DEFENSE TRADE

Observations on Issues Concerning Offsets

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Mr. Chairman and Members of the Commission:

I am pleased to submit this statement for the record on our observations on defense offsets.

Defense offsets are the full range of industrial and commercial benefits that firms provide to foreign governments as inducements or conditions for the purchase of military goods and services. They include, for example, coproduction arrangements and subcontracting, technology transfers, in-country procurements, marketing and financial assistance, and joint ventures. Foreign governments use offsets as a means of reducing the financial impact of their purchases, obtaining valuable technology and manufacturing know-how, supporting domestic employment, creating or expanding their defense industries, and making the use of their national funds for foreign purchases more politically palatable. Historically, the U.S. government has maintained a “hands off” policy toward defense offsets, viewing them as part of the transaction between the contracting parties. However, offsets are one of the many factors contributing to the globalization of the U.S. industrial base. Studying offset transactions can provide insights into what is occurring in the industrial base and whether these transactions need to be considered on a policy level by the U.S. government.

As a result of congressional concerns about emerging trends in defense offsets, we have conducted a number of reviews and issued multiple reports. Because of our work in this area, you asked us to provide our observations on offset issues for the Commission’s use in its deliberations. Specifically, we are providing our observations on (1) the impact of offsets, (2) trends in defense offsets, and (3) the quality and extent of information currently available concerning offsets. Summaries of GAO reports on offsets and related issues are provided in attachments 1 and 2.

RESULTS IN BRIEF

Views on the effects of offsets are divided between those who believe they are both positive and an unavoidable part of doing business overseas and those who believe they negatively affect the U.S. industrial base. Defense offsets are often viewed as the key to foreign sales and thus increased business on the prime contractor level. They can also result in reduced unit costs to the U.S. military due to the increased size of production runs. However, use of a foreign supplier by a U.S. prime contractor as a result of an offset may lead to decreased business opportunities for U.S. suppliers. Additionally, U.S. prime contractors may develop long-term relationships with foreign suppliers, which could lead to the loss of capability in the U.S. defense industrial base.

Since we began reporting on defense offsets, countries buying U.S. defense items have become increasingly sophisticated in their offset demands. These demands have included requiring offset proposals prior to contract award and increasing the offset value as a percentage of contract value. These demands are often based on developmental goals of the purchasing country. It should be noted, however, that
purchasing countries often use multipliers as a means of encouraging companies to engage in certain activities to fulfill offset obligations. These multipliers can lessen the dollar effect of offset demands.¹

Identifying the effect of offsets on industrial sectors, or the U.S. economy as a whole, is difficult. For example, technology is transferred overseas for reasons other than to fulfill an offset obligation, and the choice of a foreign supplier may be based on strictly cost and quality factors. Since defense exports involving offsets are small relative to the U.S. economy as a whole, it is difficult to measure effects using national aggregated data. Lack of reliable data on the impact of offsets on the U.S. economy has been a concern for many years, and the Congress has required some federal agencies to collect offset data to address this concern. The Department of Commerce collects data and reports to the Congress on an annual basis on offset agreements, as well as activities U.S. companies engage in to fulfill offset obligations. The Departments of Defense and State include limited offset information when notifying the Congress of large sales of defense items to foreign countries.

**DISAGREEMENTS EXIST AS TO THE EFFECTS OF DEFENSE OFFSETS ON THE U.S. INDUSTRIAL BASE AND NATIONAL SECURITY**

Offsets are often a part of defense export sales. In fact, company officials from U.S. prime contractors consider offsets an unavoidable cost of doing business overseas. These officials have indicated that if they did not offer offsets, export sales would be reduced and the positive effects of those exports on the U.S. economy and defense industrial base would be lost. These positive effects include both employment in the U.S. defense industry and orders for larger production runs of U.S. weapon systems, thus reducing unit costs to the U.S. military. They also noted that many offset deals create new and profitable business opportunities for themselves and other U.S. businesses. Critics charge that offsets have effects that limit or negate the economic and defense industrial base benefits claimed to be associated with defense export sales.

While offsets take many forms, we found that technology transfer, coproduction tied to a weapon sale, and subcontracting for defense-related products were common offset transactions. These technology transfers as a result of offsets may result in long-term supplier relationships. On the one hand, the U.S. prime contractor may have found a less costly supplier; on the other hand, U.S. subcontractors may find reduced business opportunities, which could result in the loss of capability in the U.S. industrial base.

U.S. companies also may find that they have contributed to the development of a future competitor. In one instance, a U.S. subcontractor stated that it was required by the prime contractor to grant a licensing agreement to a foreign company to

¹ A multiplier is used to increase the value of an offset project when determining offset credit. For example, if a company helped facilitate a $10,000 export of a product with particular importance, the country could offer a multiplier of 5, thereby increasing the amount of offset credit to $50,000.
produce a subsystem. The foreign company subsequently used a similar subsystem to compete against the U.S. subcontractor.

National security may also be affected by offset-related technology transfer. For example, national security may be affected if foreign content in U.S. weapon systems is increased. However, little is known about the effect of offsets on increasing the foreign content in U.S. weapon systems because information linking offsets to foreign content is not collected.

OFFSET DEMANDS HAVE INCREASED

Since we began reporting on issues associated with offsets, countries buying U.S. defense items have been increasing their demands for offsets. Countries are requiring more technology transfer, higher offset percentages, and higher local content. Countries that prior to the 1990's did not require offsets now require them as a matter of routine policy. In at least one case this policy had been established in law. In some cases, purchasing countries require preapproval of offset projects to ensure that they are consistent with their development goals as well as providing the stated economic benefit.

Countries are also increasingly sophisticated in their use of offsets to achieve regional industrial and employment goals. For example, one country requires that companies distribute offset projects across its various regions. Some countries establish time frames within which an offset must be performed and include penalty clauses for non-performance within those time frames. However, many countries also permit companies to “bank” offset credits to be used to fulfill offset obligations associated with future sales of defense goods in that country. According to one U.S. company official, companies have begun trading offset credits through industry associations and individual contacts and one country has established a company to facilitate offset deals.

The nature of the offset demanded varies according to the objectives of the purchasing government and, to an extent, the level of economic development. An offset activity that is considered valuable or very desirable – the introduction of a new industry or technology transfer – will be encouraged through the use of multipliers. This can lessen the dollar effect of offset demands.

DATA NOT AVAILABLE TO QUANTIFY IMPACT OF OFFSETS

Identifying the effect of offsets on industrial sectors, or the U.S. economy as a whole, is difficult. First, according to officials from large defense firms and an association representing U.S. suppliers, obtaining reliable information on the impact of offsets is difficult because company officials are generally not aware that a particular offset arrangement caused them to lose or gain business. As a result, it is difficult to isolate the effects of offsets from the numerous other factors affecting specific industry

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sectors. Second, defense exports involving offsets are small relative to the U.S. economy as a whole, making it difficult to measure any effects using national aggregated data. Additionally, technology is transferred overseas for reasons other than to fulfill an offset obligation. For example, the choice of a foreign supplier may be based on strictly cost and quality factors. In some instances, alliances such as joint ventures may be formed to gain access to the European market without being the result of offsets. Likewise, European companies may gain access to U.S. technology as they gain access to the U.S. market through acquisitions of small and medium U.S. defense companies.

The lack of reliable data on the impact of offsets on the U.S. economy has been a concern for many years, prompting the Congress to enact legislation requiring three federal agencies (the Departments of Commerce, Defense, and State) to collect data on offsets. The Defense Production Act of 1950 requires the Department of Commerce to report annually to the Congress on the impact of offsets on the U.S. defense preparedness, industrial competitiveness, employment, and trade. Commerce requires companies to annually report (1) offset agreements entered into during the previous year that are valued at more than $5 million and are associated with sales of defense articles or services and (2) completed offset transactions being used to meet existing offset commitments that have a credit value of at least $250,000. The required information includes the name of the country purchasing the defense item or service for which the offset is required, the credit value of the offset, the actual dollar value of the offset, and a description of the type of offset.

The Departments of Defense and State report offset information to the Congress pertaining to individual sales of defense items. The Arms Export Control Act requires the President to notify the Congress of any agreements to sell defense articles or services over a certain amount. The President delegated this reporting function to the Secretary of Defense for foreign military sales agreements and to the Secretary of State for commercial sales of defense items that require an export license. Prior to November 29, 1999, the law required that the congressional notification contain only a statement of whether or not an offset agreement was associated with the sale, if that fact was known. The Defense Offsets Disclosure Act of 1999 amended the Arms Export Control Act to require a description of the offset agreement.

The Congress also legislated that the President develop an offset policy and negotiate with foreign countries to mitigate the adverse effect of offsets. The National Defense Authorization Act for Fiscal Year 1989 directed the President to establish a comprehensive offset policy addressing (1) technology transfer, (2) the application of offset arrangements, and (3) the effects of offset arrangements on specific subsectors of the U.S. industrial base and for preventing or ameliorating any serious adverse effects on such subsectors. In 1990, the President issued a policy statement that

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3 50 U.S.C. app. §2099, as amended.
6 Section 825 of P.L. 100-456.
recognizes that certain offsets are economically inefficient and market distorting but reaffirms, and is consistent with, the U.S. government’s traditional policy of noninvolvement in offset arrangements. The policy statement does not address technology transfer or the effects of offsets on specific subsectors.

In 1992, the Defense Production Act Amendments of 1992 directed the Secretary of Defense to lead an interagency team to consult with foreign nations on limiting the adverse effects of offsets. According to Defense Department officials, the interagency team began to meet in 1999. As of September 1, 2000, the interagency committee had met with representatives of the governments of Canada, France, Great Britain, and the Netherlands and had sent letters to other nations that had memorandums of understanding with the U.S. government requesting meetings to discuss offsets. The committee recently has also begun to consult with industry.

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Mr. Chairman, this concludes my statement. This statement is based on the results of our work on offsets (see attachment 1) and related issues (see attachment 2) from our reports issued from April 1990 through October 2000, and therefore agency comments were not requested. All of the reviews were done according to generally accepted government auditing standards.

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7 Section 123 of P.L. 102-558.
GAO Reports on Defense Offsets, 1990-2000


GAO determined that three federal agencies – the Departments of Commerce, Defense, and State – are required by law to report to the Congress on defense offsets, although other federal agencies may collect related data. The Department of Commerce was the primary agency collecting data on offsets and is required to submit an annual report to the Congress. GAO also found that federal agencies generally had not coordinated defense offset data collection efforts. This lack of coordination might not be significant because (1) the type of data being collected by each of the reporting agencies differs or (2) time period for reporting to the Congress differs. However, federal agencies were coordinating on reporting and some policy issues.


GAO examined over 100 offset transactions of six major U.S. defense contractors to determine the types of activities in which U.S. contractors engage to fulfill offset obligations. GAO found that companies had undertaken a variety of activities to satisfy offset requirements, such as coproduction and subcontracting related to defense items, technology transfers, in-country procurements, marketing assistance, financial assistance, and investments or joint ventures. Coproduction tied to a weapon sale, subcontracting for defense-related products, and technology transferred were transactions commonly found in the arrangements reviewed. The long-term supplier relationships that develop through these activities might have resulted in reduced business opportunities for some U.S. firms. Nonetheless, the value of the export sale, in the transactions examined, greatly exceeded the amount of work placed overseas.


GAO reviewed the status of the State Department’s efforts to issue regulations implementing the Feingold Amendment (P.L. 103-236, section 733, April 30, 1994, 22 U.S.C. 2779a). The Feingold Amendment prohibits U.S. contractors from making incentive payments to a U.S. company or individual to induce or persuade the contractors to buy goods or services from a foreign country that has an offset agreement with the contractor. At the time of this report, the amendment applied only to the sale of defense articles or services sold under the Arms Export Control
Act, not commercial sales. GAO also found that the State Department had made little progress in developing the needed regulations.

**Military Exports: Offset Demands Continue to Grow (GAO/96-65, Apr. 12, 1996)**

GAO examined the experience of 9 U.S. companies with 10 countries in Asia, Europe, and the Middle East in 76 offset agreements. GAO found that, over a 10-year period, demands for offsets in foreign military procurement had increased in terms of requiring more technology transfer, higher offset percentages, and higher local content. Countries that previously did not require offsets now require them as a matter of policy, and many countries were now focused on longer term offset deals to pursue industrial policy goals. Also, the type of offset project required varied according to each country’s industrial and economic development needs. For example, countries with developed economies encouraged offsets related to the defense or aerospace industries, whereas countries with less industrialized economies generally pursued indirect offsets to help create profitable businesses and build their country’s infrastructure.


GAO examined offset transactions associated with weapon sales to countries that received grants or loans from the U.S. Foreign Military Financing Program. At the time of this review, four countries – Egypt, Greece, Israel, and Turkey – were the largest recipients of Foreign Military Financing Program funds. GAO found that all four countries were obtaining offsets in purchases funded by the Program. Thus, these countries benefited from the Program by (1) using U.S. funds to purchase weapon systems and (2) developing their industrial bases through offset requirements, such as technology transfer and directed subcontracting. At the time this report was issued, U.S. laws, regulations, and policies did not preclude offsets when purchasers were using Foreign Military Financing Program funds.

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8 The Defense Offsets Disclosure Act of 1999 (sec. 1246 of app. G of P.L. 106-113) expanded the prohibition to include items licensed under the Arms Export Control Act, i.e., commercial sales.


10 The Defense Federal Acquisition Regulation Supplement partially addressed this in 1994 when it precluded U.S. companies from recovering offset-related costs if the sale is financed with non-repayable foreign military financing grants.

GAO examined the implementation of the National Defense Authorization Act, Fiscal Year 1989 (P.L. 100-456), which (1) directed the President to establish a comprehensive offset policy and enter into negotiations with foreign governments about limiting the adverse effects of offsets and (2) required U.S. industry to notify the Secretary of Defense of offset arrangements exceeding $50 million. GAO found that the President's April 1990 policy statement on offsets did not specifically discuss technology transfers and the effects of offsets on U.S. industrial base subsectors, as required by the law. Additionally, the President directed that an interagency team consult, not negotiate, with foreign nations. Finally, at the time of the report, the Department of Defense had not developed regulations, in accordance with the law, requiring U.S. industry notification.


GAO reviewed (1) the Administration's 1988 report to the Congress, Offsets in Military Exports, and (2) proposed amendments to the Defense Production Act of 1950, under Senate bill 1379. GAO found that the results of the methodology used to prepare the defense preparedness and employment sections of the 1988 report was of limited value because, although they provided an assessment of the overall impact of offsets on U.S. industry, they did not identify the effect on more specific industry sectors critical to defense. Additionally, the use of differing assumptions in applying that methodology to the sections on defense preparedness and employment made the analyses of the two sections inconsistent and appeared contradictory. Regarding Senate bill 1379 as well as the Defense Production Act itself, GAO stated the need to better provide for disclosing significant differing agency views in the annual report.11

11 Senate bill 1379 was not passed, although similar language on offsets was included in the Defense Production Act Amendments of 1992 (P.L. 102-558).


GAO surveyed four large U.S. contractors, reviewed four weapon system programs, and studied three foreign-owned U.S. companies to determine (1) what types of alliances U.S. and European defense companies are establishing and the reasons for forming alliances, (2) why companies prefer certain types of alliances over others, and (3) whether U.S. laws, regulations, policies, and practices influence a company's decision to form an alliance or the type of alliance chosen. GAO found that U.S. and European companies created teams, joint ventures, and subsidiaries and sometimes merged with or acquired another company to access and increase their competitiveness in another country’s market. Large U.S. companies preferred to engage in flexible alliances, such as teaming, whenever possible to increase company capabilities without forming permanent relationships, and access unique technology needed to meet military requirements. Companies that wanted to satisfy European governments’ desire for greater industrial participation formed joint ventures in which companies shared risk, decision-making, work, and technology. Subsidiaries were not a favored approach for U.S. companies because in the fragmented European market a subsidiary in one country had no impact on market access in another country. However, European acquisitions of small and medium U.S. defense companies were common because they provided access to the U.S. market, which is the world’s largest. The companies reviewed did not consider the U.S. legal and regulatory environment to be a major impediment to forming an alliance or to be a principal determinant of the type of alliance chosen.

Defense Trade: Department of Defense Savings From Export Sales are Difficult to Capture (GAO/NSIAD-99-191, Sept. 17, 1999)

GAO reviewed the sales of five major weapon systems - The Hellfire Missile, Advanced Medium Range Air-to-Air Missile (AMRAAM), High Mobility Multipurpose Wheeled Vehicle (HMMWV), Black Hawk Helicopter, and Aegis Weapon System - to determine whether the Department of Defense is maximizing the cost benefits of export sales. The Department saved at least $342 million on its purchases of the five systems because either the Department or its contractors also exported the systems to foreign governments. However, the full impact of contractor direct sales on the price of weapon systems could not be assessed because sufficient information was not available. Nonetheless, the Department could have realized greater savings had it (1) combined purchases for foreign governments with purchases for the U.S. military, (2) negotiated prices for export sales without giving up U.S. system price reductions, (3) required the contractor to perform work in the most economical manner, even if offset agreements were affected, or (4) ensured that the export prices always included a proportionate share of the sustaining engineering and program management costs.

GAO reviewed (1) the Defense Department's reported trends on contracts performed outside the United States, (2) the Department's use of foreign subcontract information, and (3) the completeness and accuracy of how the Department collects and manages its data. From fiscal years 1987 to 1997, the Defense Department's prime contract awards outside the United States remained about 5.5 percent of total Defense Department contract awards. These contracts tended to be concentrated in countries such as Germany, Italy, Japan, South Korea, and the United Kingdom and in sectors such as services, fuel, and construction. The Department's Office of Foreign Contracting and industrial base offices each collect and use foreign subcontract data, but do not exchange data with one another. Additionally, the Office of Foreign Contracting, which is responsible for collecting foreign subcontract information from prime contractors and first-tier subcontractors, had no process or procedures to systematically ensure that contractors are complying with the foreign subcontract reporting requirement. Further, the Office lacked standards and procedures for managing its database, which has caused numerous data entry errors that compromise the database's usefulness.


This report examined issues relating to the F-2 fighter aircraft program – known as the FS-X program during the development phase – such as (1) the proportion of production work that will be done in the United States, (2) the status of technology transfers from Japan to the United States and whether these technologies are of interest to U.S. government and industry, and (3) the program's potential contributions to Japan's future aerospace industry. Under the F-2 production agreements, signed on July 30, 1996, U.S. industry was expected to receive about 40-percent workshare, based on estimated production costs and a constant exchange rate of 110 yen/dollar. The U.S. workshare was to be monitored through verifying that Japan has awarded contracts to U.S. companies, although the value of the contracts would not be tracked. Transfers of technology from Japan to the United States were generally in accordance with the development agreements, although U.S. access to some technologies has been limited because of disagreements as to whether these technologies are derived from U.S. technical data - to which the United States is entitled to free and automatic access - or Japanese indigenous technologies - for which U.S. companies would have to pay a licensing fee to use. The United States conducted several technology visits to explore the potential benefits of F-2 technologies but found that some technologies were too costly to produce or not advanced enough to be of interest. However, officials at one company indicated that tooling techniques from the F-2 program were being applied to the Joint Advanced Strike Technology program. Defense Department officials believed that the F-2 program would significantly enhance Japan's systems integration capability but would not provide significant new capability in engine production.
Export Controls: Sensitive Machine Tool Exports to China (GAO/NSIAD-97-4, Nov. 19, 1996)

In September 1994, the Department of Commerce approved an export of machine tools to China. The machine tools were to be used to produce parts for commercial aircraft that would be built in China under a contract with McDonnell Douglas but were subsequently diverted to a Chinese facility in Nanchang engaged in military production. GAO reviewed (1) the military and civil applications of the equipment and whether these military applications were important to China's military modernization plans and (2) the process for approving the export licenses and how the process addressed the risks associated with the export, and determined whether export control license conditions were violated and what the U.S. government's response was. GAO found that, although the equipment was not state-of-the-art, it had military and civil applications, and China needed machine tools to upgrade both its military and civil aircraft production capabilities. The Commerce Department had approved the export subject to conditions to mitigate the risk of diversion. The movement of the machine tools to Nanchang violated key conditions in the Commerce export licenses. However, before it could be misused, the diverted equipment was relocated to a facility associated with the McDonnell Douglas aircraft project. Commerce's enforcement office did not formally investigate the export control violations until 6 months after the violations were first reported, and the Justice Department was overseeing a criminal investigation at the time of the report.


GAO reviewed (1) the approaches that selected Asian nations used to develop their aeronautics industries, (2) the level of aeronautics development each country had achieved, and (3) the implications of this development for the U.S. aeronautics industry. China, Japan, Indonesia, and Taiwan appeared intent on developing their own aeronautics industries by acquiring technologies developed in the West and improving them over time. These countries were developing their aeronautics industries using (1) strong government support, (2) importation of technologies, (3) a strong emphasis on applied research rather than basic research, and (4) direct, synergistic links between military and civil aeronautics projects. The Asian countries reviewed often required technology to be transferred as a condition of purchasing Western equipment. These transfers can occur through such activities as subcontracting, licensed production, and codevelopment. The four countries differed in the level of aeronautics development, with Japan being the most advanced and China the slowest to develop, and each could be expected to continue to develop at varying rates because of differences in their political and economic environments. It appeared unlikely that Asian aeronautics companies would compete directly with U.S. aircraft builders in the immediate future, but some industry observers believed that in the long term, cooperative aeronautics technology transfers to Asia could help to create a new competitor for the U.S. aeronautics industry.