


Offsets in Defense Trade

Fifth Annual Report To Congress



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U.S. Department of Commerce
Bureau of Export Administration
Office of Strategic Industries
& Economic Security

MAY 2001

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OFFSETS IN DEFENSE TRADE

Fifth Annual Study
Conducted Under Section 309
of the Defense Production Act
of 1950, as Amended

Prepared by
U.S. Department of Commerce
Bureau of Export Administration
Office of Strategic Industries and Economic Security
Strategic Analysis Division

May 2001

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20010821 150

The Honorable Phil Gramm
Chairman, Committee on Banking,
Housing and Urban Affairs
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

Pursuant to Section 309 of the Defense Production Act (DPA) of 1950 (50 U.S.C. app. §2099), as amended, I am pleased to submit our fifth annual report, *Offsets in Defense Trade*.

To assist in preparation of the report, the Bureau of Export Administration has authority under the DPA to collect data from U.S. firms involved in offset agreements relating to overseas sales of weapon systems or defense-related items. The data that industry provided for this report cover offset transactions and agreements entered into during 1993-1998. The cooperation of private industry in this endeavor was outstanding.

If you would like further information on this report or have any questions about the Bureau of Export Administration, please contact me at (202) 482-1455 or have a member of your staff call Eugene Cottilli, Acting Director of BXA's Office of Congressional Affairs, at (202) 482-2721.

Sincerely,

Kenneth Juster

Enclosure

The Honorable Michael G. Oxley
Chairman, Committee on Financial Services
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

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Sincerely,

Kenneth Juster

Enclosure

The Honorable Paul Sarbanes
Ranking Member, Committee on Banking, Housing
and Urban Affairs
United States Senate
Washington, D.C. 20510

Dear Senator Sarbanes:

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Sincerely,

Kenneth Juster

Enclosure

The Honorable John J. LaFalce
Ranking Member, Committee on Financial Services
House of Representatives
Washington, D.C. 20515

Dear Representative LaFalce:

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Enclosure

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EXECUTIVE SUMMARY

The U.S. Department of Commerce, Bureau of Export Administration (BXA), Office of Strategic Industries & Economic Security is responsible for assessing the impact of offsets in defense trade on the United States under the authority of Section 309 of the Defense Production Act of 1950, as amended.¹ This report covers the six-year period from 1993 through 1998.

In defense trade, offsets are industrial compensation practices required as a condition of purchase in either government-to-government or commercial sales of defense articles and/or defense services as specified in the International Traffic in Arms Regulations. Offset agreements are commercial contracts between a defense firm and a foreign government. Companies fulfill their offset obligations over a period of time specified in the offset agreement through a series of offset transactions. Transactions are the actual compensation towards the outstanding balance of an existing offset agreement.

Over 120 countries currently require offsets of some sort. Recently, a number of countries have implemented new, formal offset policies, including Brazil, the Czech Republic and Poland; other countries have increased already established offset percentage requirements.

New Agreements

In 1998, U.S. prime defense contractors entered into 41 new offset agreements with 17 countries. The total defense sales to be exported were valued at \$3.1 billion, with corresponding offsets equaling \$1.8 billion. Thus, the average offset required was 57.9 percent of the value of the sales item. Europe dominated the total amount of defense purchases and offsets provided by U.S. prime contractors. Offsets to Europe totaled \$1.3 billion in 1998 alone; this was 72.3 percent of all U.S. offsets to the rest of the world. Europe accounted for about one-half of the value of all associated defense sales. In 1998, the average offset percentage in Europe was 81.6 percent, almost 24 percent higher than the global average.

¹ Codified at 50 U.S.C. app. 2099 (1999 and Supp. 2000).

From 1993 to 1998, U.S. prime contractors signed 279 new offset agreements totaling \$21 billion, which corresponded to \$38.5 billion in U.S. defense export sales. These new agreements averaged 54.5 percent of the value of the defense item. Approximately 72 percent of the value of new offset agreements was attributed to European nations; the United Kingdom alone was responsible for 23 percent. Almost one half of all new agreements required 100 percent or more in offsets. For the period, offsets with Europe averaged 85.8 percent of the value of the defense sales, and sales to the region accounted for 46 percent of all reported sales. This average was higher than that for the other regions of the world, with the exception of North, South, and Central America, where offsets averaged 95.1 percent; however, that region made up only 1 percent of reported sales.

Offset Transactions

In 1998, 17 U.S. defense firms reported \$2.28 billion offset transactions. These transactions received offset credits of \$2.6 billion, or 114 percent of their actual value. The top three U.S. defense companies who reported offset activity to BXA accounted for 85.6 percent of the value of all reported transactions. Europe was by far the largest offset recipient region, with more than 80 percent of all offsets followed by Asia with only 9 percent. In 1998, direct offsets totaled \$1.43 billion, 62.6 percent of the value of all offsets; this is a 39 percent increase from 1997. This significant rise is attributed to two large transactions totaling more than \$470 million. This increase in direct offsets interrupted a pattern of a relative decline in direct offsets; because it was attributable to just two transactions, this interruption is not likely to result in a lasting change in the long-term pattern. Indirect offsets constituted the remaining activity in 1998, equaling \$850 million.

For 1993 to 1998, U.S. companies provided \$14.1 billion in offset transactions, receiving \$16.6 billion in offset credits. Three countries alone received \$8.2 billion in offsets, which accounted for 58 percent of the total value of all transactions. More than a thousand foreign companies and government agencies received offsets from U.S. firms, providing an average credit of 118 percent of the actual value of the offset. The credit values for Asia and the Middle East are higher than those provided in Western Europe.

Indirect offsets were still the largest type of offsets, totaling \$7.8 billion or 55 percent of the actual value of all offsets. Meanwhile, direct offsets equaled \$5.8 billion, 41 percent of the total. Purchases, the largest offset category, equaled \$5.1 billion followed by Subcontracts with \$4.1 billion. Technology and Credit transfers worth \$1.6 billion and \$1 billion respectively constituted the majority of the remaining offsets.

Between 1993 and 1998, offset transactions were fulfilled in 47 two-digit Standard Industrial Classification (SIC) industry groups. Transportation equipment was the largest industry group of offset activity, approximately 34 percent of the value of all transactions. This is to be expected as 41 percent of all offsets were directly related to the defense item sold, which are generally aerospace-related and usually categorized in this group. The next largest group was a distant second with only 9 percent of all offsets was Electronic & Other Electric Equipment. Following closely behind this sector was Industrial Machinery & Equipment with 6 percent of the value of all offset transactions.

Offsets in Developed vs. Developing Nations

The use and extent of offsets varies widely between developed and developing countries. For developing countries, indirect offsets were the most commonly provided offset, equaling 63 percent, while direct was 36 percent, and unspecified 1 percent. In contrast, developed nations require more direct offsets, 42 percent, while indirect constituted 54 percent and unspecified 4 percent.

Several countries were studied for their use of offsets, and the differences between developed (Finland and Israel) and developing countries (the Czech Republic and the UAE) were highlighted. The developing countries were examined to show different offset policies and how they are used for development purposes. In particular, research was conducted on the extent to which Finnish companies benefited from the receipt of offsets. A majority of the Finnish offsets studied were purchases that directly increased company net income, thus boosting employment and overall economic performance. Another interesting case is that of Israel, which receives foreign military funding from the United States and then requires offsets of U.S. firms.

Presidential Commission

In July, 1999, Senator Russell Feingold of Wisconsin introduced a bill entitled the Defense Offsets Disclosure Act of 1999,² which called for increased monitoring of the impacts of offsets in international defense trade. This bill was incorporated into an appropriations bill that became law in November 1999 and created the National Commission on the Use of Offsets in Defense Trade. A parallel President's Council on Offsets in Commercial Trade was created by Executive Order. The purpose of the Commission and parallel Council is to study offsets, focusing in particular on their effect on the aerospace industry and its suppliers, as well as other high-technology industries, and to analyze their impact on national security.

The Commission and Council share the same membership, which includes representatives from both the public and private sectors. The group must report to Congress and the President by October 2001 on future U.S. policies regarding military and commercial offsets. The final report is expected to include a strategy for unilateral, bilateral, or multilateral negotiations toward a treaty on offset standards, with a goal of reducing any detrimental effects of offsets on the nation's economy.



In an attempt to standardize U.S. prime contractor offset data, BXA recently updated its database. Therefore, there may be slight discrepancies between data provided in previous BXA offset reports and this report.

All percentages and numbers are stated in terms of the actual dollar value of the offset rather than by the number of transactions. This provides a clearer representation of the state of offset activities and trends. One reason for this change is that prime contractors are allowed to group similar transactions for the same year, thus rendering the "number of transactions" completed inaccurate. All averages, unless otherwise noted, are weighted. Both of these changes provide a more accurate description of the data. Offset agreements and transactions

with small monetary value are not given equal significance compared to more noteworthy offset activity. In addition, all offset data are from BXA's offset database.

²Pub.L. 106-113, Div. B, S1000(a)(7) [Div. B, Title XII, Subtitle D (SS 1241 to 1247)], Nov. 29, 1999, 113 Stat. 15.

1.0 INTRODUCTION

1.1 Legislation and Regulations

In 1984, Congress enacted amendments to the Defense Production Act of 1950, which included the addition of Section 309.³ Section 309 requires the President to submit an annual report on the impact of offsets on the United States to the then Committee on Banking, Finance, and Urban Affairs of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate.

When Section 309 was first enacted, the Office of Management and Budget (OMB) was appointed the interagency coordinator in the preparation of the annual offsets report for the Congress. The report was to be produced in consultation with the Departments of Commerce, Defense, and Labor, and the Office of the United States Trade Representative. This interagency reporting requirement continued, with minor adjustments, until 1992, when the Congress amended Section 309 by requiring the Secretary of Commerce to perform the interagency coordination role.⁴ The Department of Commerce sent its first annual report to Congress in 1996.

Section 309 authorizes the Secretary to develop and administer regulations to collect required offset data from the defense industry for the report. This responsibility was delegated to the Department's Bureau of Export Administration (BXA). The Department's offset regulations were published in the Federal Register in 1994 (59 FR 61796, Dec. 2, 1994, codified at 15 CFR Part 701 – see Appendix B for a copy of the notice). The 1992 amendments to section 309 also reduced the offset agreement threshold from \$50 million to \$5 million for U.S. firms entering into foreign defense sales contracts subject to offset agreements. On a per-transaction level, firms report all offset transactions for which they receive offset credits of \$250,000 or more. An itemized list of information that is collected annually from industry is in Section 701.4 of the Department's offset regulations.

³ See Pub. L. 98-265, April 17, 1984, 98 Stat. 149.

⁴ See Pub. L. 102-558, Oct. 28, 1992, 106 Stat. 4198.

The official U.S. Government policy, developed in 1990, views offsets as economically inefficient and market distorting. Offsets introduce a new element into the purchase decision unrelated to the price or quality of the products. The policy states that the U.S. Government will not encourage or enter into 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 allies regarding limiting the adverse effects of offsets in defense procurement.⁵

1.2 Offset Definitions

While there are different definitions of offsets used by industry and government for different purposes, for this report, offsets in defense trade are industrial compensation practices required as a condition of purchase in either government-to-government or commercial sales of defense articles and/or defense services as specified in the International Traffic in Arms Regulations.

1.21 Offset Agreements

Offset agreements are commercial contracts between a defense firm and a foreign government. As noted above, the United States Government does not actually enter into any offset agreements. Only in rare instances are offset agreements concluded between a defense firm and a foreign firm. The purchasing government decides how much compensation is required and what type of offset it desires. Firms can propose various products and services, but ultimately it is the foreign government's decision what the offset will entail. The value of the offset, and therefore the credit amount the defense firm receives for providing that offset, is assigned by the foreign government as well. Offset agreements specify a certain percentage of the value of the export sale.⁶ The specific requirements of offset agreements are *offset obligations*.

⁵ Congress incorporated this policy statement into law with an amendment to the National Defense Authorization Act (Pub. L. 102-558, Title I, Part C, §124, 106 Stat. 4207).

⁶ For example, if the defense item exported sold for \$1 million and the corresponding offsets agreement was for \$1.2 million, the offsets percentage would equal 120%.

Penalties are used to motivate defense firms to fulfill their offset obligation in the time allotted by the contract. There are several different kinds of penalties: liquidated damages, non-performance measures, and best efforts. For liquidated damages, if a firm fails to fulfill all offsets by the stipulated deadline, it must pay a percentage (usually 5-20 percent) of the total value of the export contract. The percentage is specified in the contract. Non-performance penalties dictate that firms must pay a prearranged percent (2-10 percent) of all obligations not fulfilled in the allotted time. In best efforts clauses, there really is no penalty for non-fulfillment of the contract; the firm is judged to be acting in good faith to meet its obligations. However, firms' reputations can be jeopardized if offset obligations are not fulfilled as stated in the contract; non-fulfillment would likely result in the U.S. defense firm being excluded from future procurements by that purchasing government.

When a defense firm enters into an offset agreement with a foreign government, foreign firms receive the benefits from the offset; these companies are the *offset recipients*. For example, in a direct offset, a U.S. company sells a defense item to a foreign country, with an offset obligation requiring that components worth 50 percent of the export contract to be built locally; the foreign companies manufacturing these components are the offset recipients. In an indirect offset, a foreign government may require the U.S. company to provide export assistance for small- and medium-sized companies in various industries; these companies are the offset recipients.

The *offset fulfiller* is the company that provides the offset compensation; this is usually the defense firm who signed the offset agreement. However, there are times when the obligation is not related to the defense firm's specialty and therefore is contracted out. This is generally the case with indirect offsets. For example, if marketing is a component of the offset requirement, the defense firm may hire a marketing company to satisfy the obligation. The marketing firm is the offset fulfiller.

1.22 Offset Transactions

Companies fulfill their offset obligations over a period of time specified in the offset agreement through a series of *offset transactions*. Offset transactions are the actual delivery of compensation towards the outstanding balance of an existing offset agreement. For example, a U.S. firm sells a defense item to a foreign government for \$1 billion with 50 percent offset, to be fulfilled within ten years. The U.S. company completes \$50 million of offset benefits in one year by providing training related to the defense item sold; this is one of many offset transactions that will fulfill the total offset commitment. In a growing number of cases, U.S. defense firms are submitting transactions to foreign governments for credit, only to have the transaction rejected. In the Netherlands, for example, these rejections are adding almost 50 percent to the country's current 100 percent offset demands.

Offset transactions have an *actual* and *credit value*. The actual value of the offset transaction is the market value of the offset. The foreign government places a credit value on the offset based on its economic priorities. The credit value may be greater than the actual value of the offset. Foreign governments use *multipliers* (which increase the actual value) to provide firms with incentives to offer offsets in targeted areas of economic growth. A multiplier is applied to the off-the-shelf price of a more desirable service or product offered as an offset, thus giving a higher credit value to the defense firm towards fulfilling an offset obligation. For example, a foreign government interested in a specific technology may offer a multiplier of six. A U.S. defense company with 120 percent offset obligation from a \$1 million sale of defense materiel would ordinarily be required to provide technology transfer through an offset equaling \$1.2 million. With a multiplier of six, however, the U.S. company could then offer only \$200,000 (actual value) in technology transfer for a \$1.2 million credit value and fulfill its entire offset obligation.

Offsets are divided into two different types, direct and indirect. When the type of compensation, or offset, is directly related to the defense item or services exported, this is called a *direct offset*. These are usually in the form of co-production, subcontracting, training, production, licensed production, or possibly technology transfer or financing activities, which are explained below. Conversely, an *indirect offset* is a form of

compensation that is unrelated to the contracted defense item. The kinds of offsets associated with this type vary widely among purchases, investment, training, financing activities, marketing/exporting assistance and technology transfer.

For the purpose of analysis, BXA divides offset transactions into nine different categories:

Technology Transfer: Transfer of technology that occurs as a result of an offset agreement and that may take the form of: research and development conducted abroad; technical assistance provided to the subsidiary or joint venture of overseas investment; or other activities under direct commercial arrangement between the U.S. manufacturer and a foreign entity.

Subcontractor Production: Overseas production of a part or component of a U.S. origin defense article. The subcontract does not necessarily involve license of technical information and is usually a direct commercial arrangement between the U.S. manufacturer and a foreign producer.

Co-production: Overseas production based upon government-to-government agreement that permits a foreign government(s) or producer(s) to acquire the technical information to manufacture all or part of a U.S. origin defense article. It includes government-to-government licensed production. It excludes licensed production based upon direct commercial arrangements by U.S. manufacturers.

Licensed Production: Overseas production of a U.S. origin defense article based upon transfer of technical information under direct commercial arrangements between a U.S. manufacturer and a foreign government or producer.

Purchases: Procurement of off-the-shelf items from the offset recipient. Often, but not always, purchases are indirect by nature. Indirect purchases are similar in definition to countertrade while direct purchases are analogous to buy-backs.

Training: Generally includes training related to the production or maintenance of the exported defense item. Training may be required in unrelated areas, such as computer training, foreign language skills, or engineering capabilities.

Investment: Investment arising from the offset agreement, taking the form of capital invested to establish or expand a subsidiary or joint venture in the foreign country.

Marketing: Marketing assistance to foreign companies in either defense or unrelated industries. In some cases, countries require marketing in addition to the offsets. Also encompasses export assistance.

Other. Any other form of offset required or offered by a defense company/foreign government.

1.23 Offset Example

An example is the easiest way to understand what an offset is and to identify all of the agents involved in these agreements. This example is invented and in no way represents an actual offset agreement. The fictitious nation of Atlantis purchased ten KS-340 jet fighters from a U.S. defense firm, PJD Inc., for a total of \$500 million with 100 percent offset - the offset agreement obligated PJD to fulfill offsets equal to the value of the contract, \$500 million. The government of Atlantis decided what would be required of PJD in order to fulfill its offset obligation, which would include both direct and indirect compensation. The government also assigned the credit value for each category.

- 1) Direct (related to the export item, the KS-340 jet fighter)
 - a) **Technology Transfer:** The technology transfer requirement was assigned 36 percent of the total offset obligation. PJD agreed to transfer all the necessary technology and know-how to Atlantis firms in order to repair and maintain the jet fighters. The Atlantis government deemed this capability to be vital to national security and therefore gave a multiplier of six; the transfer of technology actually worth \$30 million was given the credit value equaled \$180 million.

- b) **Co-production:** Atlantis firms manufactured some components of the KS-340 jet fighters, totaling \$220 million – 44 percent of the obligation.
- 2) Indirect (not related to the production of the KS-340 jet fighter)
 - a) **Purchase:** PJD purchased marble statues from Atlantis manufacturers for eventual resale. This equaled 7 percent of the offset obligation, or \$35 million.
 - b) **Financing Activities:** PJD made investments in non-defense related industries in Atlantis; this accounted for 4 percent of the offset obligation, or \$20 million.
 - c) **Technology Transfer:** PJD provided submarine technology to Atlantis firms, which amounted to 6 percent of the offset obligation, or \$30 million.
 - d) **Marketing:** Commercial assistance was provided for Atlantis fisheries to market their fish in the United States, which fulfilled the remaining 3 percent, or \$15 million, of the offset obligation. In this example, the Atlantis fisheries are *offset recipients*; they received marketing services for their product. PJD hired an American advertising firm, the *offset fulfiller*, to market the Atlantis fish.

The offset agreement was for 10 years with a three-year grace period. A timetable was created by the Atlantis government outlining which obligations should be fulfilled, to what extent, and when. If PJD did not meet the deadlines given, the company was required to pay the Atlantis government 5 percent liquidated damages. For example, if after 10 years, only 98.5 percent of the offset obligation of \$500 million was fulfilled, PJD would be mandated to pay 5 percent of the 1.5 percent unfulfilled portion of the offset obligation equaling \$375,000.

1.3 Economics of Offsets

A basic analysis of offsets from an economic perspective is useful to determine the positive and negative impacts for both the purchasing and selling country or firm. When a government requires offsets, it directs labor and capital into industries that are deemed important and necessary instead of allowing the market to allocate inputs. This, in essence, subsidizes industries that receive benefits from offsets through government intervention. Countries with a small defense industry generally do not have sufficient sales volumes for either internal or external markets; therefore, they typically produce more expensive

components than countries where firms are able to take advantage of economies of scale. These companies probably would not survive in a free market and therefore are being indirectly subsidized through offsets. Government attempts to allocate resources through offsets create and sustain these firms for national security, political, and employment reasons.

The implicit and explicit costs of offset agreements are often overlooked. The cost of fulfilling offset obligations can be substantial. Prime contractors also incur additional administrative expenses (added travel time, employee hours, insurance, legal and translation fees, etc.) due to prolonged negotiations. Also, additional employees with expertise in offsets often must be hired. For the duration of the offset contract, the prime contractor must monitor its fulfillment of its obligations in order to avoid penalties, adding additional costs. There can be many unforeseen costs that arise from any number of events associated with fulfilling offsets. Some of these costs are passed on to customers through increasing prices.

With indirect offsets, a defense company can be responsible for selling a product or providing services in which it has no expertise. For example, if marketing is a required offset, the defense company may hire a marketing firm, thus creating added costs. Firms operating outside their area of specialization incur additional costs, both for the prime contractor and the economy as a whole.

As discussed above, foreign governments direct offset benefits into areas that are believed to be nationally important; this may lead to emphasis on products that are not competitive. When foreign governments require offsets, they are creating inefficiencies for all involved, from the defense industry to the offset recipient. Moreover, defense companies are sometimes required to purchase from or market products for non-competitive companies. These inefficiencies result in higher prices for all industries involved and distort international trade patterns.

In addition to supporting unnecessary or non-competitive producers, when the foreign government dictates from whom the prime contractor must purchase or where to build sub-components, market participants are no longer basing their decisions on market factors, such

as price and quality. In reality this does not affect the defense contractor to a large degree, because most of the additional costs are passed on to the purchaser. However, this obscures the market value of goods. In addition, there can be a significant impact on U.S. suppliers to the defense prime contractor who are displaced.

The problem of non-market decisions is more serious when looking at the factors foreign governments use in procurement strategies. Some governments readily admit that they are no longer concerned with the price or quality of the defense system purchased, but rather with the scope of the offset package offered. Recently, the Czech Republic announced that in competition for its jet fighter procurement, offsets would be the deciding factor as opposed to technical and performance criteria and price.⁷

⁷ Czech MIT Committee Reviews Fighter Offset Bids. *Countertrade & Offset*, Vol. XVII, No. 22, 22 November 1999.

2.0 STATISTICAL OVERVIEW

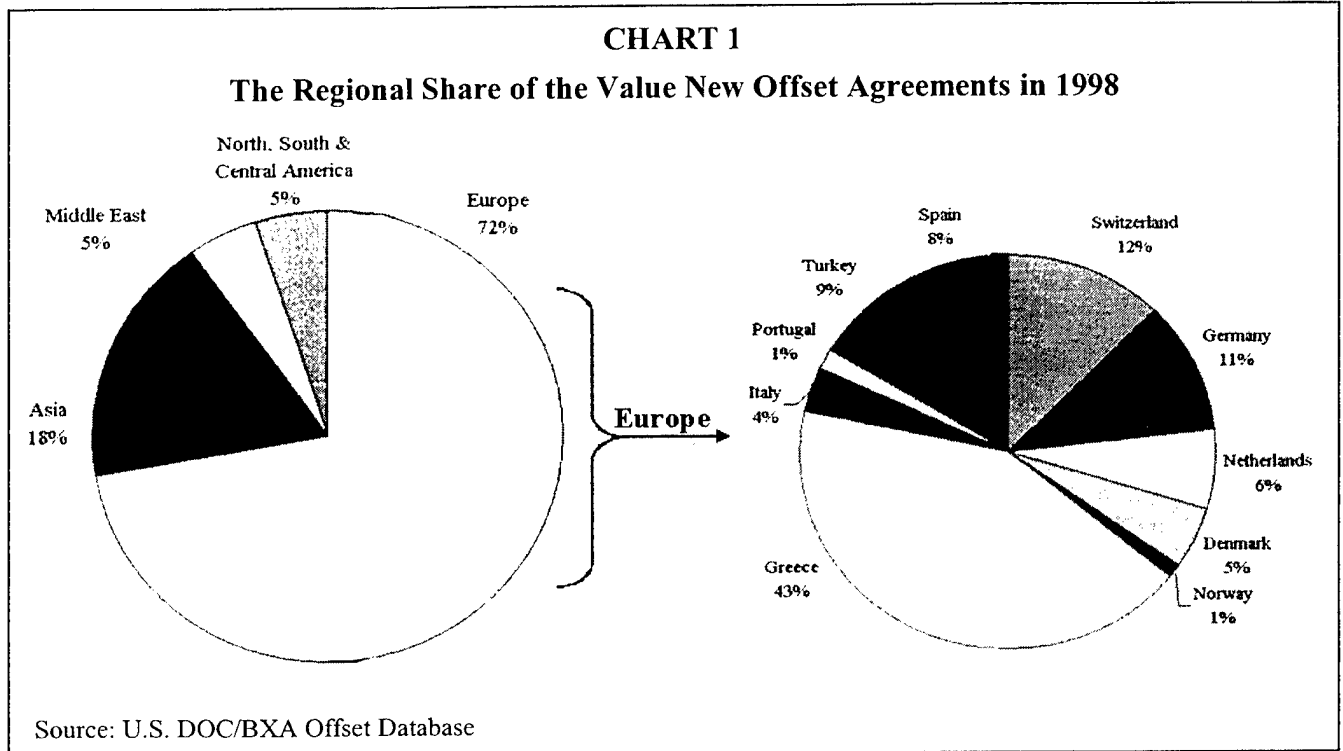
This section provides a statistical overview of the data collected on new offset agreements and offset transactions from 1993 through 1998.

2.1 New Agreements

The offset agreement is separate from the sales contract and outlines what the defense prime contractor promises as an offset over a specified number of years. The "new" offset agreement often summarizes the type of offset required by the foreign government, any areas that receive multipliers, the percentage of direct and indirect fulfillment requirements, any penalties for non-fulfillment, and the procedures for receiving credits. These agreements usually are for 5-10 years and are signed between the purchasing government and the prime contractor. The goods/services to be provided or purchased by the prime contractor as the offset are generally not specified in the contract.

2.11 1998 Data: New Agreements

In 1998, U.S. prime defense contractors entered into 41 new offset agreements. The total defense export sales were valued at \$3.1 billion, with corresponding offsets equaling \$1.8 billion. Thus, the average offset required was 57.9 percent of the value of the sales item. U.S. prime defense contractors entered into these new agreements with 17 countries. This year, defense prime contractors signed a new agreement with a country not previously reported -- New Zealand. Greece was the highest defense purchaser in 1998 and also had the highest value of offsets, with \$547.4 million in offset obligations. Canada had the highest offset obligation, with offsets totaling over 100 percent of the value of the defense sales. Denmark, Germany, the Netherlands, Norway, and Switzerland all required high levels of offsets, with 100 percent. The average time U.S. prime contractors were allowed to complete their offset obligations was 80 months (6.7 years), up six months from 1997. The time period ranged from one year to 15 years.



Europe dominated U.S. defense purchases and the total amount of offsets provided by U.S. prime contractors, as shown in Chart 1. In 1998 alone, new offset agreements in this region totaled \$1.3 billion; this was 72.3 percent of the value of all U.S. offsets. Asia, the second highest, comprised 17.9 percent, while the Middle East and the Americas were only 5 percent each. Even though Europe accounted for almost three-fourths of all offsets by value, the region entered into only half of the total associated defense contracts with the world. The average offset percent for Europe was 81.6 percent, up slightly from the previous year; this is 23.7 percent higher than the global average.

Of the 41 new agreements, 21 were concluded with Europe, half of which required more than 95 percent of the value of the defense item in offsets. Further, Australia (with overall average offsets of 28 percent) and Canada (with overall average offsets of 168 percent) were the only non-European countries with some new offset agreements in 1998 for 100 percent or more. See Table 1 for a summary of new agreements data, comparing European nations with the rest of the world. It is clear from these data that the leading European economies

continue to have the highest offset requirements in the world. The five nations with the highest requirements in the table below have among the highest per capita incomes in the world. And, with the exception of the Netherlands, the United States runs overall (defense and nondefense) trade deficits with each of the top five. Trade balance figures for 1998 are also included in Table 1

TABLE 1		
Average New Offset Agreements and U.S. Trade Balances— 1998		
Country Receiving the Offset	Avg. Offset Percent Required	U.S. Trade Balance (U.S. \$millions)
European		
Switzerland	100%	\$-1,422.9
Germany	100%	\$-23,184.6
Netherlands	100%	\$11,378.4
Denmark	100%	\$-520.7
Norway	100%	\$-1,162.3
Greece	90%	\$888.5
Italy	70%	\$-11,968.2
Portugal	60%	\$-377.0
Spain	50%	\$673.4
Overall	82%	
Non-European		
Canada	168%	\$-16,652.6
Turkey	55%	\$962.8
Israel	39%	\$-1,657.1
S. Korea	35%	\$-7,456.3
Taiwan	33%	\$-14,960.3
Kuwait	30%	\$258.1
Australia	28%	\$6,530.7
Overall	37%	

Source: U.S. DOC/BXA Offset Database

2.12 1993 to 1998 Data – New Agreements

From 1993 to 1998, U.S. prime contractors signed 279 new offset agreements totaling \$21 billion, which corresponded to \$38.5 billion in U.S. defense export sales. These new agreements averaged 54.5 percent of the value of the defense item. The average term for completing the offset agreements was 86.7 months, a little more than seven years. New

offset agreements were concluded with 31 nations; agreements were also signed with NATO and the EPG, which includes Belgium, the Netherlands, and Norway. Table 2 summarizes the new offset agreement activities for the six-year period.

Year	Value of Defense Contracts	Value of Offset Agreements	Avg. Percent Offset Required	Avg. Duration of Agreement (in months)	Number of New Agreements
1993	\$13,934,998,420	\$4,784,428,535	34.3%	84.71	28
1994	\$4,962,216,660	\$2,061,815,658	41.6%	92.19	50
1995	\$7,420,046,200	\$6,052,103,816	81.6%	92.13	46
1996	\$3,119,670,454	\$2,422,624,635	77.7%	93.35	53
1997	\$6,016,683,527	\$3,882,962,262	64.5%	77.86	61
1998	\$3,094,014,147	\$1,790,834,882	57.9%	80.03	41
Total	\$38,547,629,408	\$20,994,769,788	54.5%	86.71	279

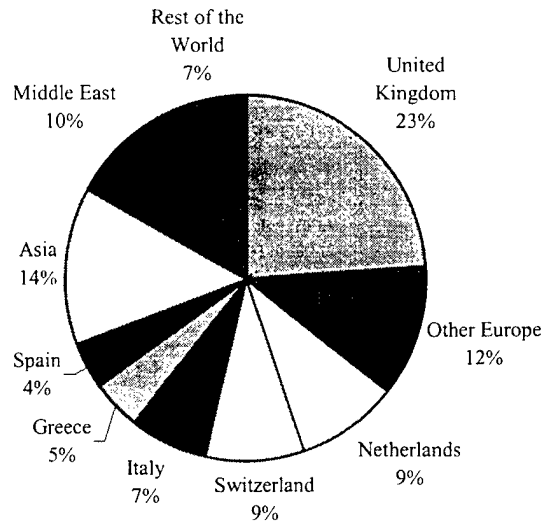
Source: U.S. DOC/BXA Offset Database

As shown in Table 2, offset percentages vary because of the cyclical nature of defense purchases (and related agreements), and the percentages demanded also vary by region. However, as shown in Chart 4, offset percentages have been steadily increasing since 1980.

Chart 2 shows the distribution of the largest offset obligations by country or region. Approximately 72 percent, or \$27.8 billion, of the value of new offset agreements was attributed to European nations; the United Kingdom alone was responsible for 23 percent. Following the United Kingdom are the Netherlands and Switzerland with 9 percent each. Most European nations require at least 100 percent offsets on defense procurements while non-European nations make actual offset burdens more manageable through the use of multipliers or smaller offset requirements.

Other countries with a significant percentage of the new offset agreements were Taiwan with 8 percent; and Saudi Arabia and Italy with 7 percent each. Some of these countries had only a few large offset agreements, while others had more than twenty agreements.

CHART 2
New Agreements, 1993 to 1998



Source: U.S. DOC/BXA Offset Database

Almost one half of all new agreements required 100 percent or more in offsets. Europe constituted the majority of offset agreements that were greater than 100 percent. The United Kingdom accounted for 44 percent of all offset agreements over 100 percent in Europe. Of the offset agreements that were above 100 percent, Greece, the Netherlands, Norway, Sweden, and Turkey averaged approximately 115 percent or more – the Netherlands was almost 125 percent. Brazil, Canada, and South Korea were the only other non-European nations to require more than 100 percent in offsets.

As shown in Chart 3, the average time U.S. prime contractors were allowed to complete their offset obligations was 87 months (7.25 years). The time period for fulfillment ranged from one to 15 years.

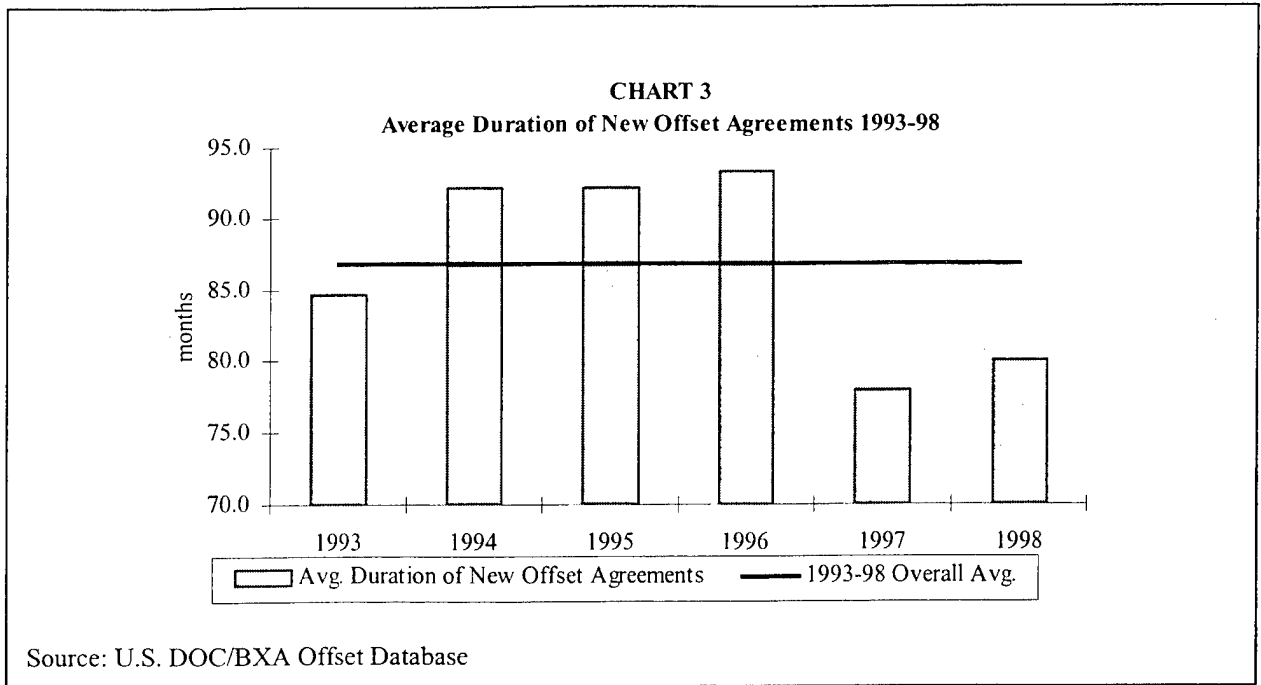


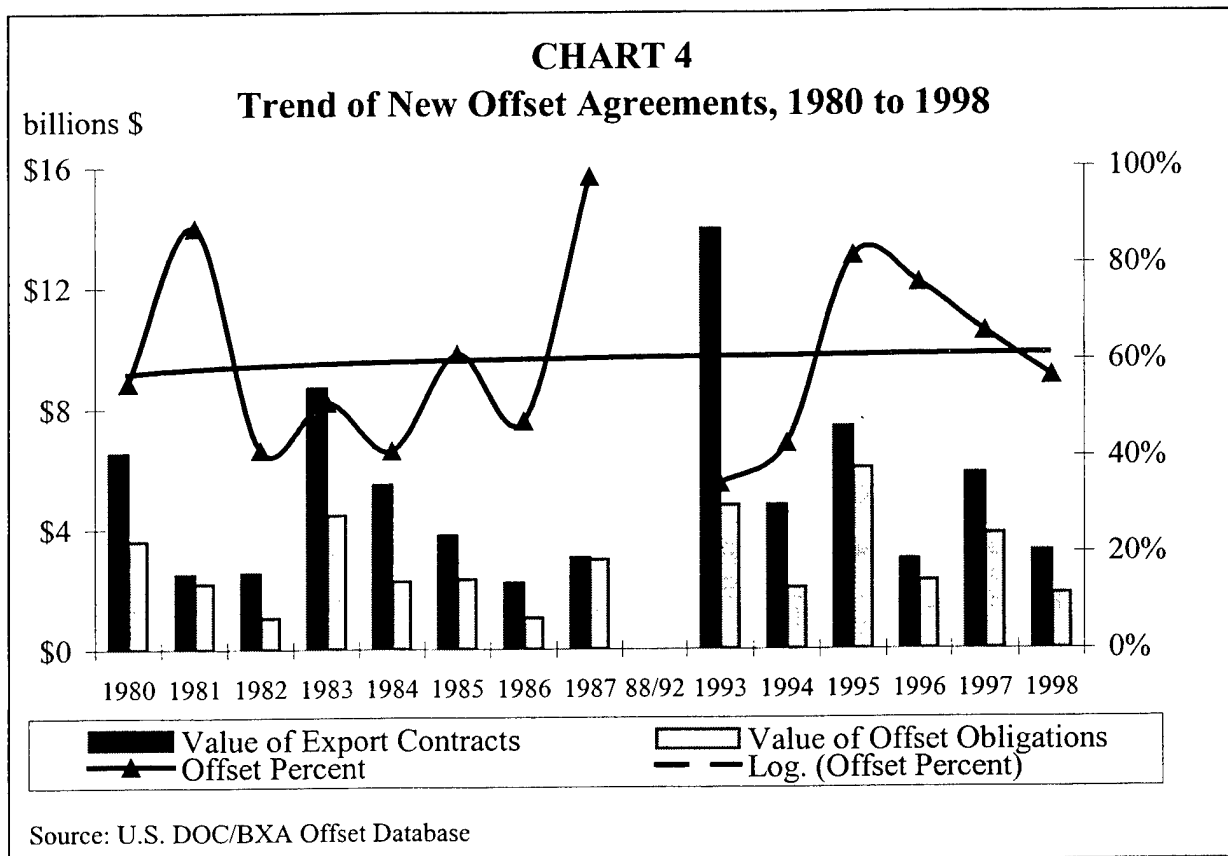
Table 3 depicts the regional distribution of new offset agreements between 1993 to 1998. The North, South and Central American area required the highest offset obligation, 95 percent, but only represented 1 percent of the associated sales contracts; Canada is the largest offset demander in this region. Europe was by far the largest offset imposer in terms of total values in both offset and defense imports. Asia had equivalent defense sales but requires far less in offset obligations, only an average of 22.6 percent.

TABLE 3				
Regional Distribution of New Agreements, 1993 to 1998				
Year	Total Value of Export Contract	Total Value of New Offset Agreements	Average Percent Offset Required	Total Number of New Agreements
Asia				
1993	\$6,717,659,000	\$943,766,000	14.0%	7
1994	\$1,984,057,000	\$486,440,098	24.5%	10
1995	\$2,246,490,000	\$770,406,750	34.3%	11
1996	\$862,081,000	\$236,462,000	27.4%	8
1997	\$1,775,744,163	\$578,323,351	32.6%	22
1998	\$1,190,399,714	\$320,844,899	27.0%	14
	\$14,776,430,877	\$3,336,243,098	22.6%	72
<i>Regional Portion of Grand Total</i>	<i>38%</i>	<i>16%</i>		<i>26%</i>
Europe				
1993	\$3,026,872,352	\$2,362,547,085	78.1%	15
1994	\$2,017,582,660	\$1,011,229,660	50.1%	24
1995	\$4,991,349,000	\$5,191,735,000	104.0%	28
1996	\$2,051,002,040	\$2,079,592,040	101.4%	37
1997	\$3,887,954,272	\$3,133,425,629	80.6%	32
1998	\$1,587,538,811	\$1,294,974,983	81.6%	21
	\$17,562,299,135	\$15,073,504,397	85.8%	157
<i>Regional Portion of Grand Total</i>	<i>46%</i>	<i>72%</i>		<i>56%</i>
Middle East				
1993	\$4,167,500,000	\$1,455,200,000	34.9%	3
1994	\$842,737,000	\$477,411,900	56.7%	11
1995	\$116,707,200	\$37,462,066	32.1%	4
1996	\$150,087,414	\$59,170,595	39.4%	6
1997	\$291,995,092	\$112,383,282	38.5%	5
1998	\$261,975,622	\$83,915,000	32.0%	4
	\$5,831,002,328	\$2,225,542,843	38.2%	33
<i>Regional Portion of Grand Total</i>	<i>15%</i>	<i>10%</i>		<i>12%</i>
North, South & Central America				
1993	\$22,967,068	\$22,915,450	99.8%	3
1994	\$117,840,000	\$86,734,000	73.6%	5
1995	\$65,500,000	\$52,500,000	80.2%	3
1996	\$56,500,000	\$47,400,000	83.9%	2
1997	\$60,990,000	\$58,830,000	96.5%	2
1998	\$54,100,000	\$91,100,000	168.4%	2
	\$377,897,068	\$359,479,450	95.1%	17
<i>Regional Portion of Grand Total</i>	<i>1%</i>	<i>2%</i>		<i>6%</i>

Source: U.S. DOC/BXA Offset Database

2.13 Long-Term Trends

In order to ascertain long-term trends, Chart 4 combines data collected by the Office of Management and Budget from 1980 through 1987 with BXA data for 1993 through 1998 to show a long-term trend in offset requirements. No data was collected from 1988 to 1992. While it appears from the offset percent line that offset percentages overall are varying widely, the trend, as shown by the log of the offset percent, is gradually increasing. There is a cyclical pattern in the data, with increases in defense exports, and therefore offsets, corresponding to major military conflicts around the world. While this is a useful examination, it is important to note that there are differences in the methods used by each agency to collect data.



2.2 Offset Transactions

Offset transactions are the means by which defense firms obtain credits to fulfill the terms of an offset agreement. These transfers of goods or services are categorized into ten areas, as defined in Section 1.2. The foreign government has the ultimate authority as to which offset

credits are deemed acceptable. For example, the Netherlands offset authority denies credit for almost 40 percent of all completed offset transactions submitted.⁸

The foreign government may assist the U.S. defense contractor in choosing a local company to benefit from the offset. Benefits are usually directed to specific industries deemed important by the government or to areas that will boost economic growth. The latter may include projects such as infrastructure improvements - roadways, telephones, electricity, etc. If the offset transactions are not in the area of expertise of the defense company, the U.S. company will often hire a third party, the offset fulfiller, to provide or purchase the specified goods or services. The third party may be located anywhere in the world.

Certain countries allow defense contractors to enter in to *pre-offset* transactions. This means the defense firm provides offsets not associated with a specific defense system or offset contract. These pre-offset transactions may be required in order to win new sales. If the defense company does not win the sale, these credits may be banked for future contracts or traded, or, in some cases, the company may forfeit the credits and therefore all investments associated with the pre-offset transactions. BXA has been unable to determine whether companies report these transactions when eventually applied toward an obligation.

2.21 1998 Offset Transaction Data

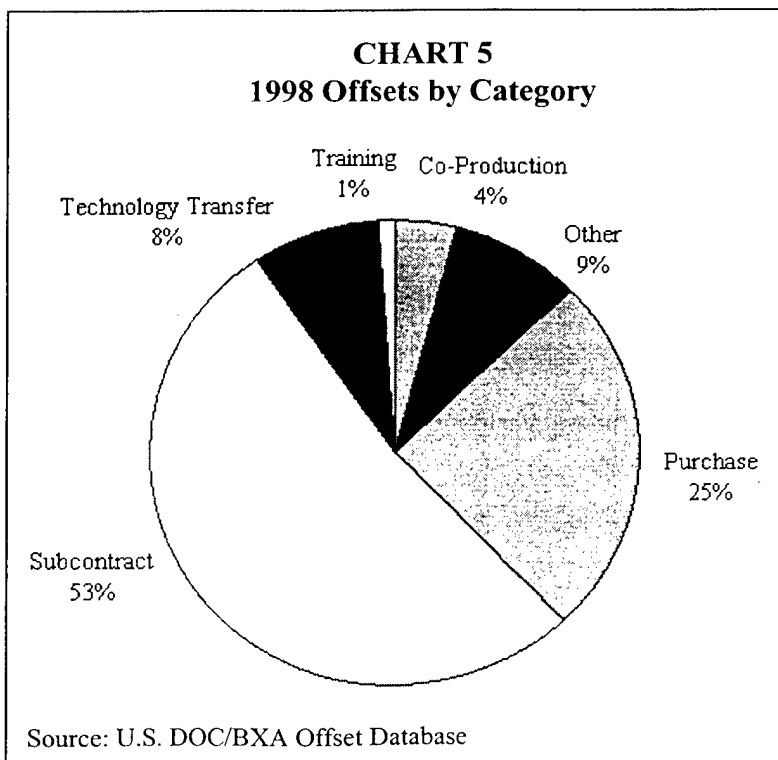
In 1998, 17 U.S. defense firms reported \$2.28 billion in offset transactions with 29 different countries and one group of nations. The value of these transactions declined 18.7 percent from 1997 and received offset credit equaling \$2.6 billion, or 114 percent of their actual value. The top three U.S. defense companies providing offsets accounted for 85.6 percent of the value of all reported transactions. Europe was by far the largest offset recipient, with more than 80 percent of all offsets, followed by Asia with only 9 percent. As in previous years, the United Kingdom is the largest offset recipient, receiving 26.2 percent of the value all European transactions and 21.4 percent of all transactions. Following the United Kingdom was Italy with 22.3 percent and 18.2 percent respectively, while Finland received 11.3 percent and 9.2 percent. Table 4 represents the dollar values of the percentages.

⁸ Defense Industry Offsets Association Annual Meeting, 2000

TABLE 4	
1998 Actual Value of Offset Transactions for the Top Seven Countries	
Country	Actual Value of the Offset
United Kingdom	\$487,345,790
Italy	\$414,517,732
Finland	\$209,319,336
Switzerland	\$156,265,139
Netherlands	\$153,821,677
Israel	\$140,042,316
Germany	\$105,957,507

Source: U.S. DOC/BXA Offset Database

Industry and government debate whether or not foreign governments are demanding more indirect offsets. While past offset data showed that much of the increase in offset activity was derived from growth in indirect transactions with slight increases in direct offsets, for 1998 the data changed dramatically. In 1998, direct offsets totaled \$1.43 billion, 62.6 percent of the value of all offsets; this is a 39 percent increase from 1997. This significant rise can be explained by two large transactions that totaled more than \$470 million. Indirect offsets constituted the remaining activity, equaling \$850 million. As mentioned before, direct and indirect offset transaction statistics vary from year to year, depending on the purchasing nation and its offset policy.



1998 Offset Transactions by Category

Chart 5 depicts 1998 offset transactions by category. Direct offsets tend to be subcontracts, co-production or licensed production. Subcontracts made up more than half of the value the offsets. A quarter of the transactions were purchases, which are generally associated with indirect offsets. Approximately 8 percent of the transactions were technology transfers; these can be

either directly or indirectly related to the exported defense item.

2.22 1993 to 1998 Offset Transaction Data

As stated in the previous section, the 1998 transaction totals are an anomaly compared to the previous years, as direct offsets increased while overall fulfillments decreased. Offset transactions totaled \$14.1 billion in actual value from 1993 to 1998. U.S. companies completed 3,432 transactions with 33 countries, NATO and the EPG.

Offset Transactions by Country

Table 5 ranks the top fifteen countries that received offsets transactions from 1993 to 1998. Three countries alone received \$8.2 billion in offsets, which accounted for 58 percent of the total value of all transactions. In contrast to new agreement data, Finland, not the United Kingdom, was the largest offset transaction recipient with over \$2.8 billion. This is in part because of a \$3 billion F/A-18 sale in 1993, which predates the BXA new offset agreements database. Otherwise, the United Kingdom, with \$2.3 billion in offset transactions, would be the largest recipient. Israel, a country that receives U.S. Foreign Military Funding (FMF), is third with \$1.1 billion. This unique relationship, where Israel receives aid to purchase U.S. defense equipment and then requires offsets of U.S. companies, is discussed in detail in Section 3.22.

TABLE 5		
Top 15 Offset Receiving Countries, 1993-1998		
Country	Total Value of Offset Transactions	Total Credit Value Awarded
Finland	\$2,841,871,720	\$3,055,539,227
United Kingdom	\$2,304,668,346	\$2,325,444,232
Israel	\$1,119,243,485	\$1,175,855,823
Switzerland	\$997,642,368	\$1,002,737,749
Netherlands	\$920,900,179	\$1,199,259,359
South Korea	\$755,398,266	\$1,048,795,766
Spain	\$591,558,212	\$765,357,153
Turkey	\$582,611,073	\$618,415,554
Italy	\$528,869,332	\$528,869,332
Germany	\$515,665,208	\$515,665,208
Australia	\$433,608,945	\$457,763,945
Canada	\$405,740,905	\$410,165,555
Greece	\$357,881,677	\$553,476,527
Taiwan	\$312,791,603	\$835,396,483
Malaysia	\$256,557,399	\$291,257,399

Source: U.S. DOC/BXA Offset Database

More than a thousand foreign companies and government agencies received offset transactions from U.S. firms. The top nine recipient companies received more than \$2 billion in transactions over the six-year period, as shown in Table 6, which equals more than 15 percent of the actual value of all offsets transactions. The largest company continues to be Valmet, a Finnish company, who received \$458 million in offsets. A new addition, Elmer, an Italian firm, received \$370 million and joined the group of leading recipients for the first time. The top six foreign government agencies received a little less than 8 percent of all transactions. The Israeli offset agency, Industrial Cooperation Authority (ICA), was the largest government agency recipient, with \$409 million.

TABLE 6		
Top Offset Transaction Recipients, Private & Government 1993 to 1998		
Recipient	Country	Total Value Of Offsets
Industry		
Valmet	Finland	\$458,105,526
Elmer	Italy	\$370,171,078
Fokker	Netherlands	\$257,830,539
Kvaerner Masa-Yards	Finland	\$208,134,000
Samsung	South Korea	\$204,628,741
Sitra	Finland	\$201,600,000
GEC Marconi	United Kingdom	\$184,531,418
Reflectone	United Kingdom	\$141,409,000
Smiths	United Kingdom	\$131,245,847
Government		
Industrial Cooperation Authority (ICA)	Israel	\$408,883,000
Air Force	Turkey	\$167,738,000
Navy	Greece	\$141,584,000
Ministry of Defense	South Korea	\$130,221,996
Ministry of Economic Affairs	Netherlands	\$102,394,000
Ministry of National Defense	Turkey	\$116,094,825

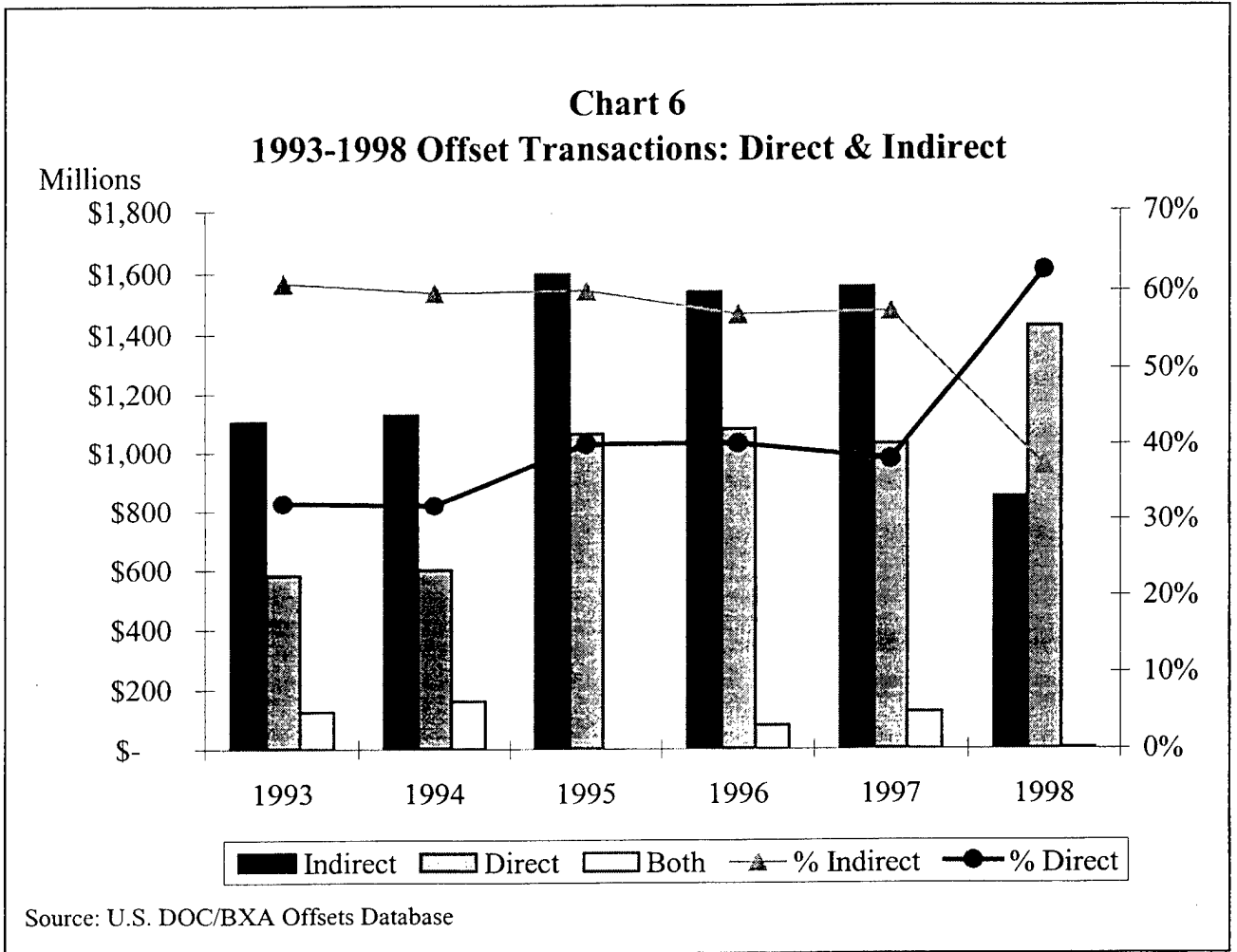
Source: U.S. DOC/BXA Offset Database

2.221 Multipliers

The \$14.1 billion in transactions received \$16.6 billion in offset credits; this is 118 percent of the actual value. So, U.S. defense firms are receiving an average multiplier of 1.18. This is quite low in comparison to what many official offset policies promulgate as possible (see Appendix E for an overview of countries' offset policies). Most industrializing countries offer higher multipliers, an average of 1.37, which is 20 percent higher than the industrialized nations. However, industrializing nations constituted only 15 percent of the value of all offsets, so the higher multipliers rarely relieve U.S. prime contractors. The United Kingdom, Switzerland and Canada, countries who received 26 percent of the value of all offset transactions, do not even allow multipliers and require 100 percent offsets on all defense procurements. Industrializing nations, such as Taiwan, Malaysia, South Korea and Greece, gave an average multiplier of 1.69; yet, as shown in Table 5, they accounted for only 12 percent of the value of all offset transactions.

2.222 Offset Type: Indirect vs. Direct Offsets

As discussed in the Section 2.21, the distribution of 1998 offset transactions between direct and indirect is an anomaly. Anecdotal evidence suggests that offsets are becoming more indirect while the data (see Chart 6) show direct offsets are actually increasing. The notion

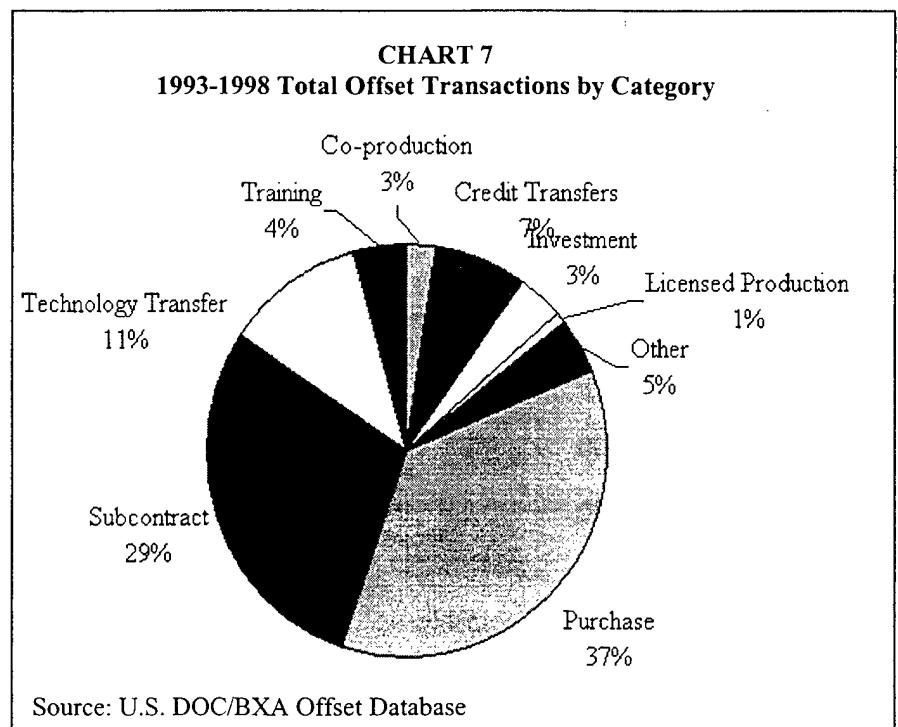


that indirects are rising stems from recent changes in offset policies. For example, in 2000, South Korea switched its offsets focus from directly related technology to any offset that would increase employment levels, thus opening the door for more indirect offsets. These modifications in official offset guidelines are not yet reflected in the data, as there is a lag between the codification changes and industry reporting.

Indirect offsets were the largest type for the period, totaling \$7.8 billion or 55 percent of the actual value of all transactions. Meanwhile, direct offsets were \$5.8 billion or 41 percent of the total. The remaining \$500 million offsets were either unspecified or both direct and indirect. Since there was a large increase in direct offsets and decline in indirects, 1998 data significantly increased the overall direct percentage. It is difficult to hypothesize whether or not this trend will continue. However, with the recent shift in offset guidelines, and given that most of the change in 1998 resulted from a few large transactions, it is highly unlikely.

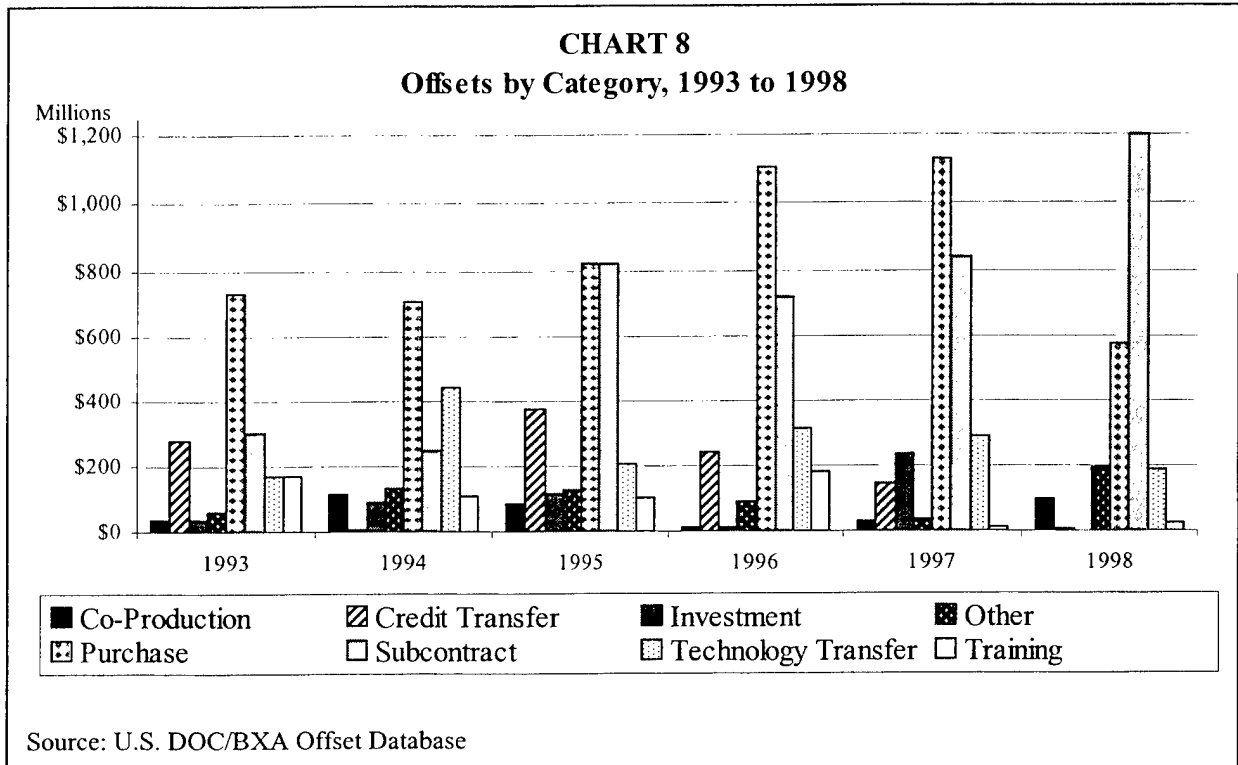
2.223 Offset Transactions By Category

Chart 7 breaks down offset transaction activity by category for 1993 to 1998. The majority of offset transactions, 66 percent of the value, are categorized as either Purchases (generally indirect offsets) equaling \$5.1 billion or Subcontracts (generally direct offsets) totaling \$4.1 billion. Technology and Credit transfers worth \$1.6 billion and \$1 billion respectively constitute a majority of the remaining offsets.



Both Purchases and Subcontracts increased overall during the six-year period, as seen in Chart 8, although Purchases fell in 1998 in line with other indirect offsets. Since 1995, Investments, Credit Transfers, and Technology Transfers have steadily declined as a form of offset while the Unclassifiable (Other) category has increased. The various means to fulfill offset requirements are increasingly complex, making it difficult to categorize offset activities. This might account for the increase in Unclassifiable offset activity and the

subsequent decline in the previously mentioned categories. Training, which remained relatively constant for the first four years declined dramatically in 1997 and 1998. The overall trend shows a movement away from Investments, Credit Transfers, and Technology Transfers, which allowed for “higher markup” for the prime contractors, toward Purchases and Subcontracts, more tangible offsets which have more of a direct effect in displacing U.S. subcontractors.



The distribution of the type of offset, direct vs. indirect, differs from category to category. Table 7 breaks down each offset category by type. As shown, Investments, Credit Transfers and Unspecified are usually indirectly related to the defense item sold while Training is typically direct. Technology Transfers are fairly evenly distributed between both types with a propensity towards indirect.

Offset Category	Offset Type	Actual Value of Offset
Investment	Direct	\$3,850,000
	Indirect	\$412,103,500
	Unspecified	\$73,743,000
Credit Transfers	Direct	\$4,004,427
	Indirect	\$1,044,810,630
Technology Transfer	Direct	\$688,396,422
	Indirect	\$827,873,323
	Unspecified	\$90,733,540
Training	Direct	\$401,016,129
	Indirect	\$189,002,727
	Unspecified	\$1,863,000
Unspecified	Direct	\$147,775,480
	Indirect	\$490,342,776
	Unspecified	\$1,188,000

Source: U.S. DOC/BXA Offset Database

The makeup of these offsets by type, direct vs. indirect, within each category has changed remarkably over the past six years. Since 1995, there have not been any direct Credit Transfers, and indirect Credit Transfers have steadily declined. Indirect Investments, on the other hand, rose rapidly from 1993. There was only one year, 1994, with a directly related Investment. Direct Licensed Production has remained relatively constant over the years with only one year of indirects in 1994. Excluding 1998, direct Technology Transfers have risen from \$65 million in 1993 to \$160 million 1997; in 1998, there was a sharp decline to \$60 million. From 1993 to 1995, indirect Technology Transfers increased from \$79 million to \$93 million and have hovered at around \$130 million since. Training in both types has consistently declined over the six-year period. Finally, Unspecified offsets in both types have steadily increased from 1993 to 1998; indirects grew from \$48 million to \$115 million, and directs moved from \$10 million to \$79 million.

2.224 Offset Items by Industry

Table 8 lists the top ten identifiable industry-specific offsets given to foreign governments by three- or four-digit Standard Industrial Classification (SIC) code levels for 1993-1998. These 10 specific industries make up 20.5 percent of all offset transactions fulfilled over the six-

year period. Note that Ship Building & Repair ranked third in offset transactions over the period, even though there were no sales of ships during the period.

TABLE 8		
Offset Transactions Provided By Detailed SIC Code, 1993-1998		
SIC Description	SIC Code	Total Value of Offsets Provided
Electronic Components & Accessories	367	\$1,069,316,208
Search & Navigation Equipment	3812	\$489,377,706
Ship Building & Repair	3731	\$448,829,013
Motor Vehicles & Equipment	501	\$411,083,004
Aircraft Engines and Engine Parts	3724	\$398,484,847
Aircraft	3721	\$314,096,639
Computer & Data Processing Services	737	\$274,227,598
Metal Working Machinery	354	\$250,154,586
Management Services	8742	\$245,025,223
Communications Equipment	366	\$206,217,200
Total		\$4,106,812,024

Source: U.S. DOC/BXA Offset Database

Table 9 shows all offsets by main industry group at the two-digit SIC code level for 1993-1998. As in previous years, transportation equipment was the largest industry group of offset activity, with approximately 34 percent of the value of all transactions. This is to be expected as 41 percent of all offsets were directly related to the defense item sold, which are generally aerospace-related and usually categorized in this group. The next largest group was a distant second with only 9 percent of all offsets, Electronic & Other Electric Equipment. Following closely behind Electronic Equipment was Industrial Machinery & Equipment, which accounted for 6 percent of the value of all offset transactions.

There are some interesting trends and changes in the make-up by type, direct vs. indirect, of the top three industrial groups. The value of direct transactions in Aircraft Equipment has consistently risen from 33 percent of all related transactions in 1993 to 80 percent in 1998. Overall, direct transactions account for 55 percent of the value of all transactions in this category, while indirect are 40 percent and unspecified comprising the remainder. Direct offsets comprised 64 percent of the value of all transactions in the Electric Equipment category, while indirects accounted for the remaining portion. In 1995 and 1996, offsets in this industry group were evenly distributed by type. In 1997, however, direct offsets

increased dramatically, causing directs to be dominant; this pattern continued in 1998 as well. Finally, 90 percent of all Industrial Equipment transactions were directly related to the sales item. Except for 1996, direct offsets have consistently been the largest portion in this industry group.

In the top three industry groups, due to the direct nature of these categories, it is expected that the majority are directly related to the defense item. For some main industry groups, offsets are primarily indirect. For example, Business Services was mainly indirect, totaling 78 percent of the value, with direct accounting for 23 percent over the six-year period. However, direct offsets in this group have been consistently increasing. In Non-depository Institutions, 99 percent of the value of transactions is indirect from 1993 to 1998.

Over 11 percent of the value of all offset transactions, \$1.5 billion, were related to the sale of aircraft engines. These offsets were split evenly among direct, indirect and unspecified. Most, 66 percent of these transactions, were classified as Transportation Equipment. The next industry group was Fabricated Metal Products, which made up 9 percent. Engineering, Accounting, Research, Management and Related Services followed with only 5 percent.

TABLE 9	
Offsets Provided by Main SIC Code, 1993-1998	
Main Category	Total Actual Value of Offsets
37 Transportation Equipment	\$6,735,249,792
36 Electronic & Other Electric Equipment	\$1,793,039,687
35 Industrial Machinery & Equipment	\$1,181,969,976
73 Business Services	\$688,532,783
38 Instruments & Related Products	\$649,891,002
61 Non-depository Institutions	\$541,163,725
87 Engineering & Management Services	\$535,542,346
34 Fabricated Metal Products	\$439,765,709
67 Holding & Other Investment Offices	\$309,072,900
82 Educational Services	\$233,697,427
50 Wholesale Trade, Durable Goods	\$229,644,109
Not Classified	\$170,206,525
28 Chemicals & Allied Products	\$91,524,171
33 Primary Metal Industries	\$76,317,926
89 Services (Not Included Elsewhere)	\$65,735,818
48 Communications	\$50,003,000
07 Agricultural Services	\$39,228,000
97 National Security & International Affairs	\$32,300,000
15 General Building Contractors	\$29,992,359
27 Printing & Publishing	\$29,403,008
26 Paper & Allied Products	\$21,089,000
20 Food & Kindred Products	\$15,466,000
13 Oil & Gas Extraction	\$12,178,000
45 Transportation By Air	\$11,360,300
32 Stone, Clay & Glass Products	\$11,344,000
55 Automotive Dealers & Service Stations	\$10,346,814
22 Textile Mill Products	\$6,362,020
76 Misc. Repair Services	\$6,111,623
44 Water Transportation	\$5,208,237
39 Misc. Manufacturing Industries	\$5,100,000
30 Rubber & Misc. Plastics Products	\$4,310,302
17 Special Trade Contractors	\$3,874,000
23 Apparel & Other Textile Products	\$3,813,418
16 Heavy Construction (Except Building)	\$3,510,167
47 Transportation Services	\$3,474,921
51 Wholesale Trade, Non-durable Goods	\$3,065,665
14 Nonmetallic Minerals Mining (Except Fuels)	\$2,727,536
42 Trucking & Warehousing	\$1,451,000
57 Furniture & Home Furnishings Stores	\$1,324,046
62 Security & Commodity Brokers	\$1,302,000
49 Electric, Gas, & Sanitary Services	\$1,085,200
53 General Merchandise Stores	\$835,629
95 Environmental Quality & Housing Admin.	\$635,000
81 Legal Services	\$75,000
80 Health Services	\$28,000
79 Amusement & Recreation Services	\$22,336
41 Local & Interurban Passenger Transit	\$11,488
Grand Total	\$14,058,391,965

Source: U.S. DOC/BXA Offset Database

3.0 OFFSETS IN DEVELOPED VS. DEVELOPING NATIONS

This chapter provides examples of offset policies for developed and developing countries. U.S. companies provided \$2 billion in offset activities to industrializing countries over the six-year period analyzed, and about \$12 billion to industrialized countries for the same period. For industrializing countries, indirect offsets were the most commonly provided offset, equaling 63 percent, while direct was 36 percent, and unspecified 1 percent. In contrast, industrialized nations require more direct offsets, 42 percent, while indirect constituted 54 percent and unspecified 4 percent.

Table 10 breaks down the industries in which offset activities were provided for industrializing and industrialized countries. Transportation Equipment is the largest category in both groups, followed by Electronic Equipment & Components. In industrializing nations, 52 percent of their Transportation Equipment transactions were indirectly related to the sales item while only 38 percent were indirectly related in the same category in industrialized countries. A similar relationship exists in Electronic Equipment & Components, although the differences are not so dramatic; in this group, 70 percent of the activities were indirect in industrializing countries and 62 percent indirect in industrialized. Educational Services were requested more frequently in industrializing nations while Nondepository Credit Institutions were significant only in industrialized nations.

TABLE 10				
Offsets Provided to Industrializing vs. Industrialized Countries				
SIC # and Description	Industrializing Countries		Industrialized Countries	
	Total Value of Offsets Received	% of Offsets Received	Total Value of Offsets Received	% of Offsets Received
37 Transportation Equipment	\$916,299,768	44.0%	\$4,608,104,217	38.5%
36 Electronic Equipment & Components	\$463,137,193	22.3%	\$2,482,443,372	20.7%
35 Industrial & Commercial Machinery	\$83,136,427	4.0%	\$901,016,067	7.5%
73 Business Services	\$49,059,000	2.4%	\$639,473,783	5.3%
34 Fabricated Metal Products	\$34,728,000	1.7%	\$543,634,345	4.5%
61 Nondepository Credit Institutions	\$2,280,000	0.1%	\$538,883,725	4.5%
38 Measuring, Controlling & Analyzing Instruments	\$64,546,000	3.1%	\$531,712,044	4.4%
82 Educational Services	\$83,136,427	4.0%	\$15,0561,000	1.3%
87 Engineering, Accounting, Research & Mgmt Services	\$51,930,920	2.5%	\$483,611,426	4.0%

Source: U.S. DOC/BXA Offset Database

3.1 Developing Nations and Indirect Offsets

Developing nations use defense purchases and related offsets to provide for security needs as well as much needed infrastructure projects. Developing nations usually operate under budget constraints, and offsets seem to be a good solution to this problem. (This form of indirect offsets is productive only when governments and prime contractors work closely together to effectively and efficiently utilize resources.)

3.11 Czech Republic: the Development of an Offset Policy

The fall of the Berlin Wall has brought new opportunities for the Czech Republic and specifically its national defense industry. Despite a difficult period of transition in Czech industry, industry observers feel the Czech military industry is ready to expand. After seeing

its military sales figures and employment levels steadily decrease for much of the last decade, Czech officials hope to recapture the nation's tradition of military manufacturing.⁹

Although NATO officials have recommended the Czech Republic focus more on recruiting and training its military personnel, Czech Republic officials are anxious to begin acquiring advanced weaponry. In May 2000, *Defense News* quoted an official from the Czech Foreign Ministry as saying it is the goal of the Czech Republic to be "a real ally and not a free-rider."¹⁰ Therefore, there are new opportunities for Western aerospace contractors looking to establish themselves in the Czech market. The Czech Republic sees this stage of development as a time to maximize the financial benefits of its future purchases by instituting its own offset policy.

Recognizing its leading role as one of the most advanced economies in Central Europe and its important status in the international market for defense items, the Czech Republic formalized an offsets policy in 2000. The policy aims to increase levels of foreign investment in the Czech Republic, especially in civil sectors of society such as high technology and science. In 1998, the drafters of the legislation indicated that they also view offsets as a way to acquire new technology, increase employment opportunities for Czech Republic citizens, enhance sustainable economic development, and effectively further "the economic interests of the Czech Republic."¹¹

The Czech government was able to draw from the offset experiences of other European nations while formalizing their own rules for offsets. The Ministry of Trade & Industry (MTI) consulted with government officials from European allies, such as Great Britain, France, Finland, and Denmark, and held several conferences on the utility of offsets for the Czech Republic with representatives from both private industry and the government. In May 2000, one Czech official noted that when Finland recently negotiated a deal for F/A-18s, it

⁹ Green, Peter S. Where the Armorers No Longer Thrive. *The New York Times*, Sunday, April 2, 2000.

¹⁰ Hill, Luke. Czech Fighter Decision Taxes to Runway. *Defense News*, May 8, 2000.

¹¹ Czech Republic, Ministry of Industry and Trade; Ref. 311147/98/6110/1000, PID: MIPOX005WHYE, Order No. 26/98 of the Ministry of Industry and Trade on implementation of offset programmes; December 1, 1998.

required 150 percent in offsets. The official said the example “is a good one” for what the Czech Republic hopes to achieve.¹²

The decision to codify its policy on offsets coincided with the Czech Republic’s announcement of its plan to devote \$2 billion for the purchase of new fighter aircraft to replace its fleet of Russian MiGs. Since as early as March 1999, Czech Republic government officials have stated that offsets will be the main criteria for deciding which fighter aircraft they purchase. Because Czech officials view the technical parameters of the fighter jets being offered as so similar, offset packages will outweigh technical factors and price when making a final decision.

Realizing this new opportunity for sales, the Czech Republic has been inundated with offers from major international aerospace contractors. The companies vying to conclude deals with the Czech government include Boeing with its F/A-18, Lockheed Martin with its F-16, British Aerospace-Saab with the JAS-39 Gripen and Dassault Aviation with its Mirage 2000-5. In addition to presenting their product, each firm is constructing offset packages (each of which will be at least 100 percent) and starting to create a niche for itself in the Czech economy.¹³

Boeing bought 34 percent of Aero Vodochody, a Czech firm, as a pre-offset and won a contract to supply 737s to Czech Airlines. It was valued at \$33 million and resulted in a deal between Boeing and Czech Airlines. Boeing's subsidiary, Ayers, also bought LET Kunovice, a major producer of commuter planes. Ayers plans to move part of the production line for its own planes to LET. Lockheed Martin's pre-offset activities included a technology transfer program with Skoda Elcar, a Czech manufacturer of transportation equipment. Saab and British Aerospace have also started to make pre-offset arrangements with the Czech government.¹⁴

¹² Hill

¹³ *Offset Requirements of Major Arms Importers – Additional Information*; “Czech Republic”; <http://area51.upsu.plym.ac.uk/~dgadd/offsets/offreqag.html>.

¹⁴ *Countertrade & Offset*, Vol. XVII, No. 10, May 24, 1999.

3.12 United Arab Emirates: the Use of Offsets

The United Arab Emirates (UAE) has developed an extensive offset policy aimed at developing its economy. The UAE Offsets Group (UOG) administers the program and seeks suppliers who show a commitment to the growth of the UAE, not just to the procurement or the offset agreement. In this sense, the UAE Offset Program is a prime example of a developing country using defense procurements to benefit other aspects of its economy. As Dr. Amin Badr-El-Din comments in a UOG brochure,

The aim of our offset program is to enhance security by leveraging off our defense procurements to fulfill both our military and economic goals simultaneously. . . The UAE Offset Program is designed to generate wealth among the people of the UAE and assist with the global integration of its economy by the creation of commercially viable ventures through partnerships and strategic alliances between the domestic private sector and international business.¹⁵

Offsets are required on all UAE Armed Forces procurements over \$10 million. Offsets must be a minimum of 60 percent of the imported content of the defense item. Pre-offset credits may help a prime contractor win an award; the credits may later be traded or banked for future obligations. Prime contractors may choose to fulfill offset obligations in any industry except oil. Credit is awarded based on the profits of the projects undertaken in the offset program. Since the UOG strives to increase its gross domestic product (GDP) per capita, credits will not be awarded for projects that are labor intensive.

Between 1993 and 1998, U.S. defense prime contractors signed \$180 million in new offset agreements in connection with \$325 million in export sales, for an average of 55 percent required offsets. During this same time period, U.S. primes fulfilled part of these and previous agreements with \$65 million worth of transactions, receiving \$206 million worth of credits. These credits average a multiplier of 3.2.

The UOG has been quite creative in generating new ways to fulfill offsets and help the economy. For example, offsets were used to manage Ghantoot, a world-class polo and

¹⁵ Partnerships for a Better Future Brochure, *UAE Offsets Group*.

racine facility that stages annual international events.¹⁶ The UOG encourages foreign offset partners to launch Initial Public Offerings (IPOs) for all of their joint venture projects. Not only do the IPOs raise money for the projects, but they also increase profits. In 1998, a new joint venture company called International Fish Farming Company was created for offset credits, in which Dassault and other foreign partners provided 45 percent of the capital investment and 55 percent came from public and IPO funding. Recently, Boeing joined Berlitz International, Inc. and local investors to fulfill an offset obligation by establishing a Berlitz Language Center in Abu Dhabi.¹⁷

In early 2000, the United States approved the sale of 80 F-16s to the UAE. The radar equipment on the UAE fighters will be technologically superior to any other F-16s made to date, including those used by the U.S. military. With the nature of the UAE offset program and its requirement for partnerships, the UAE is paying for the majority of the R&D for the new technology.

3.2 Industrialized Nations and Direct Offsets

Industrialized countries in Europe originally received offsets from the United States after World War II. These offsets were mainly direct to help these countries rebuild their defense industries. Indirect offsets provided at this time were also focused on rebuilding, consisting mainly of infrastructure projects and public works very similar to those that developing countries now receive.

In recent years, however, European nations have less justification for demanding direct or indirect offsets. Their economies are among the most developed in the world. The United States is now subsidizing strong industrialized countries in their efforts to further enhance existing competitive industries. Further, many European countries use offsets to make up for their lack of spending on defense and related research and development.

¹⁶ Ibid.

¹⁷ *Countertrade & Offset*, Vol. XVII, No. 12; June 26, 2000. CTO Data Services Co.

3.21 Finland: the Work of Indirect Offsets

Finland is a prime example of an industrialized country that receives large amounts of indirect offsets. Finland requires 100 percent offsets on any defense procurement over FIM 50 million (about \$7.4 million). Based on offset policy changes initiated by the Finnish Ministry of Trade, which took effect in 1998, the current Finnish offset policy focuses on indirect offsets.

The highly publicized sale in 1993 by McDonnell Douglas (now Boeing) of F/A-18s resulted in \$3 billion in offset obligations.¹⁸ By reviewing income and employment data for several of the largest Finnish companies who also received offsets, it is likely that offsets probably aided these companies' growth (see Chart 9¹⁹).

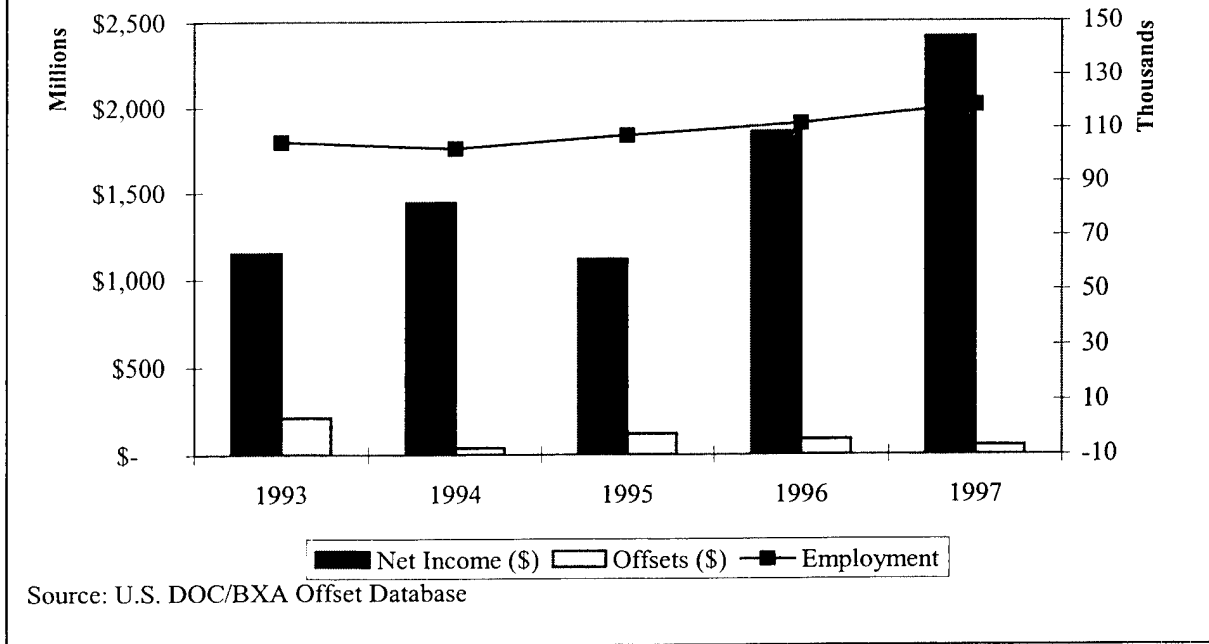
To assess the impact of offsets on Finnish offset recipient companies, it was necessary to define a small group of firms receiving a relatively large portion of the total offset amount. Then, a list of Finland's 500 largest companies²⁰ was compared against the list of Finnish offset recipients; those industrial participation recipients that appeared among the top 150 private companies were selected for further examination. A narrower group was selected based on percentage of offset agreements received, ranking in the Finnish industry, and the type of offset received.

¹⁸ The International Association of Machinists and Aerospace Workers, 1997.
<http://www.iamaw.org/news/journal/spring97/defensefirms.html>.

¹⁹ 1999 employment data: <http://www.wow.fi/WOW/?path=500biggest/detail&com>, 1993-1998 employment data: <http://www.nan.shh.fi/NAN/Corp/>; net income from company websites.

²⁰ Taouselämä, <http://www.wow.fi/WOW/?path=500biggest>, based on financial statements and Finnish accounting standards.

Chart 9
Aggregated Indicators for Several Finnish Offset Recipients



The Finnish recipients studied seem to have benefited from the offsets. After a large surge in offsets in 1993, the aggregated net income of the companies gradually increased, ending 10 percent higher in 1998 than in 1993. As the benefits of offsets are not immediate, it is to be expected that the net incomes rose significantly only in 1996 and 1997. Of course, offsets are not the only reason for an increase in net income, but are undoubtedly a factor. With these rises in net income, employment also increased by 13 percent; these numbers may have also increased due to an upswing in the overall European economy.

The companies studied represented 30 percent of all offsets received by Finnish companies from U.S. defense primes from 1993 to 1998. Exactly half of these offsets were direct and half were indirect, although the direct offsets were much fewer and larger in value. The majority of the offsets were purchases, representing 37 percent of the offsets to these companies, as shown in Chart 10. Purchases essentially aid recipient companies by creating demand for their products. Moreover, due to these aforementioned purchases, a company's

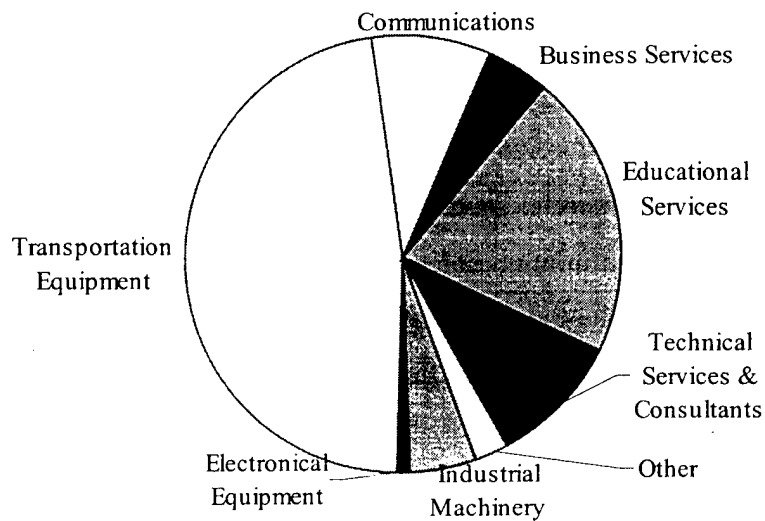
need for employment will usually increase as well. As shown in Chart 9, the offsets to these companies in 1993 alone represented almost 20 percent of their combined total net income.

As stated in the Finnish Rules of Industrial Participation, Finland's requirement for offsets is founded on a desire to support small- and medium-sized businesses as they are entering the global marketplace, to increase employment, and to maintain or improve the overall health of the economy. See Chart 10 for offsets by industry received by Finnish companies. In light of this notion, it is understandable that a chemical company struggling with plummeting net income figures received its offset portion in purchases of industrial chemicals, the company's main product. A large company producing communications equipment received offset benefits through purchases of its electronics and communications equipment; this satisfies the Finnish requirement for receiving offset credit because it is "benefiting high-level engineering industry, electronics industry, or other advanced industries in Finland."²¹ In this particular case, a significant increase in the number of employees resulted in an even more staggering growth in net income. Whereas employment merely doubled, net income quadrupled. Arguably, there are many other factors contributing to a company's rapid growth; however, the trends show that these companies have increased employment and net income recently after receiving these offsets.

In addition to receiving offset benefits through purchases made by U.S. companies, many Finnish offset recipients also benefited from technology transfers. Transferring and introducing know-how and new technology to Finnish companies may not only have impacted a specific industry sector or company, but it is likely that it also may have strengthened the trend of growing investment in commercial research and development, an economic indicator signaling high level of innovation. As Finland is already a leader in investment in commercial R&D, offsets in this area are certainly not necessary for national security purposes.

²¹ Finnish Ministry of Defense, *Draft Agreement on Industrial Participation, Rules of Industrial Participation*.

Chart 10
Offsets by Industry for Finnish Companies Studied



Source: U.S. DOC/BXA Offset Database

3.22 Israel: Foreign Military Financing and Offsets

The Industrial Cooperation Authority (ICA), a division of the Ministry of Industry and Trade, administers the Israeli offset policy, called Industrial Cooperation. The ICA monitors all industrial cooperation agreements made between government agencies and foreign firms. The Israeli government seeks long-term relationships between Israeli and foreign firms that will help Israeli companies find new access to global markets. The government places importance on subcontracting, technology transfer, investment, and market growth.

Israel requires offsets from foreign companies on government procurements over \$50,000, for both defense and commercial goods. This minimum value is quite low compared to other countries (world average minimum defense contract requiring offsets is approximately \$15 million). While Israeli industrial cooperation agreements only require offsets equal to 35 percent of the procurement value, the offset is often much greater.

Between 1993 and 1998, U.S. defense companies entered into 23 new offset agreements with the Israeli government. These agreements had a total export value of \$945 million with a total offset value of \$468 million. These new agreements actually mandate offsets of 50 percent, higher than the 35 percent stated by the ICA. Over the same six-year period, U.S. defense companies partially fulfilled these and previous obligations with offset transactions totaling \$1.1 billion. Approximately \$588 million of these transactions were related directly to the sales items. These direct offsets included subcontractor production and technology transfers, allowing Israeli workers to manufacture components for the defense items the country was purchasing. The remaining transactions were required investments, which facilitated economic growth in Israel, increasing the competitiveness of Israeli companies.

Each year, the U.S. federal budget appropriates military aid in the form of Foreign Military Financing (FMF) to Israel. In 1999, the U.S. Government appropriated \$1.86 billion, requiring all but \$400 million be spent on U.S. military goods (78.5 percent of the funds must be spent on procurements from the United States). The FMF funds are given to Israel, who then pays U.S. prime contractors for goods.

Despite the fact that Israel receives funding to purchase the defense items from the United States (Egypt has a similar arrangement), Israel also requires offsets on its large defense procurements. U.S. prime contractors use offset packages to compete against each other to win these contracts. The offsets often take the form of direct investments into Israel or co-production of the purchased defense item. With these offsets, Israel is purchasing a defense system that will be partly produced in Israel. Recently, the U.S. Government agreed to allow Israel to waive provisions of the U.S. Arms Export Control Act that would have limited the amount of U.S. aid money that Israel could spend locally.²²

Israeli companies often become competitors to U.S. companies, in many cases with the technology gained through partnerships and offsets. A U.S. company can form a joint venture with an Israeli company to co-develop new technology. This gives the U.S. defense prime contractor offset credits as well as an opportunity for earning profits. The partnerships may prove profitable for a U.S. contractor, but Israeli suppliers often displace former U.S. suppliers. Oftentimes, U.S. companies also bring technology to a partnership and also receive offset credit for the technology transfer.

3.3 Sophistication and Complexity

More and more countries are formalizing offset policies. For example, the Czech Republic, Brazil and Poland have recently implemented or revised offset regulations. Offset policies constantly change and become stricter as foreign governments redefine their defense and development needs. In order to adjust to this moving target, defense firms are becoming more creative in finding new means to fulfill offset obligations. In particular, firms are using a small but growing number of banking schemes, IPOs, business connections, and capital infusions into promising new companies, with some positive results. Firms apply these practices while focusing on a country's defense and development goals to offer the most enticing offset.

These new methods are increasing the complexities of offset transactions. For example, this year, Lockheed Martin signed an \$8 billion contract to sell 80 F-16s to the UAE Part of the

²² U.S. Agrees to Allow Israel to Spend More Aid at Home. *Defense News*, Vol. 15 No. 24, June 19, 2000.

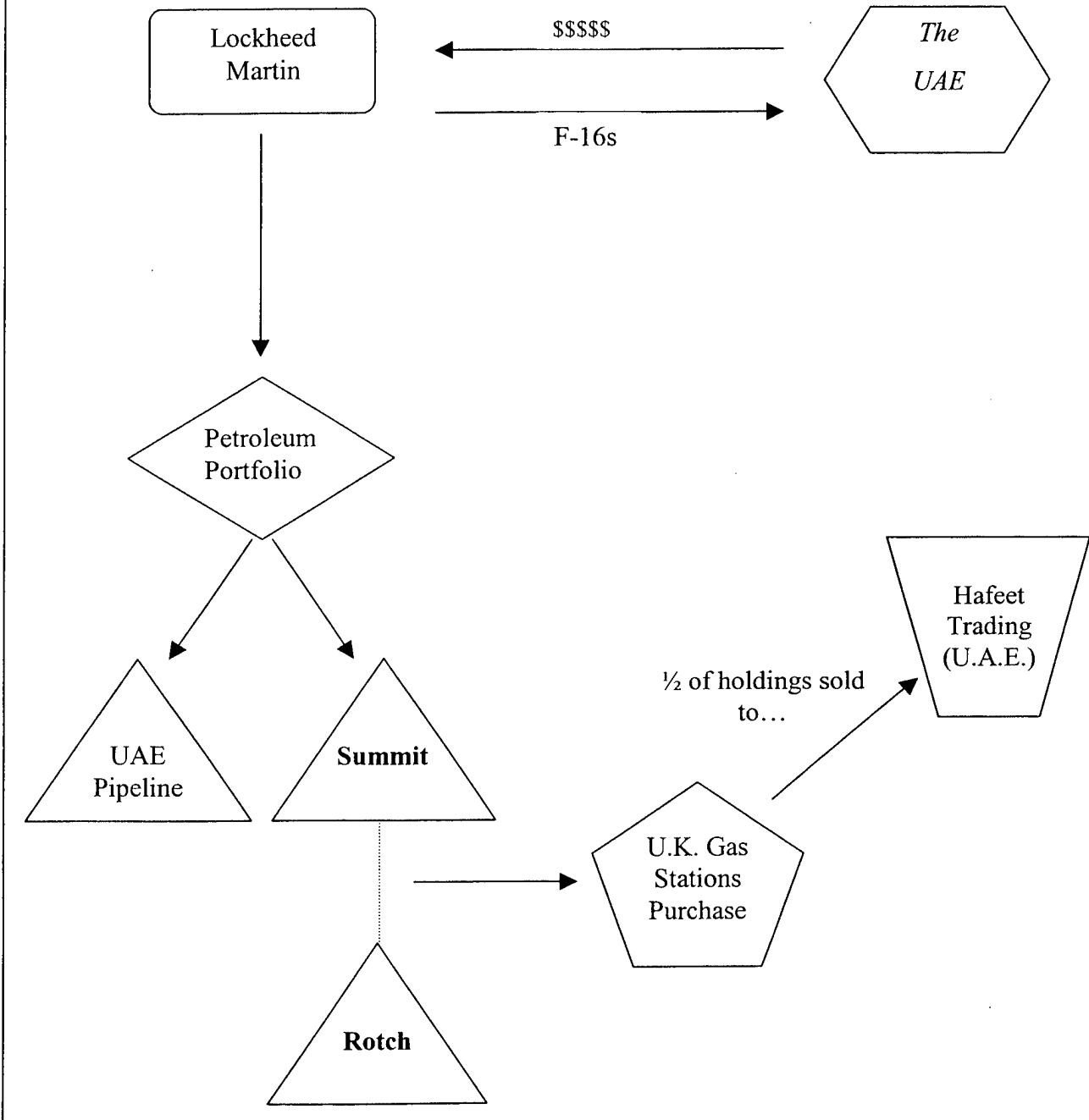
offset obligation is expected to be fulfilled through investing \$160 million in a petroleum-related portfolio, which includes a natural gas pipeline through the UAE, as well as a United Kingdom start-up called Summit Corporate Services Ltd. Summit is trying to help the UAE buy into oil tankers and European gasoline stations.²³ Summit, founded by an American, is partnering with another U.K. company, Rotch Property Group Ltd., to purchase gas stations in the United Kingdom. After the purchase, the partners plan to sell half of their holdings to a UAE company, Hafeet Trading. This chain of financial dealings fulfills part of Lockheed's future offset obligations. Chart 12²⁴ shows the complexity of this offset arrangement.

The shift from traditional offset activity is difficult to capture in the data submitted by prime defense contractors for this report. The information presented here is largely anecdotal and taken from the media, company press releases, conferences, and discussions with industry.

²³ Pearl, Daniel. Arms Dealers Get Creative With Offsets. *The Wall Street Journal*, 20 April 2000.

²⁴ Ibid.

Chart 11
Example of a Complex Offset with the UAE



Source: U.S. DOC/BXA Offset Database

4.0 PRESIDENTIAL COMMISSION

4.1 Background and Structure

In July, 1999, Senator Feingold introduced a bill entitled the Defense Offsets Disclosure Act of 1999 which called for increased monitoring of the use of offsets in international defense trade.²⁵ This bill was incorporated into an appropriations bill that became law in November 1999 (see final version at Appendix C). The legislation created the National Commission on the Use of Offsets in Defense Trade, and a parallel President's Council on Offsets in Commercial Trade was created by Executive Order. The purpose of the Commission and parallel Council is to study offsets, focusing in particular on their effect on the aerospace industry and its suppliers, as well as other high-technology industries, and to analyze their impact on national security.

The Commission and Council share the same members and are made up of six representatives from the private sector and five from the federal government. The private sector membership includes:

- R. Thomas Buffenbarger, International President of the International Association of Machinists and Aerospace Workers
- Philip M. Condit, Chairman and Chief Executive Officer of the Boeing Company;
- Vance D. Coffman, Chairman of the Board and Chief Executive Officer of Lockheed Martin Corporation;
- Pierre Chao, Managing Director and Senior Aerospace/defense Analyst, Credit Suisse First Boston Corporation;
- David C. Mowery, Professor of Business at the University of California at Berkeley;
- and
- Ann R. Markusen, Professor of Planning and Public Affairs at the University of Minnesota.

²⁵ Defense Offsets Disclosure Act of 1999 (Pub.L. 106-113, Div. B, S1000(a)(7) [Div. B, Title XII, Subtitle D (SS 1241 to 1247)], Nov. 29, 1999, 113 Stat. 15.

The federal government representatives include five members from the executive branch, including one each from the Office of Management and Budget, the Department of Commerce, the Department of Defense, the Department of State, and the Department of Labor. In most cases, the Secretary of the Department has been appointed.

The Commission and Council have until the end of the year to report to Congress and the President on future U.S. policies regarding military and commercial offsets. As stated in the original legislation, the report is expected to include a strategy for unilateral, bilateral or multilateral negotiations toward a treaty on offset standards, with a goal of reducing any detrimental effects of offsets to the nation's economy.

4.2 Actions to Date

The Commission and Council held their first public meeting on December 4, 2000. The purpose of the meeting was to allow the Commissioners to hear from expert witnesses about the impact of offsets on the nation's economy. The witnesses represented a wide range of views on offsets, from labor, academia, and private industry. The Commission and Council published an interim report in January 2001. The next meeting is planned for the summer of 2001, when the newly-appointed Administration officials will meet for the first time.

For more information about the activities of the Commission and Council, please see their website at <http://www.offsets.brtrc.net/>.

Appendix A:

Section 309, Defense Production Act of 1950, as amended

THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED
(50 U.S.C. App. 2061, et seq.)

Section 309.

(a) Annual Report on Impact of Offsets--

(1) Report Required -- Not later than 18 months after the date of the enactment of the Defense Production Act Amendments of 1984, and annually thereafter, the President shall submit to the Committee on Banking, Finance and Urban Affairs of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate, a detailed report on the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States.

(2) Duties of the Secretary of Commerce (hereafter in this subsection referred to as 'the Secretary' shall--

(A) prepare the report required by paragraph (1);

(B) consult with the Secretary of Defense, the Secretary of the Treasury, the Secretary of State, and the United States Trade Representative in connection with the preparation of such report; and

(C) function as the President's Executive Agent for carrying out this section.

(b) Interagency Studies and Related Data—

(1) Purpose of Report-- Each report required under subsection (a) shall identify the cumulative effects of offset agreements on—

(A) the full range of domestic defense productive capability (with special attention paid to the firms serving as lower-tier subcontractors or suppliers); and

(B) the domestic defense technology base as a consequence of the technology transfers associated with such offset agreements.

(2) Use of Data--Data developed or compiled by any agency while conducting any interagency study or other independent study or analysis shall be made available to

the Secretary to facilitate the execution of the Secretary's responsibilities with respect to trade offset and countertrade policy development.

(c) Notice of Offset Agreements--

(1) In General--If a United States firm enters into a contract for the sale of a weapon system or defense-related item to a foreign country or foreign firm and such contract is subject to an offset agreement exceeding \$5,000,000 in value, such firm shall furnish to the official designated in the regulations promulgated pursuant to paragraph (2) information concerning such sale.

(2) Regulations--The information to be furnished under paragraph (1) shall be prescribed in regulations promulgated by the Secretary. Such regulations shall provide protection from public disclosure for such information, unless public disclosure is subsequently specifically authorized by the firm furnishing the information.

(d) Contents of Report--

(1) In General--Each report under subsection (a) shall include--

(A) a net assessment of the elements of the industrial base and technology base covered by the report;

(B) recommendations for appropriate remedial action under the authority of this Act, or other law or regulations;

(C) a summary of the findings and recommendations of any interagency studies conducted during the reporting period under subsection (b);

(D) a summary of offset arrangements concluded during the reporting period for which information has been furnished pursuant to subsection (c); and

(E) a summary and analysis of any bilateral and multilateral negotiations relating to the use of offsets completed during the reporting period.

(2) Alternative Findings or Recommendations--Each report required under this section shall include any alternative findings or recommendations offered by any

departmental Secretary, agency head, or the United States Trade Representative to the Secretary.

(e) Utilization of Annual Report in Negotiations—

The findings and recommendations of the reports required by subsection (a), and any interagency reports and analyses shall be considered by representatives of the United States during bilateral and multilateral negotiations to minimize the adverse effects of offsets.

Appendix B:

Federal Register – Docket No. 940364-4064

[Federal Register: December 2, 1994]

DEPARTMENT OF COMMERCE

Bureau of Export Administration

15 CFR Part 701

[Docket No. 940364-4064]

Offsets in Military Exports

AGENCY: Bureau of Export Administration,
Department of Commerce.

ACTION: Final rule.

SUMMARY: The Bureau of Export Administration (BXA) is amending the National Security Industrial Base Regulations to require U.S. firms entering into offset agreements associated with the sale of defense articles and/or defense services to foreign governments or foreign companies to provide BXA certain information regarding those agreements when they exceed \$5,000,000 in value. This new regulation is being promulgated pursuant to the Defense Production Act of 1950, as amended.

DATES: This rule is effective December 2, 1994. Annual reports must be submitted on or before June 15 of the succeeding year, except that the report for calendar year 1993 must be submitted on or before March 15, 1995.

ADDRESSES: Annual reports should be sent to Brad Botwin, Director, Strategic Analysis Division, Office of Strategic Industries and Economic Security, Attention: Offset Regulation Report, Room 3878, U.S. Department of Commerce, 14th Street and Pennsylvania Avenue N.W., Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Erin Finn, Offsets Program Manager, Strategic Analysis Division, Office of Strategic Industries and Economic Security, Room 3878, U.S. Department of Commerce, 14th Street and Pennsylvania Avenue N.W., Washington, DC 20230. Telephone 202-482-2322 or Fax 202-482-5650.

SUPPLEMENTARY INFORMATION:

BACKGROUND: The Defense Production Act Amendments of 1992 amended the Defense

Production Act of 1950 (the Act). The Act now requires that U.S. firms entering into contracts for the sale of defense articles or defense services to foreign countries or foreign firms that are subject to offset agreements exceeding \$5,000,000 in value to furnish information regarding such sales to the Secretary of Commerce (the Secretary). The Act also now requires the Secretary to establish regulations to collect this information and to protect it from public disclosure unless public disclosure is specifically authorized by the firm furnishing the information. The Act further requires the Secretary to serve as the President's executive agent in preparing an annual report to Congress on the impact of offsets on the United States.

This report will include an aggregated summary of information provided to the Secretary by U.S. industry pursuant to the regulation provided here. It will address the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States.

On April 26, 1994, BXA published in the Federal Register (59 FR 21678) a proposed rule on reporting of offsets in military exports designed to elicit comments, suggestions, information, or advice relative to the proposed regulation. 20 responses were received commenting on the proposed rule. The two major comments concerned the requirements to submit semi-annual reports and to report each individual transaction undertaken to fulfill an offset commitment. The rule has been amended to address these concerns.

Rulemaking Requirements

1. This rule has been determined to be "significant" for purposes of Executive Order 12866.
2. This rule involves collections of information subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These collections have been approved by the Office of Management and Budget under control number 940364-4212. Public reporting burden for this collection of information is estimated to be 5 to 60 hours per response, with an average of 10 hours, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

3. This rule does not contain policies with Federalism implications sufficient to warrant preparation of a Federalism assessment under Executive Order 12612.

4. The General Counsel of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule will not have a significant economic impact on a substantial number of small entities. It is anticipated that the rule will primarily affect large defense contractors that engage in offset agreements with foreign governments. Moreover, the rule is not expected to pose a burden because firms engaging in offset transactions already must prepare periodic accounts of progress toward fulfillment of offset obligations for the foreign entity that is party to the offset agreement. The information to be collected pursuant to these regulations is less than that required by these foreign parties. With regard to new offset agreements entered into, the information requested is readily available and will take a minimum amount of time to assemble by the parties involved.

List of Subjects in 15 CFR Part 701

Administration practice and procedure, Arms and munitions, Exports, Offsets, Reporting requirements.

Accordingly, the National Security Industrial Base Regulations (15 CFR parts 700-709) are amended by adding part 701 to read as follows:

PART 701--REPORTING OF OFFSETS AGREEMENTS IN SALES OF WEAPON SYSTEMS OR DEFENSE-RELATED ITEMS TO FOREIGN COUNTRIES OR FOREIGN FIRMS

Sec.

701.1 Purpose.

701.2 Definitions.

701.3 Applicability and Scope.

701.4 Procedures.

701.5 Confidentiality.

Authority: Title I, sec. 124, Pub. L 102-558, 106 Stat. 4207 (50 U.S.C App. 2099).

Sec. 701.1 Purpose.

The Defense Production Act Amendments of 1992 require the Secretary of Commerce to promulgate

regulations for U.S. firms entering into contracts for the sale of defense articles or defense services to foreign countries or foreign firms that are subject to offset agreements exceeding \$5,000,000 in value to furnish information regarding such agreements. The Secretary of Commerce has designated the Bureau of Export Administration as the organization responsible for implementing this provision. The information provided by U.S. firms will be aggregated and used to determine the impact of offset transactions on the defense preparedness, industrial competitiveness, employment, and trade of the United States. Summary reports will be submitted annually to the Congress pursuant Section 309 of the Defense Production Act of 1950, as amended.

Sec. 701.2 Definitions.

(a) Offsets--Compensation practices required as a condition of purchase in either government-to-government or commercial sales of defense articles and/or defense services as defined by the Arms Export Control Act and the International Traffic in Arms Regulations.

(b) Military Export Sales--Exports that are either Foreign Military Sales (FMS) or commercial (direct) sales of defense articles and/or defense services as defined by the Arms Export Control Act and International Traffic in Arms Regulations.

(c) Prime Contractor--A firm that has a sales contract with a foreign entity or with the U.S. Government for military export sales.

(d) United States--Includes the 50 states, the District of Columbia, Puerto Rico, and U.S. territories.

(e) Offset Agreement--Any offset as defined above that the U.S. firm agrees to in order to conclude a military export sales contract. This includes all offsets, whether they are "best effort" agreements or are subject to penalty clauses.

(f) Offset Transaction--Any activity for which the U.S. firm claims credit for full or partial fulfillment of the offset agreement. Activities to implement offset agreements may include, but are not limited to, co-production, licensed production, subcontractor production, overseas investment, technology transfer countertrade, barter, counterpurchase, and buy back.

(g) Direct Offset--Contractual arrangements that involve defense articles and services referenced in the sales agreement for military exports.

(h) Indirect Offset--Contractual arrangements that involve defense goods and services unrelated to the exports referenced in the sales agreement.

Sec. 701.3 Applicability and scope.

(a) This rule applies to U.S. firms entering contracts for the sale of defense articles or defense services (as defined in the Arms Export Control Act and International Traffic in Arms Regulations) to a foreign country or foreign firm for which the contract is subject to an offset agreement exceeding \$5,000,000 in value.

(b) This rule applies to all offset transactions completed in performance of existing offset commitments since January 1, 1993 for which offset credit of \$250,000 or more has been claimed from the foreign representative, and new offset agreements entered into since that time.

Sec. 701.4 Procedures.

(a) To avoid double counting, firms should report only offset transactions for which they are directly responsible for reporting to the foreign customer (i.e., prime contractors should report for their subcontractors if the subcontractors are not a direct party to the offset agreement).

(b) Reports should be delivered to the Offsets Program Manager, U.S. Department of Commerce, Office of Strategic Industries and Economic Security, Bureau of Export Administration, Room 3878, 14th Street and Pennsylvania Avenue, N.W., Washington DC 20230. The first industry reports should be submitted to the Bureau of Export Administration not later than March 15, 1995 and should cover offset transactions completed during the calendar year 1993, as well as information regarding unfulfilled offset agreements. After this initial submission, companies should provide information once yearly not later than June 15 covering the preceding calendar year. All submissions should include a point of contact (name and telephone number) and should be by a company official authorized to provide such information.

(c) Companies may submit this information in computerized spreadsheet/database format (e.g., Lotus 1-2-3, Quattro Pro, dbase IV) using a 3.5 inch 1.44 megabyte diskette, accompanied by a printed copy.

(d) Offset Transaction Reporting.

(1) Reports should include an itemized list of offset transactions completed during the reporting period, including the following data elements (Estimates are acceptable when actual figures are unavailable; estimated figures should be followed by the letter "E"):

(i) Name of Country--Country of entity purchasing the weapon system, defense item or service subject to offset.

(ii) Name or Description of Weapon system, Defense Item, or Service Subject to Offset.

(iii) Name of Offset Fulfilling Entity--Entity fulfilling offset transaction (including first tier subcontractors).

(iv) Name of Offset Receiving Entity--Entity receiving benefits from offset transaction.

(v) Offset Credit Value--Dollar value credits claimed by fulfilling entity including any intangible factors/multipliers.

(vi) Actual Offset Value--Dollar value of the offset transaction without multipliers/intangible factors.

(vii) Description of Offset Product/Service--Short description of the type of offset (e.g., co-production, technology transfer, subcontract activity, training, purchase, cash payment, etc.).

(viii) Broad Industry Category--Broad classification of the industry in which the offset transaction was fulfilled (e.g., aerospace, electronics, chemicals, industrial machinery, textiles, etc.). Firms may request a list of the Standard Industry Classification (SIC) codes to assist in identifying an appropriate industry category. Forward such requests to the Offsets Program Manager, U.S. Department of Commerce, Office of Strategic Industries and Economic Security, Bureau of Export Administration, Room 3878, 14th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20230 or Fax 202-482-5650.

(ix) Direct or Indirect Offset--Specify whether the offset transaction was direct or indirect offset.

(x) Name of Country in Which Offset was Fulfilled--United States, purchasing country, or third country.

(2) Offset transactions of the same type (same fulfilling entity, receiving entity, and offset product/service) completed during the same reporting period may be combined.

(3) Any necessary comments or explanations relating to the above information should be footnoted and supplied on separate sheets attached to the report.

(e) Reporting on Offset Agreements Entered Into.

(1) In addition to the itemized list of offset transactions completed during the year as specified above, U.S. firms should provide information regarding new offset agreements entered into during the year, including the following elements:

(i) Name of Country--Country of entity purchasing the weapon system, defense item, or service subject to offset;

(ii) Name or Description of Weapon System, Defense Item, or Service Subject to Offset;

(iii) Names/Titles of Signatories to the Offset Agreement;

(iv) Value of Export Sale Subject to Offset (approximate);

(v) Total Value of the Offset Agreement;

(vi) Term of Offset Agreement (months);

(vii) Description of Performance Measures--(e.g., "Best Efforts," Liquidated Damages, (describe)).

Sec. 701.5 Confidentiality.

(a) As provided by Sec. 309(c) of the Defense Production Act of 1950, as amended, BXA shall not publicly disclose the information it receives pursuant to this Part, unless the firm furnishing the information subsequently specifically authorizes public disclosure.

(b) Public disclosure must be authorized in writing by an official of the firm competent to make such an authorization.

(c) Nothing in this provision shall prevent the use of data aggregated from information provided pursuant to this part in the summary report to the Congress described in Sec. 701.1.

Sue E. Eckert,

Assistant Secretary for Export Administration.

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Dated: November 28, 1994.

Appendix C:
Defense Offsets Disclosure Act of 1999

Public Law 106-113

Title XII

Subtitle D--Defense Offsets Disclosure

SEC. 1241. SHORT TITLE.

This subtitle may be cited as the "Defense Offsets Disclosure Act of 1999".

SEC. 1242. FINDINGS AND DECLARATION OF POLICY.

(a) Findings.--Congress makes the following findings:

(1) A fair business environment is necessary to advance international trade, economic stability, and development worldwide, is beneficial for American workers and businesses, and is in the United States national interest.

(2) In some cases, mandated offset requirements can cause economic distortions in international defense trade and undermine fairness and competitiveness, and may cause particular harm to small- and medium-sized businesses.

(3) The use of offsets may lead to increasing dependence on foreign suppliers for the production of United States weapons systems.

(4) The offset demands required by some purchasing countries, including some close allies of the United States, equal or exceed the value of the base contract they are intended to offset, mitigating much of the potential economic benefit of the exports.

(5) Offset demands often unduly distort the prices of defense contracts.

(6) In some cases, United States contractors are required to provide indirect offsets which can negatively impact nondefense industrial sectors.

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(7) Unilateral efforts by the United States to prohibit offsets may be impractical in the current era of globalization and would severely hinder the competitiveness of the United States defense industry in the global market.

(8) The development of global standards to manage and restrict demands for offsets would enhance United States efforts to mitigate the negative impact of offsets.

(b) Declaration of Policy.--It is the policy of the United States to monitor the use of offsets in international defense trade, to promote fairness in such trade, and to ensure that foreign participation in the production of United States weapons systems does not harm the economy of the United States.

SEC. 1243. DEFINITIONS.

In this subtitle:

(1) Appropriate congressional committees.--The term "appropriate congressional committees" means--

(A) the Committee on Foreign Relations of the Senate; and

(B) the Committee on International Relations of the

House of Representatives.

(2) G-8.--The term ``G-8'' means the group consisting of France, Germany, Japan, the United Kingdom, the United States, Canada, Italy, and Russia established to facilitate economic cooperation among the eight major economic powers.

(3) Offset.--The term ``offset'' means the entire range of industrial and commercial benefits provided to foreign governments as an inducement or condition to purchase military goods or services, including benefits such as coproduction, licensed production, subcontracting, technology transfer, in-country procurement, marketing and financial assistance, and joint ventures.

(4) Transatlantic economic partnership.--The term ``Transatlantic Economic Partnership'' means the joint commitment made by the United States and the European Union to reinforce their close relationship through an initiative involving the intensification and extension of multilateral and bilateral cooperation and common actions in the areas of trade and investment.

(5) Wassenaar arrangement.--The term ``Wassenaar Arrangement'' means the multilateral export control regime in which the United States participates that seeks to promote transparency and responsibility with regard to transfers of conventional armaments and sensitive dual-use items.

(6) World trade organization.--The term ``World Trade Organization'' means the organization established pursuant to the WTO Agreement.

(7) WTO agreement.--The term ``WTO Agreement'' means the Agreement Establishing the World Trade Organization entered into on April 15, 1994.

SEC. 1244. SENSE OF CONGRESS.

It is the sense of Congress that--

(1) the executive branch should pursue efforts to address trade fairness by establishing reasonable, business-friendly standards for the use of offsets in international business transactions between the United States and its trading partners and competitors;

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(2) the Secretary of Defense, the Secretary of State, the Secretary of Commerce, and the United States Trade Representative, or their designees, should raise with other industrialized nations at every suitable venue the need for transparency and reasonable standards to govern the role of offsets in international defense trade;

(3) the United States Government should enter into discussions regarding the establishment of multilateral standards for the use of offsets in international defense trade through the appropriate multilateral fora, including such organizations as the Transatlantic Economic Partnership, the Wassenaar Arrangement, the G-8, and the World Trade Organization; and

(4) the United States Government, in entering into the discussions described in paragraph (3), should take into account

the distortions produced by the provision of other benefits and subsidies, such as export financing, by various countries to support defense trade.

SEC. 1245. REPORTING OF OFFSET AGREEMENTS.

(a) Initial Reporting of Offset Agreements.--

(1) Government-to-government sales.--Section 36(b)(1) of the Arms Export Control Act (22 U.S.C. 2776(b)(1)) is amended in subparagraph (C) of the fifth sentence, by striking ``and a description'' and all that follows and inserting ``and a description of any offset agreement with respect to such sale;''.

(2) Commercial sales.--Section 36(c)(1) of the Arms Export Control Act (22 U.S.C. 2776(c)(1)) is amended in the second sentence, by striking ``(if known on the date of transmittal of such certification)'' and inserting ``and a description of any such offset agreement''.

(b) Confidentiality of Information Relating to Offset Agreements.-- Section 36 of the Arms Export Control Act (22 U.S.C. 2776) is amended--

- (1) by redesignating the second subsection (e) (as added by section 155 of Public Law 104-164) as subsection (f); and
- (2) by adding at the end the following new subsection:

``(g) Information relating to offset agreements provided pursuant to subparagraph (C) of the fifth sentence of subsection (b)(1) and the second sentence of subsection (c)(1) shall be treated as confidential information in accordance with section 12(c) of the Export Administration Act of 1979 (50 U.S.C. App. 2411(c)).''.

SEC. 1246. EXPANDED PROHIBITION ON INCENTIVE PAYMENTS.

(a) In General.--Section 39A(a) of the Arms Export Control Act (22 U.S.C. 2779a(a)) is amended--

- (1) by inserting ``or licensed'' after ``sold''; and
- (2) by inserting ``or export'' after ``sale''.

(b) Definition of United States Person.--Section 39A(d)(3)(B)(ii) of the Arms Export Control Act (22 U.S.C. 2779a(d)(3)(B)(ii)) is amended by inserting ``or by an entity described in clause (i)'' after ``subparagraph (A)''.

SEC. 1247. ESTABLISHMENT OF REVIEW COMMISSION.

(a) In General.--There is established a National Commission on the Use of Offsets in Defense Trade (in this section referred

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to as the ``Commission'') to address all aspects of the use of offsets in international defense trade.

(b) Commission Membership.--Not later than 120 days after the date of enactment of this Act, the President, with the concurrence of the Majority and Minority Leaders of the Senate and the Speaker and Minority Leader of the House of Representatives, shall appoint 11 individuals to serve as members of the Commission. Commission membership shall

include--

- (1) representatives from the private sector, including--
 - (A) one each from--
 - (i) a labor organization,
 - (ii) a United States defense manufacturing company dependent on foreign sales,
 - (iii) a United States company dependent on foreign sales that is not a defense manufacturer, and
 - (iv) a United States company that specializes in international investment, and
 - (B) two members from academia with widely recognized expertise in international economics; and
- (2) five members from the executive branch, including a member from--
 - (A) the Office of Management and Budget,
 - (B) the Department of Commerce,
 - (C) the Department of Defense,
 - (D) the Department of State, and
 - (E) the Department of Labor.

The member designated from the Office of Management and Budget shall serve as Chairperson of the Commission. The President shall ensure that the Commission is nonpartisan and that the full range of perspectives on the subject of offsets in the defense industry is adequately represented.

(c) Duties.--The Commission shall be responsible for reviewing and reporting on--

- (1) the full range of current practices by foreign governments in requiring offsets in purchasing agreements and the extent and nature of offsets offered by United States and foreign defense industry contractors;
- (2) the impact of the use of offsets on defense subcontractors and nondefense industrial sectors affected by indirect offsets; and
- (3) the role of offsets, both direct and indirect, on domestic industry stability, United States trade competitiveness and national security.

(d) Commission Report.--Not later than 12 months after the Commission is established, the Commission shall submit a report to the appropriate congressional committees. In addition to the items described under subsection (c), the report shall include--

- (1) an analysis of--
 - (A) the collateral impact of offsets on industry sectors that may be different than those of the contractor providing the offsets, including estimates of contracts and jobs lost as well as an assessment of damage to industrial sectors;
 - (B) the role of offsets with respect to competitiveness of the United States defense industry in international trade and the potential damage to the ability of United States contractors to compete if offsets were prohibited or limited; and

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(C) the impact on United States national security, and upon United States nonproliferation objectives, of the use of coproduction, subcontracting, and technology transfer with foreign governments or companies that results from fulfilling offset requirements, with particular emphasis on the question of dependency upon foreign nations for the supply of critical components or technology;

(2) proposals for unilateral, bilateral, or multilateral measures aimed at reducing any detrimental effects of offsets; and

(3) an identification of the appropriate executive branch agencies to be responsible for monitoring the use of offsets in international defense trade.

(e) Period of Appointment; Vacancies.--Members shall be appointed for the life of the Commission. Any vacancy in the Commission shall not affect its powers, but shall be filled in the same manner as the original appointment.

(f) Initial Meeting.--Not later than 30 days after the date on which all members of the Commission have been appointed, the Commission shall hold its first meeting.

(g) Meetings.--The Commission shall meet at the call of the Chairman.

(h) Commission Personnel Matters.--

(1) Compensation of members.--Each member of the Commission who is not an officer or employee of the Federal Government shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which such member is engaged in the performance of the duties of the Commission. All members of the Commission who are officers or employees of the United States shall serve without compensation in addition to that received for their services as officers or employees of the United States.

(2) Travel expenses.--The members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Commission.

(3) Staff.--

(A) In general.--The Chairman of the Commission may, without regard to the civil service laws and regulations, appoint and terminate an executive director and such other additional personnel as may be necessary to enable the Commission to perform its duties. The employment of an executive director shall be subject to confirmation by the Commission.

(B) Compensation.--The Chairman of the Commission may fix the compensation of the executive director and other personnel without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates, except that the rate of pay for the executive director and other

personnel may not exceed the rate payable for level V of the Executive Schedule under section 5316 of such title.

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(4) Detail of government employees.--Any Federal Government employee may be detailed to the Commission without reimbursement, and such detail shall be without interruption or loss of civil service status or privilege.

(5) Procurement of temporary and intermittent services.--The Chairman of the Commission may procure temporary and intermittent services under section 3109(b) of title 5, United States Code, at rates for individuals which do not exceed the daily equivalent of the annual rate of basic pay prescribed for level V of the Executive Schedule under section 5316 of such title.

(i) Termination.--The Commission shall terminate 30 days after the transmission of the report from the President as mandated in section 1248(b).

SEC. 1248. MULTILATERAL STRATEGY TO ADDRESS OFFSETS.

(a) In General.--The President shall initiate a review to determine the feasibility of establishing, and the most effective means of negotiating, a multilateral treaty on standards for the use of offsets in international defense trade, with a goal of limiting all offset transactions that are considered injurious to the economy of the United States.

(b) Report Required.--Not later than 90 days after the date on which the Commission submits the report required under section 1247(d), the President shall submit to the appropriate congressional committees a report containing the President's determination pursuant to subsection (a), and, if the President determines a multilateral treaty is feasible or desirable, a strategy for United States negotiation of such a treaty. One year after the date the report is submitted under the preceding sentence, and annually thereafter for 5 years, the President shall submit to the appropriate congressional committees a report detailing the progress toward reaching such a treaty.

(c) Required Information.--The report required by subsection (b) shall include--

(1) a description of the United States efforts to pursue multilateral negotiations on standards for the use of offsets in international defense trade;

(2) an evaluation of existing multilateral fora as appropriate venues for establishing such negotiations;

(3) a description on a country-by-country basis of any United States efforts to engage in negotiations to establish bilateral treaties or agreements with respect to the use of offsets in international defense trade; and

(4) an evaluation on a country-by-country basis of any foreign government efforts to address the use of offsets in international defense trade.

(d) Comptroller General Review.--The Comptroller General of the United States shall monitor and periodically report to Congress on the progress in reaching a multilateral treaty.

Appendix D:

Partial Listing of Previous U.S. Government Reports on Offsets

PARTIAL LISTING OF PREVIOUS U.S. GOVERNMENT REPORTS

October 1985 *Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries* - U.S. International Trade Commission.

December 1985 *The Impact of Offsets in Defense-Related Exports* - Office of Management and Budget.

December 1986 *Second Annual Report on the Impact of Offsets in Defense-Related Exports* - Office of Management and Budget.

December 1987 *Impact of Offsets in Defense-Related Exports: A Summary of the First Three Annual Reports* - Office of Management and Budget.

December 1988 *Offsets in Military Exports* - Office of Management and Budget.

April 1990 *Report on Offsets in Military Exports* - Office of Management and Budget.

April 1996 *Military Exports: Offset Demands Continue to Grow* - U.S. General Accounting Office.

May 1996 *Offsets in Defense Trade: A Study Conducted Under Section 309 of the Defense Production Act of 1950, As Amended* - U.S. Department of Commerce

June 1997 *Policy Issues in Aerospace Offsets: Report of A Workshop* - Board on Science, Technology, and Economic Policy, National Research Council.

August 1997 *Offsets in Defense Trade: A Study Conducted Under Section 309 of the Defense Production Act of 1950, As Amended* - U.S. Department of Commerce

January 1998 *Symposium Papers on: Trends and Challenges in Aerospace Offsets* - Board on Science, Technology, and Economic Policy, National Research Council.

August 1998 *Offsets in Defense Trade: A Study Conducted Under Section 309 of the Defense Production Act of 1950, As Amended* - U.S. Department of Commerce

December 1998 *Defense Trade: U.S. Contractors Employ Diverse Activities to Meet Offset Obligations* - U.S. General Accounting Office.

March 1999 *Trends and Challenges in Aerospace Offsets* - Board on Science, Technology, and Economic Policy, National Research Council.

October 1999 *Offsets in Defense Trade: A Study Conducted Under Section 309 of the Defense Production Act of 1950, As Amended* - U.S. Department of Commerce

Appendix E:

Overview of Countries' Offset Policies, Updated Summer 2000

Country	Title of Offset Policy	Agency handling	Offset part of procurement decision	Offset Sector	Min. value of contract requiring offsets	Min. Offset requirement (%)	Term	Multipliers	Penalties	Focus	Direct vs Indirect	Eligible offset activities
Australia	Australian Industry Involvement (All) (not termed "offset", but SIDAs)	(DOD) Defense Acquisition Organization	no	civ & mil	A\$2.5M foreign content/ any tender of A\$5M	maximized where cost effective	not defined	none in policy	during project, strict review of SIDAs, if not completed, not credited: must fulfill obligation	local content (Australia & New Zealand), Strategic Industry Development Activities (SIDA)	both	local production, R&D, tech transfer, training, export sales, infrastructure, collaborative ventures
Belgium	Industrial Benefit in the Field of Defense Procurement ("economic compensations")	Ministry of Economics	yes	civ & mil	not specified	100%	not defined	none in policy	penalty for non-executed obligation	high technology	both	coproduction, direct supplies & services, tech transfer, R&D
Canada	Industrial & Regional Benefits (will not use term "offset")	Industry Canada	yes	civ & mil	C\$2M - preferred C\$100M - required	100%	not defined	none in policy	performance guarantee utilized	economy, job creation, technology, politics	both	well defined
Denmark	Industrial Cooperation Agreement (ICA)	Ministry of Economics	yes	civ & mil	25 million DKK (approx 3.8 billion US\$)	100%	not defined	none in policy	performance guarantee utilized	defense and technology similar to product purchased	both	technology transfers, defense, aerospace industries, etc.

Egypt	no official policy	not specified	ad hoc basis	military	not specified	low	not defined	none in policy	not defined	defense industry development & support	direct	direct, technology transfer
Finland	Industrial Participation	Trade Ministry (& Finnish Committee on IP)	yes	civ & mil	"largest defence materiel purchases"	100% + marketing consulting	not defined	1-3 times if Finnish products are exported	penalty: exclusion from future bids until contract fulfilled	participation of domestic defense industry, technology, export, internationalization of exports	both	transactions that benefit economy & industries, technology transfer
Germany	Industrial Balance, no official policy	The Federal Office for Defense Technology and Procurement	yes			aim is 100%				German company participation from the inception of a project, balance globalization with growth of local cos.	both	if just procurement contract, co-production required
Greece	Policy of Offset Benefits (O/B)	Hellenic Ministry of National Defense/General Armaments Directorate (GAD)	yes	military	250 million drachmas	80-120%	not defined	very complex, depends on value, offset, & recipient, maximum is 12	10%	defense industry & coproduction	direct	require: (co-production) local content, joint ventures, technology transfers

Israel	Industrial Cooperation (Industrial Cooperation Benefits - ICB)	Industrial Cooperation Authority (ICA), Ministry of Trade and Industry	no	civ & mil	US\$100,000	35%	usually 3 years, may be extended to 10 years	1-2 times, dependent upon type of offset	no liquidated damages clause	development of close, long-term working relationships	No distinction	subcontracts, R&D work, tech transfer, investment, global market access & exposure
Korea, South	Policy of Offset Benefits (O/B)	MND (Ministry of National Defense)	yes	military	\$10M	30%	not defined	0-6 times based on type of offset	debarment from participating for non-adherence to offset obligation	High technology, must be more than 30% of contract	No distinction	mainly technology transfers, also employment, equipment, purchases and other
Kuwait	Offset Program	Ministry of Finance, Program Executive Office PEO	yes	civ & mil	KD 1 million, sum of contracts in 1 yr	30%	8 yrs w/ intermediary steps of completion	2-10 times based on activity & sectors	6% of total contract	Tech transfer & Training	No distinction	Expenses of joint ventures with local parties
Netherlands	Industrial Participation and Offset	Ministry of Economics	no	military	5 million Guilders	100%	10 years	1-3 times	5% of late portion, must still fulfill obligation	technology similar to product purchased	Mix with original focus on direct	Counter-purchase, coproduction, licensed production

New Zealand	Defence Offsets Policy/ Industrial Involvement	Minister of Defence & Ministry of Commerce	no	military	NZ \$5 million	30%	not defined	1-3 times	liquidated damages	stimulate growth and employment, sustainable activities	No distinction	R&D, technology transfer, joint ventures, training, export marketing, etc
Norway	Industrial Policy, Offset Program	Royal Norwegian Ministry of Defence	yes	civ & mil	NOK 50 million	100% contract value	not defined	-	performance guarantee utilized	technology similar to product purchased	No distinction	well defined
Philippines	Countertrade (Implementing Rules & Regulations)	Department of Trade & Industry through the Philippine International Trading Corporation (PITC)	yes	civ & mil	US\$1 million	50%	3 years after from execution of the contract (2 yr grace period)	2-5 subject to the value of the desired activities	non performance ranging from 5%-100%	foreign capital equipment, machinery and services	indirect	co-production, countertrade, or barter
Saudi Arabia	Offset Program	Economic Offset Committee EOC (Ministry of Defense and Aviation)	yes	civ & mil	not specified	35%	Within 10 years	Subject to approval of offset authority	Best efforts but reconsidering policy	Jobs, training, tech transfer, investment	Mix with original focus on direct	Investments in joint ventures with local parties
South Africa	National Industrial Participation (IP)	Department of Trade & Industry (DTI)	yes	civ & mil	import content greater than US \$10 mil.	100%	7 years	1-2 subject to type of IP	5% (on unfulfilled) performance guarantee	develop industry, tech tran, job creation	No distinction	foreign investment, exports, R&D, tech transfer

Spain	Industrial Cooperation	Ministry of Defense (Industrial Cooperation Directorate/Mgmt Office)	yes	military	NA	100% expected contract value	not defined	none in policy	none in policy	technology similar to product purchased, economy, domestic industry	both	evaluated on case by case basis, prefer partnerships with domestic firms
Sweden	Offset & Participation Program	DOD, Defense Material Administration (FMV)	yes	civ & mil	100 MSEK	NA	not defined	none in policy	performance guarantee utilized	strengthen domestic defense industry	both	co-production, technology transfer, etc.
Switzerland	Defense Procurement and Offset Policy	DOD	yes	civ & mil	50 million Swiss francs	100%	not defined	none in policy	performance guarantee utilized	retain domestic industry independence, overcome trade barriers	both	co-production, cooperation with universities, export assistance
Taiwan	Industrial Cooperation Program (ICP)	Ministry of Economic Affairs & Industrial Development Bureau (IDB), Committee for Aviation & Space Industrial Development	yes	civ & mil	\$50 million	30-40%		1-10 times, based on type of offset		upgrade industrial technology, increase quality of workforce, globalization	both	local procurement, technology transfer, training, research & development, marketing

Thailand	Countertrade Policy	Department of Foreign Trade, Ministry of Commerce	yes	civ & mil	300 million Bath	20-50%	2 months prior to end of contract	none in policy	5% (on unfulfilled) performance guarantee	enhance trade, prevent imbalance of trade	indirect	Counter-purchase
Turkey	Military Offset Policy & Guidelines	Undersecretariat for Defense Industries (SSM)	yes	military	US\$5 million	30% of contract, 50% of project import value, will change to 100%	not defined	1-5 times, based on type of offset	10% (on unfulfilled) & temporary exclusion from future bids	self-sufficiency, new business opportunities, increase foreign currency inflow, improve quality	both	exports, technology transfer, R&D, training, investments, etc.
UAE	The Defense and Procurement Policy of the UAE	UAE Offsets Group UOG	yes	military	US \$10 million	60%	7 years	yes but unpublished	8.5% of offset obligation or 4.5% of total contract	Sustainable wealth creation	No distinction	Profits of joint ventures with local parties
United Kingdom	Industrial Participation	MOD/ DESO	no	military	£10M (\$16.10M)	100%	over period of procurement contract	-	none, however strict enforcement of IP program	provide new business opportunities/ technologies and maintain a credible defense industry	No distinction	defense related or civilian high tech through defense manufacturer & be "new work"

Countries that currently do not have a defense related offset policy: Argentina, Cameroon, Croatia (ad hoc), Hungary (policy not defined but offsets are practiced), Malaysia, Bangladesh, India (currently forming a policy), Italy, Jordan, Kenya, Pakistan, Peru, Thailand

Appendix F:
Offset Transactions by Detailed SIC Code

Total Trans.	Main Category	Sub Category	Sub Category Division	Total Actual Value of the Offset	Total Value of Sub Category	Total Value of Sub-Category
5	AGRICULTURAL SERVICES			\$ 39,228,000		
3	OIL & GAS EXTRACTION		crude petroleum & natural gas	\$ 12,178,000		\$ 10,000,000
1	NONMETALLIC MINERALS (EXCEPT FUELS)			\$ 2,727,536		
11	GENERAL BUILDING CONTRACTORS		industrial building & warehouse	\$ 29,992,359		\$ 10,360,359
4	HEAVY CONSTRUCTION (EXCEPT BUILDING)			\$ 3,510,167		
1	SPECIAL TRADE CONTRACTORS			\$ 3,874,000		
28	FOOD & KINDRED PRODUCTS			\$ 15,466,000		
3	TEXTILE MILL PRODUCTS			\$ 6,362,020		
10	APPAREL & OTHER TEXTILE PRODUCTS			\$ 3,813,418		
8	PAPER & ALLIED PRODUCTS			\$ 21,089,000		
9	PRINTING & PUBLISHING		misc. publishing	\$ 29,403,008		\$ 21,711,000
34	CHEMICALS & ALLIED PRODUCTS			\$ 91,524,171		
		Industrial Organic Chemicals			\$ 21,292,246	
		Misc. Chemical Products			\$ 13,907,705	
5	RUBBER & MISC. PLASTICS PRODUCTS			\$ 4,310,302		
7	STONE, CLAY & GLASS PRODUCTS			\$ 11,344,000		
52	PRIMARY METAL			\$ 76,317,926		

INDUSTRIES				
	Blast Furnace & Basic Steel Products	\$ 31,066,750		\$ 25,375,750
	Primary Nonferrous Metals	\$ 15,052,861		
	blast furnaces & steel mills			
	primary aluminum			\$ 11,381,861
101	FABRICATED METAL PRODUCTS	\$ 439,765,709		
	Fabricated Structural Metal Products	\$ 67,568,257		\$ 12,319,000
	fabricated structural metal			\$ 51,398,257
	heating equipment (except electrical)			
	Metal Forgings & Stampings	\$ 146,628,414		\$ 10,408,856
	iron & steel forgings			\$ 136,087,858
	nonferrous forgings			
	Ordnance & Accessories	\$ 85,715,429		
452	INDUSTRIAL MACHINERY & EQUIPMENT	\$ 1,181,969,976		
	Engines & Turbines	\$ 6,324,800		\$ 12,237,800
	turbines & turbine generator sets			\$ 50,574,000
	internal combustion engines			
	Construction & Related Machinery	\$ 51,574,570		\$ 14,199,000
	mining machinery			\$ 33,573,000
	industrial trucks & tractors			
	Metalworking Machinery	\$ 250,154,586		\$ 139,038,095
	machine tools, metal cutting			\$ 19,413,262
	machine tools, metal forming			

	special dies, tools, jigs & fixtures		\$	24,589,963
	welding apparatus		\$	13,413,000
Special Industry Machinery		\$ 127,539,568		
	textile machinery		\$	93,946,568
	paper industries machinery		\$	25,158,000
	special industry machinery		\$	10,289,240
General Industrial Machinery		\$ 95,302,380		
	air & gas compressors		\$	52,350,737
	industrial furnaces & ovens		\$	35,208,000
Computer & Office Equipment		\$ 85,831,820		
	electronic computers		\$	14,616,712
Refrigeration & Service Machinery		\$ 47,716,423		
	refrigeration & heating equipment		\$	41,624,423
Industrial Machinery (Not Included Elsewhere)		\$ 10,972,663		
483 ELECTRONIC & OTHER ELECTRIC EQUIPMENT		\$ 1,793,039,687		
	Electric Distribution Equipment		\$	21,771,466
	Electrical Industrial Apparatus		\$	30,556,237
	motors & generators		\$	27,700,712
	Household Appliances		\$	24,000,000
	Household Audio & Video Equipment		\$	13,919,850
	Communications Equipment		\$	206,217,200
	telephone & telegraph		\$	16,886,688

	Electronic Components & Accessories	apparatus	\$1,069,316,208	
		electron tubes	\$ 18,386,640	
		semiconductors & related devices	\$ 33,648,000	
	Misc. Electrical Equipment & Supplies		\$ 34,535,839	
1523	TRANSPORTATION EQUIPMENT		\$ 6,735,249,792	
	Motor Vehicles & Equipment		\$ 411,083,004	
		motor vehicles & car bodies	\$ 159,436,676	
		motor vehicles parts & accessories	\$ 164,207,142	
	Aircraft & Parts		\$ 5,667,740,073	
		aircraft	\$ 314,096,639	
		aircraft engines & engine parts	\$ 398,484,847	
		aircraft parts & equipment (not included elsewhere)	\$ 1,538,504,624	
	Ship & Boat Building & Repair		\$ 448,829,013	
		ship building & repair	\$ 448,829,013	
	Guided Missiles, Space Vehicles, Parts		\$ 71,816,559	
102	INSTRUMENTS & RELATED PRODUCTS		\$ 649,891,002	
	Search & Navigation Equipment		\$ 489,377,706	
	Measuring & Controlling Devices		\$ 50,475,796	
		instruments to measure electricity	\$ 24,610,455	
		optical instruments & lenses	\$ 22,399,304	
	Medical Instruments &		\$ 56,423,000	

Supplies		x-ray apparatus & tubes	\$ 16,400,000
2	MISC. MANUFACTURING INDUSTRIES	\$ 5,100,000	
1	LOCAL & INTERURBAN PASSENGER TRANSIT	\$ 11,488	
1	TRUCKING & WAREHOUSING	\$ 1,451,000	
1	WATER TRANSPORTATION	\$ 5,208,237	
4	TRANSPORTATION BY AIR Airports, Flying Fields, & Services	\$ 11,360,300	\$ 11,360,300
8	TRANSPORTATION SERVICES	\$ 3,474,921	
7	COMMUNICATIONS Telephone Communications	\$ 50,003,000	
2	ELECTRIC, GAS, & SANITARY SERVICES	\$ 1,085,200	
52	WHOLESALE TRADE, DURABLE GOODS Motor Vehicles, Parts & Supplies Professional & Commercial Equipment medical & hospital equipment Metals & Minerals (Except Petroleum) metals service centers & offices	\$ 229,644,109	\$ 137,274,868 \$ 59,560,495 \$ 10,660,000
10	WHOLESALE TRADE, NONDURABLE GOODS	\$ 3,065,665	
1	GENERAL MERCHANDISE STORES	\$ 835,629	
13	AUTOMOTIVE DEALERS &	\$ 10,346,814	

SERVICE STATIONS				
1	FURNITURE & HOME FURNISHINGS STORES	\$	1,324,046	
40	NONDEPOSITORY INSTITUTIONS	\$	541,163,725	
1	SECURITY & COMMODITY BROKERS	\$	1,302,000	
39	HOLDINGS & OTHER LODGING PLACES	\$	309,072,900	
	Misc. Investing	\$	29,049,000	
161	BUSINESS SERVICES	\$	688,532,783	
	Computer & Data Processing Services	\$	274,227,598	
	computer programming services	\$	89,816,297	
	computer facilities management	\$	32,374,829	
6	MISC. REPAIR SERVICES	\$	6,111,623	
2	AMUSEMENT & RECREATION SERVICES	\$	22,336	
1	HEALTH SERVICES	\$	28,000	
1	LEGAL SERVICES	\$	75,000	
29	EDUCATIONAL SERVICES	\$	233,697,427	
142	ENGINEERING & MANAGEMENT SERVICES	\$	535,542,346	
	Engineering & Architectural Services	\$	200,229,464	
	engineering services	\$	199,471,327	
	Research & Testing Services	\$	42,494,784	
	commercial physical research	\$	21,842,000	
	commercial nonphysical research	\$	14,081,000	
	Management & Public Relations	\$	286,753,330	

		Facilities support services management services	\$	26,416,132
		business consulting (not included elsewhere)	\$	245,025,223
			\$	13,511,975
15	SERVICES (NOT INCLUDED ELSEWHERE)	\$	65,735,818	
1	ENVIRONMENTAL QUALITY & HOUSING	\$	635,000	
1	NATIONAL SECURITY & INTERNATIONAL AFFAIRS	\$	32,300,000	
48	NOT CLASSIFIED	\$	170,206,525	
3432	GRAND TOTAL	\$	20,012,885,368	\$ 4,23,077,351 \$ 4,765,624,759

Appendix G:
Strategic Analysis Division Publications List

**U.S. DEPARTMENT OF COMMERCE
BUREAU OF EXPORT ADMINISTRATION
OFFICE OF STRATEGIC INDUSTRIES AND ECONOMIC SECURITY
STRATEGIC ANALYSIS DIVISION
PUBLICATIONS LIST**

The U.S. Department of Commerce's Strategic Analysis Division is the focal point within the Department for conducting assessments of defense-related industries and technologies. The studies are based on detailed industry-specific surveys used to collect information from U.S. companies and are conducted on behalf of the U.S. Congress, the military services, industry associations, and other interested parties. The assessments are completed with the assistance of industry experts, both from the private sector and other government agencies. The collected data serves as the core of the Division's analyses, as in most cases data with this level of detail is unavailable from other sources.

Italics indicate forthcoming studies

PUBLICATION TITLE	GPO ORDER #	PRICE
<i>National Security Assessment of the Air Delivery (Parachute) Industry - Fall 2001</i>		
<i>Critical Technology Assessment: Assistive Technology - Fall 2001</i>		
National Security Assessment of the U.S. High-Performance Military Explosives & Components Sector - June 2001	003-009-00714-3	
National Security Assessment of the U.S. Shipbuilding and Repair Industry: May 2001	003-009-00719-4	
Statistical Handbook of the Ball and Roller Bearing Industry (Update) - June 2001	Available on SAD Website	
Offsets in Defense Trade - Conducted under Section 309 of the Defense Production Act of 1950-May 2001	003-009-00722-4	
National Security Assessment of the Cartridge and Propellant Actuated Device Industry: Update - Dec. 2000	003-009-00710-1	
The Effect on the National Security of Imports of Crude Oil and Refined Petroleum Products-November 1999	003-009-00723-2	
Offsets in Defense Trade - Conducted under Section 309 of the Defense Production Act of 1950-October 1999	003-009-00677-5	\$9.50
Critical Technology Assessment: Optoelectronics - October 1998	003-009-00678-3	\$7.00
Offsets in Defense Trade - Conducted under Section 309 of the Defense Production Act of 1950 - August 1998	003-009-00674-1	\$7.50
National Security Assessment of the Emergency Aircraft Ejection Seat Sector - November 1997	003-009-00680-5	\$10.00
Offsets in Defense Trade - Conducted under Section 309 of the Defense Production Act of 1950 - August 1997	003-009-00681-3	\$9.50
Critical Technology Assessment of the U.S. Semiconductor Materials Industry - April 1997	003-009-00682-1	\$1.50
Offsets in Defense Trade - Conducted under Section 309 of the Defense Production Act of 1950 - May 1996	003-009-00683-0	\$9.50
National Security Assessment of the Cartridge and Propellant Actuated Device Industry - October 1995	003-009-00676-7	\$14.00
The Effect of Imports of Crude Oil and Petroleum Products on the National Security - December 1994	003-009-00684-8	\$10.00

PUBLICATION TITLE	GPO ORDER #	PRICE
Critical Technology Assessment of U.S. Artificial Intelligence - August 1994	003-009-00685-6	\$19.00
Critical Technology Assessment of U.S. Superconductivity - April 1994	003-009-00706-2	\$7.00
Critical Technology Assessment of U.S. Optoelectronics - February 1994	003-009-00686-4	\$13.00
Critical Technology Assessment of U.S. Advanced Ceramics - December 1993	003-009-00687-2	\$9.00
Critical Technology Assessment of U.S. Advanced Composites - December 1993	003-009-00688-1	\$28.00
The Effect of Imports of Ceramic Semiconductor Packages on the National Security - August 1993	003-009-00689-9	\$15.00
National Security Assessment of the U.S. Beryllium Industry - July 1993	003-009-00690-2	\$9.00
National Security Assessment of the Antifriction Bearings Industry - February 1993	003-009-00691-1	\$13.00
National Security Assessment of the U.S. Forging Industry - December 1992	003-009-00692-9	\$10.00
The Effects of Imports of Gears and Gearing Products on the National Security - July 1992	003-009-00693-7	\$15.00
Natl. Security Assessment of the Dom. and For. Subcontractor Base-3 US Navy Weapon Systems - March 1992	003-009-00695-3	\$16.00
National Security Assessment of the U.S. Semiconductor Wafer Processing Equipment Industry - April 1991	003-009-00694-5	\$9.00
National Security Assessment of the U.S. Robotics Industry - March 1991	003-009-00696-1	\$13.00
National Security Assessment of the U.S. Gear Industry - January 1991	003-009-00697-0	\$14.00
Effects of Imports of Uranium on the National Security - September 1989	003-009-00698-8	\$6.50
Effects of Crude Oil and Refined Petroleum Product Imports on the National Security - January 1989	003-009-00699-6	\$10.00
Effects of Imports of Plastic Injection Molding Machines on the National Security - January 1989	003-009-00700-3	\$14.00
Effects of Imports of Anti-Friction Bearings on the National Security - July 1988	003-009-00701-1	\$24.00
Investment Castings: A National Security Assessment - December 1987	003-009-00702-0	\$13.00
Joint Logistics Commanders/DOC Precision Optics Study - June 1987	003-009-00703-8	\$15.00
An Economic Assessment of the U.S. Industrial Fastener Industry - March 1987	003-009-00704-6	\$6.50
Joint Logistics Commanders/DOC Bearing Study - June 1986	003-009-00705-4	\$15.00

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