Tools
Foreign-Made Machine
DOD Purchases of
Procurement
Defense

Helen Bentley, Director

1999
February 15, 1991

The Honorable Helen Delich Bentley
House of Representatives

Dear Ms. Bentley:

As you requested, we have reviewed the Defense Department's procurement of machine tools. In this report, the second of two responding to your request, we discuss Defense's procurement of foreign-made machine tools during fiscal years 1987 through 1989 and Defense's use of waivers of the legislative restriction on purchasing machine tools not manufactured in the United States or Canada. The prior report dealt with the various U.S. efforts to revitalize the U.S. machine tool industry.

Unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of Defense and appropriate congressional committees. We will also make copies available to others upon request.

Please contact me on (202) 275-4812 if you or your staff have any questions concerning this report. The major contributors to this report are listed in appendix II.

Sincerely yours,

Allan I. Mendelowitz, Director
International Trade, Energy, and Finance Issues
Executive Summary

Purpose

Competition from foreign producers has been steadily eroding the domestic machine tool industry. Imports now represent about 50 percent of the value of machine tools purchased in the United States. Concern about this vital industry's stability and ability to meet the nation's defense mobilization needs prompted congressional action which, among other things, restricted the Department of Defense's machine tool procurement to U.S. and Canadian sources for certain machine tools. Congresswoman Helen Delich Bentley asked GAO to examine the Defense Department's procurement of foreign-made machine tools and its use of waivers to the restriction.

Background

Machine tools are vital to any industrialized nation. They cut, grind, shape, and form materials, including metals, into useful products for home, industry, and defense. For instance, these tools are used to make the planes, tanks, ships, and other heavy equipment used by the military services. Without machine tools the United States could not manufacture these products.

Public Law 99-591, which provided continuing appropriations for fiscal year 1987, restricted the Defense Department's procurement of foreign-made machine tools in 21 classifications. Three more restricted classifications were added in fiscal year 1989. Foreign-made machine tools could be bought, but only if the responsible Secretary of the Army, Navy, or Air Force, on a case-by-case basis, waived the restriction. The responsible Secretary had to find that adequate supplies of the legislatively restricted machine tool being procured were unavailable from U.S. or Canadian sources to meet defense requirements on a timely basis.


During fiscal years 1987-1989, the Defense Department procured machine tools valued at about $458 million. About $352 million were in the legislatively restricted classifications.
Results in Brief

During fiscal years 1987-1989, Defense records identify procurements of foreign-made, restricted machine tools valued at about $29 million. Of that $29 million procured abroad

- about $16.5 million were waived in accordance with the appropriation acts' criteria,
- about $10.4 million were not subject to the appropriation acts' restriction,
- about $0.4 million were not awarded in accordance with the appropriation acts' restriction, and
- about $1.7 million were not reviewed by GAO.

About $1.2 million of foreign built, legislatively restricted machine tools procured during fiscal year 1989 did not comply with the restriction provisions contained in the 1989 National Defense Authorization Act, which was applicable to those purchases.

Principal Findings

Defense Waivers Meet Statutory Criteria

During the 3-fiscal-year period 1987 through 1989, 108 procurement actions were taken by Defense for foreign-made, restricted machine tools. The value of these purchases was $29 million. Of these purchases, 51, totaling about $16.5 million, were waived in accordance with the appropriation acts' requirements. The waivers were all approved before the contract was awarded, signed by the appropriate official, and approved for a valid reason.

Acts' Restriction Did Not Apply to Some Procurements

Of the $29 million in foreign-made machine tool purchases, about $10.4 million (37 procurements) were not subject to the appropriation acts' restriction. About $9.3 million were purchased with funds appropriated before the machine tools became restricted. The remaining $1.1 million were not subject to the restriction because the procurements (1) were awarded before the effective date of the restriction, (2) were foreign military sales and thus were not purchased for use in a government-owned or Defense-controlled facility, (3) were modifications to existing contracts that were exempt from the restriction, or (4) were purchased as spare parts for an existing machine tool.
Three Procurements Did Not Comply With the Acts' Restriction

Three Air Force procurement actions involving foreign-made, restricted machine tools during fiscal year 1987, amounting to about $0.4 million, were not purchased in accordance with the 1987 appropriation act's restriction because waivers were not obtained. These procurements involved contract modifications for increased quantities. The original contracts were awarded after the restriction became effective, but funds appropriated before fiscal year 1987 were used. The options for increased quantities, however, used fiscal year 1987 funds and, therefore, the restriction was applicable and waivers were necessary. Defense officials did not dispute that waivers should have been obtained.

Two Purchases Did Not Meet Provisions of the Authorization Act

Two purchases, amounting to about $1.2 million of foreign-made, restricted machine tool procurements during fiscal year 1989 did not comply with the 1989 National Defense Authorization Act. Waivers should have been obtained on these procurements but were not. Defense officials did not dispute that these procurements required waivers.

For machine tool procurements during fiscal year 1989, two acts apply—the 1989 appropriations act and the 1989 authorization act. The overlapping provisions of these acts must be read together. The 1989 appropriation act restricts funds appropriated to that act, but the 1989 authorization act restricts all funds available to Defense.

Recommendations

GAO is making no recommendations.

Agency Comments

As requested, GAO did not obtain written agency comments on the matters discussed in this report; however, GAO discussed the report's contents with Defense officials and has incorporated their comments in the report where appropriate.
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Abbreviations

DFARS  Defense Federal Acquisition Regulation Supplement
DLA   Defense Logistics Agency
DOD   Department of Defense
GAO   General Accounting Office
MOU   Memorandum of Understanding
NATO  North Atlantic Treaty Organization
Machine tools are important to any industrialized nation. They are the means by which material, including metal, is cut, ground, shaped, and formed into useful products for home, industry, and defense. These tools make the planes, tanks, ships, and other heavy equipment used for defense. Without machine tools these products could not be made. Consequently, the machine tool industry has been characterized as the cornerstone of the nation's industrial base.

Since the early 1980s, the U.S. machine tool industry has faced stiff competition from foreign producers. In 1982, import penetration as a percent of the value of machine tools consumed in the United States was about 26 percent; presently, it represents about 50 percent.

Concern about the domestic industry's stability and viability in general, and its ability to meet the nation's defense mobilization needs in particular, prompted government action. In one action, Congress restricted Department of Defense (DOD) machine tool procurement to U.S. and Canadian sources for certain machine tool classifications. Other actions were taken to reduce foreign competition and to help the domestic industry increase sales by obtaining 5-year voluntary export restraint agreements with Japan and Taiwan and requesting nine other countries to restrict their exports to the United States. The President's December 1986 Domestic Action Plan called for the government to assist and fund research and development activities to help modernize machine tool and manufacturing technology.

DOD Appropriation Acts

Public Law 99-591 making continuing appropriations for fiscal year 1987, enacted on October 18, 1986, restricted DOD procurement of certain machine tool classifications. When funds appropriated by that act were used to buy restricted machine tools for use in any government-owned facility or DOD-controlled property, the machine tools had to be of U.S. or Canadian manufacture. Foreign-made machine tools could be bought, but only if the Secretary of the Army, Navy, or Air Force responsible for the procurement waived the restriction on a case-by-case basis. To do so, the Secretary had to find that adequate domestic supplies of the specified machine tool were not available to meet DOD requirements on a timely basis. Previously existing contracts were exempted from the restriction.

The countries are Brazil, Italy, South Korea, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and Germany.
The restriction was continued in the legislation appropriating funds to DOD for fiscal years 1988 and 1989, but not in fiscal year 1990. However, the provisions in the fiscal year 1989 National Defense Authorization Act, as codified in 10 U.S.C. 2507, also restrict DOD machine tool procurement for fiscal year 1990 and at least fiscal year 1991. This restriction provision differs somewhat from that contained in the appropriation acts.

### Fiscal Year 1989 National Defense Authorization Act

The fiscal year 1989 National Defense Authorization Act, approved September 29, 1988, restricts, among other things, DOD machine tool procurement. This act provides that during fiscal years 1989, 1990, and 1991, funds appropriated or otherwise made available to DOD may not be used to buy certain machine tool classifications unless the machine tools are manufactured in the United States or Canada. The restriction may be waived with respect to the procurement of an item if the Secretary of Defense determines that any of the following apply to that item:

- The restriction would cause unreasonable costs or delays.
- U.S. producers would not be jeopardized by competition from a foreign country, and that country provides reciprocal access.
- Satisfactory quality items manufactured in the United States or Canada are not available.
- The restriction would impede cooperative programs entered into between DOD and a foreign country, and that country provides reciprocal access.
- The procurement is under $25,000, and small purchase procedures are used.
- The restriction would result in only one U.S. or Canadian source for the item.

### DOD Implementation of the Restriction

DOD implemented the appropriation act’s restriction in its Defense Federal Acquisition Regulation Supplement (DFARS), section 225.7008. The waiver authority contained in DFARS for fiscal year 1989 is based on the restriction contained in the appropriation acts and is less discretionary than that provided in the U.S. Code.

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2The fiscal year 1989 appropriation act also restricted three additional machine tool classifications.

3The Secretary of Defense can renew the restriction at the end of fiscal year 1991 for 2 more fiscal years for any item if the Secretary determines such continuation would be in the national security interest.
Chapter 1
Introduction

DFARS provides that when adequate supplies of the restricted machine tool classifications manufactured in the United States or Canada are not available to meet DOD requirements on a timely basis, the head of the agency responsible for the procurement may waive the restriction for procurement of $25,000 or more on a case-by-case basis. Procurement under $25,000 can be waived on the same basis by the chief of the concerned contracting office. DFARS was revised in July 1990 to reflect the restriction as contained in the fiscal year 1989 National Defense Authorization Act.

Under DFARS, a machine tool is considered to be of U.S. or Canadian origin if it is manufactured in the United States or Canada and the cost of its components manufactured in the United States or Canada exceeds 50 percent of the cost of all its components. The cost of components includes transportation costs and duty.

DOD Machine Tool Purchases

During fiscal years 1987-1989, DOD took about 2,350 procurement actions, valued at about $458 million, for machine tools. About 1,550 of those actions, valued at about $352 million, were for restricted machine tools. DOD machine tool purchases represent about 10 percent of the total machine tools consumed in the United States. See appendix I for additional information on DOD machine tool procurement.

Objectives, Scope, and Methodology

Congresswoman Helen Delich Bentley requested that we review DOD's procurement of foreign-made machine tools. She noted that the Secretary of Commerce, in consultation with the Secretary of Defense and other administration officials, had determined that high levels of machine tool imports could potentially erode U.S. capabilities to manufacture critical machine tools. We were also asked to examine DOD's use of waivers of the restriction allowing otherwise prohibited purchases of foreign-made machine tools.

4Head of the agency means the Secretary of Defense; the Assistant Secretary of Defense (Acquisition and Logistics); the Secretary, the Under Secretary, or any Assistant Secretary of the Army, Navy, and Air Force; and the Director and Deputy Director of Defense agencies, except to the extent that any law or executive order limits the exercise of authority to specific individuals at the secretarial level. In the latter situation, the Assistant Secretary of Defense (Acquisition and Logistics), unless specifically restricted to the Secretary of Defense, shall exercise the authority for Defense agencies.

5Procurement actions include original contract awards and contract modifications exceeding $25,000, as reported in the DOD procurement reporting system based on its Form DD-350, with which the military departments report individual contracting actions that exceed $25,000.
This is the second report responding to Congresswoman Bentley's concerns about the U.S. machine tool industry. The first report dealt with the President's December 1986 Domestic Action Plan and certain voluntary restraint agreements and export-limiting arrangements with foreign governments.

In examining DOD's procurement of foreign-made machine tools and its use of waivers, we

- reviewed files of machine tool contracts awarded by various Navy contracting authorities within the United States, concentrating our effort on the Washington, D.C., Naval Regional Contracting Center;
- reviewed contract documentation received from various Air Force and Army contracting authorities within the United States on contracts awarded for foreign-made machine tools as identified in DOD's procurement reporting system;
- talked with headquarters officials responsible for the processing and/or approval of waivers to the appropriation acts' restriction in the Office of the Under Secretary of Defense, the Office of the Assistant Secretaries of the Navy, Air Force, and Army, and the Defense Logistics Agency (DLA);
- reviewed the waiver files at the above-mentioned headquarter locations on waivers submitted by contracting authorities to their respective approval authorities, including the documentation supporting the waiver request;
- obtained information from contracting officials responsible for machine tool procurement at the Washington Naval Regional Contracting Center; Wright-Patterson Air Force Base, Ohio; Robins Air Force Base, Georgia; Rock Island Army Arsenal, Illinois; Watervliet Army Arsenal, New York; and Defense General Supply Center, Richmond, Virginia;
- reviewed the Washington Naval Regional Contracting Center waiver files, but not those of the other military departments' individual contracting authorities;
- interviewed the Director of the Metalworking Division, Office of General Industrial Machinery, International Trade Administration, Department of Commerce; and

We did not review procurements below $25,000, except for those cited in this report for which the Navy approved appropriation act waivers.

Our review of contract files obtained from various contracting authorities concentrated on determining relevance to and compliance with the restriction contained in the appropriation acts and the authorization act. We did not review the contracts for full compliance with other applicable procurement regulations and standards.

We relied on the documentation contained in the contract files to determine a machine tool's foreign content. We did not independently perform the detailed cost analysis necessary to verify whether a machine tool was domestic or foreign. To do so would have required obtaining foreign and domestic cost data from each contractor for each contract reviewed.

We used the procurement reporting system to develop overall statistical data on total DOD machine tool procurement actions and total DOD restricted machine tool actions. We also used the procurement reporting system to select individual contracts that we reviewed. The procurement reporting system is the only centralized source for DOD procurement information. We did not independently verify the information contained in this system. We noted, however, that not all contracts involving foreign-made machine tools were identified in the system as being foreign. We did not identify the extent of this problem.

Our review covered DOD machine tool procurement for fiscal years 1987-1989; for comparison purposes we also cite some fiscal year 1986 data.

We performed our work between April 1989 and September 1990 in accordance with generally accepted government auditing standards.

As requested, we did not obtain written agency comments on the matters discussed in this report; however, we discussed the report's contents with DOD officials and have incorporated their comments in the report where appropriate.
For fiscal years 1987-1989, DOD identified the majority of machine tools it procured as domestically made. When DOD waived foreign-made purchases, it met the appropriation acts' criteria. However, several purchases requiring a waiver were awarded without one. Some procurements of foreign-made machine tools in restricted classifications were not subject to the appropriation acts' restriction because DOD used funds that were appropriated to it before the fiscal year in which the machine tools first became restricted. These procurements did not violate the appropriation acts' restriction. However, some of those purchases made in fiscal year 1989 did not comply with the restriction provisions contained in the 1989 National Defense Authorization Act.

**Procurements During Fiscal Years 1987-1989**

DOD procured about $29 million in foreign-made, restricted machine tools during the 3-fiscal-year period 1987 through 1989. These purchases represent a small part of DOD's total and restricted machine tool procurement during the period, as illustrated by table 2.1. DOD also procured about $1.9 million in nonrestricted, foreign-made machine tools, which includes about $0.9 million during fiscal years 1987 and 1988 for three machine tool classifications not restricted until fiscal year 1989.

**Table 2.1: DOD Machine Tool Procurement Actions by Military Department (Fiscal Years 1987-1989)**

<table>
<thead>
<tr>
<th>Military Department</th>
<th>Total Machine Tools</th>
<th>Restricted Machine Tools</th>
<th>Foreign-made, Restricted Machine Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actions</td>
<td>Value</td>
<td>Actions</td>
</tr>
<tr>
<td>Navy</td>
<td>1,022</td>
<td>$203.7</td>
<td>705</td>
</tr>
<tr>
<td>Air Force</td>
<td>483</td>
<td>84.6</td>
<td>343</td>
</tr>
<tr>
<td>Army</td>
<td>404</td>
<td>139.0</td>
<td>304</td>
</tr>
<tr>
<td>Other DOD</td>
<td>442</td>
<td>30.8</td>
<td>189</td>
</tr>
<tr>
<td>Total</td>
<td>2,351</td>
<td>$458.1</td>
<td>1,541</td>
</tr>
</tbody>
</table>

*aDoes not include procurement of Canadian-built machine tools valued at about $8.9 million. Canadian-built machine tools are not considered foreign.


*cTotal does not agree with the total shown in table 2.2 or table 1.5 because of rounding of individual data items.

Source: GAO analysis of DOD data.

Appendix I contains additional information on DOD machine tool procurements.
Restrictions Applicability to DOD Procurement of Foreign-Made Machine Tools

DOD procured about $29 million of foreign-made, restricted machine tools during the 3-fiscal-year period 1987 through 1989 under 108 procurement actions. Table 2.2 summarizes the applicability of the appropriation acts' restriction to the $29 million. It shows whether or not a waiver was obtained, or even required, and, if a waiver was not required, why this was so.

Table 2.2: Applicability of Appropriation Acts’ Restriction to DOD Procurement of Foreign-Made, Restricted Machine Tools (Fiscal Years 1987-1989)

<table>
<thead>
<tr>
<th>Description</th>
<th>Procurement actions</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign-made machine tools bought</td>
<td>108</td>
<td>$29.0M</td>
</tr>
<tr>
<td>Restriction applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, waiver obtained</td>
<td>51</td>
<td>16.5M</td>
</tr>
<tr>
<td>Yes, waiver not obtained</td>
<td>3</td>
<td>0.4M</td>
</tr>
<tr>
<td>No waiver needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds used are not restricted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriated before 1987</td>
<td>21</td>
<td>8.1M</td>
</tr>
<tr>
<td>Appropriated before 1989</td>
<td>2</td>
<td>1.2M</td>
</tr>
<tr>
<td>Award made before effective date of the restriction</td>
<td>2</td>
<td>0.5M</td>
</tr>
<tr>
<td>Foreign military sales</td>
<td>3</td>
<td>0.4M</td>
</tr>
<tr>
<td>Modification to prior contracts</td>
<td>7</td>
<td>-0.2M</td>
</tr>
<tr>
<td>Contract for spare parts only</td>
<td>1</td>
<td>0.1M</td>
</tr>
<tr>
<td>Listed as foreign in procurement system but foreign content in contract file was less than 50 percent</td>
<td>1</td>
<td>0.2M</td>
</tr>
<tr>
<td>Subtotal</td>
<td>37</td>
<td>$10.4M</td>
</tr>
<tr>
<td>Total actions reviewed</td>
<td>91</td>
<td>$27.3M</td>
</tr>
</tbody>
</table>

Actions not included in GAO review:

- Awards by overseas commands                                               | 7                   | 0.8M   |
- DOD could not locate contracts                                            | 5                   | 0.6M   |
- Actions not reviewed                                                      | 5                   | 0.4M   |

Total: 17 $1.7M

Note: Columns may not add due to rounding.

Total does not agree with the total shown in table 2.1 or table 1.4 because of rounding of individual data items.

Source: GAO analysis of DOD data.

Waivers were approved on about $16.5 million in foreign-made, restricted machine tools that were procured. Waivers are discussed later in this chapter.
Waivers were not obtained on about $0.4 million procured by the Air Force during fiscal year 1987. These procurements involved contract modifications exercising government options for increased quantities. The original contracts were awarded after the restriction became effective, but, because fiscal year 1986 funds were used, the restriction did not apply to them. The options for increased quantities, however, used fiscal year 1987 funds and, therefore, the restriction did apply to the machine tools procured under the options. Waivers of the appropriation acts’ restriction for these procurements should have been obtained. A contracting official at Robins Air Logistics Center told us that waivers had not been obtained for the options, even though fiscal year 1987 funds were used, because it had been determined that options for increased quantities were exempt from the appropriation acts’ restriction if the base contract had not been subject to the act. The official subsequently commented that, after further analysis, it appears that waivers should have been obtained. DOD officials did not disagree that waivers should have been obtained.

Procurements valued at about $10.4 million were not subject to the appropriation acts’ restriction and, therefore, they were procured without the need to waive the restriction. Procurement actions totaling about $9.3 million were taken with funds appropriated to DOD before the machine tools became restricted. Procurements made in fiscal years 1987 and 1988, valued at about $8.1 million, for machine tools first restricted in fiscal year 1987, were made with funds appropriated before fiscal year 1987. Procurements made in fiscal year 1989, valued at about $1.2 million, for machine tools first restricted in fiscal year 1989, were made with funds appropriated before fiscal year 1989. The appropriation acts only restrict funds appropriated by that specific act. Funds previously appropriated and still available to DOD, such as money in a Defense industrial fund, are not included within the appropriation acts’ restriction. Thus, foreign-made machine tools purchased with previously appropriated funds, even machine tools in legislatively restricted classifications, would not be subject to the appropriation acts’ restriction. No waiver of the restriction would be necessary. Navy awarded $7 million in this manner; Army, $1.8 million; and Air Force, $0.5 million.

The remaining $1.1 million were not subject to the restriction because the procurements (1) were awarded before the October 18, 1986, effective date of the restriction, (2) were foreign military sales and thus were not for use in a U.S. government-owned or DOD-controlled facility, (3) were modifications to existing contracts that were exempt from the
restriction, (4) were for spare parts for an existing machine tool, or (5) were mistakenly identified as a foreign purchase.

Procurements valued at about $1.7 million were not reviewed because the contracts had been sent to storage and could not be located at the time of our review, or because the purchases were made by overseas commands, or because the procurements were made by other than the major domestic contracting authorities, i.e., they were single awards or involved a small number of awards. We did not include these procurements in our review. Navy purchases of $1.2 million were not reviewed, nor were Army purchases of $0.4 million, nor Air Force purchases of $0.1 million. We did not include awards by overseas commands for logistical reasons.

DOD Waivers Comply With the Acts’ Requirements

During the 3-fiscal-year period, the military services and agencies submitted 57 waiver requests for foreign-made, restricted machine tool purchases valued at about $18.3 million. Waivers were approved for $16.5 million. All approvals complied with the appropriation acts’ waiver requirements. Table 2.3 illustrates the disposition of the waiver requests.

Table 2.3: Value of Waiver Requests Submitted by DOD Military Department (Fiscal Years 1987-1989)

<table>
<thead>
<tr>
<th>Waivers</th>
<th>Total DOD</th>
<th>Navy</th>
<th>Army</th>
<th>Air Force</th>
<th>DLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested</td>
<td>$18.3</td>
<td>$15.3</td>
<td>$1.9</td>
<td>$0.3</td>
<td>$0.8</td>
</tr>
<tr>
<td>Denied</td>
<td>0.3</td>
<td>0.2</td>
<td>0</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>Pending on Sept. 30, 1989</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Approved</td>
<td>18.1</td>
<td>15.1</td>
<td>1.9</td>
<td>0.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Procurement cancelled</td>
<td>0.7</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Award pending on Sept. 30, 1989</td>
<td>0.9</td>
<td>0.1</td>
<td>0</td>
<td>0</td>
<td>0.8</td>
</tr>
<tr>
<td>Approved and awarded</td>
<td>$16.5</td>
<td>$14.4</td>
<td>$1.9</td>
<td>$0.2</td>
<td>$0</td>
</tr>
</tbody>
</table>

Note: Columns may not add due to rounding.

*The request submitted to DLA ranged from $0.8 million to $1.8 million, depending on the number of machine tools procured. We used the lower value. One additional waiver was requested during fiscal year 1989; however, that was withdrawn when a domestic source was found.

*Includes waivers approved for Johns Hopkins University and Avondale Industries valued at $452,000 and $59,000, respectively, for machine tools purchased by them under Navy prime contracts. Also included are two waivers approved for purchases under $25,000.

Source: GAO analysis of DOD data.
During fiscal years 1987 through 1989, the only basis for waiving the restriction was that adequate U.S. or Canadian supplies were not available to meet the military needs on a timely basis. The waiver had to be approved before the procurement was awarded.

Our review indicated that waivers were properly approved before the procurement was awarded, signed by the appropriate approving official, and approved for the appropriate reason. In addition, the appropriate waiver-processing and contracting authorities for the procurements had assured themselves that no U.S. or Canadian sources could provide the machine tools they were procuring.

Procurement officials we talked with in the military services and agencies said they ensure that domestic sources cannot provide the machine tool being procured by using full and open competition. They publish a synopsis in the Commerce Business Daily to solicit interest from as many prospective suppliers as possible. They also indicated that they rely on their experienced, knowledgeable technical people to tell them if domestic manufacturers make the machine tool(s) being procured. In addition, they told us they use other available information sources, such as trade journals and manufacturers' brochures, that describe manufacturers' product lines.

If an acceptable domestic offer is not received and the solicitation was widely disseminated and publicized in the Commerce Business Daily, procurement authorities generally conclude that no domestic manufacturers can satisfy the machine tool specification or cannot do so in a timely manner.

For instance, in both cases where it submitted the waiver requests to DLA, the Defense Industrial Plant Equipment Center first solicited only U.S. or Canadian sources. The Center manages industrial plant equipment resources and buys or rebuilds machine tools for the military departments. When no acceptable domestic offers were received, it opened the solicitation to foreign-made machine tools and sought a waiver.

The Washington Naval Regional Contracting Center routinely takes an additional step, which most other contracting activities do not. It contacts the Metalworking Division of the Department of Commerce's International Trade Administration to verify the Contracting Center's source
information and/or to obtain other potential domestic sources for the machine tool being procured.

This division in Commerce, according to its Director, assists DOD contracting authorities by identifying domestic manufacturers that might be able to supply the machine tool(s) being sought. According to the Director, Washington Naval Regional Contracting Center negotiators regularly seek domestic source information. However, the Metalworking Division's contact with other Navy or Air Force and Army contracting authorities is rare; Commerce officials estimate that 9 out of 10 contacts are with the Contracting Center. The division's knowledge of the machine tool industry results from long-term experience. The division staff know what companies manufacture and what companies deal in machine tools and the products they each manufacture and/or handle. A library of product brochures is maintained on virtually all machine tools each company offers. Contact with the companies is maintained to keep abreast of product lines offered.

DOD established a procedure for contracting authorities to verify source information when it implemented the restriction. Initial guidance was issued by the Under Secretary of Defense (Acquisition) to the Secretaries of the Military Services and Directors of the Military Defense Agencies on March 2, 1987. That guidance pointed out that although there may be cases when past procurement histories indicate that no U.S. or Canadian producers exist to produce certain machine tools, this information was to be verified with the DOD Office of Industrial Base Assessment and documented in the contract files before proceeding with the procurement from a foreign source. According to DOD officials this guidance was applicable to DOD machine tool procurements only in fiscal year 1987 pending the machine tool restriction's implementation in the DFARS. When implemented in the DFARS, contact with the Office of Industrial Base Assessment was no longer required.

An official from DOD's Office of Industrial Base Assessment told us that few contracting authorities contact the Office. When requests for domestic sources are received from DOD contracting authorities, this official usually contacts Commerce's Metalworking Division to obtain potential domestic sources, then responds to the requesting contracting authority. The official said DOD's Office of Industrial Base Assessment does not have the expertise to identify domestic sources, so it relies on Commerce. It does not ask any other organizations, i.e., machine tool associations, for domestic source information.
Procurement officials we talked with in the military services acknowledged that they do not normally contact DOD's Office of Industrial Base Assessment. Army contracting officials were unaware of the March 1987 guidance and did not believe it was necessary. Air Force waiver-processing officials knew of the guidance, but contracting officials at Robins Air Force Base did not. Army contracting officials at Rock Island Arsenal stated they have contacted the National Machine Tool Builders Association in some instances for domestic sources but not Commerce or the DOD Office of Industrial Base Assessment.

According to a Washington Naval Regional Contracting Center official, DOD's Office of Industrial Base Assessment was contacted initially; however, since November 1988, the Contracting Center has been contacting Commerce's Metalworking Division. When that division identifies additional sources, Contracting Center negotiators will determine if the identified sources have responded to the solicitation. If not, the sources will be contacted to determine their interest in the procurement and their ability to meet its requirements. Our review of Navy contracts disclosed that the negotiators do so. Navy waiver-processing officials will not approve a waiver until Commerce's Metalworking Division has been contacted. However, we have no data to indicate that that step has resulted in an award to a theretofore unknown domestic manufacturer, nor have we data to show that harm was done because the other military services did not take that step.

During fiscal years 1987-1989, DOD procured about $9.3 million of foreign-made machine tools in legislatively restricted classifications that were not subject to the appropriation acts' restriction because previously appropriated funds were used for the procurement. However, of that $9.3 million, the $1.2 million procured in fiscal year 1989 was also subject to the machine tool restriction provisions of the 1989 National Defense Authorization Act. That $1.2 million was not awarded in accordance with the provisions of that act.


The fiscal year 1989 Appropriation Act and the fiscal year 1989 National Defense Authorization Act contain separate restrictions that overlap. They must be read together to determine under what circumstances DOD is authorized to procure foreign-made machine tools. While the source of funding is a prime factor in determining the applicability...
of the restrictive provisions of the appropriation acts, by the terms of
the fiscal year 1989 Authorization Act, any machine tools within the
restricted classes procured during fiscal year 1989, regardless of the
funds used, would be subject to the restriction.

DOD procured the $1.2 million in foreign-made machine tools during
fiscal year 1989 without first waiving the restriction, using funds appro-
priated to DOD before fiscal year 1989.

DOD procured the $1.2 million in foreign-made machine tools during
fiscal year 1989 without first waiving the restriction, using funds appro-
priated to DOD before fiscal year 1989.

DOD’s Definition of “Domestic Machine Tool” Is Reasonable

The appropriation acts restrict DOD machine tool procurement to
machine tools “manufactured in the United States or Canada” when
funds appropriated by the acts are used to procure a restricted machine
tool that will be used in any government-owned facility or DOD-con-
trolled property. But Congress did not define what that phrase means.
Congress left the phrase for DOD to define when DOD implemented the
restriction.

DOD has adopted the “50-percent domestic content” rule applicable to
purchases under the Buy American Act of 1933. Under that rule, a
restricted machine tool is considered to be of U.S. or Canadian origin if
manufactured in the United States or Canada and if the cost of compo-
nents manufactured in the United States or Canada exceeds 50 percent
of the cost of all its components.

Conclusions

DOD has complied with the restriction’s requirements when waiving
foreign-made machine tool purchases. In addition, DOD procurement
authorities have taken some steps to assure themselves that no U.S. or
Canadian manufacturer can provide the machine tool being procured
For most authorities that means that no domestic suppliers had made an
offer. The additional step that the Washington Naval Regional Con-
tracting Center takes appears to have merit. Navy officials believe the
step is necessary and beneficial. However, we have no data to indicate
that that step has provided any tangible benefit, i.e., resulted in an
award to a theretofore unknown domestic manufacturer, nor have we
data to show that any harm has been done because the other military
services and agencies did not take that step.

Three procurement actions that the Air Force took in 1987, valued at
$0.4 million, were not made in accordance with the appropriation acts’
restriction because waivers were not obtained.
The machine tool provisions contained in the fiscal years 1987, 1988, 1989 appropriation acts are, by their own terms, applicable to funds made available in those respective acts. The restriction in the fiscal year 1987, 1988, and 1989 appropriation act does not apply to funds appropriated in previous years. Consequently, DOD did not violate the appropriation acts' restriction in procuring these machine tools. However, procurements of $1.2 million made during fiscal year 1989 were not made in accordance with the machine tool restriction contained in the fiscal year 1989 National Defense Authorization Act, which applies to all procurement actions awarded during fiscal years 1989, 1990, and 1991, regardless of their source of funding.

Contracts entered into in 1989 and funded with fiscal year 1989 appropriations are covered by the machine tool restrictions in both the fiscal year 1989 appropriation act and the 1989 authorization act. While in many cases this overlap might have little practical consequence, it is worth noting that for such contracts to be exempt, the restriction in both statutes would have to be effectively waived.

By virtue of the authorization act, all available DOD funds that would be used to procure machine tools became restricted in fiscal year 1989. That fact would require that the restriction be waived if foreign-made, restricted machine tools were procured. Waivers were not obtained for the $1.2 million procured and, therefore, the funds should not have been used to procure the foreign-made machine tools. DOD officials did not dispute that waivers should have been obtained on the $1.2 million.

DOD was not required to use the same definition of "50-percent domestic content" as that used to implement the Buy American Act, as the machine tool restriction is separate from the act. Such a logical choice, however, was certainly within its discretion.
Our review showed that (1) the Buy American Act is rarely applicable to DOD foreign-made machine tool procurement and (2) DOD did not identify as foreign all machine tools of foreign manufacture in the DD-350 procurement reporting system. Also, our review indicated that contractor self-certifications used to determine if a machine tool is domestically made may allow foreign-made machine tools to be passed off as domestic-made items.

The Buy American Act generally does not apply to DOD machine tool procurement because Memorandums of Understanding (MOU) that Defense negotiates with other countries exempt the countries from each others' "buy national" legislation when purchasing military products. Machine tools are considered military products. DOD permits participating countries to compete with domestic contractors on a fair and equal basis; thus, offers from a participating country's firms are considered on an equal basis with domestic offers. Other agreements also allow purchases from designated countries to be waived from the Buy American Act provisions. The appropriation acts' restriction, however, is not exempted by an MOU.

The Buy American Act affects foreign access to U.S. government procurement by giving preference to domestically produced or manufactured goods. For DOD procurement, the act does not apply if (1) the product is for use outside the United States, (2) the domestic product cost would be unreasonable, (3) domestic preference is not in the public interest, (4) the product is not produced in the United States in sufficient and reasonably available commercial quantities of satisfactory quality, or (5) the product is for commissary sale.

As the Buy American Act is implemented, foreign-made products can be offered, but firms offering domestic goods are given an advantage. A cost differential is added to offers for foreign-made products. For DOD procurement, to qualify as a domestic product, a product must (1) be mined or produced in the United States and (2) have more than half of the cost (including transportation cost and U.S. duty) of its components originate in the United States or qualifying countries. Products not meeting these requirements are considered foreign made.

Executive Order 10582, which implements the Buy American Act, considers a domestic bid unreasonable, in most cases, if it exceeds the foreign-made offer by more than 6 percent, unless determined otherwise by
the executive agency. Most civilian agencies normally add 6 percent to
the price of a foreign product (inclusive of duty) or 12 percent if the
foreign product is competing against a small business firm or one in a
high unemployment (labor surplus) area. DOD generally adds 50 percent
(exclusive of duty) to the foreign offer as a cost differential when a for-
eign and domestic product are competing. More precisely, the foreign
offer is increased by 50 percent before being compared to the domestic
offer. Thus, foreign offerors can be considerably lower in price than
domestic competitors and still lose the contract. Therefore, while for-
eign-made products are not prohibited outright, foreign sources are
often placed at a major competitive disadvantage.

Most foreign participation in DOD's procurement process occurs under
one of 19 bilateral MOUs the United States has negotiated with other
countries. Ten MOUs are with industrialized North Atlantic Treaty
Organization (NATO) partners and define the general and reciprocal poli-
cies affecting, among other things, procurement of defense equipment.
Three others are with less industrialized NATO partners and define gen-
eral and reciprocal terms for defense industrial cooperation. Six others
cover terms for defense procurement or for defense industrial coopera-
tion, depending on the country. MOUs waive the Buy American Act price
preference for a partner country's firms so long as the partner country
reciprocally waives its similar "buy national" legislation for U.S. firms.

The DFARS identify MOU countries as qualifying countries. The Buy Amer-
ican Act is waived for qualifying countries, however, the appropriation
acts' machine tool restriction is not waived. Under the Trade Agree-
ments Act of 1979, the President can also waive the Buy American Act
for certain designated countries that grant reciprocal access to U.S. sup-
pliers. However, the appropriation acts' restriction is not waived.

1The 10 MOUs with industrialized NATO allies include agreements with the United Kingdom, France,
Germany, Italy, the Netherlands, Norway, Portugal, Belgium, Denmark, and Luxembourg. The three
defense industrial cooperation MOUs with NATO allies are with Turkey, Spain, and Greece. A
codevelopment or development-sharing agreement exists with Canada and an industrial participation
agreement with Australia. General and reciprocal procurement MOUs exist with Israel, Sweden, Swit-
zerland, and Egypt.

2These designated countries include, but are not limited to, Austria, Belgium, Canada, Denmark, Ger-
many, Finland, France, Ireland, Israel, Italy, Japan, Luxembourg, the Netherlands, Norway, Singa-
apore, Sweden, Switzerland, and the United Kingdom.
Our review of the application of the Buy American Act to 40 Navy machine tool contracts, let during fiscal years 1987 and 1988 and valued at about $11.8 million, showed that foreign-made machine tools totaling about $9.8 million were bought in 23 contracts, and domestic-made machine tools totaling about $2 million in the other 17 contracts.

None of the 23 contracts for foreign-made machine tools was subject to the Buy American Act. The primary reason given in the contract file was that an existing MOU between the United States and the country where the machine tool was manufactured exempted the procurement from the act’s provisions. Sixteen contracts, valued at about $5 million, were specifically exempted because of an existing MOU. The Buy American Act did not apply to six contracts, valued at about $4.75 million, because no offers for a domestic-made machine tool were received. In the other case, the machine tool procurement action was awarded for use outside the United States and, therefore, was not subject to the act. However, in all 23 contracts, the machine tool was made in a country with which the United States has an agreement, so that even if domestic offers were received, the MOU would have precluded the application of the Buy American Act. The contract would have been awarded for the foreign-made machine tool, provided the offer for the foreign-made machine tool was the lowest cost, technically acceptable offer.

Our review indicated that at least $6.1 million of foreign-made machine tool procurement for fiscal years 1987 through 1989 were identified as domestic awards in DOD’s procurement reporting system. The appropriation acts’ restriction had been waived for each award, but each was listed as a domestic award in the system. We cannot tell whether other examples exist without individually examining all DOD machine tool awards. The foreign-made machine tool procurement figures we discuss in this report include the $6.1 million identified here.

DOD collects data on its prime contract awards to foreign and domestic sources under its DD-350 procurement reporting system. In many respects, the data summarized in the system are used to measure the adequacy of DOD acquisitions and the efficiency with which it executes its acquisition program. The data form the basis for internal DOD reports and are used by other executive branch departments, Congress, us, and others. The data frequently provide a basis for new or revised acquisition policies. Thus, it is important that the data be reliable.
About $5.2 million of the foreign-made, restricted machine tools procured by Navy during fiscal year 1989 were identified as domestic awards in the system. Another $0.7 million in foreign-made Navy procurements during fiscal year 1988 were likewise listed as domestic awards. One Air Force fiscal year 1989 contract, valued at about $0.2 million, was also listed as a domestic award. No Army contracts for which waivers had been approved were listed as domestic awards. No waivers were approved for the Defense Logistics Agency during the 3-fiscal-year period we reviewed.

The listing of foreign-made awards as domestic awards in the procurement system was identified during our review of the appropriation acts' restriction waivers that had been submitted by contracting authorities to their respective Washington headquarters. The restriction had been waived for each procurement by the designated approving official. An approved waiver means that a foreign-made restricted machine tool, with a foreign content exceeding 50 percent, can be procured.

About $5.1 million were procured by the Washington Naval Regional Contracting Center. A Contracting Center official noted that each procurement in the $5.1 million involved a U.S. company operating outside the United States. The DD-350 entry documents identified the firm as domestic, but the foreign place of performance was not identified. Because the foreign place of performance was not identified, the procurement was listed in the procurement reporting system as a domestic award. Reviewers of the data in the reporting system could be misled as to the volume of DOD machine tool procurement that is foreign made.

The other $1 million was not discussed with the cognizant contracting activities.

Reliance on Contractor Self-Certifications Could Allow Foreign-Made Machine Tools to Be Procured

How procurement officials determine that the machine tool being offered under a contract is domestic made, rather than foreign made, may allow foreign-made machine tools to be passed off as domestic. Military contracting officials generally rely on contractor self-certifications to determine the origin of the machine tool being offered, i.e., whether it is foreign or domestic made. Some require that additional information be provided by the contractor.

The scope of our examination did not include determining whether contracting authority acceptance of a contractor self-certification has led to a foreign-made machine tool being passed off as a domestic-made
machine tool. However, knowledgeable people both in and out of the government believe this could be a problem.

The Washington Naval Regional Contracting Center has initiated certain data-gathering and verification techniques designed to provide contracting authorities with greater confidence in accepting contractor self-certifications. If these procedures prove successful, they could serve as a model for the other military contracting authorities.

Current Self Certification Practice

According to DOD procurement officials we talked with, currently a contractor need only certify that the machine tool cost is not over 50-percent foreign (in terms of the cost of components only). There is no requirement for contracting authorities to verify the machine tool’s actual foreign content percentage. Nor are offerors required to provide cost data on the foreign or domestic components in the machine tool.

However, contracting authorities can ask the contractor for these data. Before awarding a government contract, a contracting officer must determine that the potential contractor complies with Federal Acquisition Regulation criteria. The contracting officer must determine whether the potential contractor has adequate financial, technical, and physical resources to perform the contract. As part of this process, a contracting officer can request information from the contractor. Obtaining a cost breakdown is one means the contracting officer can use to ascertain whether the potential contractor will be able to meet the domestic content requirements in a machine tool contract. But this is not done routinely.

The machine tool clause causes the contractor, in signing the contract, to certify that each restricted machine tool supplied is of U.S. or Canadian origin as defined in the previous paragraph. A more precise breakdown of foreign components is not required.

The contracting authorities usually accept self-certification at face value unless they have reason to question whether a domestically made machine tool will be furnished. Only then would additional information be sought from the contractor.

Concerns About Self-Certification

Government and private industry officials are concerned that the acceptance of contractor self-certifications by a contracting officer without verification may allow foreign-made machine tools to be passed
off as domestic partially because the manner in which the foreign versus domestic content determination is made leaves much open to question. For instance, items included in a contractor's domestic cost calculation may not be true components, but rather noncomponent costs, such as engineering and installation. These items improperly inflate the machine tool's domestic content.

A National Machine Tool Builders Association official believes that assembly costs are inflated in bids and are not checked by the contracting activity. An official from DOD's Office of Industrial Base Assessment expressed concern that contractors may be submitting questionable certifications that the machine tools being offered are domestic.

A December 18, 1986, memorandum from the Defense Logistics Agency's Defense Industrial Plant Equipment Center on procurement of foreign machine tools noted the following:

Some machine tool builders are representing their machines as USA-made when actually the machine is imported as components and assembled in the United States. We do not believe this complies with the Domestic End Product definition of the Buy American Act.... It is important to remember that total component cost does not mean the contract unit price. Components mean articles, materials and supplies directly incorporated into the end products.

The Director of Commerce's Metalworking Division believes that many items now included in determining whether a machine tool exceeds the 50-percent domestic content rule are really accessories, not component parts.

An official from the Washington Naval Regional Contracting Center believes that cost is not the only consideration. Pre-award surveys often accept assembly (adding basically what are accessories to a foreign machine tool) as "manufacturing." DFARS 225-7008 does not specifically define a particular test for determining the process of manufacturing. In the Buy American Act area, GAO decisions have addressed on a case-by-case basis the question as to whether an assembly of parts or components constituted "manufacture." For instance, GAO has concluded that "manufactured in the United States" as used in the Buy American Act and the Federal Procurement Regulations implementing the act may
include the assembly in the United States of articles from foreign manufactured components. In this case the mounting and alignment in the United States of foreign-made electric motors onto domestically manufactured circulating pump units constituted a "manufacture of the complete pump units (end product) in the United States."

The DFARS regulation does not require, however, that each component also be manufactured in the United States or Canada; foreign manufactured components are permitted so long as the sum of their costs are less than 50 percent of the cost of all components.

There is also an issue concerning what should be counted in calculating the percentage cost of domestic components. Allegations have been made that contractors sometimes include various domestic accessories to raise the domestic content of the end product beyond the 50-percent level. We have addressed this issue on a case-by-case basis in our bid protest decisions. For example, in Morey Machine Incorporated (B-233793, Apr. 18, 1989), we said that where the government is purchasing a milling machine with accessory parts that are deemed necessary for the unit to comply with agency requirements, the cost of those parts may be included in determining whether the machine is a domestic product.

Under the regulations, to determine whether an item is a domestic end product that has been manufactured in the United States, only the total cost of the components is used (i.e., what the manufacturer paid for the components or the total cost to manufacture them in-house). The total cost of the end product, i.e., price minus profit, is irrelevant, since the total cost includes noncomponent costs. Labor, overhead, packaging, testing, and evaluation costs incurred in manufacturing the end product are not included as part of the total costs of all components used to make the end product.

The Washington Naval Regional Contracting Center Reviews Self-Certifications

Unlike other contracting offices, the Washington Naval Regional Contracting Center verifies contractor certifications where the stated foreign content exceeds 40 percent. To aid in this verification, the Contracting Center requires the offerors to state the percent and dollar value of any foreign components in the machine tool, the tool's country of origin, and the percent of manufacturing performed in the foreign

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country. This foreign content statement emphasizes that only component costs are to be counted in determining the machine tool’s origin. With these data, Contracting Center officials can be alerted to any improper use of the total contract price in calculations and then can ask for a cost breakdown to get the proper costs.

DOD regulations do not require a foreign content statement. This statement is included only if the local contracting authority requests foreign content information. However, without this information, contracting officers do not know what, if any, foreign components are included in the machine tool(s) offered. The Army does include a foreign content statement, but it is based on total contract price, not component costs. The Army, however, also requires that the contractor certify the total cost of machine tool components and the cost of U.S. or Canadian components. The Air Force does not include a foreign content statement in its machine tool procurements.

According to a Contracting Center official, since February 1989 the Contracting Center has generally verified any foreign content that exceeds 40 percent. To verify, it could request a pre-award breakout of prospective contractor costs, i.e., domestic versus foreign costs. It could also ask the contractor for a brochure or other documentation that cites that an American version of the machine tool is generally sold to U.S. customers. Contracting Center officials also rely on their own experience and expertise to determine which contractors need to be carefully monitored. In addition, they also contact Commerce’s Metalworking Division for assistance in determining whether a machine tool being offered is foreign or domestic made. This Contracting Center official believes the Center’s verification is yielding benefits. The contracting official said that several companies which had formerly provided questionable foreign content statements now provide more reliable foreign cost content statements or have stopped making offers.

**Conclusion**

To accurately determine the machine tool’s origin, contracting officers need to know the machine tool’s foreign cost content based on component cost, as well as the dollar value of the machine tool’s foreign and domestic components. The verification procedures initiated by the Naval Regional Contracting Center may be beneficial in this regard. Contracting Center officials told us that using the procedures has yielded benefits. However, the scope of our work did not include determining the extent to which the additional verification procedures have been beneficial or resulted in more accurate self-certifications.
The following tables summarize data on DOD's machine tool procurements in recent years. Although machine tools were not restricted during fiscal year 1986, data on 1986 procurements are also presented in some tables for comparison purposes.

### Table I.1: Machine Tool Procurement Actions by Military Department for Total Fiscal Year Period 1987-1989

<table>
<thead>
<tr>
<th>Department</th>
<th>Actions</th>
<th>Value</th>
<th>Actions</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>1,022</td>
<td>$203.7</td>
<td>705</td>
<td>$166.0</td>
</tr>
<tr>
<td>Air Force</td>
<td>483</td>
<td>84.6</td>
<td>343</td>
<td>67.8</td>
</tr>
<tr>
<td>Army</td>
<td>404</td>
<td>139.0</td>
<td>304</td>
<td>104.6</td>
</tr>
<tr>
<td>Other DOD*</td>
<td>442</td>
<td>30.8</td>
<td>189</td>
<td>13.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,351</td>
<td>$458.1</td>
<td>1,541</td>
<td>$352.0</td>
</tr>
</tbody>
</table>


Source: GAO analysis of DOD DD-350 procurement reporting system data.

### Table I.2: DOD Machine Tool Procurement Actions by Military Department (Fiscal Years 1986-1989)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actions</td>
<td>Value</td>
<td>Actions</td>
<td>Value</td>
</tr>
<tr>
<td>Navy</td>
<td>391</td>
<td>$61.0</td>
<td>347</td>
<td>$59.1</td>
</tr>
<tr>
<td>Army</td>
<td>266</td>
<td>71.5</td>
<td>185</td>
<td>82.4</td>
</tr>
<tr>
<td>Air Force</td>
<td>218</td>
<td>42.2</td>
<td>234</td>
<td>31.8</td>
</tr>
<tr>
<td>Other DOD</td>
<td>214</td>
<td>15.7</td>
<td>195</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Total DOD</strong></td>
<td>1,089</td>
<td>$190.4</td>
<td>961</td>
<td>$186.2</td>
</tr>
</tbody>
</table>

Source: GAO analysis of DOD DD-350 system data.

### Table I.3: DOD Restricted Machine Tool Procurement Actions by Military Department (Fiscal Years 1986-1989)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actions</td>
<td>Value</td>
<td>Actions</td>
<td>Value</td>
</tr>
<tr>
<td>Navy</td>
<td>252</td>
<td>$45.7</td>
<td>234</td>
<td>$46.8</td>
</tr>
<tr>
<td>Army</td>
<td>189</td>
<td>56.5</td>
<td>133</td>
<td>55.1</td>
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<tr>
<td>Air Force</td>
<td>160</td>
<td>32.9</td>
<td>164</td>
<td>23.5</td>
</tr>
<tr>
<td>Other DOD</td>
<td>66</td>
<td>4.6</td>
<td>71</td>
<td>4.5</td>
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<tr>
<td><strong>Total DOD</strong></td>
<td>667</td>
<td>$139.8</td>
<td>602</td>
<td>$129.9</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

Source: GAO analysis of DOD DD-350 system data.
### Appendix I
Data on DOD Procurement of Machine Tools, Fiscal Years 1986-1989

#### Table 1.4: DOD Procurement of Foreign-Made, Restricted Machine Tools by Military Department (Fiscal Years 1987-1989)

<table>
<thead>
<tr>
<th>Department</th>
<th>Fiscal year 1987</th>
<th>Fiscal year 1988</th>
<th>Fiscal year 1989</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actions</td>
<td>Value</td>
<td>Actions</td>
</tr>
<tr>
<td>Navy</td>
<td>19</td>
<td>$2.8</td>
<td>14</td>
</tr>
<tr>
<td>Army</td>
<td>8</td>
<td>2.0</td>
<td>8</td>
</tr>
<tr>
<td>Air Force</td>
<td>11</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Other DOD</td>
<td>2</td>
<td>0.2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total DOD</strong></td>
<td>40</td>
<td><strong>$6.0</strong></td>
<td>23</td>
</tr>
</tbody>
</table>

*Column totals do not add to the total shown on table 2.2 or table 1.5 because of rounding of individual data items.

Source: GAO analysis of DOD data.

#### Table 1.5: DOD Purchases of Foreign-Made, Restricted Machine Tools by Country of Origin (Fiscal Years 1987-1989)

<table>
<thead>
<tr>
<th>Country</th>
<th>Purchases</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3</td>
<td>$0.3</td>
</tr>
<tr>
<td>Austria</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Italy</td>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>Japan</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>The Philippines</td>
<td>1</td>
<td>a</td>
</tr>
<tr>
<td>Singapore</td>
<td>3</td>
<td>0.1</td>
</tr>
<tr>
<td>Spain</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>18</td>
<td>8.4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1</td>
<td>a</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>35</td>
<td>8.5</td>
</tr>
<tr>
<td>Germany</td>
<td>16</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>108</td>
<td><strong>$29.0</strong></td>
</tr>
</tbody>
</table>

*aLess than $0.1 million.

*bTotal does not agree with the total shown in table 2.1 or table 1.4 because of rounding of individual data items.

Source: GAO analysis of DOD data.
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