

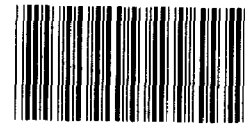
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BY THE U.S. GENERAL ACCOUNTING OFFICE

# Report To The Chairmen House And Senate Footwear Caucuses

## The U.S. Footwear Industries' Ability To Meet Military Mobilization Needs

In the event of a major military mobilization, Defense may have problems in meeting its military footwear needs. Its prepositioned war reserve stocks of footwear, which are used during the initial stages of a conflict, are below requirements. Defense reports show that, once these stocks are depleted, the domestic rubber footwear industry would be unable to fully meet mobilization needs for rubber combat footwear. In addition, reflecting its concern with the U.S. nonrubber footwear industry's loss of competitiveness due to foreign competition, Defense has initiated a major evaluation of that industry's ability to meet mobilization needs.



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NATIONAL SECURITY AND  
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B-217282

The Honorable William S. Cohen  
Chairman, Senate Footwear Caucus  
United States Senate

The Honorable William Alexander  
Chairman, House Footwear Caucus  
House of Representatives

At your request, we are reporting on the domestic rubber and nonrubber footwear industries' ability to meet Department of Defense needs in the event of a major military mobilization. As we agreed with your offices in our September 4, 1984 briefing, we relied primarily on Defense Department records and evaluations during our examination and focused on

--the adequacy of Defense's prepositioned war reserve (PWR) stocks of combat-essential footwear, which are intended for use during the initial stages of a conflict, and

--the industries' ability to meet mobilization requirements once these stocks are depleted.

The information we previously provided to your offices is summarized below and discussed in more detail in appendix I.

Your concern about the U.S. footwear industries' ability to meet mobilization needs is not without precedent. During World War II, the U.S. government rationed nonrubber footwear to the general public. The present concern focuses not only on non-rubber footwear but also on rubber footwear. The basis for this concern is diminished productive capacity due to import competition.

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Over the past 15 to 20 years, imports have come to dominate the domestic rubber and nonrubber footwear markets. Domestic shipments of athletic footwear, which represent 88 percent of domestic consumption of rubber footwear, decreased 54.2 percent during 1964-83 while imports increased about 253 percent. Domestic production of nonrubber footwear decreased 50 percent during 1968-83 while imports increased about 232 percent. During 1968-83, imports of nonrubber footwear increased from about 22 percent of domestic consumption to about 64 percent and, in the first half of 1984, imports represented about 70 percent of domestic consumption. The corresponding loss of commercial sales has caused many U.S. firms to cease domestic production and significantly reduce employment. Defense purchases, which represent only about 1 percent of domestic consumption of footwear, can sustain only a very small portion of the footwear industries.

Defense's prepositioned war reserve stocks of several major types of combat-essential footwear are below requirements, due primarily to funding limitations. The Army, which represents over 90 percent of the armed forces requirements for footwear, has met only 84.6 percent of its PWR requirements for black leather combat boots, 29.0 percent for rubber cold-weather boots, and 18.3 percent for combat boot overshoes.

Once these stocks are depleted, the U.S. footwear industries may face difficulties fully meeting military mobilization requirements. Defense, which is required by law to purchase only U.S.-made footwear, bases its mobilization requirements for footwear on a scenario that involves a multi-year, conventional war in several theaters of conflict. Consequently, these requirements include not only leather combat boots but also hot and cold-weather boots. A war of smaller geographic scope and/or shorter duration would likely place lesser demands on the domestic footwear industries than projected by Defense.

A series of reports by the Defense Personnel Support Center (DPSC)<sup>1</sup> since 1981 shows that the rubber footwear industry cannot meet mobilization needs for all types of combat-essential rubber footwear. The latest report, issued in February 1983, concluded that the domestic industry could not meet mobilization needs for black cold-weather insulated boots. Further, the loss of even one supplier would jeopardize its ability to meet

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<sup>1</sup>DPSC, among other things, conducts virtually all military purchases of footwear and monitors the mobilization capabilities of the footwear, clothing, and textiles industries.

mobilization requirements for hot-weather (jungle) boots and vinyl combat overshoes. In December 1983, DPSC formally recommended that the Defense Logistics Agency allocate \$1.3 million to enable two rubber footwear manufacturers to expand their capacity to produce insulated cold-weather boots. The Agency denied this request, stating that the measure could be implemented quickly in the event of a mobilization.

Although most industry experts with whom we spoke generally agree that the nonrubber footwear industry could presently meet mobilization needs, DPSC was sufficiently concerned about the industry's competitive position to have initiated a major study in May 1984 of its mobilization capacity. As a first step in this effort, DPSC compared Defense's mobilization requirements with the maximum production capacities of active nonrubber footwear suppliers. Preliminary indications are that these suppliers can meet all of Defense's mobilization needs for non-rubber footwear, with the exception of direct-molded-sole leather combat boots. DPSC cautions that these preliminary findings are inconclusive. Among other things, it still needs to survey firms that are on the bidders list for nonrubber footwear, but are not active suppliers, to determine their maximum capacities for producing combat-essential footwear. This study will also take into consideration the ability of industries that supply the nonrubber footwear industry to support a mobilization effort. From the information obtained in this survey, DPSC plans to develop conclusions and, if necessary, recommend ways to improve the industry's mobilization capacity.

We understand that DPSC will also continue monitoring developments in the rubber and nonrubber footwear industries as part of its ongoing responsibilities and report on its findings periodically.


The Defense Department provided official oral comments on this report. Defense concurred with our finding that its PWR stocks of certain combat-essential footwear are below requirements. It added that the Army is making a continuous effort to meet its PWR requirements for footwear but that, given resource limitations, it is questionable that the Army will ever reach 100 percent of these requirements. Defense also agreed that the domestic footwear industries may not be able to meet military needs in the event of a major mobilization. Defense noted that mobilization capacity for the manufacture of rubber cold-weather insulated boots is the weakest area of our mobilization base for footwear. Defense continued to believe, however, that corrective action could be implemented during a mobilization situation that would significantly reduce any shortfall in a relatively

short period of time. Defense stated that it remains concerned with the nonrubber footwear industry's ability to meet mobilization needs and will continue to monitor conditions to insure that any change in capability or requirements receives a proper response.

Although we did not solicit industry comments on this report, Footwear Industries of America, a trade association representing the nonrubber footwear industry, furnished comments to your staff at a meeting on December 3, 1984. We considered these comments in preparing our report. One of the association's comments was that, assuming a mobilization requirement similar to that experienced during 1941-42, the domestic nonrubber footwear industry currently does not have sufficient production capacity to meet mobilization requirements. The industry association's assumption regarding mobilization requirements is not shared by the Defense Department. Defense's current mobilization scenario envisions the need for less combat footwear than projected by the industry association. Nevertheless, as we have stated, Defense was sufficiently concerned about the domestic nonrubber footwear industry's loss of competitiveness to have initiated a study of its mobilization capacity. Defense anticipates concluding this study by June 1985.

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Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date it is issued. At that time, we will send copies to interested parties and make copies available to others upon request.

  
Frank C. Conahan  
Director

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### ABBREVIATIONS

DPSC	Defense Personnel Support Center
PWR	Prepositioned war reserve

THE U.S. FOOTWEAR INDUSTRIES' ABILITY TO MEET DEFENSE DEPARTMENT  
NEEDS IN THE EVENT OF A MAJOR MILITARY MOBILIZATION

In the event of a major mobilization (see p. 5), the Department of Defense may have problems in meeting its military footwear needs. The prepositioned war reserve (PWR) stocks of footwear, which would be used during the initial stages of a conflict, are below requirements set by Defense. A series of reports by the Defense Personnel Support Center (DPSC)<sup>1</sup> show that, once these stocks are depleted, the rubber footwear industry would be unable to fully meet mobilization needs for rubber combat footwear. Further, reflecting its concern with the non-rubber footwear industry's loss of domestic manufacturing capacity due to import competition, DPSC has initiated a major evaluation of that industry's ability to meet mobilization requirements.

BACKGROUND

Concern about the U.S. footwear industries' ability to meet Defense's mobilization needs is not without precedent. During World War II, the U.S. government rationed nonrubber footwear to the general public. Shoes were rationed on a basis of three pairs per person each year beginning February 1943 and on a basis of three pairs per person every 2 years beginning January 1945. The present concern focuses not only on nonrubber footwear but also on rubber footwear and the basis for this concern is diminished productive capacity due to import competition.

Section 721A of the Department of Defense Appropriations Act, 1984 (97 Stat. 1442) requires Defense to procure domestically made footwear. This provision, which was first introduced in 1954, states that, with certain exceptions, Defense can purchase only U.S.-made "food, clothing, cotton, silk, synthetic fabrics, wool, or specialty metals..." Defense has interpreted clothing to include rubber and nonrubber footwear.

Despite being protected by tariffs that increase the price of imports by as much as 60 percent, U.S. rubber footwear producers are losing their share of the domestic market to imports. Foreign producers, which use highly labor intensive manufacturing techniques, benefit from much lower labor costs. Domestic shipments of rubber-soled, canvas-upper (i.e., athletic) footwear, which represent over 88 percent of domestic consumption

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<sup>1</sup>DPSC, among other things, conducts virtually all military purchases of footwear and monitors the mobilization capabilities of the footwear, clothing, and textiles industries.



of rubber footwear, decreased 54.2 percent from 1964 to 1983, while imports increased about 253 percent. Domestic production of rubber protective footwear decreased about 67 percent while imports remained stable during 1978-83 (the only years for which statistical information is available). A number of firms, including some major rubber footwear producers, have ceased or curtailed domestic production. Employment in the production of rubber and plastic footwear has declined steadily, from 26,300 employees in 1973 to 15,600 employees in 1983. Defense purchases, which represent less than 1 percent of domestic consumption of rubber footwear, can sustain only a very small portion of the domestic industry.

The domestic nonrubber footwear industry has also lost considerable domestic market share to foreign competition, which benefits from much lower wage rates. Domestic production of nonrubber footwear decreased 50 percent, from 642 million pairs in 1968 to 341 million pairs in 1983, while imports increased nearly 232 percent. During 1968-83, imports increased from about 22 percent of domestic consumption to 64 percent and, during the first six months of 1984, imports represented about 70 percent of domestic consumption. The corresponding loss of commercial sales caused many nonrubber footwear firms to cease domestic production. According to the Footwear Industries of America, a nonrubber footwear industry trade association, the U.S. nonrubber footwear industry experienced a net decline of 402 plants during 1968-83. Employment in producing nonrubber footwear decreased 42 percent, from 230,000 workers in 1968 to 133,000 workers in 1983. Defense purchases represent only about 1 percent of domestic consumption of nonrubber footwear and, thus, can sustain only a very small portion of the domestic industry.

#### OBJECTIVES, SCOPE, AND METHODOLOGY

In response to a request from Senator William S. Cohen and Representative William Alexander, Chairmen of the Senate and House Footwear Caucuses, we examined the U.S. footwear industries' ability to meet Defense needs in the event of a major military mobilization. We subsequently agreed with members of their staffs to rely primarily on Defense records and evaluations in examining (1) the adequacy of prepositioned war reserve stocks of military-essential footwear and (2) the domestic industries' ability to meet Defense mobilization needs once these prepositioned stocks are depleted. We did not assess the U.S. footwear industries' ability to meet civilian needs in a crisis. We could find no sound method for projecting civilian footwear needs or the ability of foreign sources to meet those needs nor could we foresee technological advancements in the manufacture of commercial footwear. The information in this report served as the basis for an earlier briefing provided to the requestors' staffs.

In reviewing the adequacy of prepositioned war reserve stocks of footwear, we interviewed officials of the Defense Logistics Agency, DPSC, the Army Materiel Command, and Army Support Activity-Philadelphia. We also obtained statistical data on projected requirements for rubber and nonrubber combat footwear and compared this with information showing PWR stocks on hand and in process of being purchased as of May 1984 to identify possible shortfalls.

In reviewing the industry's ability to meet mobilization requirements, we interviewed representatives of the Footwear Industries of America, Footwear Division of the Rubber Manufacturers Association, Commerce's Bureau Of Industrial Economics, and International Trade Commission regarding the overall competitive situation and prospects for the U.S. rubber and nonrubber footwear industries. We also interviewed officials of DPSC, the Federal Emergency Management Agency, and Commerce's Office of Industrial Resource Allocation regarding U.S. government determination of mobilization needs and the industries' ability to meet those needs. We also reviewed in detail a series of DPSC reports on the rubber footwear industry's ability to meet mobilization requirements and the ongoing study regarding the nonrubber footwear industry's ability to meet mobilization needs.

#### PREPOSITIONED WAR RESERVE STOCKS OF FOOTWEAR ARE BELOW REQUIREMENTS

Defense reportedly needs to improve the readiness of the armed forces by increasing the prepositioned war reserve stocks of several combat-essential items, including footwear. The PWR stocks, which are maintained by the individual services for use during the first 60 days of a conflict, serve as a major component of the military's readiness. After this initial period, the industrial base is expected to have increased production sufficiently to meet all military needs until the end of the conflict.

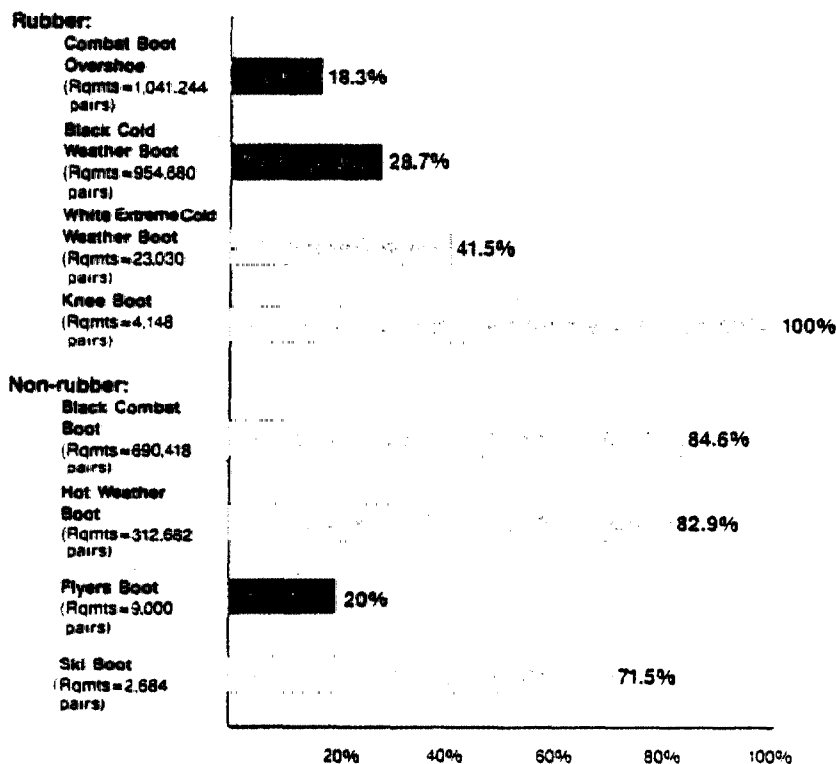
A March 1984 report by the Surveys and Investigations staff of the House Committee on Appropriations on the readiness of the U.S. military found critical deficiencies in the forward stocks of, among other things, weapon systems, ammunition, fuels, and spare parts. A similar Defense study acknowledges that deficiencies exist and outlines Defense's efforts to improve the readiness of the U.S. military, such as increasing acquisition and deployment of weapons systems.

The Army, which represents over 90 percent of the military's requirements for combat-essential footwear, has not fully met its PWR requirements for footwear, due primarily to funding

limitations. The Army centrally determines its PWR needs for footwear based on troop strength, estimates of intra-theater footwear losses, the time period covered, and a replacement ratio. A requirement is calculated for each of the Army's major commands (i.e., Europe, Korea, etc.), each of which is responsible for maintaining its own PWR stocks. If it is unable to meet its PWR requirements due to insufficient funding or lack of storage space, a major command may ask the Army Support Activity to meet the shortfall.

Despite improvements over the past 4 years, there are unfilled shortages in the Army's PWR stocks of several major types of combat-essential footwear. These shortages result largely because the Support Activity does not have sufficient funding to meet all requests received from the major commands. As shown in the chart below, the Army has met 84.6 percent of its PWR stock requirements for black leather combat boots, 29.0 percent for rubber cold-weather boots, and 18.3 percent for combat boot overshoes.

Prepositioned War Reserve Stocks of Footwear  
As A Proportion of Requirements (May 1984)<sup>a</sup>



<sup>a</sup>PWR stocks include footwear on hand as well as footwear being purchased.

Source: Based on information provided by the Department of the Army

These shortfalls could increase demands placed on the domestic footwear industries in the event of a mobilization and should be considered in DPSC's assessments of the footwear industries' ability to meet mobilization needs.

U.S. FOOTWEAR INDUSTRIES MAY NOT BE  
ABLE TO FULLY MEET MOBILIZATION NEEDS

A series of reports by DPSC recognizes that the U.S. footwear industries may face difficulties fully meeting military mobilization needs after prepositioned war reserves are depleted. Defense bases its mobilization requirements for footwear on a scenario that involves a multi-year, conventional war in several theaters of conflict. Consequently, these requirements include not only leather combat boots but also hot and cold-weather boots. A war of smaller geographic scope and/or lesser duration would likely place lesser demands on the domestic footwear industry.

The need to improve the U.S. industrial base is not unique to the footwear industries; Defense is taking steps to improve several industries' mobilization capabilities. A December 1980 House Armed Services Committee report, entitled The Ailing Defense Industrial Base: Unready for Crisis, noted that "the industrial base is not capable of surging production rates in a timely fashion to meet the increased demands that could be brought on by a national emergency." Defense contractors lacked the ability to meet mobilization needs for, among other items, the A-10, F-15, and F-16 jets, M-1 tank, and UH-60 helicopter. The mobilization base deficiencies were caused by decreases in the number of firms selling to Defense, increased lead times for producing combat-essential items, shortages of critical skilled manpower and materials, and aging production facilities. In his report to the Congress in support of Defense's fiscal year 1985 budget request, the Secretary of Defense outlined steps the Department is taking to improve the defense industrial base.

Rubber footwear

Several DPSC reports since 1981 have cited deficiencies in the rubber footwear industry's ability to meet mobilization needs. The latest report, which was issued in February 1983, concluded that the domestic industry could not meet mobilization needs for black cold-weather insulated boots. Further, the loss of even one supplier would jeopardize the industry's ability to meet requirements for hot-weather (jungle) boots and vinyl combat overshoes. The industry's problems generally stem from a lack of specialized tooling and skilled labor needed to produce

a boot that meets Defense's exacting specifications and high quality requirements.<sup>2</sup> This study also concluded that there was no acceptable commercial substitute for the present cold-weather boot or prospects that the boot currently in use would be replaced by a new design.

In December 1983, DPSC formally recommended that the Defense Logistics Agency allocate \$1.3 million to enable two rubber footwear manufacturers to expand their capacity to produce insulated cold-weather combat boots by 535,000 pairs annually. The Agency denied the request in March 1984, stating that the measure, which has a relatively short implementation lead time of 3 months, could be implemented quickly in the event of a mobilization.

### Nonrubber footwear

Although most industry experts with whom we spoke generally believe that the nonrubber footwear industry could presently meet mobilization needs, DPSC was sufficiently concerned with the industry's competitive position to have initiated a major study in May 1984 of its mobilization capacity.<sup>3</sup> As a first step in this effort, DPSC segmented the combat-essential footwear it purchases into several categories and compared Defense's mobilization requirements with the maximum production capacity of active nonrubber footwear suppliers. Preliminary indications are that these suppliers can meet all of Defense's mobilization needs for nonrubber footwear, with the exception of direct-molded-sole leather combat boots. DPSC cautions that these preliminary findings are inconclusive. Among other things, it

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<sup>2</sup>Cold-weather boots for commercial purposes generally provide protection in temperatures as low as -5°F, but Defense requires that its cold-weather boots provide protection to -40°F. As a result, while the commercial boot can be produced using a largely capital-intensive process, it takes 65 to 70 separate skilled operations to manufacture a cold-weather boot that meets Defense's specifications.

<sup>3</sup>This study will also update the findings of previous mobilization studies of the rubber footwear industry.

still needs to survey firms that are on the bidders list for nonrubber footwear, but are not active suppliers,<sup>4</sup> to determine their maximum capacities for producing combat-essential footwear. This study will also consider the ability of industries that supply the nonrubber footwear industry, such as the tanning and footwear machinery industries and firms that produce shoe parts (i.e., eyelets, shanks, laces, etc.), to support a mobilization effort.

From the information obtained in this study, DPSC plans to develop conclusions and, if necessary, recommend ways to improve the industry's mobilization capacity. Such measures generally involve either (1) a modernization and investment program, through which Defense funds supplier efforts to update production facilities, or (2) a preparedness equipment package, through which Defense funds supplier purchase and maintenance of additional production equipment which would be brought on line in the event of a mobilization. DPSC could also increase its stocks of combat-essential nonrubber footwear to compensate for limitations in the industry's mobilization capacity.

As part of its ongoing responsibilities, DPSC also plans to continue monitoring developments in both the rubber and nonrubber footwear industries. According to industry analysts, the future of both these industries is uncertain. For instance, the Footwear Division of the Rubber Manufacturers Association testified before the International Trade Commission in March 1984 that the free trade agreement being negotiated between the United States and Israel may allow Israel to export rubber footwear into this country duty free, further reducing the domestic industry's market share and weakening its competitiveness. Nonrubber footwear industry experts see conflicting trends in that industry. The Footwear Industries of America, pointing primarily to increased market penetration by imports and to plant closings, argues that if present trends continue the U.S. nonrubber footwear industry may disappear. Others, including the

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<sup>4</sup>A firm need only complete the proper form to be included on the bidders list. It need not demonstrate the capability to manufacture the items in question. Most inactive suppliers have not won contracts because they were not price competitive, but DPSC staff acknowledge that some of these firms may also not have the capacity to produce footwear that meets Defense specifications.

International Trade Commission,<sup>5</sup> point to increased profits and stable production during 1981-83 in arguing that the industry has stabilized.

#### AGENCY COMMENTS

The Defense Department provided official oral comments on this report. Defense concurred with our finding that its PWR stocks of certain combat-essential footwear are below requirements. It added that this shortage is due to the programming level authorized for the acquisition of war reserve stocks. Defense also pointed out that the Army is making continuous effort to meet its PWR requirements for footwear but that, given resource limitations, it is questionable whether the Army will ever reach 100 percent of these requirements.

Defense also agreed that the domestic footwear industries may not be able to meet military needs in the event of a major mobilization. Defense noted that mobilization capacity for the manufacture of rubber cold-weather insulated boots is the weakest area of our mobilization base for footwear. It continued to believe, however, that corrective action could be taken during a mobilization situation that would significantly reduce any shortfall in a relatively short period of time. Defense remains concerned with the nonrubber footwear industry's ability to meet mobilization needs and will continue to monitor conditions in the industry to insure that any change in capability or requirements receives a proper response.

Although we did not solicit industry comments on this report, Footwear Industries of America, a trade association representing the nonrubber footwear industry, furnished comments to your staff at a meeting on December 3, 1984. We considered these comments in preparing our report. One of the association's comments was that, assuming a mobilization requirement

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<sup>5</sup>In response to a petition for import relief under Section 201 of the Trade Act of 1974 filed by the Footwear Industries of America, the International Trade Commission, on July 9, 1984, voted unanimously to recommend against providing such relief to the domestic nonrubber footwear industry.

similar to that experienced during 1941-42, the domestic nonrubber footwear industry currently does not have sufficient production capacity to meet mobilization requirements. The industry association's assumption regarding mobilization requirements is not shared by the Defense Department. Defense's current mobilization scenario envisions the need for less combat footwear than projected by the industry association. Nevertheless, as we have stated, Defense was sufficiently concerned about the domestic nonrubber footwear industry's loss of competitiveness to have initiated a study of its mobilization capacity. Defense anticipates concluding this study by June 1985.



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