MOBILIZATION AND DEFENSE MANAGEMENT
TECHNICAL REPORTS SERIES

ACHIEVEMENT OF INDUSTRIAL MOBILIZATION
OBJECTIVES IN AN ECONOMICALLY
INTERDEPENDENT WORLD
The United States, as a result of its liberal trade policy, is becoming increasingly dependent upon foreign sources for scarce materials and manufactured components. This dependence is leading to a growing concern over the nation's ability to sustain its military capability in the event of a major and protracted war. Despite the severity and extent of the foreign dependencies, as reflected in various studies by Congress and the Executive Branch, there appears to be a reluctance to invest the resources required to ensure the maintenance of the essential industrial base and to put in place the framework and processes.
THE INDUSTRIAL COLLEGE OF THE ARMYED FORCES
NATIONAL DEFENSE UNIVERSITY

MOBILIZATION STUDIES PROGRAM REPORT

ACHIEVEMENT OF INDUSTRIAL MOBILIZATION OBJECTIVES IN
AN ECONOMICALLY INTERDEPENDENT WORLD

by

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A RESEARCH REPORT SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE RESEARCH REQUIREMENT

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THE INDUSTRIAL COLLEGE OF THE ARMED FORCES

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**ABSTRACT OF STUDENT RESEARCH REPORT**

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**ABSTRACT**

**Problem Statement**

The United States, as a result of its liberal trade policy, is becoming increasingly dependent upon foreign sources for scarce materials and manufactured components. This dependence is leading to a growing concern over the nation's ability to sustain its military capability in the event of a major and protracted war. Despite the severity and extent of the foreign dependencies, as reflected in various studies by Congress and the Executive Branch, there appears to be a reluctance to invest the resources required to ensure the maintenance of the essential industrial base and to put in place the framework and processes necessary to resolve the conflict between liberal trade and national security policies.

**Findings/Conclusions**

1. Existing U.S. policy regarding the mobilization industrial base does not adequately address the problems generated by increasing dependence.
2. Within the government, responsibility for ensuring an adequate industrial base is not clearly fixed.
3. Neither the Executive nor Legislative branches have demonstrated, other than through rhetoric, their concern for the problem.
4. Stated concerns have not been supported by budget allocations.
5. Without meaningful government intervention, the mobilization industrial base will continue to erode.
6. Organizational components comprising the defense industrial base are either unconcerned or unaware of the impact of growing foreign dependence on the ability of the U.S. to mobilize.
7. Rational, but short range, business decisions are compounding the problem of maintaining a viable mobilization base.
8. Disincentives must be removed and incentives provided to stop the deterioration of the domestic industrial base and to encourage the maintenance of domestic capabilities of selected industries essential to national security.

**Major Recommendations**

1. Modify U.S. trade policy to allow for government intervention as required to sustain a mobilization industrial base.

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2. Integrate foreign dependency as an item for evaluation in all proposed governmental actions impacting upon the industrial base.

3. Transfer the industrial mobilization preparedness mission from FEMA to the Assistant to the President for National Security Affairs.

4. Revitalize the Industrial Evaluation Board of the Department of Commerce.

5. Determine the minimum sustaining output levels for those selected industries comprising the defense and civilian elements of the mobilization industrial base.

6. Establish a single focal point within Congress charged with overseeing the management of the industrial base.
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EXECUTIVE SUMMARY

Since the end of World War II the U.S. has followed a liberal trade policy which has fostered a high degree of economic interdependence. This policy of liberal trade has resulted in international specialization of production and has had an increasingly adverse impact on the U.S. defense industrial base's ability to meet mobilization requirements. This paper focuses on the conflict between a liberal trade policy and the maintenance of an adequate defense industrial base; examines government efforts to respond to the dilemma; and suggests some institutional actions that would ameliorate the dilemma and contribute to the simultaneous achievement of both objectives.

Commencing with an examination of the theoretical underpinnings of economic interdependence, the study reviews the U.S. experience in the international economy. Particular attention is focused on the immediate post-World War II period and the adoption of liberalized trade policies by the Western Alliance, led by the U.S., as the basic economic strategy to confront the threat of Soviet expansionism. The initial success of the policy gave way to mounting U.S. concern in the late 1960's and 1970's as the implications of international specialization of production began to have a significant adverse impact on the capability of the defense industrial base. More and more defense related industrial manufacturing, particularly the labor intensive type, was and is being transferred overseas.

Following this broad theoretical and historical overview, the study examines the impact of economic interdependence on three illustrative industries--ferroalloys, machine tools, and electronic computers--all of which are confronting serious import competition which may threaten their long-term viability as key components of the defense industrial base. Finally, the government's role in maintaining an effective defense industrial base is examined with particular emphasis on the current institutional mechanisms and responsibilities for carrying out this objective. In this context the study reviews the governmental framework, processes, and guidance set forth in National Security Decision Directive (NSDD) #47 aimed at achieving industrial preparedness.

With this background, the study assesses the efficiency of government policy in maintaining an adequate defense industrial base and points out the present shortcomings of the Defense Production Act. NSDD-47, a long overdue step in the right direction, is an attempt to address the problems of industrial mobilization preparedness but, in not taking account of institutional rigidities, does not provide a sufficiently comprehensive governmental framework. Similarly the various key departments and agencies, with their parochial institutional views, do not give sufficient weight to the need for industrial preparedness.

Based on the foregoing analysis, the paper makes several recommendations, the key one being that trade policy should be modified to take explicit
account of the need for an adequate defense industrial base in the context of an open, liberal trading system. Second, the Defense Production Act should be revised and modernized to ensure the maintenance of a viable defense industrial base. Finally, the paper makes several procedures and institutional recommendations. Most notably, it recommends that the operational authority for industrial mobilization preparedness be transferred from Federal Emergency Management Agency to the National Security Council and, additionally, that single focal points be established within both Congress and Department of Defense to ensure the maintenance of the defense industrial base. Only in this manner will appropriate on-going attention be given to industrial base problems by the pertinent departments and agencies of government involved in national security and international trade policy.
CHAPTER I

INTRODUCTION

Problem

The past several years have been marked by a growing concern over the danger to national security of the nation's dependence upon foreign sources of strategic materials and the effects of foreign competition on the defense industrial base. This growing dependence is not a result of internal weakness or external subversion or conspiracy; it is the inevitable result of the free trade policy of the world's major trading partners, particularly the U.S., and of the accompanying transition of the U.S. economy from one which depends heavily on the manufacturing sector to one that is largely dependent on service sector. The absence of trade barriers and the ease of communications and transportation have resulted not only in growing dependence on foreign sources for items such as steel, machine tools, and various finished products, but also in a dependence on foreign sources for vital components of products, including those used for defense, which are manufactured in the U.S. Thus, the U.S. finds itself in an economically interdependent world, a world much changed from the 1940's and 1950's when U.S. industry was last called upon to mobilize for war.

Hypothesis

The severity and extent of foreign dependence have been addressed in various studies undertaken by both Congress and the Executive Branch.
However, the U.S. government still has not shown a willingness to come to grips with the problem. The conflict between this nation's liberal trade policies, which have led to economic interdependence, and the requirements for a strong industrial base have not been resolved. There has been a lack of will to invest the resources required to maintain the strategic stockpile or to prevent basic industries vital to defense from being displaced by foreign competition. Additionally, the framework and processes for resolving this conflict have proven inadequate.

**Purpose of the Study**

In view of the lack of definitive progress in dealing with this disturbing problem, this study will examine the government's established framework and procedures for achieving defense industrial preparedness to determine whether they are adequate to the task in the face of growing economic interdependence. The study does not assess the extent of foreign dependence in the nation's economy or even the extent to which defense products rely on raw materials or parts from abroad; nor is it intended that recommendations include action to be taken in any specific industry; nor, on a broader scale, does this study advocate a retreat from the United State's commitment to free trade. Instead, recognizing that economic interdependence exists and in most respects continues to be in the national interest, the study focuses on what measures are needed to ensure that the U.S. government is prepared to carry out its responsibilities in regard to industrial mobilization.
Assumptions

This study is structured around four basic assumptions.

- Interdependence of nations is growing as witnessed by the growth of the multi-national corporation (MNC), by U.S. dependence on foreign fuel and non-fuel resources, and by increasing volume of imports across a broad spectrum of manufactured goods and commodities.

- The U.S. has strongly encouraged a liberal international economic order which has resulted in increased economic interdependence.

- Economic growth and welfare of much of the world, including this country, have been enhanced by global interdependence.

- Economic interdependence results in increasing susceptibility to various external economic and political forces over which national governments have little or nor control.

Design of the Study

Undertaken at the suggestion of the Mobilization Concepts Development Center, National Defense University, this study is divided into four major parts:

Background, including the theory of economic interdependence and the evolution of interdependence in the U.S., culminating in the growth of the multi-national corporation;

Review of government directives and agencies involved in industrial preparedness matters, and the reactions of American industry to the phenomenon of economic interdependence;
Analysis of revised government mobilization policy and first steps toward its implementation, and a look at the problems in industry which may require government action; and, conclusions and recommendations.

The approach includes a review of the literature on economic interdependence, together with the basic policy directives and agency charters; interviews with officials of the Emergency Mobilization Preparedness Board, Federal Emergency Management Agency, and Departments of Commerce, State, Interior and Defense, and with selected corporate executives and industry spokesmen; and an analysis of the collected material providing a basis for recommendations. A bibliography is provided for reference purposes.
CHAPTER II
HISTORICAL PERSPECTIVE

Theoretical Basis of Economic Interdependence

The concept of economic interdependence has as its theoretical base the economic theories of international trade. The oldest of these is the classical theory of comparative advantage developed in 1817 by David Ricardo and later refined by Eli Heckscher and Bertil Ohlin in what is referred to as the Neoclassical Factor Endowment Theory. Both these theories are in part, based on common assumptions. Specifically, it is assumed that the factors of production are mobile, that the national government does not interfere with the "natural" laws of economics, that exports and imports are balanced for each country at any point in time, and that the gains from trade for a given country would benefit the local nationals of that country.

The theory of comparative advantage simply states that even if a country is at an absolute disadvantage in the production of every one of their products, trade is still desirable since that country would trade the item that it produces least inefficiently. The Heckscher-Ohlin theory states that the basis for trade includes not only the differential labor costs between countries (basis for Ricardian theory), but also includes the difference in all the factors of production such as land, capital, and labor as well.

From these theories we conclude that international trade is an important element impacting upon the economic growth and development of all nations.
Further, trade tends to promote greater international and domestic equalization of the prices paid for the factors of production. This equalization in turn promotes the stabilization of international prices.

The benefit of trade notwithstanding, the case has been made by several notable "free traders" for the curtailment of trade when considered necessary to preserve national security. Probably the greatest free trader of them all, Adam Smith, was not adverse to protective duties where they were required for national security. Smith stated, "It is of importance that the kingdom depend as little as possible upon its neighbors for the manufactures necessary for its defense; and if these cannot be maintained at home, it is reasonable that all other branches of industry be taxed to support them." As will be developed later, Alexander Hamilton expressed similar statements by saying that, "Every nation ought to endeavor to process within itself all the essentials of national supply." The use of protective tariffs was considered to be an acceptable practice when necessary to protect domestic industry.\(^1\)

Economic interdependence can be of two types, either natural or optional. Natural interdependence is the mutual dependency that grows between trading partners over a period of time and is based on mutually understood and recognized needs or demands. Optional interdependence encompasses the creation by design of an interdependent relationship between two nations.\(^2\) Optional economic interdependence is often initiated and fostered to achieve a variety of ends which may go beyond purely economic considerations such as the Soviet establishment of the Council for Economic Assistance.
The actual relationship between two interdependent nations rests upon the perceived symmetry or asymmetry of the relationship. A symmetric relationship is one where each party gains and loses equally whereas asymmetry connotes one-sided dependency. Interdependence at either end of the dependency continuum can create difficulties; however, an asymmetrical relationship is normally the source of most difficulties between nations. The United States provides a good example of this asymmetry from both ends of the spectrum, ranging from a colonial dependency to a hegemonic power in the post World War II period.

The U.S. Experience with Interdependence

The economic order prevailing during the colonial history of the U.S. was set largely by mercantilist theory where the role of the colony was to augment the wealth of the mother country. Trade and control of trade by the mother country were key mechanisms in this system and thus it is not surprising that economic issues, particularly trade-related, contributed heavily to the dissent in the American colonies which eventually led to revolution and political independence from Britain.

One of the fundamental policy issues facing the newly independent country was the economic one and the Federalists, led by Alexander Hamilton, were instrumental in articulating a neo-mercantilist policy aimed at stimulating industrial development in the newly formed United States. The Federalist policy of high tariffs and government subsidies deliberately fostered industrial growth in the interest of national power and self-sufficiency. And even after laissez-faire overpowered domestic mercantilism, protectionism in
the external sector continued to prevail. While various groups such as the Southern planters, the Western farmers, and antimonopolists pressed at various times for free trade, the rule was protectionism. As U.S. industrial might began to surpass Britain in the late 19th century, the U.S. adopted a special form of free trade known as the "Open Door" policy aimed at opening export markets to all and not just to one or another of the European powers. This policy was well suited both to the strategic position of the U.S., as reflected in the isolationism and avoidance of entangling alliances of that period, and to the domestic political and economic realities wrought by the Industrial Revolution. The U.S., despite the acquisitions from the Spanish-American War, had little interest in a colonial empire and was more interested in finding open markets in a world that had been largely carved into colonial empires by the European powers. The decline of British hegemony, the economic impact of World War I and the ascendency of U.S. industrial might all combined to thrust the U.S. into center stage during World War I. In the post-war period, however, the U.S. refused to play the central role in world affairs that its economy dictated. Accordingly, the world economic order became increasingly fragile and finally collapsed in 1930 with the Great Depression.

It was with the advent of the New Deal that the U.S. restructured its trade policies on the basis of free trade principles. Secretary of State Cordell Hull pursued vigorously the Reciprocal Trade Agreements policy which laid the intellectual foundations for American policy in restructuring the world economic order after World War II.
The U.S. emerged from World War II in a position of unprecedented international power. The economies of all of the other major industrial powers had been severely damaged or destroyed by the global conflict. Thus the U.S. was, with only minor external constraints, able to unilaterally restructure the international economic system. The fundamental objective of American policy was to create a liberal, open international economic system not only because it served U.S. economic interests but also because American liberal ideology held that such a regime would promote peace and prosperity around the world.

However, domestic opposition to this vision from 1945-1947 was sufficient to block its initial implementation and the necessary resources were not made available. The international institutions which had been envisioned as the centerpieces of the new order were either inactive, such as the IMF or the World Bank, or non-existent, as the International Trade Organization. With the growing perception of the Soviet threat to non-Communist Europe, U.S. leaders were able to redefine international issues in terms of a global struggle with Communism. Accordingly, the Marshall Plan became the new centerpiece of American economic policy which would facilitate the creation of a healthy and Communism-resistant liberal economic order by promoting European and Japanese growth.

With the restructuring of the European economies and with it, their ability to compete with the U.S. in international markets, Western leaders were faced with a more symmetrical economic relationship that required a different policy response than the massive U.S. aid flows of the late 40's and
early 50's. The response was a reiteration and more meaningful implementation of liberal trade policy by the West, particularly the U.S., as demonstrated by the Kennedy Round of GATT negotiations which commenced in 1962. Despite such efforts and as could have been expected from an appreciation of comparative advantage theory, the relative international economic power position of the U.S. declined during the 1960's. Balance of payment difficulties became more apparent as an overvalued dollar stimulated imports and hampered export sales. More domestic industries, particularly labor intensive ones, faced stiff foreign competition and demands for trade protection swelled by the end of the 1960's.

By the 1970's, the international economic position of the U.S. had become untenable within the parameters of the Bretton Woods system. The U.S. balance of payments disequilibrium with its resulting "dollar glut" and gold outflow placed growing pressure on the increasingly fragile international monetary system. Finally, in August of 1970, President Nixon brought the Bretton Woods fixed exchange rate system to an end when he declared that the dollar was no longer convertible into gold and imposed a 10 percent surcharge on dutiable imports. The August shock was the prelude to broad U.S. demands for reform of the trading system on the basis of unilateral concessions by Western Europe and Japan. Scarcely had the Western alliance sat down to the Tokyo Round of trade negotiations, when the OPEC nations quadrupled the price of oil. This sharp jump in oil prices sent a tremendous shock throughout the industrialized economies aggravating the inflationary process of the early 1970's while at the same time provoking a recession in the U.S. and other key trading countries.
This combination of events contributed to a resurgence of protectionist sentiment. While pressure for protection from troubled industries had persisted throughout the postwar period, the U.S. had been able to manage such pressures in large part because of the prosperous international economy from which the U.S. shared significant economic benefits. The steady growth and rising employment in the three decades following World War II enabled the U.S. to allow industries and labor to adjust to changing market conditions without major political reactions. With lower rates of growth, recession, and structural problems in a number of sectors, however, it became increasingly costly in both political and economic terms for governments to facilitate adjustment.

Nonetheless, political and economic interest groups developed significant vested interests in the economically interdependent world of the Atlantic Alliance. This reality was reflected in the fact that by 1980 over 20 percent of U.S. industrial output was being exported; one out of every six jobs in U.S. manufacturing was dependent on exports. On the import side, the U.S. became increasingly dependent upon imports to meet demand for manufacturers, particularly those that are labor intensive. Despite the uneveness of import growth in the various manufacturing subsectors, the overall upward trend is clearly evident and indicative of the impact of interdependency, viz.:
U.S. Imports of Selected Manufacturers

<table>
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<tr>
<th>SIC</th>
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<th>Import Penetration Ratio</th>
<th>Import Growth Rate</th>
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<tr>
<td>33</td>
<td>Primary Metal</td>
<td>8.2 13.7</td>
<td>17.7</td>
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<tr>
<td>34</td>
<td>Fabricated Metal</td>
<td>2.6 3.7</td>
<td>15.2</td>
</tr>
<tr>
<td>35</td>
<td>Machinery, ex. electrical</td>
<td>5.7 7.8</td>
<td>17.8</td>
</tr>
<tr>
<td>36</td>
<td>Elec. &amp; Electronic</td>
<td>8.4 11.2</td>
<td>17.1</td>
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<td>37</td>
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<td>9.7 14.1</td>
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<tr>
<td>38</td>
<td>Instruments and related</td>
<td>7.2 10.5</td>
<td>19.9</td>
</tr>
<tr>
<td>39</td>
<td>Miscellaneous</td>
<td>14.6 20.9</td>
<td>17.4</td>
</tr>
</tbody>
</table>

The rapid growth in trade noted above was greatly facilitated by a relatively new phenomena...the multinational corporation (MNC).

The rise of the multinational corporation can be seen as a logical extension of economic interdependence because the MNC was nothing more than the vehicle or catalyst for facilitating the production and movement of goods between countries. MNC's have traditionally been viewed as capable of maximizing the world's economic welfare through the rational allocation of the earth's resources by virtue of their ability to scan the globe for production and marketing opportunities. They have also been viewed as a stabilizing force towards world harmony, since they create constituents of both producers and consumers who would be damaged economically by conflict.

Some traditional economic interest groups have been adversely affected by the economic impact of greater specialization of production implicit in the MNC's objectives. Thus, some domestic industries, particularly the less internationally competitive ones, have opposed the MNC view on interdependence, thereby contributing to a variety of viewpoints on the wisdom of total adherence to the economic dictates of interdependence.
CHAPTER III

ASSESSMENT OF CURRENT SITUATION

Industry Perspectives

U.S. industry, lacking the centralized control of a socialist government or the homogeneity of the industry of a smaller country, reflects a wide range of viewpoints with respect to interdependence. These viewpoints range from the sense of outrage and cries for government protection from such industries as ferroalloys and machine tools, whose profitability and continued existence are being threatened by foreign competition, to the self-interest of industries such as semiconductors and electronics, which have moved their operations offshore, thereby fostering greater foreign dependence. There are a few defense contractors who acknowledge the dangers to the U.S. mobilization capability of increasing foreign dependence, and there are others who seem to be unaware of the range and depth of foreign-manufactured components which are purchased from sub-contractors. The following examples serve to illustrate the views of industry on this issue.

Of those industries asking for government protection, the ferroalloys industry has been the only basic industry to claim that the loss of their industry threatens national security. Accordingly, the industry has asked for relief under the national security clause of the U.S. Trade Law (Section 232 of the Trade Expansion Act of 1962). The ferroalloys industry is composed of sixteen companies producing and selling chromium, manganese, and silicon ferroalloys and related metals which are required in the production of steel,
stainless steel, and superalloys as well as certain iron and aluminum castings. The industry charges that imports from South Africa, Japan, and Western Europe have taken over half the U.S. market and have left domestic producers with a capacity utilization of under 20 percent. The rise in foreign imports has occurred, according to Mr. George Watson, Ferroalloys Association President, because governments of ferroalloy exporting nations have provided subsidies and other incentives to encourage exports, and because of U.S. companies' burden of costly environmental and other regulations that work to their disadvantage economically. At the same time, the ferroalloys industries in other countries, such as Japan and Western Europe, have been protected by import barriers established through artificially high prices and outright controls on imports. The industry asserts that foreign competition has the edge not because of technological obsolescence, high labor rates, proximity to sources of ore, or inferior quality, but because of unfair economic benefits not available to U.S. producers. The Department of Commerce has recommended action to upgrade the national stockpile as a means of keeping the industry afloat. However, the industry has responded by recommending a "break-point duty" which would reward efficiency in production by allowing a duty on only those imports falling below the break-point price, which would be based on production costs of the most efficient domestic producers. Such a system, according to the Ferroalloys Association, would cost nothing while upgrading the stockpile could cost several billion dollars over a ten year period and even then would be only a partial solution.
A similar case is developing in the machine tool industry. In July, 1982, Senator Jepsen (R-Ia.), sought to amend the Tax Bill to deny the 10 per cent investment tax credit to imported machine tools. Although rules did not permit such an amendment, Senator Jepsen cited the following figures in testimony: "Last year 36 per cent of machine tools installed by American industry came from overseas, compared to a 7 per cent market share ten years ago." He stated that Japanese penetration of the market has increased by about 50 per cent each year from 1976 to the present, and the Japanese government, in addition to providing direct and indirect subsidies to the machine tool industry, has formed a cartel for the purpose of invading the American Machine tool market. The industry feels that it is competing with an entire government rather than an industry--"Japan, Inc.", as it is sometimes called. Japanese penetration of the market has been facilitated further by the move of one Japanese company to the U.S. (Yamazaki, Florence, Ky.), and by the takeover of a U.S. firm, LeBlond, by another Japanese company, Makimo. The American machine tool industry, on the other hand, is in such poor condition that conglomerates are picking up companies, "milking them", and liquidating the skeleton as a tax write-off. High labor costs do not appear to be a problem, as machine tools are not labor intensive. The high cost of capital and lack of U.S. government subsidies similar to those enjoyed by foreign competitors are given as primary reasons for the declining U.S. industry. On the other hand, a study prepared for the Cabinet Council of Commerce and Trade states that, "U.S. Machine Tool companies have not aggressively pursued foreign markets to offset slow periods in their highly cyclical market." In any event, this industry, like ferroalloys, is
vigorously pursuing their case both with the Congress and the Administration. In late December, 1982, the Senate adopted a resolution urging President Reagan to bar American companies from taking the investment tax credit when buying foreign machine tools. Under the Revenue Act of 1971 the President has the power to disqualify foreign goods from the tax credit if he finds that a foreign country engages in "discriminatory or other acts including tolerance of international cartels that unjustifiably burden U.S. commerce."  

The recent Japanese drive for preeminence in the computer market has sounded an alarm in the U.S. computer industry. Japan has established a Fifth-generation Computer Project to achieve a technological breakthrough in machines which are superfast and which will respond to the human voice. The response of the U.S. computer industry has been to form a research cooperative of a number of computer and semiconductor companies to fund ($50 million by 1985) and direct basic computer research in universities. A second group under the leadership of Control Data Corporation is planning to spend upwards of $100 million per year to counter the Japanese threat. IBM is considering its own strategy in addition since it has been targeted by Japanese companies who are marketing computers which are "plug-compatible" with IBM peripherals and software. In general, U.S. industry's response to Japan's computer initiative appears to be timely and vigorous and, while the U.S. may eventually share the advanced computer market with Japan, the U.S. is not likely to find its own computer industry, so vital to the defense industrial base, in any significant decline.

Complicating the effects of foreign competition on the U.S. industrial base is the tendency for some U.S. companies, if not entire industries, to
establish manufacturing and assembly plants abroad. The electronics industry, in particular, has followed this path because it permits better access to foreign markets and, of course, guarantees cheap labor. Although these are U.S. owned companies, their location overseas has obvious significance to U.S. mobilization capability. National Semiconductors, for example, has moved 90% of its assembly and 65% of its testing operations offshore. The Vice President for International Manufacturing, National Semiconductors, asserts that, in addition to considerable savings, the quality of the products coming from their overseas plants is higher than those made in California's "Silicon Valley". He does foresee, however, a possibility for reversing the trend of overseas manufacturing, as automation of assembly and testing processes is developed domestically. This reversal, however, is at least 4-5 years away. 17

The making of rational business decisions by U.S. companies has even led to joint ventures with Japanese companies in the unlikely area of computers. For example, Fujitsu, Japan's leading computer manufacturer, has joined in a venture with TRW in which the Japanese company provides the hardware, while TRW furnishes the sales force, service personnel, and software developers. This type of venture enables faster and deeper penetration of the U.S. market and results in a greater degree of interdependence in a vital industry. 18

Some companies are genuinely concerned about the problem of interdependence and its affect on national security. The Vice President for Sensor and Signal Processing at Magnavox stated that, even with guaranteed air transport from overseas suppliers, his company, which makes communication and
electronic warfare equipment, satellite navigation sets, and sonobuys, would require an additional 10-16 weeks lead time in any mobilization due to reliance on foreign components. Were those components available in the U.S., lead time could be shortened to less than a month.\textsuperscript{19} Testimony of a Texas Instruments representative before the U.S. Hearing on the Defense Industrial Base in 1980 indicated that it would require at least 18 months to gear up U.S. production to reach 50 per cent of the companies’ production capacity in its Far East facilities.\textsuperscript{20} Contrary to the awareness by these industries of the problems and opportunities fostered by international competition, many industries appear to remain unaware or unconcerned about the degree to which their products contain components from foreign manufacturers or U.S. firms operating abroad. The Aerospace Industries Association stated that their member companies “don’t have a problem,” since all manufacturing of aerospace hardware is done in this country. The question as to origin of avionics components remains unanswered, probably because many manufacturers are unaware of the extent of the problem. The Hazeltyne Corporation representative to the 1982 Mobilization Conference held at the Industrial College of the Armed Forces, similarly indicated that there is little to fear in this regard.

Thus it appears that U.S. industry views about economic interdependence and foreign dependence are geared in general to its own self-interest, as might be expected. It is left to government to decide whether protection is warranted in certain cases and whether economic incentives are needed in others to ensure the maintenance of our defense industrial base.
Government Response

The current U.S. government policy toward international trade does not necessarily reflect the concerns raised by some industry spokesman, but rather holds to the traditional attitude that a world economy open to trade and to the influence of market forces brings major benefits both to the United States and to its trading partners. The U.S. policy is based on the premise that competition, whether domestic or foreign, fosters the allocation of resources to relatively more productive activities; and that free trade will provide better products at lower prices, will diffuse technologies more readily, will reduce inflationary pressures, and will with time, increase both productivity and income.

President Reagan reiterated the central components of this policy in his Economic Report for 1982. The aspects of this policy that may directly impact on the preparedness of U.S. industry and on its ability to mobilize are:

- Market forces, if unhindered, will signal industrial adjustment problems, will provide incentives for adjustment, and therefore, will make appropriate adjustments without government assistance or "bail outs";
- A reduction in government barriers to the flow of trade and investment among nations will expand international trade; and
- Investment or export subsidies and barriers to trade are strongly opposed.21

However, the Defense Industrial Base Panel of the House Committee on Armed Services, viewed the problems in the defense industries quite differently and asserted that "...there has been a serious decline in the nation's defense
industrial capability that places our national security in jeopardy. An alarming erosion of crucial elements, coupled with mushrooming dependence on foreign sources, is endangering our defense posture at its very foundation."22

The Department of Defense (DOD) has agreed with the Panel's findings and with the results of a recent General Accounting Office study of industrial preparedness. DOD has stated that a "national policy in industrial preparedness is needed and the lack of a national policy must be addressed by the Congress and the National Security Council."23

Jacques Gansler in The Defense Industry has stated that DOD is already "legally responsible (by the Defense Production Act of 1950, as amended) and administratively responsible (by Presidential Executive Order 11490) to ensure the existence of a viable industrial base to supply military needs....However, the reality of the matter is that responsibility for industrial preparedness is considerably dispersed around the Executive Branch."24

Agency responsibilities for defense industrial preparedness are delineated in numerous Congressional Acts, by Presidential Executive Orders and Decision Directives, and by Executive Branch departmental and agency directives and instructions. These documents designate twenty-two different federal-level organizations as having responsibility for various aspects of defense industrial preparedness and its ancillary function of evaluating the impact of foreign dependencies on the nation's capability to support mobilization. It is this framework and the related processes that will be described in this portion of the study.
The Defense Production Act of 1950 (as amended) is "the cornerstone of the present legal structure for insuring preparedness to meet crises requiring the mobilization of the Nation's industrial and material resources." Specifically, Title I of this Act establishes the Presidential authority to require the performance of defense contracts in preference to other contracts and to allocate materials to promote national defense. Title III authorizes the President, or delegated departments or agencies, to finance the expansion of productive capacity and supplies through loans, loan guarantees, and purchase commitments. And, Title VII, the only other provision still in effect, permits, inter alia, voluntary agreements and consultations between industry, government, and labor without anti-trust violations.

By Executive Order (E.O) 10480, the President assigned to the Federal Emergency Management Agency (FEMA) overall responsibility for coordinating all mobilization activities of the Executive Branch of the government. All officers and agencies of the government having functions under the Defense Production Act are to perform these functions subject to the direction and control of the Director of FEMA. FEMA is also assigned responsibility for management of the Strategic and Critical Materials Stockpile.

E.O. 10480 also spells out responsibilities for other Executive Branch departments. DOD is tasked to develop and promote expansion of productive capacity and of production and supply of materials and facilities necessary for national defense. This same function, however, is shared with the Departments of Commerce, Interior, Energy, and Agriculture and with the General Services Administration.
The Treasury Department is assigned responsibility for making loans to private enterprises for the expansion of capacity and the production of essential materials. Such loans are to be made from funds appropriated for Title III of the Defense Production Act.

Additionally, E.O. 10480 authorizes the Export-Import Bank to make loans in those cases where capacity expansion or production of essential materials are to be accomplished in foreign countries.

By Executive Order 11490 responsibilities for industrial preparedness, under the overall direction of FEMA, are further delineated. The Department of Commerce is directed to prepare national emergency plans and to develop preparedness programs covering, among other things, the production and distribution of all materials and the use of all production facilities.

DOD is tasked by E.O. 11490 to:

- Assist FEMA in developing a system of international allocations of critical materials and products among the United States and various foreign claimants;
- Plan for and administer the priorities and allocations authority of Title I of the Defense Production Act;
- Assist the Department of Commerce in developing production and distribution control plans;
- Recommend to FEMA measures to overcome potential production deficiencies;
- Analyze and take action to overcome problems in maintaining an adequate mobilization production base; and,
- Assist the Department of Commerce in the identification and evaluation of facilities important to national defense.

To further emphasize the importance of industrial and mobilization preparedness, and to ensure the involvement of various Executive Branch departments, President Reagan established the Emergency Mobilization Preparedness Board (EMPB) in December 1981. The EMPB, chaired by the Assistant to the President for National Security Affairs, is specifically tasked to improve the nation's capability to respond to major peacetime and wartime emergencies. Most Executive Branch departments and agencies are represented on the Board with various departments and agencies tasked to chair working groups addressing all major aspects of mobilization preparedness. The Director of FEMA is designated as Chairman of the EMPB Secretariat, which is to provide support to the EMPB Chairman and to coordinate the various working groups. The Department of Commerce is designated to chair the interagency working group on Industrial Mobilization and DOD is to chair the Military Mobilization working group.

By National Security Decision Directive Number 47 (NSDD #47) of July 1982, the President articulated a national policy on emergency mobilization and on the subset function of industrial mobilization. NSDD #47 stated, "It is the policy of the United States to have an emergency mobilization preparedness capability that .... can respond decisively to any major national emergency with defense of the United States as the first priority." Additionally, "it is the policy of the United States to have a capability to mobilize industry in order to achieve timely and sufficient production of military and
essential civilian material needed to prosecute successfully a major military conflict, to lend credibility to national strategic policy, and to respond to national security emergencies.\textsuperscript{27}

To implement these national policies, the Chairman of the EMPB specified to the Industrial Mobilization Working Group the following measures:

- Develop plans and procedures for determining the industrial capability to meet mobilization requirements;
- Assess industrial output and capacity of essential industries to reveal deficiencies in capabilities to accommodate mobilization requirements; and
- Develop policy options to improve industry capability to respond to emergencies.\textsuperscript{28}

As a result of these various directives and specifically as the result of the creation of the EMPB, a mechanism has been established to provide more effective leadership and coordination of mobilization preparedness efforts of the several departments and agencies which have direct access to the President. From the industrial base standpoint, FEMA and each of the Departments of Commerce, State, Interior, and Defense have major responsibilities and organizations in place to fulfill some, if not all, of the taskings.

FEMA remains responsible by standing Executive Orders for coordinating Executive Branch efforts in ensuring the viability of the mobilization industrial base. However, as a result of the White House memorandum of 17 December 1981, the Director of FEMA performs this function, at least
temporarily, under the direction of the EMPS chairman, rather than reporting
directly to the President.

FEMA's National Preparedness Programs Directorate, as the coordinating
activity for industrial base preparedness measures, depends on the Commerce
Department's Industrial Evaluation Board for analysis of industrial capacity
trends. FEMA also looks to Commerce for evaluations of international economic
and industrial dependencies and assists Commerce, upon request, in processing
investigations (under Section 232 of the Trade Expansion Act of 1962) of
import threats to the nation's industrial base.29

FEMA relies on DOD to evaluate the impact of foreign military sales
offsets or co-production agreements and other foreign dependencies on the
defense industrial base. FEMA utilizes defense scenarios, guidance and
spending levels to develop a computer-based "picture" of required national
industrial capacity for comparison with the existing capacity determined by
the Department of Commerce.30

As previously discussed, FEMA plays a major support role to the EMPS, but
also relies on the EMPS to motivate and integrate the more recalcitrant
departments and agencies in preparedness planning processes.

Relatively, the Department of Commerce has overall responsibility for
continually monitoring the U.S. industrial base. This function is assigned in
part to the Industrial Evaluation Board (IEB), an organization which is
presently moribund due to the lack of required resources.31 Because of the
important role of the IEB, particularly in its support of FEMA, Commerce is
now attempting to revitalize the board as the nucleus of the Industrial
Capacity Task Force, a subgroup of the EMPB Industrial Mobilization Working Group.

The Department of Commerce is also responsible for investigating and processing cases involving import threats to national security. This function is accomplished in a reactive manner as firms, industries, or government agencies file cases under Section 232 of the Trade Expansion Act of 1962. To date little use has been made of this section of the Act as reflected by the fact that only four cases have been or are being processed.

The Department of Commerce is the major claimant and an advocate for funding of Title III of the Defense Production Act. However, Commerce relies heavily on DOD and the Bureau of Mines to identify deficiencies in the defense industrial base.

The State Department is the major proponent of the U.S. international free trade policy and controls foreign aid for development of foreign industrial capabilities. Unless specifically tasked or requested to participate, the State Department does not involve itself in evaluating the impact on the U.S. industrial base of foreign or multi-national corporation foreign investments. The department is a participant in the EMPB Industrial Mobilization Working Group; specifically the sub-group evaluating the impact of foreign military sales offset agreements. The State Department is also consulted on all investigations of imports initiated under Section 232 of the Trade Expansion Act.

The Department of Interior's Bureau of Mines is tasked to continually monitor the productive capacity of the domestic mineral industry. To evaluate
the adequacy of this domestic industrial base, to determine stockpile requirements and excesses, and to assess the degree of foreign dependency, the Bureau looks to DOD for statements of requirements. Because these DOD requirements have proven to be neither timely nor very accurate, requirements are based on the Bureau's best parametric estimates and on the output of FEMA's econometric model, "REGRIP".

As presented in earlier discussion, the Department of Defense has both legal and administrative responsibility for ensuring the adequacy of the defense industrial base. In recognition of DOD's role, the Under Secretary of Defense for Research and Engineering (USDR&E) chartered in May 1981 a DOD task force to improve industrial responsiveness. In March 1982 the summary report of this task force was published and recommended revisions to the Defense Production Act and to various internal DOD procedures. The proposed amendments to the Defense Production Act "Declaration of Policy" officially acknowledged the nation's reliance on imported raw materials and components, the requirement to institute measures to improve defense industrial base efficiency and responsiveness, and the need to continually assess the capability of the defense industrial base - including subcontractors and vendors.32

The most significant proposed revisions to existing DOD directives are summarized in the following paragraphs:

- DOD Instruction 4005.1 (Subject: Industrial Resources) added:

  * USDR&E will act as principal staff assistant to the Secretary of Defense on all matters relating to the capability of the industrial base to
meet mobilization requirements;

* USDR&E will collect, consolidate, and analyze Production Base Analysis data;

* Each DOD component will provide USDR&E with Production Base Analyses - the annual assessment of the industrial base as viewed by each component; and,

* Foreign sources are to be identified and analyzed when they are defense suppliers.\(^{33}\)

- DOD Instruction 4005.3 (Subject: Industrial Preparedness Planning) incorporated changes similar to those of DODI 4005.1.\(^ {34}\)

- DOD Instruction 4210.4 (Subject: Studies of the Availabilities of Materials:

* Added that it is the DOD policy to:

  + Continually assess the capability of the U.S. industrial base to provide the types and quantities of materials and production facilities to satisfy "mobilization production requirements for critical or essential defense items"; and,

  + Require the heads of DOD components to maintain surveillance over materials and production facility availability problems. USDR&E is to be advised of any significant availability problems.

* Retained and strengthened the provision that it is DOD policy to determine total defense requirements for critical or essential defense items and to forward the results to FEMR for comparison with the total national capacity. If additional domestic capacity is required, FEMR will take steps to encourage expansion.\(^ {35}\)
USDR&E has delegated to the Director of Industrial Resources the responsibility for ensuring that the provisions of these various directives on industrial preparedness planning are carried out. However, it must be noted that none of the recommended changes detailed above has been officially promulgated or implemented to date.

USDR&E also is jointly responsible with the ASD for Manpower, Reserve Affairs, and Logistics for the development of mobilization scenarios, plans and related requirements. Due to serious concern regarding the adequacy of these scenarios and requirements, such plans are being addressed by the DOD-chaired EMPB Working Group on Military Mobilization.

In the area of international trade as it relates to defense matters, another DOD Task Force was chartered to address international co-production, offset, and industrial participation agreements. In February 1982 this Task Force reported that current processes within DOD for addressing international collaborative acquisition efforts were crisis and single-issue oriented with little provision for long-term resolution of procedural difficulties. The Task Force also found that there was no one office within DOD which considered itself responsible for ensuring overall DOD international acquisition/sales policy and procedures were appropriate, consistent, and functional.36

The potential impact of DOD international acquisition policies and procedures on the U.S. defense industrial base is depicted in three documents:

- The Culver-Nunn Amendment to the DOD Appropriation Authorization Act of 1977 waives the "Buy America" Act to facilitate standardization of NATO weapons systems and directs DOD to prepare to operate in an era of
international acquisition. It further states that, via general reciprocal procurement memoranda of understanding between the U.S. and allied nations, all qualified sources in other countries are to be considered in the procurement of DOD requirements. The only exceptions to this provision are to be those involving mobilization base, security, and small business set asides;\(^3\)

- A USD\&E memorandum of July 1981 stated, "We have recently been criticized by a number of allies as a result of various mobilization restrictions contained in solicitations for U.S. defense equipment. ....therefore, I request that in the future each service and the Defense Logistics Agency carefully review its mobilization decisions."\(^3\)

- A Deputy Secretary of Defense memorandum of May 1978 established the policy that discourages DOD commitments and involvement in offset agreements. U.S. industry was declared to be in the best position to decide whether or not to enter into offset agreements.\(^3\)

The Director of International Acquisition in the office of USD\&E is assigned responsibility for international procurement of DOD requirements. Under DOD Directive 2010.6 (Subject: Standards and Interoperability of Weapons Systems in NATO), USD\&E is directed to review DOD acquisition policies and regulations and to incorporate provisions that will ensure that sources in NATO countries will have an opportunity to compete with U.S. sources for DOD business.\(^4\)

The current Director of International Acquisition testified before Congress in 1981 that:
- Reciprocal trade, license production, and co-production agreements, singly or in combination, tend to preserve a nation's exchange holdings, maintain or expand the defense industrial base, and provide employment. As a part of foreign military sales as well as foreign procurements, foreign governments tend to require such offsets for a combination of defense base and economic reasons;

- DOD believes that U.S. industry is in the best position to decide whether or not to enter into such offset agreements. Therefore, we advise foreign governments to negotiate such agreements directly with U.S. industry;

- DOD depends on individual military departments or agencies to identify foreign dependency. DOD will continue monitoring these offset and co-production programs; and

- In many cases foreign co-production keeps U.S. production lines warm even after the U.S. defense procurements of a weapons system have ended.\(^1\)

In effect, the DOD Director of International Acquisition is responsible for promoting international acquisition of weapons systems and to encourage foreign competition to enhance interoperability among allied nations. This office limits assessment of the impact of international offset agreements on the U.S. defense industrial base to requests from industry.

The level of governmental concern for both this latter issue and for the more general problems of domestic industrial base adequacy and foreign dependency is reflected in the draft of the EMPB Plan of Action dated 15 November 1982. The Commerce-chaired Working Group on Industrial Mobilization proposed the following action items:
- By the fourth quarter of fiscal year (FY) 1983, provide an assessment of the impact on the industrial base of international co-production of defense materials, related offset arrangements, and other international trade agreements;

- By the first quarter of FY 1985, revise the Department of Commerce "Emergency Plan for Industrial Mobilization", specifically addressing federal industrial resource claimancy policy and procedures;

- By the third quarter of FY 1983, make changes to the Defense Priority and Defense Material Systems to enhance the capability of industry to respond to emergencies;

- By the third quarter of FY 1983, develop a comprehensive five-year plan to restructure the National Defense (Strategic and Critical Material) Stockpile and to close the gap between strategic material availabilities and mobilization requirements; and,

- By the fourth quarter of FY 1984, improve the capability of the national emergency planning agencies to assess accurately the capabilities of industries vital to the industrial base; and complete collection of assessment data from forty essential industries.
CHAPTER IV

ANALYSIS OF GOVERNMENT AND INDUSTRIAL POSITIONS

Introduction to Analysis

Having presented the theoretical and historical backgrounds for economic interdependence, various industry positions, and the government framework for dealing with the declining U.S. industrial base, this study now will examine the government's policies and the steps taken toward their implementation to determine whether further changes are needed to ensure U.S. industrial capability to mobilize in today's economically interdependent world.

Government Policy

Since the end of World War II the U.S. has advocated a liberal, open trading system to provide the economic underpinning for the Western Alliance in its confrontation with the Soviet Union and its allies. Over time the international economy has responded to the workings of economic interdependence and the process of industrial specialization, implicit in the theory of free trade, has proceeded apace. For the U.S. this has meant that portions of its industrial base, particularly non-research intensive industry, have eroded. More importantly, this trend is likely to have or may have already had a substantial adverse impact on the more narrowly defined defense industrial base.

Despite these disquieting developments, the basic international economic policy of the present Administration and most of its predecessors since World
War II has been one of supporting a more open, market oriented trading system with little apparent regard for the consequent erosion of the defense industrial base that such a policy entails. The President's 1982 Economic Report and his more recent State of the Nation speech on January 25, 1983 emphasize the U.S. commitment to a free trade policy with no allowances made for defense industrial requirements. Though there is no doubt that the strategy of economic interdependence and the policies of open trade are essential to the maintenance of the Western alliance, an uncritical, universal application of free trade strictures can be self-defeating. It must be noted that a free or liberal trade policy is a means to an end and not an end in itself. It is an excellent method for "waging peace," but it should be implemented so as not to cripple this nation's ability to wage war, if the need arises.

Recognition that market forces alone will not provide adequately for national defense needs was a major reason for the Defense Production Act of 1950. Drafted during the early years of the Cold War, it reflected the economic perceptions of that era and aimed at an expansion of productive capacity in excess of civilian demand. The industrial base of the 1950's was broad and deep but the special needs of the military build-up during the early 1950's could not be fulfilled solely through the market mechanism. Thus the DPA and its mechanisms permitted a diversion of civilian production into military channels as well as investment incentives to stimulate production for which there was no civilian demand.

The DPA was effective in solving the defense industrial production
problems of the 1950's, but the basic structure of the American economy has evolved significantly since that time. The U.S. economy of the 1980's is an adaptation to the system of economic interdependence and comparative advantage which has been operationally effective since the postwar recovery of Europe and Japan. Accordingly, American industry is in the process of losing its broad-based character and is becoming increasingly specialized with foreign production meeting much of domestic U.S. civilian demand for manufactured goods. Thus, the basic problem of meeting defense industrial mobilization needs is fundamentally different from that of 1950. Though the DPA was effective in meeting the needs of the 50's, it must now be used in the context and with the recognition of the growing foreign dependency of the defense industrial base.

Though the Congress has on occasion focused on the problems of the defense industrial base, e.g. the House Armed Services Committee report on "The Ailing Defense Industrial Base: Unready for Crises", much of the attention has been spent on symptoms and not on underlying causes, such as economic interdependence. When the Congress does focus critically on interdependence and liberal trade policies, it is not in response to national defense concerns but rather in response to specific trade effects that cause domestic political complaints. In sum, while the Congress in 1950 accurately assessed the national security problems associated with a market oriented economy by passing the extraordinarily effective DPA, it has not made a similar diagnosis of the internationally interdependent economy of the U.S. in the 1980's nor has it come up with any effective prescriptive remedies.
The Executive Branch, for its part, has also been largely unresponsive to the erosion of the defense industrial base arising from interdependence. The growing perception in the late 1970's of an increased Soviet threat to U.S. security coupled with the election of Ronald Reagan in 1980, resulted in a reappraisal of U.S. defense needs. Not only did the U.S. commence a broad defense build-up, but the new Administration also expressed concern regarding the nation's capability to mobilize necessary industry in the event of a prolonged war. President Reagan in NSDD-47 took a necessary first step by mandating the identification of production and supply deficiencies and initiating actions to overcome them. In a follow-up plan of action, the Emergency Mobilization Preparedness Board addressed the problem of inadequate information about the industrial mobilization base and instructed the appropriate departments and agencies of government to develop policy options aimed at improving industrial capability. Both the NSDD-47 and the EMPB plan of action provide for a long over-due assessment of industrial mobilization capability but neither address the underlying potential policy conflict between the current U.S. espousal of economic interdependence policies and the absence of effective policies to maintain the capability of the domestic industrial base to respond to mobilization requirements. If a solid statistical data base is developed in response to the EMPB plan of action, the need to address the inherent policy conflict will become evident.
Policy Implementation Analysis

In the process of analyzing the specific measures employed by both the Executive and Legislative Branches to implement the policies addressing trade, defense and civilian industrial bases, and mobilization, several general concerns or problems, aside from overall policy considerations, are readily apparent.

First, the number of agencies sharing the responsibilities is very large. Due to the ineffectiveness of FEMA in the industrial base assessment and mobilization areas and to the short-term nature of the EMPB charter, there is no point short of the President that the actions of the various departments and agencies can be reviewed in terms of consistency and long-term impact on national security.

Secondly, despite the proven success of the Defense Production Act and its contribution to the sharp expansion in defense-related productive capacity during the Korean War period, the provisions of the Act have been used only sparingly since that time. The last expansion project occurred in 1967 and subsequently only two minor R&D projects and a very limited acquisition program to reduce a $10 billion strategic materials stockpile deficiency have been funded. In 1974 and 1975 the Congress emasculated the Act by cancelling the borrowing authority that had contributed so greatly to the rapid resurgence of the defense industrial base in the mid-1950's. Today, contrary to the statements of policy regarding the industrial base, there appears to be a continued reluctance to commit resources at the national level to improve the nation's mobilization capability. A letter from David Stockman, the Director of the Office of
Management and Budget, imposed severe limitations on the financial resources that would be made available for use under Title III of the Act during FY 1983. Additionally, the reluctance of Congress to renew the Act, the principal, if not only, legal mechanism for maintaining or enhancing the industrial base, seriously undermines any efforts presently envisioned or subsequently identified to ensure the viability of the nation's mobilization capability.

An additional indication of the tenuous nature of this Administration's commitment to industrial mobilization preparedness is the Memorandum from President Reagan to the EMPB that, "Due to the fiscal restraints through fiscal year 1983, the Working Groups (of the EMPB) are to concentrate on the identification of preparedness measures that will enable the government to make more effective use of existing (emphasis added) resources".

A final general concern is the fact that the Special Trade Representative, who plays such a critical role in international trade matters, and thereby international interdependence, is neither tasked to consider the impact of his decisions or initiatives on increasing foreign dependency or on the domestic defense industrial base nor even to participate in the current efforts of the EMPB to address emergency mobilization shortfalls and plans of corrective action.
Organizational Implementation Analysis

EMERGENCY MOBILIZATION PLANNING BOARD

As stated previously, the establishment of the EMPB offers an opportunity for developing a more effective framework to improve the nation's capability to respond to emergencies and presents an initial step in attempting to identify deficiencies. However, in assessing the role of the EMPB from an organizational perspective and in evaluating the effectiveness of its performance to date, several deficiencies are noted.

The designation of the Assistant to the President for National Security Affairs as Chairman of the EMPB has provided the organization with the ability to effectively coordinate the efforts of the various Executive Branch departments and agencies. Such actions, however, have also added another organizational layer by not officially removing similar responsibilities from existing organizations, particularly FEMA in the industrial preparedness arena. Additionally, it will be most difficult, if not impossible, for subordinate organizations to effectively reassume these responsibilities when the EMPB is dissolved, as planned.

Secondly, the EMPB Plan of Action is noteworthy with regard to its omission of any initiatives to address the issue of foreign dependency and its impact on the defense and essential civilian industrial bases. The narrow issue of evaluating the effect of co-production and offset agreements falls considerably short of identifying segments of the essential industrial bases which are now located outside the continental U.S. - either as foreign-owned industries or as foreign subsidiaries of U.S.-based corporations.
Finally, the plan to assess the industrial capability or capacity of forty industries is necessary first step toward revitalizing an essential data base neglected by the Department of Commerce. However, the plan is remiss in not including the requirements that the assessment mechanism be permanently established within the Department of Commerce and that the scope be expanded to include all industries that comprise the essential defense industrial base. The fact that such a one-time study is required at all is a condemnation of the "Pre-EMPB" framework and processes for evaluating the adequacy and identifying problems of the industrial base.

Federal Emergency Management Agency

As indicated in preceding sections of this study, FEMA has been relegated to a staff support role to the EMPB, except in the areas of Civil Defense and Government operations. However, under the existing Executive Orders 10480 and 11490, the Executive Director of FEMA remains responsible to the President for directing and coordinating Executive Branch actions in the area of industrial base mobilization preparedness. FEMA's ineffectiveness in fulfilling this latter responsibility has only been accentuated by this duplication of assignments.

Department of Defense

The Department of Defense responsibilities for assisting the Department of Commerce and FEMA in maintaining an adequate defense industrial base, in promoting expansion of domestic production capacity, and in developing
production and distribution plans have been fulfilled, at best, to a very limited degree. The lack of interest and the reluctance over the years to commit resources to industrial preparedness planning have generated problems across a wide spectrum of the industrial base.

The true severity of these problems in terms of the capability of the U.S. to mobilize both military and industrial resources has not been determined for several reasons, the most serious of which are:

- The inability to identify a single office within DOD that has accepted overall responsibility for ensuring the adequacy of the defense industrial base. USD(R&E) and ASD(MRA&L) share responsibility for military mobilization plans and requirements and the relationship of these two organizations has been described as adversarial. Additionally, the conflict of maintaining a viable domestic industrial base while encouraging foreign competition in DOD weapons system procurements to enhance standardization and interoperability has further compounded the problem.

- The numerous revisions to DOD directives recommended in March, 1982, by the DOD Task Force on Industrial Responsiveness remain “under review” or “in chop” one year later. As such, the requirements and the mechanism for defining the defense industrial base, for assessing industrial capacity, and for identifying foreign dependencies remain at best inadequate. Additionally, if funding to permit implementation of these directives remains a low priority, the results can be easily predicted.

- The inability of DOD to provide definitive mobilization requirements prevents the comparison of requirements with industrial capability and the identification of shortfalls.
The distinction between the roles and responsibilities of DOD viz-a-viz Commerce and FEMA remain ill-defined.

The expectation that individual contractors will identify problems in the adequacy of the domestic industrial base or in the availability of critical materials and components remains naive and has proven ineffective to date. Also, the reliance on individual corporations to negotiate offset or co-production agreements that will maintain or enhance the capacity for domestic industry to mobilize is equally naive. DOD's dependence on the market forces to maintain a viable defense industrial base and to avoid dependency on foreign sources for components must be seriously questioned until DOD is prepared to provide the incentives for defense contractors to consider mobilization as a critical factor in making rational business decisions.

Department of Commerce

Commerce has been only marginally responsive in fulfilling its responsibilities for assessing and monitoring the U.S. industrial base. The Industrial Evaluation Board (IEB), upon which FEMA depends for industrial base data and recommendations to correct deficiencies, has been unable to conduct required analyses due to insufficient personnel and financial resources. The ineffectiveness of the IEB and the inability of DOD to provide mobilization requirements have combined to preclude the identification of minimum levels of industrial capacity to meet mobilization or the identification of critical deficiencies in this industrial base.
The weaknesses noted above have caused Commerce to rely heavily on industry or other government agencies to fulfill its "watch dog" role and to surface potential weaknesses in the industrial base. Due to this reactive approach, cases involving imports that threaten national security, addressed by Section 232 of the Trade Expansion Act, are rarely processed or, when processed, require unreasonably long periods of investigation and deliberation.

Department of State

Though State has no direct responsibility for this nation's industrial mobilization capability, it has traditionally been the prime architect and advocate of economic interdependence and its component element of foreign aid to developing countries. As noted earlier, this is the bastion from which the U.S. "wages" peace. Accordingly, State is not overly concerned with the possible detrimental effects that interdependence might have on the industrial base. The concern demonstrated thus far is directed toward the strategic minerals base, where interdependence is a stark reality. Thus, NSDD-47 and the EMPB Plan of Action are being handled by the Economic Bureau's Industrial and Strategic Materials Division with the Office of International Trade only involved in an advisory capacity.

Department of Interior

The Bureau of Mines has been responsible for monitoring the productive capacity of the domestic mineral industry and advising on the adequacy of the strategic minerals stockpile. The Bureau has maintained an active interest in
the stockpile, has consulted actively with DOD on the composition of the stockpile, and has presented alternative policy recommendations to improve the mobilization effectiveness of the stockpile. However, to date the fruits of these efforts remain undeveloped because of DOD's inability to provide quantified requirements and the limited funding made available for strategic material procurements.

Department of Treasury

As overseer of international financial policies, Treasury has also been an advocate of interdependence for both national strategic reasons and economic efficiency. It serves as the U.S. representative to the international or multi-national development banks, (e.g., the World Bank) and its main criteria in fulfilling this role are the economic efficiency and cost-benefit criteria. Thus, project loans for industrial development in Third World countries are screened for economic/financial viability with little thought to potential adverse impact on the defense industrial base.

Problems in Industry

Nowhere is the conflict between U.S. trade policy and the need for a strong, diversified industrial base more evident than in the growth of the multi-national corporation (MNC). The MNC's have been characterized as "virtually independent actors on the international scene, serving their own corporate international interest in the context of needing to placate host and home country national interests while maintaining their profit maximizing
goals."50 Although chartered in the U.S. and largely owned by American stockholders, the companies can hardly be considered as secure and reliable elements of the U.S. industrial base. A prime example of vital import to defense is the electronics industry with its many ties to Northeast and Southeast Asia. Lack of ability to adapt to wartime needs, lack of commitment of the labor force, increased danger of sabotage and political turmoil, uncertain raw materials availability, and transportation needs are all factors which make reliance upon U.S. firms overseas in wartime highly questionable. The problem remains that no incentive exists to encourage firms which are a vital part of the defense industrial base to locate their production facilities in the U.S. Initiatives that would assist in reversing this trend toward foreign manufacture include tax incentives, requirements for a higher percentage of American made components in items manufactured for defense use (now only 50%), government assistance in the development of automated production equipment which would help to ameliorate the high labor cost factor, and guaranteed government procurement of domestic industrial output.

As can be seen from our earlier look at the ferroalloys, machine tools, and computer industries, U.S. industry has been losing markets--and leadership in key industries--to Japanese and European entrepreneurs. To say that the lagging position of U.S. industry is due to unfair trade practices and government benefits not available in the U.S., as our industries charge, is overly defensive and diverts attention from the more immediate factors which include disincentives for domestic investment and the short-sighted management policies of industry itself. In truth, it has been the failure of industry to
make the capital investment required to attain competitive levels of productivity and quality which has led to the decline. Additionally, the shortage of capital available for investment has made attempts to modernize all the more difficult. Low savings rates, high consumer debt, high government borrowing to finance the deficit, and the massive increase in oil prices, all have combined to squeeze financial markets, with steadily higher interest rates as a result. Escalating wages have further restricted the flexibility of industry to change its direction. The President's Council of Economic Advisors recently concurred, stating, "Wages and prices in these industries are probably too high to be sustainable in an integrated world economy."51

While it is not wholly accurate to say that foreign companies are ahead because of advantages given them by their governments, it is also clear that U.S. laws have hindered more than helped, and that, depending on the administration in office, government has had more or less of an adversary relationship with industry. Anti-trust laws, environmental, and occupational safety and health legislation have either placed limitations or added requirements on businesses, putting them at some disadvantage relative to their foreign counterparts.

The 1981 Report of the Defense Science Board stated that the need to stimulate capital investment is "a matter of national priority, and industry and DOD should strongly support revisions to tax policy."52 In addition, the 1980 Congressional hearings on the nation's ailing industrial base cited declining productivity growth in the defense sector in particular and stated
that, "means for capital investment in new technology, facilities, and machinery have been constrained by inflation, unfavorable tax policies, and management priorities." Recommendations of the panel, however, concentrated on contracting procedures and failed to include any but the briefest mention of measures to influence the investment policies of industry.

Thus, it seems that U.S. government can do a great deal more in the way of eliminating disincentives and economically inefficient regulations to permit a more rational determination of the comparative advantage of U.S. industry. Concurrently, government should be prepared to provide incentives, especially in the area of taxes, government guaranteed loans or even trade protection in the most vital areas of the defense industrial base. Such measures will be viewed as a departure from the free trade, hands-off policies of our government and, as such, these measures must be applied selectively, and for a limited period to revitalize deteriorating sectors of the defense industrial base.
CHAPTER V

Conclusions and Recommendations

Existing U.S. policies regarding the industrial base do not adequately address the problems generated by increasing interdependence. Current U.S. trade policy, the Defense Production Act, and NSDD 47 are inadequate in the light of today's economic realities and the need to insure continued national security. Even if these shortcomings were eliminated, substantial difficulties in structuring a meaningful policy would still exist. Specifically, the responsibility for insuring an adequate industrial base is not clearly fixed within the government; organizational relationships preclude the effective management of the industrial base; and, lastly, there seems to be a lack of demonstrated commitment from both the Executive and Legislative Branches regarding these issues. This is evidenced by inaction by all parties in response to numerous studies and reports which have concluded that our nation is not effectively managing and maintaining the domestic industrial base for mobilization contingencies. If the allocation of funds by the Executive Branch is a measure of commitment, one must conclude that the reduced capabilities of the industrial base are not of sufficient magnitude to warrant serious concern.

Recommendations

Trade Policy

Recognizing the vital role that international trade plays in retaining an
industrial base in an interdependent world, the Special Trade Representative should be fully integrated into the governmental framework addressing industrial preparedness problems. Further, to resolve the basic and potentially serious conflict between this nation's liberal trade policy and the need to protect the mobilization base from eroding, the U.S. trade policy must be modified and articulated by the Special Trade Representative to include the following:

- Restoring strong noninflationary growth at home. Fundamental to any effective trade policy is carrying out domestic programs that increase the incentives to invest, to raise productivity, and to reduce costs, thus helping to lower inflationary pressures. These programs will strengthen the ability of American firms to respond to changes in domestic and international markets without destroying a domestic industrial base that is essential to national security.

- Reducing self-imposed trade disincentives. Confusing and needlessly complex laws and regulations that inhibit exports and imports will be reformed.

- Effective and strict enforcement of U.S. trade laws and international agreements. Our policy toward other nations' barriers to trade and to investment or export subsidies is one of strong opposition. Our trading partners must recognize that it is in their own best interest, as well as ours, to assure that international trade and investment remain a two-way street, with the only reservations being those related to national security needs, such as the defense industrial base.

- A more effective approach to industrial adjustment problems. In a
healthy economy some industries and regions will grow more rapidly than others, and some sectors will experience more difficulty. If unhindered, the market will signal these changes and provide incentives for adjustments. Market forces will be relied upon to make appropriate adjustments except in those cases where such adjustments will not sufficiently reflect the essential needs of the domestic defense industrial base.

- Reducing government barriers to the flow of trade and investment among nations. To this end it is necessary to continue efforts to improve and expand existing international trade rules, particularly into the areas of services and investment. However, it must be understood that some restrictions may be necessary to ensure the viability of this nation's mobilization capability.

**Defense Production Act**

As the cornerstone of government policy and the legal base for ensuring that the U.S. retains a viable defense industrial base, the DPA should:

- Be recommended for amendment by the Executive Branch to reflect the changes proposed by the DOD Task Force to Improve Industrial Responsiveness in their Summary Report, March 1982, and to reflect provisions that would establish the availability of tax incentives to be utilized in selected cases to stimulate economic activity within an industry.

- As an interim measure, be renewed by Congress for an extended period of time and that Congress amend the DPA to provide the Executive Branch with Title III borrowing authority.
National Security Decision Directive Number 47

White House Memorandum of 17 December 1981, (Subject: Emergency Mobilization Preparedness Board) and NSDD 47 serve as the base for ongoing actions relating to mobilization issues. Although issue is not taken with what was said, the administration must strengthen NSDD 47 by amending it to reflect:

- The need to identify key industries where normal market forces are considered to be inadequate in maintaining the level of capacity essential for industrial mobilization.
- Responsible departments or agencies will be funded to accomplish their missions.

EMPB Plan of Action

The plan must be expanded to include a tasking to analyze the impact of foreign dependency upon the industrial base beyond the realm of reciprocal trade and co-production agreements. DOD in particular should be tasked to identify foreign dependencies within the defense industrial base.

Industrial Mobilization Planning Responsibility

As the government's focal point for developing all emergency plans, FEMA is recognized nationally as being expert in the area of civil defense and government operations. However, management's attention to these functions has been accomplished to the detriment of their other principal responsibility: industrial mobilization preparedness planning. Recognizing the complexity of the mobilization preparedness problem and the need to elevate the level at which coordination is affected, it is recommended that:
- The industrial mobilization preparedness mission be transferred permanently from FEMA to the Assistant to the President for National Security Affairs. FEMA must be relieved of its assignments under E.O. 10480 and 11490.

- The EMPB staff or similar organization within the National Security Council (NSC) become the action organization responsible for industrial mobilization preparedness.

- Operational personnel from FEMA who have been involved in the industrial preparedness mission be transferred to the NSC staff.

**Special Trade Representative**

The U.S. Trade Representative (USTR) has primary responsibility for developing international trade policies and for coordinating their implementation. Although USTR consults with DOD and DOD participates in the formulation of policy as it relates to the maintenance of a visible defense industrial base, USTR is not included as a member of the EMPB nor does it have any assigned responsibility under NSDD #47. To play an effective role in the establishment and implementation of trade policies which are consistent with national security considerations, the USTR should be made a member of the National Security Council.

**Department of Commerce**

The Department has overall responsibility for monitoring both the defense and civilian sectors of the U.S. industrial base. To properly execute their mission the Department of Commerce must:
- Revitalize the Industrial Evaluation Board (IEB) by providing the Board with sufficient personnel and financial resources to allow for initial and continuing assessment of U.S. industrial capabilities.

- Task the IEB to determine the minimum output levels of industries that compromise the defense and essential civilian elements of the mobilization industrial base and that must be maintained for national security purposes.

- Provide Congress periodic reports on the state of the industrial mobilization base and recommend incentives or protection as appropriate for those industries where productive capacity is approaching or has fallen below the minimum sustaining level.

Department of Defense

DOD as the focal point for national security must:

- Clearly fix total responsibility within USD&E for identifying and providing to the Commerce Department defense mobilization requirements. A target date for providing these requirements must be established.

- Eliminate the adversarial relationship between USD&E and ASD MRA&L.

- Task USD&E to integrate the international acquisition and industrial preparedness function to insure consistency of policy and implementation procedures.

- Implement the recommendations of the DOD Task Force to Improve Industrial Responsiveness. Continued delays in implementation will only further the debate over DOD's commitment to resolving industrial base problems.
Department of State

State must be directed by the NSC to ensure that all foreign aid and related policy decisions are consistent with and supportive of national efforts to protect the mobilization industrial base. Policy decisions not supportive of mobilization efforts are to be concurred in by the NSC before any action is initiated.

Department of Treasury

Treasury must be directed by the NSC to ensure that all internal decisions resulting in funds being provided to foreign nations for industrial development purposes are reviewed for compatibility with the requirements of the mobilization industrial base. Policy decisions not supportive of mobilization efforts are to be concurred in by the NSC.

Congress

Congress must:

- Establish single institutional focal point within the Legislative branch for overseeing the maintenance and management of the industrial base and to insure that potential legislation is reviewed to assess its impact upon the defense industrial base.
- Insure that potential legislation is reviewed to assess its impact upon the defense industrial base.
- Encourage the Executive Branch to utilize all authority granted it by Congress to ensure the retention of the essential elements of the nation's industrial base.
FOOTNOTES


3Ibid., p. 12

4Earle, pp. 128-141.


7Interview with Mr. George A. Watson, President, Ferroalloys Association, Washington, D.C., 19 November 1982.

8Ibid.


13The Economist, "Will Japan Leapfrog America on Superfast Computers?", London, 6 March, p. 95.


16Basruk, p. IV-7.
17 Telephone conversation with Mr. William Collins, Vice President for International Marketing, National Semi- Conductors, 18 December 1982.

18 Basuk, p. IV-5.

19 Telephone conversation with Mr. Gene McAllister, Director, Sensor and Signal Processing Division, Magnavox Corporation, 18 December 1982.


27 Ibid., p. 5.


Ibid., Tab 9.

Ibid., Tab 10.

Ibid., Tab 11.


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