	17.62	18.52	30.31	n.a.	n.a.
Netherlands	228.07	188.37	171.36	236.60	n.a.	n.a.
Portugal	18.19	1.05	4.16	2.53	n.a.	n.a.
Spain	65.63	68.41	38.87	76.51	118.80	n.a.

* 1990 figures are for West Germany.

** First three quarters of 1995 only.

Source: Figures for 1990 to 1994 are from United Nations Trade Statistics, as reported by exporting countries. 1995 figures were reported by the U.S. Embassy in Bonn.

On August 5, 1996, the President signed into law the Iran and Libya Sanctions Act in an effort to deny Iran and Libya the ability to support acts of international terrorism and to develop and acquire weapons of mass destruction. The Act requires the President to sanction a person who made an investment of \$40 million or more that directly and significantly contributed to Iran's or Libya's ability to develop its petroleum resources, and to sanction persons who provide Libya with certain goods and services proscribed under United Nations Security Council Resolutions 748 and 883 that significantly and materially contribute to Libya's military, aviation, or certain petroleum development capabilities. Effective August 6, 1997, the \$40 million threshold dropped to \$20 million for investments in Iran (but not Libya).

5. Enforcement of Control. It is not possible to monitor all trade with Libya in non-strategic items. However, it appears that in light of the widespread perception of Libya as a supporter of international terrorism, along with UN sanctions, there is substantial voluntary compliance on the part of subsidiaries of U.S. multinational companies. The controls on aircraft traditionally have posed enforcement problems because in reality they have resulted in a complete embargo of all reexports of U.S.-origin aircraft parts, components and avionics, including the servicing of U.S.-origin aircraft, or foreign-manufactured aircraft with any U.S. content. The 1992 and 1993 UNSC Resolutions, which imposed an international embargo on civil aviation items to Libya, assist U.S. efforts to maintain these controls. The reexport controls on aircraft parts to Libya require significant enforcement and diplomatic resources. Commerce will continue to aggressively enforce all controls concerning Libya.

C. Consultation with Industry

The Department of Commerce published a notice in the *Federal Register* on October 8, 1997, requesting public comments on its foreign policy-based export controls. As of the date of publication of this report, Commerce had received no comments on its export controls on Libya.

D. Consultation with Other Countries

Extensive consultation with other nations has taken place under UN auspices. The United States also intends to continue consulting friendly governments in order to achieve full compliance with UN sanctions.

E. Alternative Means

These controls complement diplomatic measures that have been, and will continue to be used, to influence Libyan behavior. In January 1986, the United States implemented a comprehensive trade embargo against Libya which remains in force. All direct trade with Libya is prohibited and certain Libyan Government-owned or -controlled assets subject to U.S. jurisdiction--estimated at \$1 billion--are frozen by the Department of the Treasury.

F. Foreign Availability

The foreign availability provision does not apply to items determined by the Secretary of State to require control under Section 6(j) of the Act.⁴ Cognizant of the value of such controls in emphasizing the U.S. position toward countries supporting international terrorism, Congress specifically excluded them from foreign availability assessments otherwise required by the Act. The foreign availability of items controlled under Section 6(a) has been considered by the Department of Commerce. In general, numerous foreign sources of commodities similar to those subject to these controls are known, especially for items controlled by the United States.

ADDENDUM

Restricted Reexports to Libya

Effective December 1, 1993

A. Oil Terminal and Refining Equipment

1. Pumps of medium or large capacity whose capacity is equal to or larger than 3500 cubic meters per hour and drivers (gas turbines and electric motors) designed for use in the transportation of crude oil and natural gas.
2. Equipment designed for use in crude oil export terminals, as follows:
 - o Loading buoys or single point moorings;
 - o Flexible hoses for connection between underwater manifolds (plem) and single point mooring and floating loading hoses of large sizes (from 12-16 inches);
 - o Anchor chains.
3. Equipment not specially designed for use in crude oil export terminals, but which because of its large capacity can be used for this purpose, as follows:
 - o Loading pumps of large capacity (greater than 4000 m³/h) and small head (10 bars);
 - o Boosting pumps within the same range of flow rates;
 - o In line pipeline inspection tools and cleaning devices (i.e. pigging tools) (16 inches and above);
 - o Metering equipment of large capacity (1000 m³/h and above).
4. Refinery equipment, as follows:
 - o Boilers meeting American Society of Mechanical Engineers 1 standards;
 - o Furnaces meeting American Society of Mechanical Engineers 8 standards;
 - o Fractation columns meeting American Society of Mechanical Engineers 8 standards;
 - o Pumps meeting American Petroleum Institute 610 standards;
 - o Catalytic reactors meeting American Society of Mechanical Engineers 8 standards; and
 - o Prepared catalysts including catalysts containing platinum and catalysts containing molybdenum.
5. Spare parts for any item above.

B. Items Used to Service or Maintain Aircraft and Airfields

1. Any aircraft or aircraft components.
2. Engineering or maintenance servicing of any aircraft or aircraft components.
3. Any materials destined for the construction, improvement or maintenance of Libyan civilian or military airfields and associated facilities and equipment. **Note:** Emergency equipment and equipment and services directly related to civilian air traffic control are exempt from this control and reexport applications for such will continue to be reviewed on a case-by-case basis.
4. Any engineering or other services or components destined for the maintenance of any Libyan civil or military airfields and associated facilities and equipment. **Note:** Emergency equipment and equipment and services directly related to civilian air traffic control are exempt from this control and reexport applications for such will continue to be reviewed on a case-by-case basis.
5. Any advice, assistance or training to Libyan pilots, flight engineers, or aircraft and ground maintenance personnel associated with the operation of aircraft and airfields within Libya.

ENDNOTES

1. *Though the Libyan Sanctions Regulations encompass the restrictions in the Export Administration Regulations (EAR) on exports from the United States to Libya, all the Department of Commerce controls are being extended. These controls can be reevaluated in the event the IEEPA authorities are revoked.*
2. *See 15 CFR 146(c)(2)(vii).*
3. *The World Factbook, 1995, Central Intelligence Agency.*
4. *Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under Sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, Section 108(g)(2), 99 Stat. 120, 134-35. Moreover, Sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability.*

7. Chemical Precursors and Associated Equipment, Technology and Software (Sections 742.2, 744.4 and 744.6)

Export Control Program Description And Licensing Policy

The Bureau of Export Administration (BXA) maintains export controls over certain chemicals, equipment, materials, software, technology and whole plants to further U.S. foreign policy opposing the proliferation and use of chemical weapons.¹ These controls are implemented in coordination with the Australia Group (AG), an informal forum of 30 nations cooperating to halt the proliferation of chemical and biological weapons. (See table in Appendix II for complete list of members.) BXA also has primary responsibility for overseeing the compliance of industry with the Chemical Weapons Convention (CWC), which bans the development, production, stockpiling, and retention of chemical weapons, and provides for an extensive verification regime.²

The licensing requirements for chemicals, equipment, materials, software, technology and whole plants are as follows:

A. A license is required for the export to all destinations, except AG member countries, for certain chemicals that may be used for toxic chemical agents; relevant process control software; technology for their use, production and/or disposal; and facilities designed to produce them. (Chemical warfare agents deemed to have direct military application are controlled by the State Department under the International Traffic in Arms Regulations.)

A license is required for the export to specified destinations of certain chemical manufacturing facilities and equipment, toxic gas monitoring systems and detectors that can be used in the production of chemical warfare agents, and technology for the use of such items. The countries to which these licensing requirements apply are indicated in Column CB:3 of the Commerce Country Chart, Export Administration Regulations (EAR) , Part 738, Supplement No. 1.³

A license is also required for the export of any commodity, technology, or software, when the exporter knows that it will be used in the design, development, production, stockpiling, or use of chemical weapons in, or by, specified countries. (Country Group D:3, EAR, Part 740, Supplement No. 1.⁴) BXA may inform the exporter or reexporter that a license is required due to an unacceptable risk that the items will be used in, or diverted to, a chemical weapons project anywhere in the world.

No U.S. person may export, reexport or transfer any item without a license, when that person knows that the item will be used in the design, development, production, stockpiling or use of chemical weapons in, or by, a country listed in Country Group D:3. No U.S. person may knowingly support an export, reexport or transfer covered by these controls. Support could mean any action, including financing, transportation, or freight forwarding.

No U.S. person may, without a license, perform any contract, service or employment knowing that it will directly assist in the design, development, production, stockpiling or use of chemical weapons in, or by, a country listed in Country Group D:3.

B. Applications for licenses will be considered on a case-by-case basis to determine whether the export would make a material contribution to the design, development, production, stockpiling, or use of chemical weapons. When an export is deemed to make such a contribution, the application will be denied.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of these controls is to prevent a U.S. contribution to, and to support multilaterally coordinated efforts to control, the proliferation and use of chemical weapons. They also provide regulatory authority to control the export of any item from the United States when there is a significant risk that it will be used for chemical weapon purposes. These controls implement some of the measures specified in Executive Order 12735 of November 16, 1990, and its successor, Executive Order 12938 of November 14, 1994, and the Enhanced Proliferation Control Initiative (EPCI) announced by President Bush on December 13, 1990.

These controls advance U.S. implementation of multilateral export control commitments made by members of the AG to further non-proliferation objectives. The AG works to accomplish this objective through the harmonization of export controls, the exchange of information, and other diplomatic means. In addition, these controls assist the United States in implementing its obligation under the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on their Destruction (the Chemical Weapons Convention, or CWC) not to assist anyone, in any way, in chemical weapons activities. The controls also support the goals of the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, which prohibits the use of chemical or biological weapons.

B. Considerations and/or Determinations of the Secretary of Commerce

1. **Probability of Achieving the Intended Foreign Policy Purpose.** The chemicals, equipment and technology covered by these controls have many commercial uses and are widely available from foreign sources. Many of the major sources of these items are in industrialized countries that are members of the AG. While it is not expected that export controls alone can prevent the proliferation of chemical weapons, these controls strengthen U.S. efforts to stem the spread of such weapons. Accordingly, the Secretary has determined that these controls are likely to achieve the intended foreign policy purpose.

2. Compatibility with Foreign Policy Objectives. In extending these controls, the Secretary has determined that the controls are compatible with the foreign policy objectives of the United States. The United States has a strong interest in remaining in the forefront of international efforts to stem the proliferation of chemical weapons. These controls are compatible with the multilateral export controls for chemicals and related equipment and technology agreed to by the AG. Moreover, the United States has a binding international commitment under the CWC to the complete prohibition and elimination of all weapons of mass destruction. The Administration considers full implementation of the CWC a high priority for continuing U.S. leadership in the non-proliferation arena.

3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to these controls by the United States is not likely to render the controls ineffective in achieving the intended foreign policy purpose or to be counterproductive to U.S. foreign policy interests. In 1997, the United States continued to consult with the AG and other nations on the problem of chemical weapons proliferation and terrorism. The AG continues to urge all countries to take necessary steps to ensure that they are not contributing to the spread of chemical weapons. Some developing country governments believe that AG export controls discriminate against less industrialized nations by depriving them of goods and assistance in the field of chemical and biological technology. The United States does not agree with this position, which it believes the evidence does not support (see next section, Economic Impact on United States Industry). In international fora the United States has sought to dispel this perception by clarifying the purpose of the controls and demonstrating that very few export requests are denied.

4. Economic Impact on United States Industry. The Secretary has determined that the potential impact of these export controls on the U.S. economic position is minimal as shown by export licensing statistics. In FY 1997, 675 license applications were approved for export and reexport of controlled chemical precursors with a value of \$855 million. Only five applications were denied, with a value of \$5 million. For chemical production equipment, 76 export license applications were approved valued at \$6 million, while no export license applications were denied.

These statistics also demonstrate that AG export controls do not undermine the legitimate economic or technological development of any country. Rather, they are consistent with Article I of the CWC which prohibits assistance of any type to any country's CW program.

5. Enforcement of Control. Chemical controls pose problems for Commerce enforcement personnel because of the vast size, dispersion, diversity, and specialized nature of the dual-use chemical industry. In addition, enforcement officers can be exposed to personal safety risks when seizing and inspecting chemical materials.

To meet the challenge of effective enforcement of these controls, Commerce has redirected resources toward preventive enforcement, with particular attention to Shipper's Export Declarations, to ensure that the products labeled "No License Required" (NLR) are in fact eligible for unlicensed shipment. Also, Commerce conducts an extensive ongoing outreach program to

educate companies about export controls, and to heighten their awareness of "red flags" that may indicate potentially risky transactions. This program is an important component of Commerce's efforts to prevent companies from illegally exporting dual-use products which can be used to make chemical weapons.

C. Consultation with Industry

The Department has sought the views of a broad cross-section of industry by consulting with various advisory committees, trade associations and individual firms. Planning for implementation of the CWC has provided a significant opportunity for interaction with the chemical industry. (See CWC under Section E, "Alternative Means".)

D. Consultation with Other Countries

These U.S. controls are consistent with the multilateral export control criteria of the 30 member-nation AG, which includes many of the world's major chemical producers and traders. South Korea was the only country to join the AG 1997. A number of non-AG countries--including Bulgaria, Russia, and Ukraine--have taken steps to adopt AG-type controls. The United States continues to encourage harmonization of export control provisions among AG participants to ensure a level playing field for U.S. exporters. In accordance with our AG commitments, BXA revised the Commerce Control List (CCL) on February 12, 1997, which will reduce the licensing burden on U.S. exporters by simplifying export controls on chemical mixtures that contain relatively small amounts (traces) of controlled precursor chemicals.

At the October 1997 AG session, the members agreed to another change in the chemical mixtures rule that will eliminate the use of the solvent free basis for calculating the percentage of controlled chemical in the mixture, while still providing measures against the misuse of such mixtures by proliferators. This change simplifies the mixtures rule and provides a substantial liberalization in the amount of chemical precursor that can be shipped in a mixture.

E. Alternative Means

The United States continues to address the problem of the proliferation of chemical weapons on a number of fronts. Direct negotiations with countries intent on acquiring chemical weapons are not likely to prevent the use of U.S.-origin materials in such activities, nor are such negotiations likely to affect the behavior of these countries.

Alternative means to curtail the acquisition and development of chemical warfare capabilities, such as diplomatic negotiations, do not obviate the need for controls. The following are some examples of additional means that the United States has used and will continue to use in an attempt to curb the use and spread of chemical weapons:

- o U.S. legislation: The Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Title III, Pub. L. 102-182) provides for the imposition of sanctions on foreign entities and countries for certain kinds of chemical and biological weapons related activity. Sanctions have been imposed on certain entities for chemical weapons-related activities;
- o The Chemical Weapons Convention: As another tool for stemming the proliferation of chemical weapons, the CWC imposes a global ban on the development, production, stockpiling, retention and use of chemical weapons (CW) and supports the economic viability of the U.S. chemical industry. The CWC also prohibits the direct or indirect transfers of CW as well as restricting trade in chemicals to non-Parties.

The Department has made significant progress in planning for the implementation of the CWC. During this period, the Department has worked closely with chemical industry associations, including the Chemical Manufacturers Association and the Synthetic Organic Chemical Manufacturers Association, on CWC industry-related and policy issues. In addition, the Department has participated in international fora to negotiate positions which minimize burdens and maximize protections to industry.

Both houses of Congress have passed CWC implementing legislation, and a law is expected to be enacted in early 1998. Implementation of the CWC will require Commerce to revise the Export Administration Regulations accordingly.

F. Foreign Availability

Past reviews conducted by Commerce revealed that there was availability from non-AG countries for a wide range of AG chemical precursors and production equipment. Some producing countries have export controls on certain AG-controlled items. Non-AG suppliers of precursors and/or related production equipment include Brazil, Chile, Colombia, India, Mexico, China (PRC), South Africa, the countries of the former Soviet Union, Taiwan, Thailand, and Turkey. However, most of these countries have signed the CWC and will take steps under this treaty to prevent CW proliferation.

ENDNOTES

1. *Anti-terrorism controls also apply to exports of these items to countries designated as state sponsors of terrorism by the Secretary of State.*
2. *The CWC was ratified by the United States on April 25, 1997 and entered into force on April 29, 1997. As of September 30, 1997, 100 nations were States Parties to the treaty.*
3. *As of the date of submission of this report, the countries in the Commerce Country Chart CB column 3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria,*

Burma, China (PRC), Egypt, Georgia, India, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Moldova, Mongolia, Oman, Pakistan, Qatar, Russia, St. Kitts & Nevis, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.

4. *As of the date of submission of this report, the countries in Country Group D:3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria, Burma, China (PRC), Cuba, Egypt, Georgia, India, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Moldova, Mongolia, North Korea, Oman, Pakistan, Qatar, Russia, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.*

8. Biological Agents and Associated Equipment, Technology and Software (Sections 742.2, 744.4 and 744.6)

Export Control Program Description And Licensing Policy

The Bureau of Export Administration (BXA) exercises export controls over certain microorganisms and toxins, biological equipment, and technology for their use or disposal in order to further U.S. foreign policy opposing the proliferation and use of biological weapons.¹ These export controls are implemented multilaterally in coordination with the Australia Group (AG), an informal forum of 30 nations cooperating to halt the proliferation of chemical and biological weapons. (See Appendix II for complete list of regime members.) BXA also participates in international efforts to effect a total ban on biological weapons in compliance with the Convention on the Prohibition of the Development Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC).²

The licensing requirements for biological agents, related equipment and technology as specified on the Commerce Control List (CCL) are as follows:

A. A license is required for the export to all destinations, except Canada, of certain human pathogens, zoonoses, toxins, animal pathogens, genetically modified microorganisms and plant pathogens, and technology for their use and/or disposal.

A license is required to export to specified countries certain dual-use equipment and materials that can be used in the production of biological agents and technology for their production. The countries to which this licensing requirement applies are indicated in Column CB:3 of the Commerce Country Chart, Export Administration Regulations (EAR), Section 738, Supplement No. 1.³

A license or reexport authorization is required for any item subject the EAR, when the exporter knows that it will be used in the design, development, production, stockpiling, or use of biological weapons in, or by, specified countries (Country Group D:3, EAR, Section 740, Supplement No. 1).⁴ No U.S. person may knowingly support an export, reexport or transfer covered by these controls. Support could mean any action, including financing, transportation, or freight forwarding. BXA may inform the exporter or reexporter that a license is required due to an unacceptable risk that the items will be used in, or diverted to, a biological weapons project, anywhere in the world.

No U.S. person may, without a license, perform any contract, service or employment knowing that it will directly assist in the design, development, production, stockpiling, or use of biological weapons in, or by, a country listed in Country Group D:3.

B. Applications for licenses will be considered on a case-by-case basis to determine whether

the export would make a material contribution to the design, development, production, stockpiling, or use of biological weapons. When an export is deemed to make such a contribution, the application will be denied.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of these controls is to prevent U.S. contribution to, and to support multilateral efforts to control, the proliferation and illegal use of biological weapons. They also provide regulatory authority to control the export of any item from the United States when there is a significant risk that it will be used for biological weapons purposes. The controls implement some of the measures directed in Executive Order 12735 of November 16, 1990, and its successor, Executive Order 12938 of November 14, 1994, and the Enhanced Proliferation Control Initiative of December 13, 1990.

These controls are implemented in coordination with the AG. The AG works to accomplish this objective through the harmonization of export controls, the exchange of information, and other diplomatic means. In addition, these controls assist the United States in implementing its obligation under the BWC not to assist other countries develop, produce, stockpile, or otherwise acquire or retain biological agents or toxins, weapons, equipment or the means of delivery for hostile purposes or in armed conflict. The controls also advance the goals of the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or other Gases, and of Bacteriological Methods of Warfare, which prohibits the use of chemical or biological weapons.

B. Considerations and/or Determinations of the Secretary of Commerce

1. **Probability of Achieving the Intended Foreign Policy Purpose.** The Secretary has determined that the control is likely to achieve the intended foreign policy purpose in light of other factors including availability from other sources of these biological materials and related equipment, technology and software. The United States continues to address the problem of biological weapons proliferation through a variety of international fora, and urges other AG members to pursue export control cooperation with non-members on a bilateral or regional basis.

While the controlled materials are widely available from other countries, the continuation of these controls reaffirms U.S. opposition to the development, proliferation and use of biological weapons and serves to distance the United States from such activities.

2. **Compatibility with Foreign Policy Objectives.** In extending these controls, the Secretary has determined that the controls are compatible with the foreign policy objectives of the United States. The United States has a strong interest in remaining in the forefront of international

efforts to stem the proliferation of biological weapons. These controls are compatible with the multilateral export controls for biological materials agreed to in the AG. Moreover, the United States has a binding international commitment under the BWC to the complete prohibition and elimination of biological weapons. Therefore, these controls are compatible with multilateral efforts to strengthen the BWC to deter noncompliance and to reinforce the global commitment against the proliferation of biological weapons.

3. Reaction of Other Countries. The United States regularly engages in consultation with other countries regarding use of export controls to halt the proliferation of biological weapons. In addition, the AG urges all countries to adopt export controls on microorganisms, equipment technology and software related to the production of biological weapons. Some developing country governments believe that AG export controls discriminate against less industrialized nations by depriving them of goods and assistance in the field of chemical and biological technology. The United States does not agree with this position, which it believes the evidence does not support (see next section, Economic Impact on United States Industry). In international fora the United States has sought to dispel this perception by clarifying the purpose of the controls and demonstrating that very few export requests are denied.

4. Economic Impact on United States Industry. The Secretary has determined that the potential impact of these export controls on the U.S. economic position is minimal as borne out by our export licensing statistics. In FY 1997, the Department approved 418 export license applications for biological agents valued at \$80 million. One export application, worth \$324, was denied. No export license applications for the categories of equipment and materials related to production of controlled biological agents were approved or denied. These statistics also demonstrate that AG export controls do not undermine the legitimate economic or technological development of any country.

5. Enforcement of Control. Enforcing controls on biological weapons materials poses problems similar to the enforcement of chemical controls, but with additional difficulties. Biological materials are microscopic organisms that require technical expertise and specialized facilities to identify and to handle. Because of their size, they can be concealed and transported with ease. Enforcing controls on biological agents and associated equipment brings enforcement personnel into contact with industries, manufacturers and exporters with whom they have had little prior contact until recently.

To meet the challenge of effective enforcement of these proliferation controls, Commerce has redirected resources toward preventive enforcement, and conducts an extensive on-going outreach program to educate appropriate industries about export controls. The program is also designed to increase the industry's awareness of suspicious orders for products or equipment that could be used for biological weapons proliferation. A significant number of investigations have been opened into allegations of illegal activity related to these concerns. In cases when unlicensed shipments of biological materials have already taken place, Commerce has found that investigations and prosecutions can be successfully conducted on the basis of routine

documentation, as in other export control enforcement cases.

C. Consultation with Industry

BXA recognizes the need to consider the issue of U.S. industry's competitiveness while administering these controls in a manner that will achieve nonproliferation objectives. Throughout 1997 BXA worked closely with various industry associations, including the Pharmaceutical Manufacturers Association (PhRMA), the Biotechnology Industry Organization, and the Animal Health Institute. BXA engaged in numerous discussions with industry to identify areas of concern to industry, seek technical advice and obtain industry views as to measures that could be used to strengthen the BWC. Finally, the Materials Technical Advisory Committee includes a biotechnology subgroup to provide the technical input needed to understand the potential impact of proposed measures on industry. This industry advisory group is playing an important role in the development and implementation of export controls for biological agents, equipment and technology as well as in its efforts to strengthen the BWC.

D. Consultation with Other Countries

Recognizing that multilateral coordination of export controls and enforcement actions is the most effective means of restricting proliferation activities, the United States coordinates its controls on biological items with 29 other countries in the AG. The AG held its annual session October 6-9, 1997, in Paris during which the members addressed a range of export control issues

South Korea is the most recent member of the AG, joining in February 1997. The United States continues to urge key non-AG countries to adopt AG biological controls. We have been working closely with Bulgaria, Russia and Ukraine to set up an export control system, including an enforcement mechanism, that will include AG-listed biological items.

The BWC, which entered into force in 1975, is an international arms control agreement among 140 nations that bans the development, production, stockpiling, or otherwise acquiring or retaining biological agents or toxins that have no justification for prophylactic, protective or other peaceful purposes, and prohibits assisting other countries in acquiring such items. A multilateral Ad Hoc Group has been established to develop a legally binding protocol to strengthen the effectiveness of the BWC. This group is working to define elements that could be included in the protocol. Elements under consideration include mandatory data declarations, on-site inspections, enhanced information exchange, and a permanent BWC international oversight organization.

E. Alternative Means

The United States continues to address the problem of the proliferation of biological weapons on a number of fronts. Direct negotiations with countries intent on acquiring biological weapons are not likely to prevent the use of U.S.-origin materials in such activities. Neither are such negotiations likely to affect the behavior of these countries.

Alternative means to curtail the acquisition and development of biological warfare capabilities, such as diplomatic negotiations, do not obviate the need for controls. Some of the following are examples of additional means that have been and will continue to be used in an attempt to curb the use and spread of biological weapons:

- o U.S. Legislation: Regulations issued by the Public Health Service (42 CFR Part 72) pursuant to the "The Antiterrorism and Effective Death Penalty Act of 1996" (Sec. 511 of Pub. L.104-132), places additional shipping and handling requirements on laboratory facilities that transfer or receive select infectious agents capable of causing substantial harm to human health.
- o The Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Title III, Pub. L.102-182) provides for the imposition of sanctions on foreign persons and countries for certain kinds of chemical and biological weapons related activity. To date, no sanctions have been imposed for biological weapons related activities.
- o Trilateral US/UK/Russian Statement: In September 1992, the United States, United Kingdom and Russia confirmed their commitment to full compliance with the BWC and agreed to a number of steps including data exchanges, visits to sites, and further consultations to enhance cooperation and confidence.
- o Biological Weapons Convention - An Ad Hoc Group continues to develop a protocol to strengthen the effectiveness and build confidence in compliance with the BWC.

F. Foreign Availability

Past reviews conducted by BXA identified the availability of AG-controlled viruses and bacteria in the non-AG countries of Brazil, Bulgaria, India, Indonesia, Iran, Jordan, Mexico, China (PRC), Senegal, Singapore, Taiwan, and Thailand and related AG-controlled equipment items available in Brazil, Bulgaria, Hong Kong, India, Israel, Malaysia, Pakistan, PRC, Russia, Saudi Arabia, Singapore, South Africa, Taiwan and Ukraine. (Most of this equipment has application in the food processing and pharmaceutical industries.) Many of the countries listed above are parties to the BWC, and BXA is working with other U.S. agencies as part of ongoing international efforts to strengthen the effectiveness of this Convention.

ENDNOTES

1. *Anti-terrorism controls also apply to exports of these items to terrorist-supporting destinations as designated by the Secretary of State.*
2. *The treaty was signed in 1972 and ratified by the United States in 1975.*

3. *As of the date of submission of this report, the countries in the Commerce Country Chart CB column 3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria, Burma, China (PRC), Egypt, Georgia, India, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Moldova, Mongolia, Oman, Pakistan, Qatar, Russia, St. Kitts & Nevis, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.*

4. *As of the date of submission of this report, the countries in Country Group D:3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria, Burma, China (PRC), Cuba, Egypt, Georgia, India, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Moldova, Mongolia, North Korea, Oman, Pakistan, Qatar, Russia, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.*

9. Missile Technology (Sections 742.5 and 744)

Export Control Program Description And Licensing Policy

The United States continues its efforts to limit the proliferation of missiles capable of delivering weapons of mass destruction through its membership in the Missile Technology Control Regime (MTCR). The MTCR was formed in 1987 by the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom. Its initial focus was to limit the proliferation of missiles capable of delivering nuclear weapons; in 1993, its scope expanded to include missile delivery systems for all types of weapons of mass destruction. Over the years, its membership has also expanded; in 1997, Turkey became the twenty-ninth country to become a member of the MTCR. (See Appendix II for complete list of members.)

In 1997, the MTCR also continues to seek the cooperation of non-member countries in its non-proliferation efforts. The MTCR Transshipment Seminar and Workshop series, in which Commerce plays a major role, is an outreach program for both MTCR and invited non-MTCR countries to explore different approaches to the illegal transshipment of sensitive items to missile programs worldwide. This series of seminars was initiated by the United States, with the first seminar held in Washington, D.C., in July 1996. In 1997, two "expert-level" workshops were held on legal and regulatory authority (March 1997), and licensing and enforcement (June 1997). All of the MTCR member countries and six non-member countries plus Hong Kong attended.

Other countries are also encouraged to adopt so-called "catch all" controls on items that would otherwise not be subject to a licensing requirement. Under U.S. "catch all" controls, an exporter must obtain a validated license, even if one is usually not needed, if the exporter knows or is informed by the Bureau of Export Administration (BXA) that the export is for use in nuclear, chemical or biological weapons or missile activities. U.S. persons are also restricted from activities abroad in support of nuclear, chemical or biological weapons, and missile delivery systems. These controls, initiated by President Bush in 1990 on the eve of the Persian Gulf War under the Enhanced Proliferation Control Initiative (EPCI), are designed to prevent exports that could make a material contribution to proliferation projects of concern, but are not intended to affect legitimate commercial trade. With U.S. leadership, a large majority of our non-proliferation regime partners have incorporated so-called "catch-all" export controls in their own regulatory regimes. The European Union and Australia implemented catch-all controls in 1995, as did Japan in 1996 and Argentina and South Africa in 1997. At present, approximately three-fourths of the MTCR member countries have some form of catch-all controls.

On February 3, 1997, Commerce published the "Entity List," a roster of foreign end-users who pose an unacceptable risk of diversion to nuclear and missile proliferation activities (see 15 CFR 744 Supplement No. 4, and Appendix III to this report). Commerce published additions and revisions to the list in May, June and October. With the publication of this list, Commerce requires a license for the export or reexport of otherwise uncontrolled items subject to the Export

Administration Regulations (also known as "EAR99" items) to some end-users on the list, and for specified controlled items to others. The Entity List is one part of efforts under EPCI to stem the spread of weapons of mass destruction.

The non-proliferation tenets of the MTCR are expressed in its Guidelines and the Equipment and Technology Annex; these documents form the basis of U.S. missile technology controls. The Guidelines provide licensing policy, procedures, review factors, and standard assurances on missile technology exports. The Annex is the list of items of missile-related commodities subject to controls, and is divided into two categories. Category I items include missile systems capable of delivering a 500 kg payload to at least a 300 km range, and key subsystems. Category II items include materials, components, and production and test equipment associated with Category I items, as well as missile subsystems, production facilities, and production equipment for missile systems with a 300 km range, regardless of payload.

Category I items carry a strong presumption of denial and are rarely licensed for export. Transfers of production facilities for Category I items are prohibited. Category II items are licensed only after a case-by-case review to ensure that they are not intended for use in an MTCR-class missile or a weapon of mass destruction delivery system. Commerce is responsible for administering controls on some manufacturing equipment for Category I items and all dual use items in Category II. There are approximately 120 entries on the Commerce Control List that are subject to missile technology controls.

In summary, the licensing requirements and policy for missile technology controls described in Parts 742.5 and 744 of the EAR are as follows:

- A. A license is required for the export to all destinations (except Canada) of those dual-use items specifically identified on the Commerce Control List as controlled for missile technology reasons. These items are controlled on a multilateral basis by the MTCR. Munitions-related items are controlled and licensed through the Department of State.
- B. A license is required for any destination, including Canada, for the export or reexport of all items subject to the EAR, when the exporter knows that the item is either (1) destined for a missile project listed in the footnote to Country Group D:4 in the EAR, or (2) will be used in the design, development, production, or use of missiles in or by a country listed in Country Group D:4.¹
- C. The Department may inform the exporter that a license is required for any item because there is an unacceptable risk of use in, or diversion to, such activities anywhere in the world.
- D. Licensing restrictions also apply to certain forms of "knowing" participation and support by U.S. persons, including foreign branches of U.S. companies, in missile activities in countries of concern specified in the regulations. The restrictions apply to the export, reexport or transfer of any item, including foreign origin items, by a U.S. person where the person knows the item will be

used in the design, development, production, or use of missiles in or by such countries. Support activities requiring a license include financing, freight forwarding, transportation and other comparable assistance by which a person facilitates an export, reexport or transfer. In addition, no U.S. person may perform any contract, service or employment knowing it will assist in missile activities in a country of concern.

E. Applications for export licenses will be considered on a case-by-case basis to determine whether the export would make a material contribution to the proliferation of missiles.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of this control is to curtail the availability of goods and technology that could contribute to missile proliferation. Regulating exports of specific types of missile related equipment and technology, in coordination with other suppliers of these materials, helps limit the destabilizing spread of missile systems and related technology around the world. This control complements U.S. and international nuclear, chemical, and biological non-proliferation efforts by blocking development of unmanned delivery systems for weapons of mass destruction.

This control lends clear U.S. support to the collective effort of the other 28 member countries of the MTCR and underscores our resolve to address mounting international concern regarding missile proliferation. A multilateral arrangement to honor other members' denials of licenses and to support such denials through a "no undercut" commitment enhances global efforts to prevent missile proliferation and prevents unfair commercial advantage or disadvantage to members.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. **Probability of Achieving the Intended Foreign Policy Purpose.** Despite the foreign availability of some controlled items, cooperation between the United States, its MTCR Partners, and other like-minded countries, many of which are major producers of the items under control, has hindered the efforts of proliferators to successfully develop or acquire highly accurate missiles that are militarily effective. The Secretary has determined that the extended controls are likely to achieve the purpose of limiting the spread of missile delivery systems.

2. **Compatibility with Foreign Policy Objectives.** Halting the spread of missiles and related equipment and technology worldwide is a key U.S. national security goal. This control is consistent with, and contributes to, this important U.S. policy objective. Moreover, U.S. membership in the MTCR and rigorous application of the MTCR Guidelines and Annex complement the existing nuclear, chemical and biological non-proliferation control policies by working actively to curb the spread of missile technology and equipment for the use of such

weapons.

3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to these controls will not render the controls ineffective or be counterproductive to U.S. policy. The United States is confident that other members of and adherents to the MTCR, many of whom are also the leading Western suppliers of missile technology, will continue to support and strengthen this control regime. The MTCR Partners share information regarding denials of MTCR Annex items and are committed to consult before approving an essentially identical export denied to a specific end user by another Partner ("no undercut" policy). The MTCR Partners also share information about activities of potential proliferation concern and have cooperated to interdict certain transactions. In addition, both the number of MTCR member and non-member countries willing to cooperate with the Regime have increased over the past few years. At the 1997 Tokyo MTCR Plenary, the Partners also reaffirmed their commitment to combat the missile proliferation threat from non-member countries. Finally, the United States and its MTCR Partners have actively engaged in an outreach program to encourage additional countries to adhere to the Guidelines and implement effective export controls on MTCR items.

4. Economic Impact on United States Industry. In extending these controls, the Secretary has determined that the economic impact does not outweigh the foreign policy benefit of the control. There were no major changes or revisions to the MTCR Annex or U.S. missile technology controls on dual-use items in 1996 or 1997. The focus of the control is limited to those goods and technologies that would contribute to missile development. Therefore, the MTCR affects only a confined list of commodities and has limited economic impact on the export of the majority of dual-use commodities.

Multilateral support for the MTCR Annex by other major suppliers of controlled technologies and products helps restrain the flow of missile-related goods and technologies to activities and projects of proliferation concern. Multilateral cooperation from other MTCR members to honor members' export denials through a "no undercut" policy helps ensure that no member country obtains an unfair commercial advantage in the pursuit of foreign sales.

In FY 1997, a total of 1405 licenses were approved to all destinations controlled for missile technology, at a dollar value of \$765,285,871. A total of 37 licenses were denied, at a dollar value of \$21,261,706. A total of 97 applications were returned without action, with a dollar value of \$10,542,334.

5. Enforcement of Control. To meet the challenge of the effective enforcement of these controls, Commerce has redirected resources toward preventive enforcement, and conducts an extensive on-going outreach program to educate appropriate companies about export controls and to increase their awareness of "red flags" that may indicate potentially risky transactions. This program is an important component of Commerce's efforts to prevent companies from illegally exporting dual-use products or equipment that could be used to make missiles.

C. Consultation with Industry

Changes or issues involving the MTCR Annex are discussed primarily in the Transportation Technical Advisory Committee (TransTAC). There are also regular consultations with other relevant TACs on missile-related issues. The MTCR Annex can be amended by a consensus decision of all MTCR Partners. Commerce participates in interagency working groups that review proposed changes to the Annex.

D. Consultation with Other Countries

Ongoing consultations with the other members of the MTCR are a fundamental element of U.S. missile technology controls. The membership of the MTCR continues to expand, as other significant potential suppliers recognize the importance of this cooperative mechanism to restrict the proliferation of missile systems. Consultations with non-MTCR countries are also an essential element of U.S. missile non-proliferation policy. As noted above, the U.S. government shares information about activities of concern with other countries and seeks to prevent or stop certain transactions. The United States also shares denial information with its MTCR Partners. Although these export controls are coordinated multilaterally, final decisions are made at the national level.

E. Alternative Means

To participate fully in the MTCR, the United States must be able to prevent the export of equipment and technologies relevant to the development of missiles. The missile technology control provisions of the National Defense Authorization Act of FY 1991 provide for the imposition of export, import, and procurement sanctions on foreign entities engaged in certain kinds of activities relating to the transfer of MTCR Annex items to non-MTCR adherent countries. In the past, sanctions have been imposed on entities in China, India, North Korea, Pakistan, and Russia. A goal of the missile sanctions is to encourage the governments of the sanctioned entities to adopt responsible non-proliferation behavior.

Diplomatic efforts by the United States and the MTCR Partners to encourage additional countries, including other potential suppliers of missile technology, to abide by the MTCR Guidelines are on-going. These efforts are aimed at encouraging non-MTCR members to adhere unilaterally to the MTCR Guidelines and implement effective export controls on missile items.

F. Foreign Availability

The foreign availability of missile systems and launch vehicles prior to the imposition of MTCR-based controls was examined. Foreign capabilities outside the MTCR include, but are not limited to China (PRC), Egypt, India, Israel, Taiwan, and Ukraine. Some of these countries abide by the MTCR Guidelines and apply MTCR-type controls. The United States has approached and will continue to approach other nations that produce MTCR Annex-controlled items to urge vigilance in reviewing requests to export these items and to rigorously apply the MTCR

Guidelines to help prevent missile proliferation worldwide.

ENDNOTES

1. *The countries in Country Group D:4 include Bahrain, China (PRC), Egypt, India, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, North Korea, Oman, Pakistan, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen.*

10. High Performance Computers (Section 742.12)

Export Control Program Description And Licensing Policy

The revision of export controls on computers, was and will continue to be, a high priority for the Administration as computer technology improvements continually are enhancing system performance. Major revisions occurred in 1993, and again in January 1996, and now a new study has been commissioned to review system improvements and the parameters for measuring their performance. In reviewing export controls, the Administration takes into account: 1) the rapid advance of computing technology, 2) U.S. security and nonproliferation interests, and 3) the need for a policy that will remain effective over an eighteen to twenty-four month period.

For the purpose of these controls, four Computer Country Groups were established in 1996 under the U.S.-Japan bilateral High Performance Computer (HPC) Export Control Agreement. The specific performance level at which prior government review is required varies based on country of destination and the end-user and end-use of the computers. In this sliding scale of controls, the scope of control is commensurate to the performance of the computer and the level of risk associated with destination and end-use.

Congress added provisions to the FY 1998 National Defense Authorization Act (NDAA), which President Clinton signed on November 18, 1997, to require exporters to notify the Bureau of Export Administration (BXA) of their intent to export and/or reexport HPCs with a performance capability of between 2,000 and 7,000 million theoretical operations per second (MTOPS) to end-users in countries known in the Export Administration Regulations (EAR) as Tier 3 countries. Under the new law, if the Secretary of Commerce, Defense, Energy or State, or the Director of the Arms Control and Disarmament Agency, has specific objections to a proposed export or reexport within ten days, BXA will require a license application. The legislation will take effect when the Department of Commerce revises the EAR accordingly in 1998. Current regulations allow HPCs up to 7,000 MTOPS to be exported without a license to civil end-users in Tier 3 countries. The legislation also requires the Department of Commerce to perform post-shipment verifications on exports of HPCs over 2,000 MTOPS to Tier 3 countries, whether or not a licensed was required.

The controls in force during 1997 (i.e., before the enactment of the FY 1998 NDAA), listed by Tier group limits and requirements, are as follows:

Computer Country Tier 1 -- The first level of the sliding scale allows exports to most industrialized countries to proceed without prior government review (license exception). Exporters are required to maintain records of shipments and must forward certain information to the government as requested for shipments of computers at a CTP (Composite Theoretical Performance) of 2000 MTOPS and above. Reexport and retransfer restrictions also apply.

(See Addendum to this chapter for listing of specific countries by Country Tiers.)

Computer Country Tier 2 -- The second level applies to countries with mixed (but generally low risk) proliferation and export control records. There is no prior government review up to 10,000 MTOPS, but exporters are required to maintain records for computers at 2,000 MTOPS and above and report this information to the U.S. Government, as requested. Reexport and retransfer restrictions apply. Exports above 10,000 MTOPS to these countries require prior government review (an export license). Above 20,000 MTOPS, additional safeguards procedures may be required.

Computer Country Tier 3 -- The third level applies to countries posing proliferation, diversion or other security risks. Licenses are required above 2,000 MTOPS for military and proliferation end-uses and users, and at 7,000 MTOPS for all other end-uses and users, with possible requirements for full safeguards for systems at 10,000 MTOPS and above, depending on the end-user. No prior government review is required for exports to civil end-uses and users between 2,000 and 7,000 MTOPS, but exporters are required to maintain records and report this information to the U.S. Government, as requested. Reexport and retransfer restrictions apply.

Computer Country Tier 4 -- The fourth level applies to terrorist countries (Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria). The President decided to continue to deny high performance computer technology to these destinations. A license is required from Commerce to export or reexport to any end-user in Syria computers with a CTP greater than or equal to 6 MTOPS. Cuba, Iran, Iraq, Libya, North Korea and Sudan are subject to comprehensive trade embargoes and hence U.S. government authorization is required for exports of any computer, regardless of MTOP level, to Cuba, Libya, Iran, Iraq, North Korea, and Sudan, and for reexports of computers with a CTP equal to or above 6 MTOPS to Iran.¹ (The Department of the Treasury's Office of Foreign Assets Control administers these trade embargoes. However, to avoid duplication in license requirements, Commerce and Treasury have allocated licensing responsibility in many instances. Commerce exercises licensing responsibility for exports and reexports to Cuba and North Korea and for reexports to Libya and Treasury exercises licensing responsibility for exports and reexports to Iran and Iraq and for exports to Libya.) Applications to export or reexport controlled computers to designated terrorist supporting countries will generally be denied.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of the computer controls is to prevent the transfer or diversion of computers to end-users who might make unauthorized use of such computers. The controls demonstrate the degree of U.S. concern over illegitimate access to such machines, and assist the United States in its efforts to obtain multilateral cooperation consistent with the HPC Agreement.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving the Intended Foreign Policy Purpose. The widespread availability of high performance computers and related technology, and the speed with which the technology level of these items changes and becomes more diffuse, suggest there is a decreasing probability that U.S. export controls will achieve their desired objective.
2. Compatibility with Foreign Policy Objectives. United States policy is to restrict the flow of goods and technology that would compromise U.S. security and foreign policy interests. Extensive U.S. leadership and participation in various multilateral control groups demonstrate the U.S. commitment in this regard. Since high performance computer export controls focus on security and foreign policy concerns, these controls substantially support U.S. foreign policy objectives.
3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to the extension of controls is not likely to render the controls ineffective in achieving the intended foreign policy objectives, or to be counterproductive to U.S. foreign policy interests. Countries that want high performance computers for legitimate civilian purposes should have no objection to the control because export licenses are reviewed on a case-by-case basis and are denied only if the export would adversely affect U.S. security or foreign policy objectives.
4. Economic Impact on U.S. Industry. In FY 1997, Commerce approved 20 licenses for high performance computers, valued at \$ 57.5 million. Commerce denied only one license application for a high performance computer, valued at \$.3 million in FY 1997. The major deregulation in January 1996 resulted in a reduced licensing compliance burden for U.S. industry. In FY 1995, for example, Commerce approved 306 licenses, valued at \$525.8 million.
5. Enforcement of Control. The Secretary has determined that the United States has the ability to enforce the control effectively. Significant problems of product identification are not expected. Because this control covers only one class of items, training of enforcement personnel to familiarize them with the equipment can be done without undue difficulty. In addition, the actual computer hardware is only one component of the total system. Specialized application software, maintenance, and spare parts often require continued contact with the exporter. Therefore, with appropriate safeguards, computers could not be completely, readily, and reliably diverted to unauthorized uses, moved, or adequately maintained for extended periods of time without the knowledge and support of the exporter or manufacturer.

C. Consultation with Industry

The Department of Commerce published a notice in the *Federal Register* on October 8, 1997, requesting public comments on its foreign policy-based export controls. As of the date of publication of this report, the Department had received no comments on export controls of high-performance computers.

However, the computer industry has expressed in other fora its concerns that the implementation of additional controls on the exports of HPCs could hamper U.S. industry's abilities to conduct legitimate trade and hurt its competitiveness relative to other producer nations who do not have such unique controls in place.

D. Consultation with Other Countries

The United States has actively consulted our allies and friends to ensure that they understand the basis for the controls. The United States is working particularly closely with Japan and others in the Wassenaar Arrangement, to explain that our controls are consistent with the basic foundations and principles already agreed in these negotiations. Exporters are required to report certain information to the U.S. Government consistent with U.S. multilateral commitments on information sharing in the Wassenaar regime.

E. Alternative Means

Alternatives to controls would not be the most effective means of achieving the intended strategic and non-proliferation objectives. The United States will continue to use diplomatic efforts to discourage other countries from engaging in activities which the controls address, and to consult with other supplier countries about adhering to multilateral export controls. However, these efforts can only supplement, not replace, the effectiveness of actual export controls.

F. Foreign Availability

The January 1996 revisions to computer export controls took a realistic account of the likely effectiveness of controls in the face of the rapid advance and diffusion of computer technology worldwide. The key to effective export controls is setting control levels above foreign availability--that is, the level of computer capability that end-users of security and proliferation risk can obtain from non-U.S. sources because of widespread availability or by diversion from normal commerce. When the United States adjusted the controls in 1996, it was evident that computer technology would continue to change rapidly, warranting a new review about every eighteen to twenty-four months. Thus, the Administration has announced that it is again reviewing computer controls, as the eighteen-month time frame has passed.

ADDENDUM

COMPUTER TIER	COUNTRIES
1	Australia, Austria, Belgium, Canada ² , Denmark, Finland, France, Germany, Greece, Holy See, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Mexico, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and all territories thereof.
2	Antigua & Barbuda, Argentina, Bahamas, Barbados, Bangladesh, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Brunei, Burkina Faso, Burma, Burundi, Cameroon, Cape Verde, Central Africa, Chad, Chile, Colombia, Congo, Costa Rica, Cote d'Ivoire, Cyprus, Czech Republic, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia (The), Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Indonesia, Jamaica, Kenya, Kiribati, Korea (Republic of), Lesotho, Liberia, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritius, Micronesia (Federated States of), Mozambique, Namibia, Nauru, Nepal, Nicaragua, Niger, Nigeria, Palau, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Rwanda, St. Kitts & Nevis, St. Lucia, St. Vincent and Grenadines, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, Singapore, Slovak Republic, Slovenia, Solomon Islands, Somalia, South Africa, Sri Lanka, Surinam, Swaziland, Taiwan, Tanzania, Togo, Tonga, Thailand, Trinidad & Tobago, Tuvalu, Uganda, Uruguay, Western Sahara, Western Samoa, Zaire, Zambia, and Zimbabwe.
3	Afghanistan, Albania, Algeria, Andorra, Angola, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia & Herzegovina, Bulgaria, Cambodia, China (People's Republic of), Comoros, Croatia, Djibouti, Egypt, Estonia, Georgia, India, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lithuania, Macedonia (The Former Yugoslavia Republic of), Mauritania, Moldova, Mongolia, Morocco, Oman, Pakistan, Qatar, Romania, Russia, Saudi Arabia, Serbia and Montenegro, Tajikistan, Tunisia, Turkmenistan, Ukraine, United Arab Emirates, Uzbekistan, Vanuatu, Vietnam, and Yemen.
4	Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

ENDNOTES

1. *The scope of the embargo as pertains to reexports to Sudan has not been determined as of the submission of this report.*
2. *Exports of HPC items classified on the Commerce Control List under Export Control Classification Number (ECCN) 4A003 can be exported to Canada with no license required (NLR) rather than under the license exception for high performance computers*

(CTP). The record keeping requirements do not apply for HPC exports to Canada. Retransfer and reexport restrictions still apply.

11. Encryption (Section 742.15)

Export Control Program Description and Licensing Policy

On December 30, 1996, the Bureau of Export Administration (BXA) published in the *Federal Register* (61 FR 68572) an interim rule that exercises jurisdiction over, and imposes new combined national security and foreign policy controls on, certain encryption items, including recoverable encryption “software,” that were on the United States Munitions List (USML), consistent with Executive Order 13026 and pursuant to the Presidential Memorandum of that date, both issued by President Clinton on November 15, 1996. The Memorandum and E.O. 13026 directed that all encryption items controlled on the USML, with the exception of those specifically designed, developed, configured, adapted, or modified for military applications (including command, control and intelligence applications), be transferred to the Commerce Control List (CCL). The latter items remain on the USML, and continue to be controlled by the Department of State, Office of Defense Trade Controls. In the CCL the acronym “EI” (Encryption Items) designates foreign policy controls on these items.

The Administration’s encryption policy, which was first announced by the Vice President on October 1, 1996, makes it easier for Americans to use stronger encryption products to protect their privacy, intellectual property and other valuable information. The policy relies on market forces to develop a worldwide key management infrastructure with the use of key recovery encryption items to promote electronic commerce and secure communications while protecting national security and public safety. The regulations contain procedures which allow recoverable encryption products of any strength and key length to be exported under a license exception after a one-time review. In order to encourage the development of these recoverable encryption products, the policy allows a two-year liberalization period (until January 1, 1999) during which companies may export non-recoverable encryption items up to 56-bit key length Data Encryption Standard (DES) or equivalent strength, provided the exporter submits a commitment and business plan demonstrating the intent to develop recoverable encryption products and a global key management infrastructure.

The President’s Executive Order directs the Secretary of Commerce to take actions to control the export of assistance to foreign persons in the same manner and to the same extent as the export of such assistance is controlled under the Arms Export Control Act. Therefore, the interim rule on encryption prohibits U.S. persons, without a license from Commerce, from knowingly providing assistance to foreign persons, including providing training, to manufacture or to export encryption items transferred from the USML to the CCL. This provision does not apply to any activity involving such encryption items that have been licensed or otherwise authorized by Commerce.

During 1997, encryption policy has been a heavily debated issue. New topics in the debate have prompted discussion on revisions to the regulations. Pending amendments to the regulations

will address the issue of banks and financial institutions.

In May 1997, the Department of Commerce announced that it would allow the export of the strongest available data encryption products to support electronic commerce around the world. These products include direct home banking software of any key length, offered by banks to their customers world-wide. This step was part of the overall Clinton Administration initiative to promote the development of a secure and trusted environment for electronic commerce. The products and institutions that will make up a robust security infrastructure will permit users from homes and businesses to perform all types of commercial data transactions, ranging from managing investment transactions to purchasing goods and services. That infrastructure will manage encryption and digital signature keys to provide privacy, message integrity, user authentication, and recovery services. Because banks and other financial institutions are subject to explicit legal requirements and have shown a consistent ability to provide appropriate access to transaction information in response to authorized law enforcement requests, key recovery will not be required for certain financial-specific products.

In addition, on April 24, 1997, the Secretary of Commerce established the President's Export Council Subcommittee on Encryption, comprising forty members from the exporting community, manufacturers and law enforcement officials interested in encryption policy. The Subcommittee will advise the President, through the President's Export Council, and the Secretary on matters pertinent to implementing an encryption policy that will support the growth of electronic commerce while protecting the public safety and national security

A. In general, the United States requires a license for all destinations, except Canada, for exports and reexports of commercial encryption items. However, certain exceptions to the licensing requirements may apply.

B. Export license applications for commercial encryption items are reviewed on a case-by-case basis, to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests.

C. Exporters of 56-bit DES or equivalent encryption products are required to make commitments to develop and market products that support key recovery. The Administration believes that the worldwide use of key recovery encryption products will promote secure international networks for electronic commerce, while protecting national security and public safety.

Analysis of Control as Required by Section 6(f) of the Act

A. The Purpose of the Control

The purpose of the control is to protect U.S. national security and foreign policy interests, including the safety of U.S. citizens here and abroad. Encryption can be used to conceal the

communications or data of terrorists, drug smugglers, or others intent on taking hostile action against U.S. facilities, personnel, or security interests. Policies concerning the export control of cryptographic products are based on the fact that the proliferation of such products will make it more difficult for the U.S. Government to have access to information vital to national security and foreign policy interests. Also, cryptographic products and software have military and intelligence applications.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving the Intended Foreign Policy Purpose. Consistent with Executive Order 13026 of November 15, 1996, and a Presidential Memorandum of the same date, the Secretary has determined that the control achieves the intended purpose of denying the export of commercial encryption items, including products with key recovery features, if their export would be contrary to U.S. national security or foreign policy interests.
2. Compatibility with Foreign Policy Objectives. The Secretary has also determined that the controls are compatible with the foreign policy objectives of the United States. The control is consistent with U.S. foreign policy goals to promote peace and stability and to prevent U.S. exports that might contribute to destabilizing military capabilities and international terrorist or criminal activities against the United States. The controls also contribute to public safety by promoting the protection of U.S. citizens overseas.
3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to this control has not rendered the control ineffective in achieving its intended foreign policy purpose or counterproductive to U.S. foreign policy interests. Other allied countries recognize the need to control exports of encryption products for national security and law enforcement reasons. These countries also recognize the desirability of restricting goods that could compromise shared security and foreign policy interests.
4. Economic Impact on United States Industry. The Secretary has determined that the transfer of commercial encryption items, including products with key recovery features, from the USML to the CCL benefits industry positively and makes U.S. manufacturers more competitive in the world market. Removal of these products from the USML may actually improve their marketability to foreign, civil end-users who prefer not to trade in items the United States considers to be munitions. Moreover, since key recoverable encryption products pose less security and law enforcement risks, their export has been treated more liberally than export of encryption products with non-recoverable keys. This will allow U.S. manufacturers and exporters to capture a larger share of growing world demand for key recovery-based products.

From December 30, 1996, through September 30, 1997, BXA received 1,488 license applications containing encryption items. During this period, 1,075 of these applications were approved, valued at \$3.3 billion, and 20 applications were rejected, worth \$1.1 million. There were 97 applications returned without action, valued at \$238 million. The remaining cases were

still pending at the end of FY 1997.

Forty companies have submitted commitment plans which lay out how they will build and market key recovery products. These companies include some of the largest software and hardware manufacturers in the United States. BXA has approved 32 of these plans; none have been rejected. Furthermore, eight companies have submitted requests for a one-time review of key recovery encryption items which will facilitate the establishment of a key management infrastructure (KMI). Four of these products have been approved for eligibility under License Exception KMI. BXA has also approved four U.S. entities to serve as their own Key Recovery agents for these products (i.e., corporate “self-escrow”).

Some U.S. firms argue that U.S. export controls on encryption hurt their international competitiveness, asserting that encryption products are readily available overseas and foreign manufacturers are not subject to similar controls. However, these claims do not seem wholly valid for several reasons, including the dominance and superior quality of U.S. encryption products in the world market. Section F below (Foreign Availability) discusses this issue in further detail.

5. Enforcement of Control. The Secretary has determined that the United States has the ability to enforce these controls effectively. U.S. controls on this product and technology have been transferred from the State Department’s Munitions List to the Commerce Department’s Commerce Control List. Commerce Department is making manufacturers and dealers aware of the transfer of authority, and that the items covered by this transfer are under strict control. The strategic importance of these items is clear. Finally, since these items are also under multilateral control, we can expect cooperation from foreign enforcement agencies in preventing violations and punishing violators.

C. Consultation with Industry

The United States consulted with various elements within industry on the proposed change in controls and on the desirability of development of key recoverable encryption products for both Government and industry. During the first two months of 1997, the Department of Commerce received industry comments to the December 30, 1996, published rule. These comments included general concerns and objections to the policy embodied in the regulations, recommendations for specific changes or clarifications to the regulations that are consistent with the broad encryption policy implemented in the December 30 rule, claims that no market presently exists for key recoverable features, and recommendations for additional changes to encryption policy. These comments were made available to the general public on the Bureau’s web site. The Bureau continues to seek comments from industry sectors affected by encryption export controls, and takes these views into account in its internal deliberations on changes to encryption regulations and policy.

D. Consultation with Other Countries

The United States took the lead in international efforts to stem the proliferation of sensitive items, urging other supplier nations to adopt and apply export controls comparable to those of the United States. The major industrial partners of the United States maintain export controls on this equipment and technology. Pursuant to their agreement to establish a new regime for the control of conventional arms and sensitive dual-use technologies, the 33 participants in the Wassenaar Arrangement have agreed to control these items on a global basis and to coordinate export policies for such items. Members of the Organization for Economic Cooperation and Development have agreed to a set of cryptography policy guidelines which allow for the development of a global key management infrastructure.

In addition, the President appointed Ambassador David L. Aaron as Special Envoy for Cryptography, with the responsibility to promote the growth of international electronic commerce and robust, secure global communications in a manner that protects the public safety and national security. As Special Envoy, Ambassador Aaron has led discussions with major supplier nations on common approaches to encryption policy, including export controls. He has found that most of the nations have concerns similar to those of the United States regarding encryption. The United States hopes to work together with supplier nations to develop common encryption policies that are compatible and do not hinder development of the emerging information infrastructure.

E. Alternative Means

Alternatives to export controls at this time would not be the most effective means of achieving the intended national security and foreign policy objectives. The United States has undertaken a wide range of diplomatic means, both bilateral and multilateral, to encourage the proper restrictions on these items. However, these efforts can only supplement, not replace, the effectiveness of actual export controls.

F. Foreign Availability

The issue of foreign availability is one that is repeatedly raised in the encryption debate. It is often asserted that encryption products are widely available overseas, that other countries do not control encryption exports, or that U.S. firms are suffering significant losses due to export controls on encryption. These assertions do not appear to be entirely accurate. In 1995, the Department of Commerce and the National Security Agency (NSA) studied the foreign availability of encryption and found that claims of widespread foreign availability of encryption products were inaccurate. The United States dominates the worldwide software market, including the market for encryption products. Moreover, it does not appear that this dominance is threatened, either by export restrictions or commercial factors. While a number of countries produce encryption products, the issue of foreign availability is complex, and must address the quality of the encryption and the export controls maintained by foreign countries. The members of the Wassenaar Arrangement have agreed to control encryption on a multilateral basis. As to the quality of foreign encryption, our information indicates that, on the whole, American encryption is superior.

In regard to foreign availability as it relates to encryption items transferred from the USML to the CCL, the President's Executive Order of November 15, 1996, stated the following:

I have determined that the export of encryption products [transferred to the Commerce Control List] could harm national security and foreign policy interests even where comparable products are or appear to be available from sources outside the United States, and that facts and questions concerning the foreign availability of such encryption products cannot be made subject to public disclosure or judicial review without revealing or implicating classified information that could harm United States national security and foreign policy interests. Accordingly, sections 4(c) and 6(h)(2)-(4) of the Export Administration Act of 1979, 50 U.S.C. App. 2403(c) and 2405(h)(2)-(4), as amended and as continued in effect by Executive Order 12924 of August 19, 1994, and by notices of August 15, 1995, and August 14, 1996, all other analogous provisions of the EAA relating to foreign availability, and the regulations in the EAR relating to such EAA provisions, shall not be applicable with respect to export controls on such encryption products. Notwithstanding this, the Secretary of Commerce may, in his discretion, consider the foreign availability of comparable encryption products in determining whether to issue a license in a particular case or to remove controls on particular products, but is not required to issue licenses in particular cases or to remove controls on particular products based on such consideration.

12. Commercial Communications Satellites and Hot Section Technology (Section 742.14)

Export Control Program Description and Licensing Policy

On October 21, 1996, Commerce published a rule in the *Federal Register* accepting jurisdiction on certain commercial communications satellites and certain hot section technology for the development and production of commercial aircraft engines transferred from the U.S. Munitions List (USML) to the Commerce Control List (CCL). The Secretary of Commerce imposed new foreign policy controls on these items with the concurrence of the Secretary of State, in the belief that these controls are necessary to further significantly the foreign policy of the United States. [In the CCL the acronym "SI" (Significant Items) designates foreign policy controls on these items.] These commodities are also controlled by the Wassenaar Arrangement whose members include most of the other producers of these commodities. Commerce controls these on the CCL under Export Control Classification Numbers (ECCNs) 9A004 and 9E003.a.1 through a.12 and .f).

On September 29, 1997, Commerce amended the 1996 transfer of licensing jurisdiction of commercial communications satellites. The amendment revises ECCN 9A004 to transfer satellite fuel, ground support equipment, test equipment, payload adapter/interface hardware and replacement parts for the preceding items from State to Commerce jurisdiction when they are included with a specific commercial communications satellite. Following the completion of notification procedures under Section 38(f) of the Arms Export and Control Act (AECA), the State Department plans to publish its corresponding amendment to the International Traffic in Arms Regulations (ITAR) that will remove these items from the USML when they are included in a commercial communications satellite licensed by the Commerce Department. This provision allows exporters to obtain a single license for satellite launches. The Department of State continues to control satellite launch technology.

A. The United States requires a license for exports and reexports to all destinations, except Canada, for the above listed items. These items are controlled for national security and foreign policy reasons.

B. The United States reviews all license applications for the above items, on a case-by-case basis, to determine whether the export or reexport is consistent with U.S. national security and foreign policy interests.

Analysis of Control as Required by Section 6(f) of the Act

A. The Purpose of the Control

The purpose of the control is to protect U.S. national security and foreign policy interests and to demonstrate U.S. resolve to promote peace and stability. The United States is maintaining

such controls because of potential uses for the equipment in a manner contrary to U.S. security or foreign policy interests.

B. Considerations and/or Determinations of the Secretary of Commerce

1. Probability of Achieving the Intended Foreign Policy Purpose. The Secretary of Commerce has determined that the control is likely to achieve the intended purpose of denying the export of commercial communication satellites and hot section technology when its export would be contrary to U.S. national security or foreign policy interests.
2. Compatibility with Foreign Policy Objectives. The Secretary has also determined that the controls are compatible with the foreign policy objectives of the United States. The control is consistent with U.S. foreign policy goals to promote peace and stability and to prevent U.S. exports that might contribute to inappropriate military capabilities abroad.
3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to this control is not likely to render the control ineffective in achieving its intended foreign policy purpose or to be counterproductive to U.S. foreign policy interests. Other allied countries currently control commercial communications satellites and hot section technology for commercial jet engines as dual-use commodities. These countries also recognize the desirability of restricting goods that could compromise shared security and foreign policy interests.
4. Economic Impact on United States Industry. The Secretary has determined that the transfer of commercial communication satellites and commercial hot section technology from the USML to the CCL has benefitted industry positively in the context of multilateral agreements and made U.S. manufacturers more competitive in the world market. In FY 1997, the Bureau of Export Administration (BXA) approved 22 licenses, authorizing the export of 71 commercial communications satellites with a total value of \$3,954,233,970. BXA has not issued any licenses for the export of hot section technology resulting from the change in jurisdiction.
5. Enforcement of Control. The Secretary has determined that the United States has the ability to enforce these controls effectively. The United States expects no unusual problems in enforcing the controls. Under the State Department's authority, the items covered by this action were under strict control. Manufacturers and dealers are familiar with U.S. controls on this product and technology. The strategic importance of these items is clear. Finally, since these items are also under multilateral control, we can expect cooperation from foreign enforcement agencies in preventing violations and punishing violators.

C. Consultation with Industry

Commerce consulted with various elements within industry on the proposed change in controls. Industry comments, in large measure, favored transfer of the items to Commerce.

D. Consultation with Other Countries

The United States has taken the lead in international efforts to stem the proliferation of sensitive items, urging other supplier nations to adopt and apply export controls comparable to those of the United States. The major industrial partners of the United States maintain export controls on this equipment and technology and control them as dual-use commodities. Pursuant to their agreement to establish a new regime for the control of conventional arms and sensitive dual-use goods and technologies, the 33 participants in the Wassenaar Arrangement have agreed to control these items on a global basis and to ensure that transfers of such items are carried out responsibly and in furtherance of international peace and security.

E. Alternative Means

The United States has undertaken a wide range of diplomatic means, both bilateral and multilateral, to encourage the proper control over these items. The United States has specifically encouraged efforts to limit the flow of satellites and hot section technology to areas contrary to U.S. security and foreign policy concerns.

F. Foreign Availability

Although other countries produce commercial communications satellites and hot section technology, the United States is the world's leader. This fact alone would make a unilateral control effective; however, this is not a unilateral control because most producers of commercial communications satellites and hot section technology are members of the Wassenaar Arrangement and are controlling these items as dual-use items.

In addition, it is important to note that while the Export Administration Act contains provisions on foreign availability, items controlled for foreign policy reasons are excluded from mandatory foreign availability decontrol provisions of the Act.

13. Nuclear Non-Proliferation (Section 744.2)

Export Control Program Description and Licensing Policy

To further its nuclear non-proliferation policy, the United States maintains controls on exports under the provisions of the Nuclear Non-Proliferation Act of 1978. While these controls are not foreign policy-based in the same sense as other controls included in this report, they have been included in this report because they are usually grouped with the other non-proliferation controls referenced to elsewhere. The format of this chapter does not follow that of previous chapters; instead, it addresses the requirements of the legal authority for these controls.

A. A validated license is required for exports of the following commodities and related technology and software:

1. Commodities or related technology or software that could be of significance for nuclear explosive purposes (i.e., the Nuclear Referral List included in the Commerce Control List); and
2. Any commodity or related technology or software that the exporter knows, or has reason to know, will be used directly or indirectly in any of the following activities:
 - a. nuclear explosive activities including research on, designing, developing, manufacturing, maintaining or testing nuclear weapons or nuclear explosive devices; or
 - b. unsafeguarded nuclear activities including the research, design, development, manufacture, construction, operation, or maintenance of any nuclear reactor, critical facility, facility for the fabrication of nuclear fuel, facility for the conversion of nuclear material from one chemical form to another, or separate storage installation, where there is no obligation to accept International Atomic Energy Agency safeguards at the facility or installation, when it contains any source of special fissionable material, or where any such obligation is not met; or
 - c. safeguarded and unsafeguarded nuclear fuel cycle activities including research on, designing, constructing, fabricating, or operating the following facilities, or components for such facilities: (i) facilities for the chemical processing of irradiated special nuclear or source materials; (ii) facilities for the production of heavy water; (iii) facilities for the separation of isotopes of source and special nuclear material; or (iv) facilities for the fabrication of nuclear reactor fuel containing plutonium.
3. The Commerce Department may inform the exporter that a license is required for any item because there is an unacceptable risk of use in or diversion to such activities.
4. In addition, on February 3, 1997, Commerce published the "Entity List," a roster of foreign end-users who pose an unacceptable risk of diversion to nuclear and missile proliferation

activities (see 15 CFR 744 Supplement No. 4, and Appendix III to this report). Commerce published additions and revisions to the list in May, June and October. With the publication of this list, Commerce requires a license for the export or reexport of otherwise uncontrolled items subject to the Export Administration Regulations (EAR) (also known as "EAR99" items) to some end-users on the list, and for specified controlled items to others. The Entity List is one part of the Enhanced Proliferation Control Initiative, designed to stem the spread of weapons of mass destruction.

- B. Factors considered in reviewing applications for licenses include:
- o the stated end-use of the item;
 - o the significance for nuclear purposes of the particular component and its availability elsewhere;
 - o the types of nuclear non-proliferation assurances or guarantees given in a particular case; and
 - o the non-proliferation credentials of the recipient country.

A major change in the Commerce Control List occurred this year with the liberalization of controls on oscilloscope exports. Used in the development of the nuclear weapons programs of the 1950s and 1960s, oscilloscopes are now a key testing device for consumer products. After three years of multilateral and unilateral consultations, agreement was reached in the Nuclear Suppliers Group (discussed below), of which the United States is a member, to decontrol most oscilloscopes to all but the most sensitive destinations, effective August 6, 1997.

Analysis of Control as Required by Law¹

Section 17(d) of the Act and Section 309(c) of the Nuclear Non-Proliferation Act of 1978 are interpreted to provide that:

- A. Nuclear non-proliferation controls do not expire annually and determinations to extend them are thus not required; and
- B. The criteria and other factors set forth in Sections 6(b) through 6(f) of the Act are not applicable to these controls.

The Congress is, therefore, notified that these controls continue in effect. These controls further significantly the nuclear non-proliferation policy of the United States, and have made it more difficult for nations to acquire sensitive nuclear technology or equipment.

These controls also meet U.S. international nuclear non-proliferation obligations. The United States maintains on-going discussions with other countries to coordinate export controls for nuclear non-proliferation purposes and is a member of the multilateral Nuclear Suppliers Group

(NSG). The NSG, composed of 35 members (Latvia became a member in 1997 and Brazil and Ukraine became members in 1996), sets forth guidelines on the export control of a list of nuclear-related dual-use items. (See Appendix II for complete list of regime members.) The United States is also a member of the Zangger Committee, a multilateral group established in the early 1970s to establish guidelines for the export control provisions of the Nuclear Non-Proliferation Treaty. In 1997, China joined Zangger and pledged to implement its own nuclear export controls.

The Departments of Commerce and Energy, in consultation with the Departments of State and Defense, the Arms Control and Disarmament Agency, and the Nuclear Regulatory Commission, regularly review and revise this list of U.S. dual-use items controlled for nuclear non-proliferation reasons. Referred to as the Nuclear Referral List (NRL), it also conforms with our international obligations under the NSG. The last revision of the NRL was published in January 1996.

ENDNOTES

1. *The analysis required by law differs for nuclear non-proliferation controls. It is governed by the Nuclear Non-Proliferation Act of 1978. Therefore, the headings under this section differ from the rest of the report.*

APPENDIX I

SUMMARY OF COMMENTS ON FOREIGN POLICY CONTROLS

In the *Federal Register* of October 8, 1997, the Department of Commerce requested comments from the public on existing foreign policy-based controls maintained under Section 6 of the Export Administration Act. In the notice, the Department sought comments on how existing foreign policy-based controls have affected exporters and the overall public. Specifically, the notice invited public comments about such issues as the effectiveness of controls where foreign availability exists; whether the goals of the controls can be achieved through other means such as negotiations; the compatibility of the overall U.S. policy toward the country in question; the effect of controls on U.S. economic performance; and the enforceability of the controls. The Department also requested comments from the member companies of its Technical Advisory Committees (TACs) and the President's Export Council Subcommittee on Export Administration (PECSEA).

The Department received three responses to this request, from the Regulations and Procedures Technical Advisory Committee (RPTAC), Sun Microsystems, and Allegheny Teledyne. The Bureau of Export Administration (BXA) makes the comments available for public review upon request. This Appendix summarizes the comments received and some of the various reports issued in 1997 on unilateral sanctions.

Industry Comments

The RPTAC's response centered on its perception that foreign policy controls are expanding, thus penalizing U.S. industry without effecting noticeable change of behavior by the target countries. RPTAC noted that the United States is targeting more countries (*e.g.*, Sudan) and is also placing items that have been removed from multilateral control under unilateral control. The response recommended that BXA survey foreign governments and companies for their reactions to U.S. foreign policy export controls. It suggested that the United States reduce the number of both target destinations and items subject to unilateral export controls, and employ multilateral controls whenever possible.

Sun Microsystems focused its response on the "Catch-All" controls implemented as part of the Enhanced Proliferation Control Initiative. Sun recommends abolishing "Catch-All" provisions. If this is not feasible, Sun suggests that BXA subject "Catch-All" controls to the same analysis as other controls in its annual report on foreign policy export controls; expediting end-user checks; establishing procedures whereby BXA would inform all companies if it informs one about a foreign entity that poses a proliferation concern; eliminating license requirements for EAR99 items to parties on the "Entities List;" and publishing the Department of Energy's list of

sensitive nuclear facilities and unsafeguarded facilities. Sun recommended revisions to the high-performance computer requirements, specifically to minimize control levels on items that are readily available elsewhere.

Allegheny Teledyne supported a recommendation made by the Materials Technical Advisory Committee (MATAC) that BXA eliminate controls on high-strength titanium alloys (ECCN 1C202). Allegheny Teledyne claims these alloys have widespread foreign availability and that substitute products exist that are not controlled.

BXA also received a copy of the “1997 Statement of Goals of the Industry Coalition on Technology Transfer (ICOTT),” a U.S. group of high technology trade associations whose member firms export controlled goods and technology. ICOTT submitted this Statement to BXA to advise the U.S. Government of its primary concerns about export controls. These goals include, *inter alia*, restricting the use of unilateral export controls; harmonizing nonproliferation, national security, and foreign policy controls; limiting interagency review; moving embargo functions administered by the Department of the Treasury to the Department of Commerce; halting extraterritorial application of export controls; limiting encryption controls; and having BXA conduct an annual review of the Commerce Control List.

Unilateral Sanctions

Much attention in 1997 focused on the issue of U.S. unilateral sanctions. Two Executive Branch advisory committees published reports on sanctions, as did several industry associations and research institutes. This Appendix, while not inclusive, summarizes some of the reports published this year and highlights their major conclusions.

The President’s Export Council submitted a report to the President in June 1997, titled, “Unilateral Economic Sanctions: A Review of Existing Sanctions and Their Impacts on U.S. Economic Interests with Recommendations for Policy and Process Improvement.” The Council concluded that unilateral economic sanctions could be an effective tool of U.S. foreign policy but may weaken U.S. competitiveness by creating advantages for foreign competitors, inviting retaliation, and creating uncertainty about the availability of U.S.-origin goods, services and technology. However, the Council states, “The negative economic impacts of unilateral sanctions could be substantially reduced with no significant negative impact on the domestic and foreign policy interests of the United States.” The Council recommends *inter alia* that the President establish guidelines for the implementation of sanctions, consult with Congress and affected private parties before enacting sanctions, avoid extraterritorial measures, and set time limits and review procedures on sanctions to ensure their long-term effectiveness.

The Sanctions Working Group (SWG) of the Department of State’s Advisory Committee on International Economic Policy completed its report on U.S. unilateral sanctions in September 1997. It focused on which factors the United States should consider when imposing sanctions,

including the consideration of the vulnerabilities of the leaders of the target countries and groups, which may not be the same as the country or group as a whole. The SWG recommended use of a “response ramp” of alternative or complementary measures to achieve U.S. strategic aims, and the establishment of a G-7 Sanctions Working Group to coordinate multilateral cooperation.

The CATO Institute included a chapter on “Unilateral Sanctions” in its *Handbook* for the 105th Congress. It recommended, among other things, that Congress require economic analyses of the effects of all current and proposed sanctions on the U.S. economy and provide compensation to U.S. companies hurt by the imposition of sanctions.

The National Association of Manufacturers published “A Catalog of New U.S. Unilateral Economic Sanctions for Foreign Policy Purposes, 1993-1996” in March 1997. This report concluded that unilateral sanctions may be effective, if it can be proved that they will likely meet their foreign policy objectives and if the relevant goods, services or investment are not widely available. However, the report concludes that few existing sanctions meet these requirements. The report recommends that the United States produce an annual report of the effects of U.S. sanctions on their targets and U.S. industry.

The Institute for International Economics (IIE) published its working paper, “U.S. Economic Sanctions: Their Impact on Trade, Jobs, and Wages,” in April 1997. This study concludes that U.S. unilateral sanctions reduced U.S. exports to 26 target countries by \$15 to \$20 billion in 1995, and provided export opportunities to U.S. trading partner nations not available to U.S. firms. While IIE found only limited proof that sanctions cause foreign importers to view U.S. firms as unreliable suppliers even after sanctions are lifted or expire, IIE found these effects may be more significant to exporters of high-technology and infrastructure equipment. IIE also expressed concern over the “disturbing precedents” set by such extraterritorial measures as the Libertad Act and the Iran/Libya Sanctions Act.

The Heritage Foundation published “A User’s Guide to Economic Sanctions” in June 1997. Its unique recommendations included limiting the powers of the International Emergency Economic Powers Act to national security policies only (thus reducing or eliminating foreign policy controls), mandating presidential consultation with Congress after implementing sanctions via an Executive Order, requiring the Secretary of Commerce to identify all U.S. businesses hurt by U.S. sanctions, and forbidding state and local government from imposing sanctions contrary to U.S. national interests.

USA Engage, a coalition of over 650 U.S. businesses and industry associations working to promote U.S. economic engagement overseas and limit the use of U.S. unilateral sanctions, has published several articles on this subject in 1997. In summary, USA Engage argues that unilateral sanctions harm U.S. competitiveness and rarely achieve their stated foreign policy objectives.

APPENDIX II

MULTILATERAL EXPORT CONTROL REGIMES			
WASSENAAR	AG	MTCR	NSG
Argentina	Argentina	Argentina	Argentina
Australia	Australia	Australia	Australia
Austria	Austria	Austria	Austria
Belgium	Belgium	Belgium	Belgium
		Brazil	Brazil
Bulgaria			Bulgaria
Canada	Canada	Canada	Canada
Czech Republic	Czech Republic		Czech Republic
Denmark	Denmark	Denmark	Denmark
	European Union		European Union
Finland	Finland	Finland	Finland
France	France	France	France
Germany	Germany	Germany	Germany
Greece	Greece	Greece	Greece
Hungary	Hungary	Hungary	Hungary
	Iceland	Iceland	
Ireland	Ireland	Ireland	Ireland
Italy	Italy	Italy	Italy
Japan	Japan	Japan	Japan
			Latvia
Luxembourg	Luxembourg	Luxembourg	Luxembourg
Netherlands	Netherlands	Netherlands	Netherlands
New Zealand	New Zealand	New Zealand	New Zealand
Norway	Norway	Norway	Norway
Poland	Poland		Poland
Portugal	Portugal	Portugal	Portugal
Romania	Romania		Romania
Russia		Russia	Russia
Slovakia	Slovakia		Slovakia
		South Africa	South Africa
South Korea	South Korea		South Korea
Spain	Spain	Spain	Spain
Sweden	Sweden	Sweden	Sweden
Switzerland	Switzerland	Switzerland	Switzerland
Turkey		Turkey	
Ukraine			Ukraine
United Kingdom	United Kingdom	United Kingdom	United Kingdom
United States	United States	United States	United States

APPENDIX III

Entities of Proliferation Concern Listed in Supplement No. 4 to Part 744 of the Export Administration Regulations (as of December 31, 1997)

This supplement lists certain entities subject to license requirements for specified items under part 744 of the Export Administration Regulations (EAR). This list of entities is revised and updated on a periodic basis in Supplement No. 4 to part 744 by adding new or amended notifications and deleting notifications no longer in effect.

- All-Russian Scientific Research Institute of Technical Physics (a.k.a. VNIITF, Chelyabinsk-70, All-Russian Research Institute of Technical Physics, ARITP, Russian Federal Nuclear Center), the All-Union Scientific Research Institute of Experimental Physics (a.k.a. VNIIEF, Arzamas-16, Russian Federal Nuclear Center, All Russian Research Institute of Experimental Physics, ARIEP, Khariton Institute), and any other entities, institutes, or centers associated with the Ministry for Atomic Power of Russia located in either Snezhinsk or Kremlev, Russia, for all items subject to the EAR.
- Bhaba Atomic Research Center (BARC), Trombay, India, for all items subject to the EAR.
- Ben Gurion University, Israel for computers between 2,000 and 7,000 million theoretical operations per second (MTOPS).
- Bharat Electronics Limited (BEL) in Bangalore, India; and Bharat Electronics Limited (BEL) in Hyderabad, India; for all items subject to the EAR having a classification other than EAR99. In addition, exporters are reminded to follow "BXA's Know Your Customer Guidance and Red Flags," in Supplement No. 3 to part 732 of the EAR, with regard to the specific end-use of any item subject to the EAR destined to any Bharat Electronics Limited located in India.
- Chinese Academy of Engineering Physics (a.k.a. Ninth Academy, including the Southwest Institutes of: Applied Electronics, Chemical Materials, Electronic Engineering, Explosives and Chemical Engineering, Environmental Testing, Fluid Physics, General Designing and Assembly, Machining Technology, Materials, Nuclear Physics and Chemistry, Structural Mechanics; Research and Applications of Special Materials Factory; Southwest Computing Center (all of preceding located in or near Mianyang, Sichuan Province); Institute of Applied Physics and Computational Mathematics, Beijing; and High Power Laser Laboratory, Shanghai, People's Republic of China), for all items subject to the EAR.
- Indian Rare Earths, Ltd., India, for all items subject to the EAR.

- Indira Gandhi Center for Atomic Research, Kalpakkam, India, for all items subject to the EAR.
- Khan Research Laboratory, Kahuta, Pakistan, for all items subject to the EAR.
- National Development Centre, Pakistan, for all items subject to the EAR.
- Nuclear Research Center at Negev, Dimona, Israel, for all items subject to the EAR.
- Pakistan Institute for Nuclear Science and Technology, Rawalpindi, Pakistan (including New Labs Rawalpindi), for all items subject to the EAR.