Chapter 4. Strategic Industries and Economic Security

BXA's Office of Strategic Industries and Economic Security (SIES) is the focal point within the Department of Commerce (Department) for issues related to the competitiveness of the U.S. defense industrial base. Its responsibilities include helping U.S. companies diversify their product lines by adding commercial production and markets to their defense-related business, promoting the sale of U.S. weapons systems to U.S. allies, and conducting primary research and analysis on critical technologies and defense-related sectors. The office has two divisions: the Defense Programs Division and the Strategic Analysis Division. SIES also provides staff support for BXA's Technical Advisory Committees.

Defense Programs Division

Defense Priorities and Allocations System

Title I of the Defense Production Act of 1950, as amended (DPA), (50 U.S.C. app. § 2701 et seq.) authorizes the President to require preferential acceptance and performance of defense contracts or orders over other contracts or orders to meet approved defense and energy program requirements, and to allocate materials, facilities, and services as needed to meet those requirements. Authority for establishing priorities and allocations of industrial resources is delegated to the Department of Commerce, and within Commerce, to BXA/SIES to implement this authority through the Defense Priorities and Allocations System (DPAS).

In FY 2001, SIES staff worked on a number of significant DPAS cases. SIES worked with American Panel Corporation (APC), the only qualified source of Advanced Matrix Liquid Crystal Displays for use in the cockpits of U.S. Air Force and Navy military aircraft, including Air Force One. SIES worked to ensure an adequate supply of this critical item, while making certain that requirements for civilian aircraft cockpit use were impacted as little as possible. With Department of Defense (Defense) support, SIES worked with Westland Helicopter in the United Kingdom to secure the timely delivery of transponders from Raytheon for various Canadian and United Kingdom items. SIES also resolved issues pertaining to the timely delivery of electronic components for production of a U.S. Special Forces field radio and for the U.S. Air Force C-17 transport aircraft, ensuring timely delivery of ammunition belts for the U.S. Army. SIES worked with Boeing in support of its request to the California Public Utility Commission to obtain an exemption from rolling blackouts at Boeing's C-17 production facility in southern California during the energy crisis in the state.

Responding to the increasing threat of terrorism against U.S. embassies worldwide, SIES worked with the Department of State to develop a request for priority rating authority under the DPAS to support the Department of State Embassy Security Protection Program. The purpose of this five-year, \$6.5 billion program is to upgrade U.S. embassy security around the world.

SIES also continued working with representatives to the NATO Industrial Planning and Procurement Policy Committees to implement a North Atlantic Council recommendation concerning implementation of multilateral NATO-wide "security of supply" (priorities and allocations) plans and procedures. This effort will help ensure international defense industrial base cooperation in the event of future emergencies. Other international efforts included working with Defense officials to implement a bilateral agreement on security of supply with the United Kingdom Ministry of Defense and U.K. defense industry, and giving DPAS presentations emphasizing security of supply to the NATO Industrial Planning Committee meeting, and Swedish Ministry of Defense and Civil Emergency Preparedness.

In addition, SIES worked closely with the White House, other agencies, and the Congress to obtain a two year reauthorization of the DPA. SIES staff also participated in Congressional briefings regarding the use of the DPA authority in response to the California energy crisis.

Defense Trade Advocacy

SIES is the Department office charged with international defense trade advocacy responsibilities. SIES will consider formally supporting a conventional arms transfer if the transfer is in the economic interests of the United States, and the U.S. Government determines that the transfer will further U.S. national security and foreign policy objectives.

In FY 2001, SIES defense advocacy efforts supported sales of approximately \$700 million, including the sale of a military tanker aircraft to the Italian Air Force. SIES worked with the Defense Security Cooperation Agency (DSCA) within the Foreign Military Sales (FMS) Reinvention program to develop Team International, a new initiative bringing U.S. industry, the foreign customer, and the U.S. Government together in the early stages of the weapons acquisition process. Increased transparency of the technology transfer and the FMS processes will enhance overall U.S. competitiveness in defense trade. During FY 2002, SIES will continue outreach activities at major defense-related trade shows to increase awareness among small- and medium-size U.S. defense firms of the important advocacy role that SIES and BXA play in this highly competitive industry sector.

Defense Memoranda of Understanding

SIES reviews Defense's proposed Memoranda of Understanding (MOU) and other types of international agreements for commercial implications and potential effects on the international competitive position of U.S. industry. These international agreements provide the framework for research and development cooperation and cooperative production between Defense and other countries.

In FY 2001, SIES reviewed 101 proposed international agreements with 25 countries. Since 1990, SIES has reviewed more than 1,080 proposed agreements.

SIES also continued to serve on the interagency team overseeing Japan's development and production of the FS-X/F-2 weapon system. Each phase of the program is governed by the terms of a separate

MOU. SIES represents U.S. industry interests in the ongoing U.S. and Japanese discussions regarding the implementation of the MOUs and adherence to their provisions.

Emergency Preparedness

SIES's National Security Emergency Preparedness (NSEP) program ensures that the U.S. industrial/technology base can respond effectively to the requirements of national emergencies. During FY 2001, SIES staff participated in interagency planning and execution of the joint civilian/military Positive Force 01 emergency mobilization exercise which took place in April 2001 to ensure appropriate civil agency and industrial base activities. Also, SIES staff reviewed three Presidential Emergency Action Documents (PEADs). The Commerce Department continues to lead federal agency response to industrial emergency preparedness planning and implementation of a variety of NSEP programs, and SIES remains a major contributor to ongoing interagency reviews and assessments of the industrial/technology base.

Excess Defense Articles

SIES reviews the proposed transfer of defense equipment to foreign governments as Excess Defense Articles (EDA) to ensure that any proposed transfer does not interfere with ongoing sales or marketing by the U.S. defense industry. SIES reviewed 118 proposed EDA transfers in FY 2001, valued at \$197.2 million. SIES determines whether the transfer will have an adverse impact on the defense industrial base and, if so, can recommend to Defense that the transfer be denied.

International Diversification and Defense Market Assessments

SIES developed its Diversification and Defense Market Guide Assessment program to assist small-and medium-sized U.S. companies to diversify and/or expand into overseas commercial and defense markets. This program provides 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 guide chapter provides comprehensive information on doing business in a specific country, including details on specific upcoming commercial and defense trade opportunities open to U.S. firms in these markets, and a listing of key points of contact in the United States and in the host country who can provide additional information and assistance to U.S. firms.

Updates of all editions will be completed in FY 2002. Current editions of these guides are available on the BXA Web site and in printed format.

National Defense Stockpile

SIES, on behalf of the Department serves as statutory co-chair (with the Department of State) of the Interagency National Defense Stockpile Market Impact Committee (MIC). The MIC provides expert

interagency advice to Defense on stockpile acquisitions and disposals. The MIC helps Defense avoid undue market impact and helps protect the government from avoidable loss. In FY 2001, the MIC continued to monitor closely the market conditions in several major commodity markets and has encouraged Defense to limit proposed stockpile sales of these commodities where undue market impact appeared probable. The MIC also supported several proposed Defense increases in commodity sale quantities to take advantage of high prices and favorable market conditions.

NATO Industrial Planning Committee

During FY 2001, SIES continued to represent the United States on the NATO Industrial Planning Committee (IPC), which is responsible for coordinating industrial preparedness planning among the NATO allies for both NATO military defense and civil emergency preparedness response. Adoption of new terms of reference for the senior committee led to adoption of new initiatives regarding defense industry globalization and countering the effects of weapons of mass destruction (WMD). The IPC established a new WMD working group at its September 19, 2001, meeting. The working group will examine the NATO alliance's industrial capability to support WMD detection and countermeasures requirements, protective civilian populations, and responsiveness of the medical and pharmaceutical industries.

SIES continued its leadership role in promoting the security of supply effort in the NATO system. On September 1, 2001, the 19 NATO members approved arrangements for a NATO alliance-wide security of supply initiative. This agreement, based on the U.S. Defense Priorities and Allocations System (DPAS), is designed to improve the ability of the NATO members to supply critical components, materials, and services to NATO forces during a coalition action. IPC's action has spurred parallel initiatives bilaterally and in other international fora.

Strategic Analysis Division

Federal Resource Access Partnership Needs Assessment Survey

In keeping with its mission, SIES works with small- and medium-sized businesses nationwide to help them gain access to government resources that could improve their competitiveness. SIES has formed a partnership with the Federal Laboratory Consortium (FLC) to assist businesses in the United States. The office collects information about each company through a Needs Assessment Survey. The survey asks a wide variety of questions designed to determine what kind of assistance would be most useful to the respondents. Topics covered in the survey include manufacturing technology deployment, product/service development, research and development programs, and exporting activities.

During FY 2001, SIES received more than 30 completed surveys from companies located in the western United States. After analyzing the surveys, SIES forwards report summaries to 12 government response team members who provide those businesses with assistance designed to help them maintain competitiveness in the marketplace. The response team includes the Commerce Department, the 700 FLC laboratories, the Department of Labor, and the Small Business Administration. SIES has formed

a partnership with the California Small Business Development Centers to serve more firms in the western region.

Best Manufacturing Practices Program Partnership

SIES continues to be a contributing partner to the U.S. Navy's Best Manufacturing Practices (BMP) Program, which identifies, documents, and disseminates best practices through paper reports and the Internet. BMP also provides software tools to companies that mitigate risk in engineering and production programs. SIES is encouraging the BMP Program to include more small- and medium-sized companies in its upcoming activities. SIES promotes the BMP Program to members of the U.S. industrial base and the Federal Government through meetings and industry shows.

In addition to its promotion of the BMP Program in the United States, SIES has continued to consult with Australian industry and government officials to promote establishing a similar program in Australia. This initiative was undertaken in response to the United States Department of Defense and Australian Department of Defense Statement of Principles for Enhanced Cooperation in Matters of Defense Equipment and Industry, signed in the Summer of 2000. An Australian team, including an academic center and industry association, established a working group to investigate the resources, both financial and intellectual, needed to begin a BMP program in Australia.

Foreign Investment

Section 5021 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 effect 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) chaired by the Department of the Treasury, implements the law. SIES provides BXA input to the International Trade Administration, which represents the Department on the CFIUS.

In FY 2001, the Department reviewed 61 investment notifications. One case 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, consistent with the law.

Impact of Imports

At the request of industry, the Congress, and other agencies or interested parties, SIES conducts investigations of the effects of imports on national security. These studies are conducted under the authority of Section 232 of the Trade Expansion Act of 1962. BXA provides findings and recommendations, which are included in a report from the Secretary of Commerce to the President, who may use Section 232 authorities to adjust imports if such imports are found to threaten to impair U.S. national security. During FY 2001, the Department conducted, at the request of Representative James Oberstar (D-MN) and Representative Bart Stupak (D-MI), an investigation of the impact of

imports of iron ore and semi-finished steel on U.S. national security. Representatives Oberstar and Stupak contended that imports of iron ore and semi-finished steel threaten the U.S. iron ore mines and the integrated U.S. steel sector, industries they

view as critical to national security. The Secretary of Commerce submitted the final report on this investigation to the President in October 2001.

Industry Assessments

SIES conducts primary market research and analysis on critical technology developments and industrial base capabilities of key economic sectors. SIES uses industry-specific surveys to collect essential data. The final reports provide recommendations to government policy makers and industry leaders. The studies are conducted in cooperation with experts from the private sector and other government agencies. The collaboration results in detailed data that is unavailable from other sources. The goal is to maintain and enhance economic security and to enable the private sector to monitor trends in their respective sectors. Customers for these reports include the armed services, the Congress, and industry associations.

National Security Assessment of the U.S. Maritime Industry

SIES continues to conduct a national security assessment of the U.S. maritime industry in partnership with the U.S. Navy's Naval Surface Warfare Center in Carderock, Maryland, and other public and private entities. The study will identify opportunities for increased sharing of maritime technologies between public and private entities and expand the use of public maritime capabilities to increase private industry competitiveness. This will require SIES to conduct several maritime sub-sector surveys as part of the assessment. The first of the surveys was sent to approximately 330 companies in the shipbuilding and repair industry during FY 2000. The *National Security Assessment of the U.S. Shipbuilding and Repair Industry* based on the company data provided was released in May 2001. A summary of the report can be found at

http://www.doc-bxa.bmpcoe.org/Shipbuilding_and_Repair.pdf. [URL to change 2/02]

Two additional sectors are being studied. More than 200 surveys have been mailed to gather information in support of a report on the maritime research and education infrastructure that will be published in early 2002. SIES is also studying the shipbuilding supplier base; 4000 surveys were mailed and are being compiled for analysis.

<u>High Performance Explosives and Explosive Components</u>

In June 2001, SIES completed a study of the U.S. high performance explosives (HPE) and explosive component industries for the U.S. Navy's Naval Surface Warfare Center, Indian Head Division. This study followed the 1995 publication of a cartridge- and propellant-actuated device industry assessment, which was also conducted for the Navy. The Naval Surface Warfare Center requested the study

because of significant declines in the budget for military grade explosives and explosive components.

SIES found that several issues impact the HPE and HPE component industries, including reduced government research and development expenditures, weapon system program managers allowing price to become the dominant factor in source selection, and apparently conflicting Defense industrial base policies.

SIES recommended that Defense restore research and development funding to historical levels, enforce rules over weapon system program managers to purchase their HPEs using a total best value system (instead of lowest purchase price), and amend or eliminate the competing industrial base policies.

Assistive Technologies

A study on assistive technologies emerged from previous cooperative efforts between SIES and other agencies and associations with respect to U.S. defense diversification efforts. SIES initiated this study at the request of the Education Department's National Institute on Disability and Rehabilitation Research and the Federal Laboratory Consortium. Assistive technology devices enable persons with disabilities to function more fully in the workplace and in society as a whole. The study will identify the industry's technology needs and match these needs with the defense-related technologies available in federal laboratories. SIES mailed an industry-specific survey to more than 1,700 firms in the industry. The results from the survey will be used to make such matches. This effort will be completed in fiscal year 2002.

Air Delivery Industry

In early FY 2001, the U.S. Army's Soldier Biological and Chemical Command (SBCCOM) requested that SIES study the U.S. Air Delivery Industry. The products encompassing the air delivery industry include items used by the military to air drop personnel, equipment, and supplies.

SBCCOM requested the study because of several cycles of large and small acquisitions, which have created longer lead times for necessary items and some quality concerns for parachutes. A long and complex supply chain for parachute fabric that currently cannot respond quickly to spikes in demand affects lead times. Well-trained sewers leaving the parachute manufacturing industry when orders have fallen and not returning when orders recover result in parachute quality concerns. SIES cooperates with SBCCOM and the Parachute Industry Association to complete a report in FY 2002 that will investigate these and other issues and report findings and recommendations.

Welding

During FY 2001, SIES began a national security assessment of the welding sector. SIES is working with the American Welding Society and the Edison Welding Institute, which is funded by the U.S. Navy. SIES mailed over 6,000 surveys to various manufacturing firms in the sector. The information gathered will be used to quantify the economic contribution of welding to key industries and to the

overall total gross domestic product of the U.S. economy. This data will provide the foundation for rational decision-making for the investments and developments in the welding field necessary to support defense programs and company competitiveness in the future. This project will conclude in FY 2002.

Maritime Initiatives

The Deepwater Program

In FY 2001, SIES entered into an innovative new collaboration with the U.S. Coast Guard, setting the stage for increased U.S. exports of maritime vessels, aircraft, helicopters, and related system components. BXA and the Coast Guard signed a five-year Memorandum of Agreement for BXA to promote the Coast Guard's Deepwater acquisition program to foreign navies and coast guards.

The Deepwater program will modernize cutters, offshore patrol boats, and fixed-wing and rotary-wing aircraft that operate in the "deepwater" maritime region that is more than 50 miles from shore. The program also will modernize the associated sensors, electronics, communications, and logistical systems. Both BXA and the Coast Guard view the collaboration as an opportunity to enhance the U.S. maritime industrial base and related sectors and improve U.S. national security.

The Marine Transportation System

In FY 2001, SIES became involved in the Marine Transportation System (MTS) initiative led by the Department of Transportation. BXA became a member of the Interagency Committee of the MTS (ICMTS) in the summer of 2001, and BXA staff participated in the ICMTS Working Group on the Shipping Effectiveness Act for the 21st Century (SEA-21). SEA-21 seeks to modernize the MTS. BXA's future role in this program will focus primarily on prioritizing MTS planning and sector assessments dealing with the maritime industrial base as it relates to national defense.

Offsets in Defense Trade

SIES prepares an annual report to the Congress on offsets in defense trade under the authority of Section 309 of the Defense Production Act of 1950, as amended (50 U.S.C. app. § 2071 et seq.). Offsets are mandatory compensation required by foreign governments when they purchase U.S. defense systems, including technology transfer, licensing co-production agreements, and counter trade. In this

report, SIES assesses the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States, in particular the impact on small- and medium-sized subcontractors. SIES submitted its fifth report to Congress in FY 2001.

In addition, SIES participates in a Defense-led Interagency Offsets Working Group, which includes representatives from the Departments of State and Labor, and the Office of the U.S. Trade Representative. In prior years, the Group pursued negotiations on both a multilateral and bilateral basis. Important steps have been taken to address the offsets issue with our European allies, since they are our largest defense trade partners and demand the highest offsets. The Group met with representatives of the British, Canadian, Dutch, French, and Spanish governments to gain their perspective on offsets and to discuss the cost to governments of requiring and administering offset programs. During FY 2001, the Group met with representatives from prime contractors and an industry group representing small-and medium-sized firms to get a better perspective on the impact of offsets on U.S. firms. Finally, the Group assisted the Presidential Commission on Offsets as it completed its work.

Technical Advisory Committees

The Department charters Technical Advisory Committees (TACs) to provide advice and assistance from U.S. industry in formulating and implementing export control policy. SIES performs the administrative functions for the TACs reporting to BXA. The TACs advise BXA on proposed revisions to the U.S. and international export control lists, on worldwide availability and use of production technology, and on export control regulations and procedures. The TACs serve as a valuable resource on regulatory and policy matters.

The Information Systems Technical Advisory Committee (ISTAC) addresses issues relating to Control List (CCL) Categories 3 (semiconductors), 4 (computers), and 5 (telecommunications and information security). The ISTAC also continued to support BXA in evaluating alternatives to Composite Theoretical Performance (CTP) as a control metric for high performance computers and microprocessors. In a related area, the ISTAC produced a study of low-power microprocessors and submitted it to BXA for evaluation.

The Materials Technical Advisory Committee (MTAC) addresses export control

issues

regarding CCL Category 1 (materials, chemicals, microorganisms, and toxins). The MTAC expressed concern that research and development activities and certain manufactures be exempted from declaration under the Biological Weapons Convention protocol. BXA solicited comments from the MTAC regarding changes to the export controls for prepregs, high-modulus fibers, and fine-grained graphites. The MTAC recommended that changes to controls regarding the glass transition temperature of prepreg matrices not be made for reasons of missile technology control since the effect of such changes would be to extend MTCR regulations to countries having no missile activity.

The Materials Processing Equipment Technical Advisory Committee (MPETAC) recommended changes regarding current parameters for CCL Category 2 (materials processing). The "Reference Guide for Category 2 Machine Tools," a spreadsheet providing CCL paragraph references for each type of machine tool on the List, was posted on the BXA Web site. The MPETAC continued to support a defined process of follow-up when a post-shipment visit is a necessary condition to approval for an export license.

The Regulations and Procedures Technical Advisory Committee (RPTAC) continued to advise the Department on policies and procedures pertaining to the Export Administration Regulations. The RPTAC made recommendations on a wide range of issues, including deemed exports, license processing, compliance and enforcement, high performance computers and microprocessors, implementation of Wassenaar Arrangement changes, and implementation of the Enhanced Proliferation Control Initiative.

The Sensors and Instrumentation Technical Advisory Committee (SITAC) advised the Department regarding commodities and data within CCL Category 3 (electronics) and Category 6 (sensors and lasers). The SITAC commented on draft Wassenaar Arrangement proposals covering sensor, laser, infrared, and night vision topics. The SITAC examined the origins of Regional Stability controls as applied to Category 6 commodities and the possibility for their reconsideration. The SITAC presented formal comment to BXA regarding the implementation of various working definitions and figures of merit by Defense in considering license applications for uncooled infrared imaging exports.

The Transportation and Related Equipment Technical Advisory Committee (TransTAC) advised the Department on commodities and technical data within

Control List Categories 7 (navigation and avionics), 8 (marine), and 9 (propulsion systems, space vehicles, and related equipment). The TransTAC focused on CCL Category 7 items, raising concerns that the current and proposed controls do not adequately differentiate between systems that would have national security (military) potential and those that do not. Concerns also exist that terms used in this Category are not well-defined and that maintenance restrictions do not reflect commercial industry practice. The TransTAC continues to discuss and propose refinements of these controls.

Return to Table of Contents