THE ABILITY OF THE INDUSTRIAL BASE TO MOBILIZE - HISTORICAL LESSONS APPLIED TO CONTEMPORARY POLICIES AND ORGANIZATION
This paper identifies those major industrial mobilization lessons from World War II and the early 1950s and contrasts those lessons with current policies and organizations to plan and execute industrial mobilization to support a conventional war of indeterminate length and intensity.
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MOBILIZATION STUDIES PROGRAM REPORT

THE ABILITY OF THE INDUSTRIAL BASE TO MOBILIZE--
HISTORICAL LESSONS APPLIED TO CONTEMPORARY
POLICIES AND ORGANIZATION

by

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This research report represents the views of the authors and does not necessarily reflect the official opinion of the Industrial College of the Armed Forces, the National Defense University, or the Department of Defense.

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Problem Statement:
This paper identifies those major industrial mobilization lessons from World War II and the early 1950s and contrasts those lessons with current policies and organizations to plan and execute industrial mobilization to support a conventional war of indeterminate length and intensity.

Findings/Conclusions:
Industrial mobilization does not represent a viable component of national security.
1. The multiplicity of statutory requirements, authorities, and prohibitions is overwhelming, causing serious ambiguity regarding the sufficiency of existing authority and generating confusion regarding responsibilities. This seriously decrements our ability to plan and, if required, manage an industrial mobilization.
2. Current organizations do not have clearly defined responsibilities, are not adequately resourced, and do not have the ability to transition from peacetime planning to wartime execution.
3. No clearly defined mobilization plan or comprehensive planning process exists.

Recommendations:
1. Creation of omnibus legislation—or, at a minimum, improved cross indexing of existing mobilization authority—would assure the sufficiency of mobilization authority, improve the assignment of responsibility, and facilitate the transition from peacetime planning to wartime execution.
2. Single agency control of the industrial base mobilization process would enhance management control of mobilization planning and management, and could lead to adequate resourcing of this vital government function.
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EXECUTIVE SUMMARY

In an attempt to broaden understanding of industrial preparedness and mobilization, this paper draws upon the historical lessons of World War II and the early 1950s; compares them to our current state of being; and offers recommendations for their integration, as applicable, with contemporary statute law, planning programs, management systems and organizational structures. Focus is aimed at enhancement of our nation's industrial preparedness posture and the probability of a successful execution of industrial mobilization authorities and plans in times of national crisis.

The information analyzed has been delimited to a national perspective thereby excluding recommendations addressing plans, policies or procedures below the department or separate agency level. For purposes of this examination of the industrial mobilization process, it has been assumed that: the mobilization effort will be undertaken with little advance warning, a total mobilization in support of a high intensity conventional war of indeterminate length will be required, and exact materiel requirements are not known at the outset of hostility.

To foundation the analysis, the paper examines statute law, Executive Orders and Mobilization Orders in terms of legal bases for action and administrative authority. Specific attention is focused on the inadequacy of legislative authority in support of mobilization responsiveness, confused organizational responsibilities, the nation's management structure and resourcing levels which are incompatible with the intent of the law. Given legal parameters, the study proceeds to examine the nation's organization for mobilization in terms of historical successes and failures and the voids in today's structuring. Pointed assessment of the transition from steady state to national emergency and competition for limited resources is accomplished. Finally, research leads to a discussion of the essential absence of industrial mobilization planning as a viable component of national security.

Based on the factual lessons of history and analysis of today's dynamic environment, the research effort concludes that: (a) inadequate execution authority as a result of legislative insufficiency and confused understanding thereof will seriously decrement the responsiveness of any required industrial mobilization, (b) existing organization for mobilization is inadequate, under resourced and incapable of supporting a smooth transition to a crisis situation, and (c) true mobilization planning is ostensibly non-existent thereby depriving the nation of an industrial mobilization transition blueprint.
CHAPTER I

Introduction

Purpose of Study

This research effort is aimed at identifying those major industrial mobilization lessons from World War II and the early 1950's which are relevant to current industrial mobilization preparedness.

Scope of Study

This study is concentrated at the national level, concerning itself primarily with enabling legislation and orders, the organizational structure related to industrial mobilization, and the planning required for industrial mobilization preparedness. Based upon the comparison of lessons learned and current status, recommendations are offered aimed at improving industrial mobilization preparedness capabilities, policies and procedures.

Definitions

The terms shown below are defined here due to their importance to full understanding of this report.

Mobilization is the rapid expansion of military production to meet materiel demands for war. It involves declaration of a national emergency by the President.¹

Surge is the expansion of military production in peacetime without declaration of a national emergency.²

Full Mobilization is mobilization to the degree required to support a specific force structure, either existing or programmed.³
**Total Mobilization** implies a movement to the limits of the ability of the economy to support war and a maximum expansion of force structure.  

**Industrial Preparedness Planning (IPP)** consists of all planning required to assure the ability to mobilize the industrial base to meet production requirements, and takes place prior to declaration of national emergency.  

**Assumptions**  
The following assumptions underlie this study.  

1. Exact material requirements are not important during the initial period of industrial mobilization. Such requirements will certainly far exceed the productive capacity available prior to mobilization.  

2. War will involve allies of the United States who will be largely dependent upon the United States for materiel support.  

3. Time to mobilize will be extremely limited.  

4. Total mobilization capability for a high intensity, conventional war of indefinite duration is required.  

**Methodology**  

The tentative hypothesis of this study is that key industrial mobilization lessons from the past have not been institutionalized and integrated into current interdepartmental management of mobilization planning. As a result, the United States does not have adequate national policies, plans and organizational structures to achieve industrial mobilization preparedness or to manage mobilization in the event of war.  

The methodology followed during this study was to identify important lessons learned from the industrial mobilizations of World War II and the early 1950s and ascertain the degree to which the current industrial
mobilization machinery at the national level has assimilated these lessons. Total mobilization was chosen as the degree of industrial mobilization currently to be planned for and managed because it represents the most extreme effort that could be required as well as the situation with the most serious consequences of failure. Based upon the historical lessons identified and a review of the current status of industrial mobilization preparedness capabilities, policies, and procedures; recommendations are offered to improve the ability of the United States to mobilize its industrial capability.
CHAPTER I

ENDNOTES (Pages 1-3)


2. Ibid.

3. Ibid.

4. Ibid.

CHAPTER II
LEGISLATION AND ORDERS CONTROLLING OR INFLUENCING INDUSTRIAL MOBILIZATION

Introduction

One of the more perplexing aspects of mobilization in general is the impact of statutory requirements, authorities and prohibitions. Many students of the mobilization process would argue that the legislative maze has reached a point that implementation effectiveness and responsiveness are questionable.

The purpose of this chapter is to examine statute law and published orders (Executive and Mobilization) which influence industrial mobilization from a historical and contemporary perspective. Attention will focus on lessons learned in times of prior national emergencies and their influence on existing statutory authority or responsibility delineated in published orders.

An assessment of national position in terms of legislation and directive orders will conclude the chapter. Based on historical precedent, authority documents will be evaluated in terms of strengths and weaknesses, gaps and shortfalls, enforcement, effectiveness of emergency implementation, knowledge of and understanding.

Historical Perspective

The United States today is following its historical precedent concerning mobilization planning and preparedness. During previous mobilizations, the U.S. has learned numerous lessons which it subsequently attempt to capture as necessary in legislation and then generally forgets or ignores until the next mobilization, in many instances to relearn the same lessons.
The Nation.l Defense Act of 1920

The first significant piece of mobilization legislation passed in recent history, The National Defense Act of 1920, was an attempt to respond to the lessons learned from World War I. As it affected mobilization, the act consolidated mobilization responsibilities under the assistant Secretary of War. Specifically it charged him with the "supervision of the procurement of all military supplies and other business of the War Department pertaining thereto and the assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war-time needs."

In response to the charges of this act, contingency plans were developed which addressed the mobilization of the industrial base to meet mobilization requirements. These Industrial Mobilization Plans (IMP)--discussed later in Chapter III--were prepared every three years between 1930 and 1939.

Joint Resolution of 1930

The next significant legislation effort by Congress occurred in 1930. A joint resolution was adopted which created a War Policies Commission consisting of six Cabinet members and eight legislators. The Commission was generally charged to examine policies to be pursued in the event of war. The final report was comprehensive and recommended enactment of legislation giving the President emergency powers to stabilize prices, to force acceptance of munitions orders and to reorganize the executive branch. The Army and Navy were to be directed to conduct continuous, comprehensive mobilization planning which was to be reviewed by Congress periodically. None of the recommendations of the Commission were adopted by Congress.
World War II Mobilization Legislation

Management of our mobilization activities during the war years changed frequently as obstacles were confronted, leading to the passage of numerous pieces of legislation, in mostly piecemeal fashion, intended to redress specific mobilization problems. Rather than dwelling on this legislation, this study will examine the post WWII legislation, which attempted to capture our experiences from the mobilization and to consolidate/classify the authorities passed during the war.

Strategic and Critical Materials Stockpiling Act of 1946

The mobilization experiences of WWII generated numerous lessons learned. The first significant legislation generated by these lessons was the Strategic and Critical Materials Stockpiling Act of 1946. WWII experience clearly showed that the natural resources of the US in certain strategic and critical materials were deficient and insufficiently developed to supply industrial, military, and Naval defense needs.

Congress created this Act to "provide for the acquisition and retention of stocks of their materials and to encourage the conservation and development of sources of these materials within the United States, and thereby decrease and prevent wherever possible a dangerous and costly dependence by the United States upon foreign nations for supplies of these materials in times of national emergency." The Secretaries of War, Navy and Interior were jointly charged with the responsibility to identify materials that are strategic and critical, and the quantity and quality of these materials to be stockpiled.
The effectiveness of the execution of this act is open to debate because of the changing needs for strategic and critical materials as well as funding constraints which limit the quantities of materials stockpiled. The failure to appropriate funds to press the raw materials stockpiling program in the period between V-J Day and 1950 resulted in serious shortages during the Korean mobilization.

**National Security Act of 1947**

The most extensive legislation evolving from the lessons of WWII was the National Security Act of 1947. This Act created the Air Force and the Department of Defense, but its effect on mobilization was the creation of the National Security Resources Board (NSRB). The function of the Board was to advise the President concerning the coordination of military, industrial, and civilian mobilization. The NSRB was relatively short lived and was subsequently incorporated into the Office of Defense Mobilization (ODM) and the Department of Defense. The NSRB filled the need identified in WWII for a permanent agency to plan industrial and civilian mobilization policies and programs, thereby achieving a program for national mobilization.

**National Industrial Reserve Act of 1948**

The final piece of WWII generated legislation was the National Industrial Reserve Act of 1948. The purpose of the Act was to provide "adequate measures whereby an essential nucleus of Government-owned industrial plants and a national reserve of machine tools and industrial manufacturing equipment may be assured for immediate use to supply the needs of the armed forces in times of national emergency or in anticipation thereof..." The act charges the
Secretary of Defense with establishing policies to identify and control property in the national industrial reserve. Despite the provisions of this act, machine tools were a weakness during the Korean mobilization as they had been during World War II. Production of machine tools did not begin early enough to prevent the shortage during Korea; however, the act did reduce the severity of that shortage.

The National Defense Production Act of 1950

Three months after the initiation of Korean hostilities, the President requested legislation to aid in reallocating industrial resources while avoiding inflation. Congress passed the Defense Production Act of 1950. The seven titles of the Act provided authority to (1) establish critical defense items priorities and allocation system; (2) to requisition personal property and condemn real property; (3) to expand productive capacity and supply of metals, minerals, and other materials; (4) to establish wage and price controls; (5) to establish procedures to settle labor disputes; (6) to impose consumer and real estate credit controls; and (7) to encourage small business participation in the program.

The stabilization policy and machinery were, at least initially, the weakest links in the limited Korean mobilization program. The Defense Production Act of 1950 did provide most of the authority needed initially. But the President took the chance that indirect stabilization controls would be adequate. They were not. Admittedly, they did not get a fair trial since they were not used vigorously. Direct controls were instituted late, and the cost of living rose. The cost of munitions rose more, thereby materially decreasing the buying power of funds appropriated for defense. This experience again reinforced Bernard Baruch's consistent contention that controls should be instituted early and across the board, followed by adjustment and relaxation where indicated. But the
procedures and machinery to carry out a Baruch policy were not available, partly because there had been no standby legislation enacted on which to base plans, procedures, and skeleton organization. (NSRB had drafted needed legislation.) The mechanism and policy for wage stabilization lacked both strength and clarity. Congress was reluctant to provide the legislation which would give taxation maximum effectiveness as a stabilization measure but did legislate exemptions which weakened stabilization controls.7

Executive Order (EO) 10480 Providing for the Administration of the Defense Mobilization Program

In 1953 the President in EO10480 merged the Office of Defense Mobilization (ODM) and the NSRB and charged its Director to coordinate all mobilization activities of the executive branch of the Government, including all such activities relating to production, procurement, manpower, stabilization and transport. Every agency having functions under the Defense Production act of 1950 was placed under the direction and control of the Director of ODM. ODM was subsequently changed by Executive Order to the Office of Civil and Defense Mobilization and ultimately to the present Federal Emergency Management Agency.

This EO and its subsequent amendments provides the authority for a single organization to plan and coordinate the control of mobilization activities.

A Contemporary Perspective

As is the case in most studies of complex subjects, understanding the terminology or jargon associated with a given subject becomes all important. Such is the case of industrial mobilization. Today, we find many practitioners loosely interchanging the terms of industrial preparedness and industrial mobilization. It is accepted that these terms are related, but they simply are not congruous. Legislatively there is a clear difference.
From a preparedness perspective, the legal basis is established by the Defense Production Act of 1950 and the Defense Industrial Reserves Act of 1948, as amended in 1973; while administrative authority is delineated by Executive Order 11490 and the Defense Mobilization Orders. The thrust of the acts and orders is clear—planning for an emergency while creating a solid industrial foundation from which to build in response to national requirements during times of crisis.

Conversely, industrial mobilization, or actions taken during a national emergency to meet expanded requirements in a responsive manner, is facilitated by 10 USC 4501 and 9501. These statutes are action oriented and provide direct authority to broaden industrial capacity as required by the circumstances of the emergency. Although not directly related to the industrial mobilization authority, the War Powers Resolution of 1973 and the National Emergencies Act of 1976 do influence the Executive's authority to implement the preceding statutes and will be discussed subsequently.

One last entity, The Emergency Mobilization Preparedness Board, is worth citing at this time. The President, with respect to industrial mobilization in National Security Decision Directive 47, when chartering the Board, clearly cited the difference between preparedness and mobilization when he said:

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 materiel needed to prosecute successfully a major military conflict.
Again, aimed at preparing for mobilization, the Board is responsible for policy, planning guidance, coordination, resolution of issues and monitoring progress.

The balance of this section will be devoted to a detailed review of the contemporary legislation and orders previously discussed and how they fit into the industrial mobilization scenario.

**50 USC 451: Defense Industrial Reserves; Purpose and Policy**

The purpose of this statute rooted in the Defense Industrial Reserve Act of 1948 and amended by PL93-155 in 1973 is to ensure that the Government has a sufficient in-house nucleus of industrial facilities and a ready reserve of machine tools and industrial plant equipment to provide for the immediate needs of the nation's armed forces in times of national emergency or when an emergency situation is imminent. Given that the preponderance of defense production is accomplished in the private sector as directed by the statute, the ability of the Secretary of Defense to fully comply with the policy of meeting immediate needs of critical materiel is questionable. The Defense Industrial Base Panel of the Committee on Armed Services, House of Representatives states in its 1980 report, The Ailing Defense Industrial Base: Unready for Crisis, that "there are only 83 government owned facilities within a base which is made up, at any one time, of 25,000 to 30,000 prime contractors and upwards of 50,000 subcontractors."
Beyond generic authority, 50 USC 451 states that:

"to the maximum extent practicable, reliance will be placed on private industry in support of defense production, and that machine tools and industrial manufacturing equipment may be retained in plant equipment packages or in general reserve to maintain a high state of readiness for production of critical items of defense materiel, to provide production capacity not available in private industry, or to assist private industry in time of national disaster."

Obviously, there is no way that immediate needs in totality can be accommodated by in-house capability. Addressing itself to the subject in 1980, the Defense Science Board's study on Industrial Responsiveness indicated that only seven percent of the government's machine tools were less than 10 years old and that the preponderance of about 20,000 machine tools in storage were deteriorating because of inadequate maintenance. Many were also considered useless, thereby reflecting a less than acceptable resource commitment. Although some recent progress has been made, it is doubtful that legislative authority has been transitioned into an adequately resourced program which reasonably complies with statutory preparedness requirements.

50 USC 453: Defense Industrial Reserves; Powers and Duties of the Secretary of Defense

Following the preparedness theme, this statute—which is also traced to the Defense Industrial Reserves Act amended in 1973—authorizes and directs the Secretary of Defense to: decide which defense facilities, to include machine tools and industrial plant equipment, should constitute the reserve; identify excess for disposal; properly care for and maintain this equipment; and control and account for the property. As an entity unto itself the statute is clear and pointedly defines responsibility. However, given the
condition of the industrial base, compliance with all aspects of the statute is more challenging. In National Security Decision Directive 47, the President also directs:

That all Federal departments and agencies manage their financial and human resources consistent with the provision of applicable law, and provisions of this and other directives to assure the development of the required capabilities. Resources for improvements in our preparedness capabilities will be obtained through the normal budget process....

Executive Order 12148: Federal Emergency Management

This executive order signed by President Carter created the Federal Emergency Management Agency and delegated Presidential authority to act within the law in terms of emergency preparedness per the National Security Act of 1947, as amended; the Defense Production Act of 1950, as amended; and emergency functions specified in nine other acts and two reorganization plans. The purpose of the order was to, discounting civil emergencies, establish the Director of the Federal Emergency Management Agency as a single point to establish Federal policy for, and coordinate, all civil emergency planning (by definition to include wartime), management, mitigation, and assistance functions of Executive agencies.

Accepting the conceptual soundness of an umbrella type agency capable of providing the transition wherewithal from preparedness to mobilization, it would appear that hierarchical stature may well preclude the Director from fulfilling the statute authorities or the implementation responsibilities attendant thereto. Constrained resourcing, in terms of manpower, may be expected to impact effectiveness.
Executive Order 11490: Assigning Emergency Preparedness Functions to Federal Departments and Agencies, as Amended

The purpose of the order was to consolidate authority and responsibility for emergency preparedness functions contained in 21 Executive Orders and 2 Defense Mobilization Orders as applicable to Federal departments and agencies, and to establish the Director, Federal Emergency Management Agency as the source of policy guidance and coordination for the national preparedness program. Authority to implement emergency plans for which the order fixes responsibility is withheld pending enactment of law by Congress or an order of the President.

For purposes of this study, selected responsibilities of the Department of Defense and the Department of Commerce will be highlighted.

Specifically, the Secretary of Defense is charged to perform the following functions:

(a) Develop and furnish quantitative and time-phased military requirements for selected end items, consistent with defined military concepts, and supporting requirements for materials, components, production facilities, production equipment, petroleum, natural gas, solid fuels, electric powers, food, transportation, and other services needed to carry out specified Department of Defense current and mobilization procurement, construction, research and development, and production programs.

(b) Plan for and administer priorities and allocation authority delegated to the Department of Defense. Authorize procurement and production schedules and make allotments of controlled materials pursuant to program determinations of the Director, Federal Emergency Management Agency.
(c) Develop with industry, plans for the procurement and production of selected military equipment and supplies needed to fulfill emergency requirements, making maximum use of plants in dispersed locations, and, where essential and appropriate, providing for alternative sources of supply in order to minimize the effects of enemy attack.

(d) Recommend to the Director, Federal Emergency Management Agency measures for overcoming potential deficiencies in production capacity to produce selected military supplies and equipment needed to fulfill emergency requirements, when necessary measures cannot be effected by the Department of Defense.

(e) Analyze problems that may arise in maintaining an adequate mobilization production base in military-product industries and take necessary actions to overcome these problems within the limits of the authority and funds available to the Department of Defense.17

While this listing does not attempt to delineate all 30 functions for which the Secretary of Defense has emergency preparedness responsibility, it is sufficient to highlight several key considerations which will be subsequently discussed.

In concert with the preceding, the Secretary of Commerce is charged to prepare national emergency plans and develop preparedness programs for these selected functions:

(a) The production and distribution of all materials, the use of all production facilities (except those owned by, controlled by, or under the jurisdiction of the Department of Defense or the Energy Research and Development Administration, the control of all construction materials, and the furnishing of basic industrial services except those otherwise assigned, . . . .
(b) Develop control systems for priorities, allocation, production, and distribution, including provisions for other Federal departments and agencies, as appropriate, to serve as allotting agents for materials and other resources made available under such systems for designated programs and the construction and operation of facilities assigned to them.

(c) Develop procedures by which new production facility construction proposals will be reviewed for appropriate location in light of such area factors as locational security, availability of labor, water, power, housing, and other support requirements.

(d) Identify those industrial products which are essential, or of very great importance, to mobilization readiness, national defense, or postattack survival and recovery; identify the facilities capable of producing the identified products and evaluate the importance of such facilities to national security.\(^\text{18}\)

Again, this listing of responsibilities is not comprehensive, but is illustrative of considerations requiring further discussion.

Concluding this brief synopsis of Executive Order 11490, as amended, several key points merit attention. First, although the order consolidated a large number of functions and fixed departmental or agency emergency preparedness responsibility, the order is not clear in terms of hierarchical relationships or the Federal Emergency Management Agency's role prescribed in Executive Order 12148. Therefore, unless interactive processes are specified, a clear focal point is missing and recipients of the order are basically left to their own discretion. Second, the probability of all departments and agencies complying with the expressed intent of the order is exceedingly low given the far-reaching requirements which have been written into the order. Total, coordinated compliance would almost certainly mandate exceedingly high
priority, enhanced resourcing and reorganization to varying degrees. Third, the order has an emergency preparedness focus, but does not clearly portray the transition to national emergency and an ultimate of industrial mobilization. It should also be noted that implementation authority in times of emergency is pointedly withheld, thereby increasing the uncertainty of transition.

**Defense Mobilization Orders**

As indicated earlier, the mobilization orders provide administrative authority to pursue industrial preparedness as a means of providing a solid foundation for any industrial mobilization requirement. The orders are found in Title 44 of the Code of Federal Regulations.

In parts 320-332 of Chapter 1, a number of policies which encourage and, when appropriate, require a number of industrial preparedness actions are set forth. Areas covered include:

(a) Location of production facilities and protective construction thereof.

(b) Selection of critical facilities for the mobilization base based on military end items or components.

(c) Maintenance of the mobilization production base to include installed machine tools and industrial plant equipment.

(d) Voluntary agreements with management of privately-owned facilities to retain skilled key personnel knowledgeable of mobilization production items, and

(e) Utilization of government-owned equipment valued at $1,000 or more by civilian industry.
Although the mobilization orders have some strong points with respect to setting policy, they have a tendency to confuse today's issues. Many of the points covered are addressed in other statute documents or Executive Orders, and not always in the same manner. Obvious questions regarding priority and interpretation cannot be avoided. Further, the fiscal constraints on the mobilization preparedness authority seriously degrade potential implementation effectiveness given the realities of today's industrial base in the government and private sectors. Lastly, the orders published by the Federal Emergency Management Agency communicate the same doubts as to who is really in charge of enforcing or controlling the industrial preparedness initiatives of the government or who will ultimately coordinate the industrial mobilization actions which are also prescribed by the orders. It is felt that this shortfall contributes to the continued operation of a suboptimized preparedness effort which could not be pulled rapidly together in time of emergency.

10 USC 4501 (a), (c), (d): Industrial Mobilization; Orders Possession of Plants, Manufacture

This statute is the legal basis for the President to act in terms of mobilizing industry in times of national emergency. It is not a preparedness action nor reflective of a time-phased plan. Replacement of lost production base or expansion of capacity are the focal points. Relevant portions of the statute are as follows:

(a) In time of war or when war is imminent, the President, through the head of any department, may order from any person or organized manufacturing
industry necessary products or materials of the type usually produced or capable of being produced by that person or industry.

(b) In time of war or when war is imminent, the President, through the head of any department, may take immediate possession of any plant that is equipped to manufacture, or that in the opinion of the Secretary of the Army is capable of being readily transformed into a plant for manufacturing arms or ammunition, parts thereof, or necessary supplies for the Army, if the person or industry owning or operating the plant, or the responsible head thereof refuses -

(1) to give precedence to the order of the President;
(2) to manufacture the kind, quantity, or quality of arms or ammunition, parts thereof, or necessary supplies as ordered by the Secretary; or
(3) to furnish them at a reasonable price as determined by the President.

(c) The President, through the Ordnance Corps; may manufacture products that are needed in time of war or when war is imminent in any plant that is seized under subsection (b) above.19

Two major problems exist with this statute and may largely be attributed to the passing of time since enactment. First, the language dealing with in time of war or when war is imminent no longer tracks with contemporary legislation or orders. To be consistent, all authorities should be addressed in terms of national emergency or war. Second, the hierarchical delegation from the President to the Secretary of Army is not consistent with today's organizational structure or fixing of responsibility with the Secretary of Defense.
10 USC 9501: Industrial Mobilization; Orders, Possession of Plants, Manufacture

This statute provides the same authority as did 10 USC 4501 to the Department of the Air Force and reflects the same inconsistencies.

Peripheral Legislation

Although not specifically related to industrial mobilization, the Congress enacted legislation in the form of PL 93-148 (7 November 1973) differentiating between constitutional powers of the Executive and the constitutional powers of the Congress to declare war. This law constrains Presidential authority to act independent of the Congress and provides power for the Congress to terminate any Presidentially directed troop commitment by resolution.

When the National Emergency Act of 1976 was passed into law, Presidential flexibility was further constrained. The law requires that the Executive specify emergency authorities being exercised in a declaration of national emergency or Executive Orders. Congress retains the right to terminate any declaration of national emergency at any time by concurrent resolution.

Assessment of Legislation and Orders

The review of the historical and contemporary perspectives indicates that sufficient legislation has not been carried forward or created to provide unconstrained authority for industrial mobilization and necessary preparedness. Even if unconstrained authority was in place, however, it—in itself—would not ensure successful execution. During the review process, a number of points have been identified as inhibitors to effective use of authority already provided. These points will be discussed hereafter.
A significant impediment to responsive or appropriate use of preparedness or mobilization authority is the obscure audit trail of relevant statutes and orders. If one had an accurate count, there are probably in excess of 400 statutes and orders governing potential actions which must or may be effected. This problem has been recognized before, but never really solved. Partial consolidations and restatements have attempted to clarify and codify requirements to no real measure of success. In fact, more confusion has been created in some cases through omissions or less than totally accurate restatements. A more contemporary alternative to solving the problem, omnibus legislation, has been considered, but may not be the real answer to the challenge.

In a 1981 memorandum to the Under Secretary of Defense for Policy, Richard Danzig addressing legal restraints on mobilization and surge production states:

... that even if the legislative authorities are codified, perhaps the most pressing law-related mobilization problems will continue to be structuring executive branch planning and training so that the relevant actors will comprehend and use authorities that are available.20

The point made is clear. Omnibus legislation is not a solution if those managing implementation do not understand the environment. While this opinion may not be a universal consensus, it merits strong consideration.

With or without omnibus legislation, it would seem that development of the comprehensive cross reference work should become a priority action. In this manner, decisionmakers would have a single reference which would cite all appropriate laws, orders, and regulations impacting on specified subject areas, and concurrently delineate decision responsibilities, coordination or
peripheral requirements. Strengthening of the audit trail would make a
direct, positive contribution to execution quality, completeness and
responsiveness. To date, the Air Force Judge Advocate General's Digest of War
and Emergency Legislation Affecting the Department of Defense, and the Systems
Research and Applications Corporation's Compendium of Emergency Authorities
appear to be reasonably credible initial efforts. Both, however, have not
been institutionalized to the degree that they are totally comprehensive or
updated annually. A truly useful work must be current and adequately trail
the numerous interrelationships attendant to industrial mobilization.

Accepting some decrement to effectiveness of implementation resulting from
confusion with respect to knowing authorities or requirements, wording of the
specific laws or orders and the consistency thereof over time is equally
problematic. In an aggregate sense, wording is not specific in many cases,
leading to misunderstanding or interpretation to suit one's purpose in
opposition to intent of the law or order. This problem is exacerbated by the
absence of consistent terminology over the years. Changing terminology is
certainly to be expected and is not a problem in itself. However, updates are
required to ensure all parties have a clear understanding of responsibilities,
parameters and hierarchical relationships. One might reason that the
coordination maze which must be negotiated prior to legislative enactment or
publishing of and Executive Order precludes precise fixing of responsibility
in specific terms or pointed language. For the most part, this circumstance
appears to be true and the basis for a preponderance of the confusion which
exists today. When the language of old statutes still in effect is added to
the equation, problems increase dramatically. As terminology and organizational structures, to include roles, change over time, contemporary revision is absolutely essential.

Although most of the steady state preparedness authorities are clear, accepting execution decrements associated with misunderstanding or interpretation, transition from peace to national emergency and industrial mobilization offers a greater challenge. In many cases, mobilization authority cannot be implemented until such time as the President initiates a declaration of national emergency. Because of legislative mandate, this requirement may be detrimental in terms of time wasted and implementation effectiveness. Further, understanding of constraints or authority shortfall with respect to implementation are almost certain to cause problems which ultimately decrement effectiveness. Rather than insure confusion driven by dependent variables, perhaps a modification of existing authority and procedures is required. A clearly published guide based on more than steady state would do much to eliminate obstacles to effective transition during times of national emergency. Given the condition of the industrial base and military hardware inventories, the mobilization problem is much too complex for "all or none" resolution. Addition of one or more stages between steady state and national emergency, with documented authority to act, preserves Congressional prerogative while maximizing accomplishments between identification of a national security threat and the actual declaration of an emergency. In many instances, the gap may be significant and could be profitably utilized to help cut the transition angle.
Overall direction and management of the industrial mobilization effort once the transition process begins is very confusing and unclear. Review of legislation and orders does not answer the question of who is precisely in charge of or overseeing what. Continuance of an all or nothing transition process will only add to confusion and delay when implementation is authorized. Existing narrative does not clearly define hierarchical relationships or establish who is responsible for enforcement of implementation requirements or coordination. This shortfall is potentially capable of rendering any number of independent actions totally ineffective and rendering the mobilization effort counterproductive. Consideration must now focus on reducing the options and flexibility in being. Clear hierarchical lines must be established and a single point for direction and management identified. Once this is accomplished, enforcement and coordination must be effected.

Current resourcing in terms of dollars and dedicated manpower precludes compliance with numerous legislative or Executive Order requirements. The national ability to enhance the prospects of a successful industrial mobilization, should the need arise, cannot be accomplished without resources. The question of priorities is most germane. Outdated, unclear authority documents and inadequate capital assets will not improve the national state of being. Again, the potential benefit of omnibus legislation as the update vehicle must be questioned in terms of resources required to produce comprehensive legislation. It has been pointed out that such an undertaking would consume a great deal of time and manhours, be launched from a very uncertain base, and very possibly not bear the desired fruit.
Given these circumstances, can the cost be justified as other known requirements remain unfunded with a potential negative return on investment? Improvement of an untenable position fueled by a period of peace will not occur without a significant resource commitment. The choice is clearly ours.

**Conclusion**

Useable execution authority for industrial preparedness and mobilization is, in the final sense, inadequate. Additional shortcomings exist in terms of understanding, mobilization transition, executive management structure and resourcing. Significant improvements can be realized through the updating of existing legislative and order narratives by focusing on specificity, simplicity, clarity and consistency. Organizationally, department and agency relationships must be clarified while a workable check and balance management system is instituted. Restructuring of existing departments and agencies is necessary if priority is afforded to accomplishing the intent of the law. If priority is not afforded to the areas of preparedness and mobilization, requirements which are unfinanced should be eliminated. There is no point in perpetuating a scenario which is unexecutable. Resources are wasted.

Particular attention must focus on the authority for action between steady state and national emergency. If existing statutes are not modified, the effectiveness of transition will be impaired by the absence of broader authority to initiate required actions, given the less than desired condition of the industrial base, prior to the declaration of national emergency. In
the absence of a total procedural revision, creation of precise standby legislation and waiver packages can mitigate somewhat the absence of early authority to act.

Industrial mobilization will be significantly impaired in terms of responsiveness and effectiveness unless priority and resources are applied to the implementation of statute, order and management changes. Acceptance of existing shortfalls is not in the best interest of national security nor supportive of the intent of the law. Significant improvement of our current procedure cannot be accomplished without a commitment of required fiscal and personnel resources.
CHAPTER II
ENDNOTES (Pages 5-27)

1 Act of Jun 4, 1920, Ch. 227, 41 Stat. 759.


3 Act of July 23, 1946, Ch. 590, 60 Stat. 596.


9 Ibid.


17 U.S. President Executive Order 11490, Assigning Emergency Preparedness Functions to Federal Departments and Agencies, Part 4, Sec. 401.

18 Ibid., Part 9, Sec. 901.

19 10 U.S.C, sec 4501 (1976).


21 Ibid., pp. 28-33.
CHAPTER III
THE ORGANIZATIONAL STRUCTURE FOR MOBILIZATION PLANNING
AND MANAGEMENT

Introduction

As a necessary precursor to a discussion of the history of national level
organizations for mobilization planning and management, this chapter initially
reviews the mobilization planning function prior to U.S. entry into World War
II. It then proceeds to a review of wartime organizations for mobilization
management, and the evolution of that organization from the immediate post war
period through its current configuration. This organizational evolution is
followed by a brief description of the evolution of the planning function from
post World War II through its current status. The chapter then concludes with
our conclusions regarding both the organizational structure and the planning
function. While the overall sequence of these discussions may appear
arbitrary, it is, in fact, essential to an understanding of the history of
both the organizations and the function. These two are inexorably inter-
woven; for the primary peacetime role of the organizational structure is the
development of policy and plans that, hopefully, support national security
objectives—and, as we shall see, the health of the planning function cannot
be decoupled from the health of the organizational structure (although, the
existence of the structure does not necessarily assure the generation of
necessary policy and planning).
Historical Perspective through World War II

Interwar Planning

Between 1918 and 1939, little productive action was taken by the United States in the area of mobilization planning. Congress passed the National Defense Act of 1920 and created, by joint resolution, a War Policies Commission in 1930 to study the issue of mobilization. Its recommendations were comprehensive, but were not adopted by the Congress. Additionally, the Neutrality Act of 1935 barred the use of the industrial capacity of the United States to support any belligerent in a future war.

Planning efforts during this period rested largely within the planning branches of the War Department and the Army and Navy Munitions Board, which was created by the National Defense Act of 1920. Industrial Mobilization Plans, called "M-Day" plans were published in 1931, 1933, 1936, and 1939. These plans were part of a set of three plans. The others dealt with force expansion (Protective Mobilization Plan) and equipping the expanded force (Procurement Plan). As a part of this planning, over 25,000 industrial plants were surveyed, with approximately 10,000 marked for future munitions production. Managements of the latter had been informed and, in some cases, educational orders had been issued. These plans did envision the need for wartime controls and forecast methods of control and allocation.

Interwar planning envisioned a "super agency" responsible to the President as the overall mobilization manager. This agency, the War Resources Administration, was to be established as early as possible during an emergency and was to be staffed from the business community and the Army and Navy
Munitions Board. For political reasons, the War Resources Administration was never activated. In 1939, however, the War Resources Board was formed and undertook the central planning envisioned as a War Resources Administration function. In October 1939, the War Resources Board endorsed a Presidential proposal to fragment the mobilization effort among several agencies, all reporting directly to the President. The Board recommended the seven agencies shown below, none of which had power over the other.

1. Public Relations Administration
2. Selective Service Administration
3. War Labor Administration or Board
4. War Finance Administration or Board
5. War Food Administration
6. Price Control Authority
7. War Resources Administration
   A. Raw Material and Manufactures Division
   B. Facilities Division
   C. Priorities Division
   D. War Trade Division
   E. Power and Fuel Division
   F. Transportation Division
   G. Research and Technology Division

The War Resources Board and the seven recommended agencies generally followed the pattern of the Industrial Mobilization Plan, but particularly modified the "super agency" concept. The recommendations of the War Resources Board were tabled without action.
In the summer of 1940, the President, using authority from the Army Appropriation Act of 1916, activated the National Defense Advisory Commission (NDAC) and an Office of Emergency Management (OEM), the latter provided for by Executive Order on 8 September 1939. OEM was to serve as the link between the President and defense establishments. The President chose to assign operating type functions to NDAC, and the Commission became operational in nature, with power derived solely from the prestige of its members and its access to the President. NDAC provided the nucleus for most of the successor wartime organizations and quickly acquired power in the following areas.

1. Priorities
2. Commandeering
3. Anti-trust certification
4. Contracts
5. Defense expenditures
6. Certificates of Necessity
7. TVA projects

In most of these areas, NDAC was considered as a body rather than as independent advisors. NDAC coordinated Army and Navy procurement by using its inherent power and through its control over defense expenditures. At this time, military production was added to civilian production, not substituted for it, and conflicts arose. NDAC also oversaw the first steps in expansion of production facilities, the big contributor being accelerated tax amortization for such expansion. It also established the future wartime foundation in the manpower area.
By late 1940, NDAC was no longer adequate. The planning was over and emphasis had shifted to implementation of plans. NDAC was slow and did not have sufficient power to oversee this phase.

The Office of Production Management (OPM) succeeded NDAC in 1941. NDAC was supposed to continue to advise the President, but in fact disintegrated as OPM assumed its functions in the areas of priorities, purchases, materials, production and employment. OPM was to have no single head, but was supposed to direct defense production in coordination with the Secretaries of the Army and the Navy. OPM was more effective than NDAC, but still lacked authority to act decisively. OPM's responsibilities were eventually, in the mature wartime organization, divided between the War Production Board and the War Manpower Commission.

By Pearl Harbor, after two years of effort, war materiel was being produced and facilities expanded. Output was low compared with what was coming, but the plant expansion which would permit large wartime production was under way. The national mobilization organizational machinery was in its early developmental stage and numerous lessons had been learned, largely through trial and error. While much had been accomplished in terms of productive capacity, it is well to remember that a significant portion of the productive expansion had been fueled by orders for equipment and materiel from Great Britain and France, particularly in the aircraft industry.
Wartime Organization

Shortly after Pearl Harbor, on January 16, 1942, the War Production Board (WPB) was established by Executive Order 9029. This Wartime Board replaced not only the OPM but also the recently established (August 1941) Supply Priorities and Allocation Board (SPAB). Responsibilities of the latter included the determination of materials and commodities requirements for war, and the formulation of policies needed both to meet those requirements and to govern their proper distribution through a system of priorities and allocations. Coupled with OPM's large mission, which was to coordinate industries and resources in the interest of national security, the total responsibilities of the WPB were massive, and provided great power to the chairman, Ronald M. Nelson. However, from the start, the WPB chose not to assume the extent of this power by not taking on the manpower and pricing aspects of mobilization and to concentrate on industrial capability. The management of industrial mobilization proved to be no easy task and consumed two years of effort by the WPB before an acceptable management system was assembled. As a result of this and other internal and external agency difficulties, the WPB did not become the "super agency," needed to coordinate the national war effort. Ultimately, it was Congressional dissatisfaction with the functioning and accomplishments of government wartime agencies that caused President Roosevelt to establish the Office of War Mobilization (OWM) in 1943. This office, whose chief acted in the name of the President, filled the gap in coordinating the mobilization activities of all government agencies. A key element of the OWM charter was that it had real authority to direct all of those same agencies in the accomplishment of national programs.
This super agency, if it can be so called, was recognized as such by Congress and, in October 1944, it was legislated by them as the Office of War Mobilization and Reconversion (OWMR). The OWMR remained in being until after the end of World War II.

Evolution from World War II to the Current Organizational Structure

"The tremendous influence of industrial and economic factors upon modern warfare was not appreciated fully prior to 1941. Since the World War, however, many students have devoted to these subjects a great amount of study and research. Exhaustive accounts of almost every kind of industrial and economic activity in that war are now available. These serve as a basis for deduction of principles applicable to the economic and industrial phases of modern warfare."

"The necessity for industrial preparedness is clear. Military weapons and missiles are used up rapidly in war." So went the introduction of the 1939 Industrial Mobilization Plan (IMP) produced by the Army and Navy Munitions Board. It is interesting to note that today, after the experience of World War II, Korea, and Vietnam, that the 1939 IMP perspective has been added to with much history but the basic idea and principles of organization have not changed.

Post World War II Mobilization Organization

In looking back on this recent history, World War II serves as the example of total industrial mobilization conducted by the United States. That great war confirmed the "necessity for preparedness" spoken about so thoughtfully in the 1939 IMP, and like World War I, its lessons learned have also been written
about and studied over and over again. After World War II, our national leaders were again determined that this country would not be caught unprepared in the future and that the key lessons learned, or the principles, should be codified. The National Security Act of 1947, was the means by which this was done. Unlike the National Defense Act of 1920, the 1947 Act directed the creation of a war proven, organizational structure designed, among other things, to enhance national security through peacetime planning for industrial mobilization and for the development of industrial and raw material resources where they are not adequate. The Act of 1920 had stopped short of creating the then recommended organizational structure even though the lessons learned of World War I indicated a requirement. It did, however, assign to the Secretary of War the responsibility for the provision of adequate industrial mobilization and this resulted, as indicated earlier, in the formation of a new planning Branch within the War Department, and the Army and Navy Munitions Board, to assist in accomplishing the task. The war proven organizational structure directed by the Act of 1947, as taken from the industrial mobilization standpoint, included two key activities; the National Security Resources Board (NSRB) which answered to the President, and the Munitions Board which was placed under the Secretary of Defense. The specific duties and responsibilities of these Boards are contained in Figures III-1 and III-2.

Since the passing of the National Security Act of 1947, to the present time, many events have occurred which caused the modification of the directed industrial mobilization organizational structure, and perhaps, the purpose behind its original design. The Munitions Board, for example, was modeled after the Army and Navy Munitions Board of World War II. It initially
FIGURE III-1

MUNITIONS BOARD DUTIES AND RESPONSIBILITIES

THE NATIONAL SECURITY ACT OF 1947

Under the direction of the Secretary of Defense and in support of strategic and logistical plans prepared by the Joint Chiefs of Staff, the Board will:

2. Plan for military aspects of industrial mobilization.
3. Recommend inter-service procurement responsibility assignment; plan for specification standardization and for single purchase authority allocation.
4. Evaluate logistic feasibility of strategic plans.
5. Determine priorities within military procurement programs.
6. Supervise assigned subordinate agencies.
7. Recommend most efficient inter-service logistical organization.
8. Correlate and develop policies for military versus civilian requirements, particularly on strategic and critical material through liaison with other Federal activities.
9. Reconcile SCS logistic requirements with those of supply agencies, recommending action to the Secretary of Defense
Advise the President reference coordination of military civilian mobilization. Develop policies and programs for:

1. Manpower mobilization.

2. Effective wartime use of resources, balancing military and civilian requirements.

3. Unified wartime Federal effort in production, procurement, distribution, transportation of military and civilian supplies, materials and products.

4. Determine status of potential wartime supply versus needs for manpower, resources and productive facilities.

5. Strategic and critical material reserves and their conservation.

6. Strategic relocation of key industrial, service, government and economic activities.
consisted of a civilian Chairman, appointed by the President, plus necessary Assistant Under Secretaries, each appointed by the Secretaries of the Military Departments. Any additional personnel needed to carry out the Board's responsibilities were provided by the Secretary of Defense. The Board, in the early years, carried out its duties in an excellent fashion and as intended by the Act of 1947. The main thrust of the Board's action was the identification, in coordination with JCS and the Military Departments, of the material requirements to support strategic and logistical plans.\(^4\) These requirements were in turn given by the Board to the NSRB for national level review in order to determine the production feasibility, and for the coordination of military and civilian mobilization needs. The system, just outlined, was not unlike that developed and used successfully by the Army and Navy Munitions Board and the War Production Board, during World War II. It caused in the early 1950's, the identification of the strategy-resource gap and formed the basis for decisions at the national level regarding strategy and industrial capability, just as it did during that earlier time which represented America's greatest period of industrial mobilization.

In 1950, under the pressure of the Korean War mobilization, President Truman made the first change to the industrial mobilization structure. He directed the formation, under the authority of the Defense Production Act of 1950, of the Office of Defense Mobilization to coordinate and control actual mobilization activities. The NSRB remained in place by law, but was limited to the one responsibility of mobilization planning. At the end of the Korean War, the NSRB and ODM were merged under the title of ODM, and thus the original organizational structure greatly enhanced with mobilization management capability, was regained.
It was also in 1953, however, that a very significant change occurred in the overall structure as the result of the Defense Department's Reorganization Plan Number 6. Under this reorganization, the position of the Chairman, Munitions Board, was abolished and the responsibilities of the Board were integrated into the staff of the Secretary of Defense. The purpose behind this change was to allow for the full control of the Board by the Secretary of Defense to provide for better management flexibility since, as voiced by Secretary of Defense, Robert A. Lovett, "the duties assigned to the Munition Board by the Act are confused by the apparent emphasis on the planning aspects of procurement, production and distribution problems associated with industrial mobilization." The abolishment of the Board, with the shift to a short war strategy coupled with declining resources for defense, caused the de-emphasis of industrial mobilization planning. Good examples of this fact are; the situation where the Air Force did no solid industrial mobilization planning between 1958 and 1967, and the general decline of the defense industrial base which continues today.

Things were not much better on the civil side of the street. As noted above, the NSRB was merged into ODM in 1953. Over the years, changes continued, and the organization required by Act of 1947 was: named and renamed; it came under the President, then it did not; its responsibilities increased to include Civil Defense; and on-and-on. Perhaps, however, the most telling blow of de-emphasis came in 1973; when President Nixon abolished the Office of Emergency Preparedness (NSRB several times removed) and assigned the National Security Act of 1947 responsibilities of mobilization planning and coordination to the General Services Administration. This was an extreme step
down from an NSRB whose chairman was appointed by the President and whose main duty was to advise the President concerning the coordination of military, industrial and civilian mobilization.

Current Organization

History suggests that significant improvements in industrial mobilization readiness will only be achieved if there is a commonly understood national goal that mobilization readiness is important. During the 1979 time frame, there was increasing concern regarding the inability of industrial base to sustain U.S. forces in a conventional war of indeterminate length and intensity. As part of his limited reorganization of the Executive Branch, President Carter established the Federal Emergency Management Agency (FEMA) in July 1979. FEMA's responsibilities to include those of the Act of 1947 and the NSRB, for national preparedness require development of federal program policy guidance and plans to ensure that government at all levels are able to cope with the recover from emergencies. Maintaining the capability of the industrial base to respond to military contingencies is a major element of U.S. strength and deterrence. As the executive agent, FEMA is responsible for the assessment of national mobilization capabilities and the development of concepts, plans, and systems for management of our resources during an emergency. As a coordinating and policy agency, FEMA's effectiveness will depend largely upon the degree to which its activities succeed in producing effective and timely responses from other Federal agencies.

In a memorandum from President Reagan on the Emergency Mobilization Preparedness Board, December 17, 1981, President Reagan stated that "one of the most compelling tasks still facing us is the development of a credible and
effective capability to harness the mobilization potential of America in support of the armed forces, while meeting the needs of the national economy and other civil emergency preparedness requirements. With the establishment today of the Emergency Mobilization Preparedness Board, I am formalizing my commitment to achieving this objective." The functions of the Emergency Mobilization Preparedness Board (EMPB) are: 1) Formulation of recommendations concerning policy for emergency mobilization preparedness; 2) Development of policy guidance documents for working groups and agencies to implement approved policies and plans of action; 3) Resolution of mobilization preparedness issues within the framework of current Administration policy.

While reestablishment of an adequate organizational structure is a necessary prerequisite to mobilization planning, there remain the questions of whether FEMA and the EMPB are the "right" organizations and, if so, have they corrected the problem?

The EMPB, although created more recently, probably carries more "clout" as it is chaired by the President's National Security Advisor and, thus, has direct access to both the National Security Council and the President. Its primary role, however, is the establishment of mobilization policy; with a secondary function of serving, if necessary, as referee among the Executive Departments and Agencies. In its primary role, the EMPB establishes objectives and criteria for the mobilization activities of the Executive Departments and Agencies, and it should manage the progress of those outside organizations in achieving the Board's objective and criteria.

It has not, however, produced plans, probably because it is not the mission of the EMPB to plan (or to implement, for that matter). Its role as
adjudicator of differences among (largely co-equal) organizations included in mobilization is less critical to a discussion of mobilization planning. However, it is safe to assume that the "dispute" process is cumbersome and slow during peacetime, because the disputing agencies are not likely to be anxious to raise issues to the EMPB and because the EMPB, in the absence of hostilities, is apt to avoid quick resolutions that might be perceived as diminishing the authority of a major Executive organization. Our conclusion, then, is that the EMPB has enhanced the mobilization process by disseminating the objectives of and criteria for mobilization planning. However, without continued emphasis and without - as we'll discuss below - significantly improved response from the participating organizations, little measurable improvement will occur in our mobilization posture. The adjudication role which waits for issues to be elevated to the Board, is too slow and without a vigorously enforced schedule for tasks assigned to each participating activity - impedes progress.

Additionally, one of the tasks of the EMPB was to formulate a proposed statement of national policy on emergency mobilization preparedness. On 22 July 1982, President Reagan signed the National Security Decision Directive Number 47 (NSSD47), which established a national policy on emergency mobilization preparedness. The U.S. emergency mobilization preparedness policy is "the U.S. will have an emergency mobilization preparedness capability that will ensure that government at all levels, in partnership with the private structure and the American people can respond decisively and effectively to any major national emergency with defense of the United States as the first priority." As part of the national policy, President Reagan
stated that the U.S. will have a capability to mobilize industry in order to achieve timely and sufficient production of military and essential civilian materiel needed to prosecute successfully a major military conflict, to lend credibility to national strategic policy, and to respond to national security emergencies.

It is important for this nation to have a combat ready, deployable force, but we must also have in existence, an organizational structure and management systems to provide the capability to bridge the gap between initial combat capability and sustained combat or when military stocks are exhausted and when production will signal needs. Peacetime planning with industry must ensure that industrial capability and capacity can be brought up to wartime requirements to provide continuing support when war reserve stocks are depleted. Long production leadtimes for the technologically sophisticated equipment used in conventional warfare today have increased the need for effective industrial preparedness planning.

The national industrial mobilization organizational structure, based on a worst case scenario, should provide long range planning for total mobilization for an unconstrained, unconventional war of indeterminate length and intensity. The program should include national mobilization capability assessments, identification of deficiencies and production capabilities to meet wartime military requirements to include war-stoppers, and an action plan to correct shortfalls in capabilities and capacities before mobilization.

With the emphasis on national defense and emergency preparedness by the current administration coupled with the establishment of the EMPB and FEMA, an analysis of the current organizational structure for mobilization planning and
management of the industrial base follows. Recognizing the fact that numerous initiatives have been completed and/or are ongoing by OSD, the Services, executive agencies and the Cabinet to improve emergency preparedness in the event of mobilization, we have lost sight of the intent and purpose of the organizational structure and management systems that are required for total mobilization based on lessons learned from WWII, Korean and Vietnam Wars, and from exercises such as Nifty Nugget and Proud Sabre 82.

FEMA, as the national level focal point for industrial mobilization is under resourced and therefore unable to perform long-range, national mobilization capability planning for both the military and civilian sectors of our economy. The National Preparedness Program, which is assigned to the Mobilization Preparedness Office, FEMA is grossly under resourced. The office, in existence since March 19, 1982, is currently staffed with about 30 people with plans for expansion, as approved by OMB, to an office of 60 people. However, national level mobilization planning is fragmented within FEMA which degrades the planning efforts and impacts on the credibility of the organizations. Even with increased resources, omnibus legislation is required to provide FEMA with the power/"clout to be the key planning organizations for the President in mobilization planning.

Defense guidance FY 84-88 stated that "there must be far-reaching plans to provide U.S. forces with manning and equipment necessary to fight the Soviets on several fronts for an indefinite period." This guidance equates to comprehensive long-range planning, for total mobilization of industry and the economy to support the expansion of our Armed Forces. However, based on lack of resources and agreement on the national level as to total mobilization
planning, OSD is working primarily on surge mobilization. Surge planning deals with dedicated defense contractors and the defense industries and does not include plans for the non-dedicated industrial base. Therefore, this peacetime surge planning is a long way from total mobilization planning, but with current OSD staffing and resources, surge planning is about all that one can expect from this organization.

With all the emphasis by this administration on mobilization preparedness, the organization responsible for industrial mobilization for this country is the least prepared to perform this task. Department of Commerce, specifically the Office of Industrial Resource Administration, has a planning staff of one person to perform, at the national level, industrial mobilization planning and capability assessments. Based on discussions with key officials, the last time Department of Commerce developed a comprehensive Industrial Capabilities Assessment Plan was in 1962.10

The Post World War II Evolution of Mobilization Planning

World War II through Vietnam

As previously discussed, by the time we entered World War II, we had been generating - for about 10 years - a series of three part mobilizations plans. While it is axiomatic that plans are seldom, if ever, executed precisely as written; the preceding 10 years had left us with a body of knowledge regarding where our productive capacity was located, how much this was, what we thought our material requirements would be and how to procure them, what our priorities were, and what sorts of allocation problems we might confront. It also left us with a considerable number of people within Government who had
experience and knowledge concerning mobilization. Earlier in this chapter we described the organizational changes that occurred during the war. The fact of the matter, however, is that the most dramatic changes occurred at the highest levels of the structure, where it interfaced with the White House Staff and Cabinet level organizations. The changes were less encompassing at lower level, where mobilization management occurred on a day-to-day basis and to a great extent the individuals involved remained unchanged even while their duty titles and organizational symbols did. As a consequence, the war years saw management of mobilization by many of the same people who had planned for mobilization during the thirties, in organizations that probably were less changed than they appeared to be.

During the war itself, the mobilization planning function took a back seat to the mobilization management function—and basically disappeared as a discrete task. The pre-1940 planning activities had helped prepare us for the wartime management task. After the war, we turned our attention to institutionalizing our experiences—from an organization as well as a planning function perspective.

By 1947, the NSRB had been established and the Munitions Board sanctioned under legislation that reflected, theoretically, our World War II lessons learned. These organizations were intended to serve (among other roles) as policy and planning bodies respectively, but in reality evolved more toward long range versus short range planning roles. Regardless, the planning activity resulted in an Industrial Mobilization Plan, with annexes; and provided mechanisms for matching war plans to requirements, collecting industry capacity date, and allocating production capacity; and which provided
for a transition to a different mobilization management (vice planning) organization when and if a mobilization order was issued. It was in this configuration that the U.S. entered the Korean War.

As covered earlier, the actual mobilization that occurred during the Korean War saw several organizational changes. From a planning perspective, these changes are important because, although the policy and coordination role emerged more or less looking as it had in 1950 (after being split in 1950, the functions were again joined organizationally in 1953), the key military planning body had started to wane, as the responsibilities of the Munitions Board were merged into the staff of the Office of the Secretary of Defense. The years that followed also saw changes to our national strategy, envisioning an earlier and greater reliance on nuclear deterrence. This was accompanied by a further atrophying of both the policy level and planning level organizations, and a virtual disappearance of mobilization planning documents that related strategy to forces to material requirements to productive capacity.

Current Planning:

The specific sequence of events concerning mobilization planning between 1953 and the early 1970s pretty much followed the path of the organizations responsible for policy and planning. Suffice it to say here that by the mid-70s; the combination of organizational changes and concomitant de-emphasis of the mobilization planning function, lack of resources (especially, people), and a short war "mind-set" had all but eliminated mobilization planning as a viable component of National Security. The late 1970s and early 80s saw the beginnings of rebirth of organizations responsible for mobilization.13
previously discussed EMPB has provided a necessary first step by articulating mobilization policy.\textsuperscript{14} And although its task is by no means complete, we turn our attention now to the current health of the planning (as opposed to policy) function and--to the extent necessary--the organizations charged with its accomplishment.

The Federal Emergency Management Agency, in addition to having primary responsibility for managing the national response to emergencies, has overall responsibility for mobilization planning, with other Departments and Agencies responsible for related activity within their assigned missions. The planning process is currently hampered by lack of a quantitative definition of the requirement, inability to agree on certain definitions (e.g. surge, full and total mobilization), and--to a certain extent--disagreement as to who is responsible for what. The efficiency of the organization in performing the mobilization planning function can be inferred by reviewing what the planning process produces (or doesn't produce). The process does not yield requirements data or the triad of plans (M-Day, Protective Mobilization, and Procurement plans) that were generated during the 1930s, and again in the late 1940s and early 50s. The focus seems to be on preparation of exercise plans, tailored to specific warfighting (or war preparation) scenarios which--while placing heavy demands on existing force structure--do not come close to approximating a European land mass, conventional, long war. To date, plans and exercises have had little industrial participation; and where industry has participated, the planning has been limited to surge and the participation to the defense industry--and only the top tiers of Defense vendors and suppliers. The process sheds little or no light on the capability or capacity
of many current Defense suppliers, and none on the large portion of American industry that has no (or limited) current association with Defense production, but who could be essential in a true, total mobilization. 15

Conclusions

After reviewing the lessons learned from WWII, Korea and Vietnam wars, national level exercises such as Nifty Nugget and Proud Sabre, and analyzing the current industrial mobilization planning organizations that would support a conventional war of undeterminate length and intensity; we conclude that the current organizations are not resourced sufficiently to perform total mobilization planning. It can also be stated, from an organizational management viewpoint, that national level responsibilities which were initially assigned to autonomous organizations, i.e., the NSRB and the Munitions Board, have now been integrated into the staffs of FEMA and DOD. This method of management has contributed to the loss of advocacy for industrial mobilization at the highest levels of government, as principals and staff officers de-emphasize mobilization in the press to resolve "current" problems within the context of a limited resource world. A need exists to legislate and institutionalize organizational structures that would be resourced adequately to sustain mobilization planning at the national level. These organizational structures would be fully able to transition from peacetime planning to wartime execution of the national mobilization program. This structure may be more important today than in the past due to the depressed economy of not only the United States but of the world, and the fact that the U.S. industrial base capability and capacity to respond to wartime needs has eroded to a post WWII low.
The organizational weaknesses that currently exist have had a serious and adverse impact on the quality of mobilization planning. Overall, we believe that:

- the current planning process suffers from the lack of a clear, comprehensive view of what is needed for mobilization; that is, there does not appear to be a Master Plan (or a Plan for Planning) that provides the architecture against which subordinate plans can be prepared and into which they should be integrated.

- the result is a series of piecemeal documents that may or may not be relevant.

- the process is hampered by lack of information which—in fact—may not be necessary to get started, and which may not be necessary at all for planning purposes—only for implementation. For example, although the exact requirement for a conventional NATO war may not be known, we do know that the requirement is:

  -- larger than the existing force
  -- in all probability, larger than the program or the planning force.

  -- that the existing force will exhaust consumables (ammunition) before production rises to equal demand.

  -- that an expanding force structure will have some balance, which can be estimated, among types of combat and combat support units (i.e., air wings, armored divisions, infantry, sea lane protection assets, etc.).

This knowledge ought to be enough to prepare a Master plan, prioritize tasks, and initiate procedures for collecting the additional information needed to prepare more specific plans intended for implementation during mobilization.
-the disagreement over mobilization definitions is unnecessary, but it impedes progress. In reality, mobilization capacity is a continuum which starts with forces in being and stocks in place, and which ends at some unknown point where one more productive resource applied to military needs causes unacceptable damage to an essential civilian need. For purposes of mobilization planning, where we are in this continuum (i.e., a definition) is not as important as how fast we can reasonably expect to proceed from the existing point toward the maximum capacity point. Where we stop does not become an issue until we implement the plans.

-the current process is inadequately staffed. There does not exist within the participating organizations the "critical mass" of senior and middle grade personnel with experience in mobilization planning (or implementation management) necessary to accomplish the job. This appears to be partly due to budget constraints. However, we would speculate that a contributing cause is that mobilization planning is not yet accepted as important enough to devote adequate numbers of personnel to the task as their primary responsibility.

-finally, a certain amount of protection of "fiefdoms" contributes to delays in resolving who ought to be responsible for various tasks. History suggests that, regardless of where the task was assigned for planning purposes, there was a high likelihood that the implementation of the plan would be managed elsewhere in Government--although frequently by the same individual. It would appear, then, that if the nation ever needs to implement the (yet to be written) plans; there will be enough work to go around, and we ought not be too concerned now regarding who plans what.
Our overall conclusion concerning mobilization planning is that it is not happening satisfactorily. While limited progress has been made, via the EMPB and FEMA, we are not substantially closer to a mobilization capability that truly enhances security than we were four years ago-- and we are not as well off as we were 40 years ago, when we had the "luxury" of time.
CHAPTER III
ENDNOTES (Pages 30-54)

1William Y. Elliot, Mobilization Planning and the National Security (1950-1960), (Washington: Library of Congress, 1950), pp. 1. [Generally, the entire section entitled "Interwar Planning" is a summary of the early chapters of the Elliot book. To provide individual endnotes for each thought taken from Elliot would—as a practical matter—result in an endnote for virtually every sentence. We do not believe this adds to either the clarity of the discussion or the quality of documentation, and have elected to provide Elliot his due via a single endnote.]


Interview with Mr. David Novick, at the Industrial College of the Armed Forces, Ft. McNair, Washington, D.C.: 17 Nov 1982

This conclusion can also be deduced from a review of the annual documents that summarized the functions of Government agencies during the war years. Specifically:


After a detailed analysis of the historical perspective of mobilization, it might be time well spent to review some of the more current thoughts and attitudes on this subject.

Within the framework of mobilization, individual terms can be clearly defined; however, in reality there is no such "cut and dry" distinction. One phase doesn't end and the other start--there is always that indistinguishable overlap. For peacetime planning purposes, it is very convenient to define things on paper, to categorize and compartmentalize where possible. But mobilization must be viewed in its completeness to comprehend its magnitude. The mobilization concept involves many untested, interrelated parts that can only be valued when contrasted in the total context. More specifically mobilization might be pictured as a moving scale. On one end of the scale is force structure modernization and on the other end is the mobilization of the entire industrial base. The scale tips in one direction or the other based upon the weight applied in certain areas, i.e., more forces and equipment up front, more time for accurate planning to build the industrial base at the opposite end. The war strategy is currently the single factor which dramatically tips the scale.

However, the short/long war debate should be a non-debate in the context of mobilization. In referencing a Sanders and Muckerman article on the "Relationship of Military Strategy to Mobilization: The Long War/Short War
Debate, it was interesting to review their argument showing the irrelevance of the war scenario to a mobilization decision. To summarize, the authors analysis of several Soviet Warsaw Pact attacks to various regions involving U.S. interest pointedly wraps up a discussion on the issue in general. "The answer to the question of whether to mobilize is not scenario dependent. A U.S. decision to mobilize depends on the country's ability to perceive and act on warning as well as on the scale and intensity of the initial attack rather than on the probable outcome of the attack".

The war scenario has persisted for such a long time that it has practically lulled our national logistics community into a static state. It is one of the prime factors that has inhibited rational discussion and action in the areas of planning and execution of the industrial base. Of course it would be unfair to say that constant vacillation of the war scenario has been the only culprit on the non-movement of the base. The availability of strategic and critical raw materials, energy, transportation, government regulations, skilled manpower are all key issues that still hamper the successful building of the industrial base to this day. In retrospect, logic would predict that one can assume but never dictate the duration of a war effort. The lessons of all past military wars and engagements should illustrate that point. Without a doubt military strategies and options should be meshed with every segment of government to explore not only the total range of our military alternatives, but the industrial capability to respond to those options. In part, the National Security Decision #47 dated 22 July 1982 does this. It defines, if not the war scenario, at least the foundation upon
which the industrial base will be framed. To quote a segment of the decision, "It is the policy to the United States to develop systems and plans that will ensure that sufficient man\power and mater\al are available to guarantee the nation's ability to mobilize, display and sustain military operations." An obvious subtle change to the military strategy but one that fully opens the door for logistics preparation. Further expanded, the Directive addresses the need "to sustain forces in a protracted conflict" and to "expand the size of the force from partial thru full to total mobilization."

The discussion of the preceding points—which are U.S. policy—brings one back to face the harsh picture of reality. The true test of activating the industrial base is not in wartime but in peacetime. Contrasted against the realities of the social and economic problems this nation faces, the task could be long, if not impossible.

However, as already noted government has taken the first step toward mobilization by the written declaration established in NSDD #47. Admittedly, there seems to be an undercurrent within the Administration, the Defense establishment and the American people to recognize and respond to the mood for increased military posturing. And—like it or not—the nuclear freeze movement has probably enhanced the movement toward the protracted war scenario and the revitalization of our industrial base. In the final analysis, however, there are so many variable influences that come to bear on "national resolve" for mobilization that it is at best a very fleeting thing.

In one sense, we couldn't be at a worse time in our history for the expansion of our industrial base for military purposes. The current "mind
set" of guns or butter is not apt to result in widespread support for
mobilization during the current period of recovery from economic trauma. The
tradeoffs that occurred during the last two presidential budgets give the
definite impression that defense is good to a point, and then we must fill the
needs of the people. However, what that point is--is a function of who is
deciding how much is enough. This was best put in proper focus by a former
Assistant Secretary of Defense Frank Carlucci in an address to the American
Defense Preparedness Association in June of 1982.\(^3\) In a discussion with
Congress on the subject of budget cuts Mr. Carlucci was advised by some
congressmen that "we must be fair in our cuts to all agencies and like others,
Defense must bear its share of the burden." To which Mr. Carlucci replied,
"The measure isn't whether we have equity between our national security
program and our domestic programs; the measure is how much defense do you
need." Regarding mobilization it is difficult for Congress to always keep
things in proper focus, considering competing demands for limited resources.
However, there are those, many in number, who serve/or have served in key
government positions who have a tendency to "assume away" the problem because
they are uninformed on an issue. A former Secretary of State in a discussion
on the Rapid Deployment Force (RDF) had this to say about the industrial base.
"We don't need to develop the RDF, because if anything happened in that area,
we would just gear up our war machine and in a couple of months we would be
able to out-produce the Soviets and move in to create an adequate
defense."\(^4\) These points highlight a reality that those involved with
building the industrial base must face. Given the current constraint and
realities of our society, the Federal agencies concerned with mobilization

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must integrate their ideas into a single concept, build their policy on that concept and insure that what follows in the way of procedures, budgets and funding blends into the total fabric of a single responsible organization for industrial mobilization. That organization should then be responsive and capable of articulating not only the message of mobilization but the needs of mobilization. They must be especially capable of capturing and persuading the legislative and political base of government. The mistake is not with an unresponsive legislature, but rather with the lack of a cohesive management base for planning and executing industrial mobilization. When government is resolved to do this, things will move. However, there are signs that some ominous things are happening within the mobilization base. Comments extracted from the Military Posture Plan FY83 provided by the JCS indicates the following—"The most critical concern with general purpose force readiness is the shortage of qualified military personnel." More important to the future success of the industrial base expansion, however, is that "major shortfalls in equipment, supplies and training require correction as a matter of urgency." On top of this is the burden of a 157,000 shortfall of peacetime requirements in the Army Reserve Forces. Based upon these limitations to force modernization and the known choke points currently within industry to service "peacetime" military needs, it seems apparent that our lead time to industry will be in serious jeopardy. Leadership at all levels of the executive and legislative branches of government must understand the dual consequence of this readiness shortfall. It not only effects the country's capability to wage war, but it almost practically eliminates our capability to sustain the forces.
Within the industrial preparedness segment of mobilization, all the old problems still appear. There are those who would argue that a base that is operating at 67% of capacity can readily respond to expanded military demands. "We did in WWII and other wars" is a famous quote and yet when you check the record of the industrial response to fulfill military needs it's a different story. In WWII, it took almost 3 years for production to meet bomber requirements. In Korea, not a medium tank produced for that effort reached the battlefield before the war was over. In Vietnam, it took 18 months to deliver the first iron bomb. The point is that industrial preparedness and mobilization goes well beyond idle factory capacity. The deterioration of the nation's industrial base must be recognized, dealt with on an organized scale, and systematically planned and rebuilt. There is a basic imbalance between prime and subcontractors; we can't surge to any realistic level; we have exaggerated lead times and shortages of manpower and critical material; and we have low capital investment and the lowest productivity growth rate in the world. On the positive side there is some slight movement. DOD is moving ahead on:

1. Force Modernization (within fiscal restraints)
2. Planning requirements under a protracted conventional war strategy
3. Working with industry to:
   a. Make contracts less restrictive.
   b. Provide for more incentives
   c. Review tax incentives
   d. Apply joint ownership model when possible.
4. Establish a DEIM system to identify and desolve bottlenecks.

5. Establish mobilization and surge requirements within the acquisition process.

6. Establish a total of 32 acquisition initiatives for the ultimate purpose of enhancing readiness by building a more responsive base. These are referred to as the "Carlucci initiatives."

However, no matter how well intentioned these actions might be, they are independent Dept/agency initiatives lacking the cohesiveness so necessary to build the proper framework for a well integrated industrial base. When in fact there should be direction and decision to the mobilization effort, there is only debate. Major participants continued discussions over requirements, vocabulary and a definition for full mobilization. Regardless of Executive Order 11490 and NSDD #47, agencies/departments are still miles apart from setting a program in motion.

However, in a final positive sense, the National Security Directive #47 does serve notice to those in high places and across the full spectrum of the defense industry that it is time to replace rhetoric with national resolve.
CHAPTER IV

ENDNOTES (Pages 5 -63)


4Ibid., p. 5.


7American Defense Preparedness Association, p. 5.
Conclusions

There is no doubt that numerous conclusions can be drawn from the research expended. However, a reading of the three major areas will lead one to focus on a handful of key concerns:

- The multiplicity of statutory requirements, authorities and prohibitions on the subject of mobilization is overwhelming. It has reached the point where it is difficult to discern those responsible for directing, implementing and enforcing lawful directives. Such conditions have led to the idea of developing "omnibus" legislation.

- Current organizations charged with mobilization responsibilities are not sufficiently resourced to perform the planning segment of mobilization; do not have the capability to transition from peacetime planning to wartime execution; and do not have clearly defined responsibilities.

- There is no clearly defined mobilization plan or planning process. Debate continues between all concerned agencies on requirements, definitions and vocabulary, which prevents construction of a "Master Plan." This process is further inhibited by complex authorities and inadequate resources.

Recommendations.

The following straightforward recommendations are offered:

- Creation of omnibus regulation or at least improved cross indexing of statutes for audit purposes.
Single agency control of the entire industrial base mobilization process. This infers complete management control for the planning and execution process as well as the personnel to support this concept.
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