INDUSTRIAL MOBILIZATION PLANNING
FOR LOGISTICS SUPPORT

April 1984

George E. Mueller
Harrell B. Altizer

Prepared pursuant to Department of Defense Contract No. MDA903-81-C-0166 (Task ML320). Views or conclusions contained in this document should not be interpreted as representing official opinion or policy of the Department of Defense. Except for use for Government purposes, permission to quote from or reproduce portions of this document must be obtained from the Logistics Management Institute.

LOGISTICS MANAGEMENT INSTITUTE
4701 Sangamore Road
P.O. Box 9489
Washington, D.C. 20016

DISTRIBUTION STATEMENT
Approved for public release; Distribution Unlimited

84 07 11 002
Executive Summary

INDUSTRIAL MOBILIZATION PLANNING FOR LOGISTICS SUPPORT

Industrial mobilization planning for logistics support encompasses planning for the production of logistics materiel (e.g., clothing, equipment, munitions, and spare parts) and planning for the expansion of the nonmanufacturing sectors of the economy (e.g., transportation, maintenance, construction, and energy) to support military mobilization and increased defense production. Production of logistics materiel is normally included in industrial preparedness planning (IPP). Planning for expansion of the nonmanufacturing sector has no special name, but is accomplished under the broad scope of mobilization planning.

The Military Services are responsible for establishing mobilization requirements on the basis of guidance from the Office of the Secretary of Defense (OSD). Requirements for transportation, petroleum, construction, and munitions are sufficiently defined to support planning to meet military needs, but requirements in other logistics areas, such as maintenance and spare parts, are not, nor are the defense industry's requirements for nonmanufacturing support. Furthermore, OSD guidance in those areas is not clear. Consequently, Department of Defense (DoD) requirements for materiel and services from the private sector have not been forwarded to the Federal Emergency Management Agency (FEMA), which is responsible for combining mobilization requirements for all government agencies and the private sector.

Since DoD's requirements will be a dominant factor in sizing industrial base needs, they must be stated before nationwide industrial mobilization planning for logistics support can satisfactorily be accomplished. Until that
occurs, an assessment of the competition between DoD and private sector requirements for logistic services and commodities cannot be completed.

Some DoD logisticians question the viability of IPP in view of the shortfalls in war reserve stocks and the inability of the industrial base to match consumption of stocks of materiel by the time war reserve stocks are exhausted. The gap between the time when the stocks would be exhausted and the time when mobilized production would match wartime usage -- the D-to-P gap -- is prolonged and severe in many areas and, for that reason, some planners view IPP as an exercise in futility. We disagree. It is an essential element of strategic planning. However, we believe that the current approach to IPP should be reoriented to apply scarce resources more selectively and to increase preparedness by thorough analysis and specification of the items most critical in sustaining the combat; i.e., warstoppers. Some requirements might be met by intensified efforts to expand the production base, some might be met by increased funding for war reserve stocks, others might require a combination of both an expanded production base and more war reserve stocks.

The actions the Assistant Secretary of Defense (Manpower, Installations and Logistics) (ASD(MI&L)) should take to improve industrial mobilization planning for logistics support fall into two categories: (1) those he can carry out alone, and (2) those he can carry out only in conjunction with the Under Secretary of Defense for Research and Engineering (USDRE) or others.

**ASD(MI&L) Actions**

**Equipment Maintenance.** Develop and issue industrial mobilization planning guidance for equipment maintenance requirements.

**Materiel Requirements.** Develop and issue guidance on computation and review of mobilization materiel requirements.
Directives and Guidance. Review the Master Mobilization Plan, Defense Guidance, OSD charters, and other formal documents to see whether they consistently assign responsibility to the ASD(MI&L) for mobilization requirements policy for materiel, transportation, energy, construction, and equipment maintenance. Seek changes where necessary.

Joint Actions

Energy, Transportation, and Skilled Manpower. Work with the USDRE to have defense industry's mobilization requirements for energy, transportation, and skilled manpower derived from Production Base Analyses and submitted to the ASD(MI&L) for consolidation with military mobilization requirements and transmittal to appropriate federal agencies.

Depot Conversion. In conjunction with USDRE, develop guidance for converting selected organic depot-level maintenance facilities from repair to production during a crisis.

End Items. Coordinate with the USDRE and the Director, Program Analysis and Evaluation, to have staff responsibility for end items (except for major systems as they affect force structure development) clearly assigned to ASD(MI&L). This responsibility should encompass policy and procedures for requirements determination, asset distribution, maintenance, and inputs to IPP.

D-to-P Gap. Call for, and enlist the help of others in forming, a D-to-P gap steering group to formulate policy and guidelines for an integrated, prioritized list of critical warstopper items and to reallocate funds to procure sufficient war reserve stock or production capability to close the D-to-P gap for those items.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>ii</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. THE SITUATION AND THE PROBLEMS</td>
<td>1- 1</td>
</tr>
<tr>
<td>Situation</td>
<td>1- 1</td>
</tr>
<tr>
<td>Problems</td>
<td>1- 4</td>
</tr>
<tr>
<td>Requirements Identification</td>
<td>1- 4</td>
</tr>
<tr>
<td>Management of End Items</td>
<td>1- 6</td>
</tr>
<tr>
<td>Civilian Skilled Manpower</td>
<td>1- 7</td>
</tr>
<tr>
<td>The D-to-P Gap</td>
<td>1- 8</td>
</tr>
<tr>
<td>2. RECOMMENDATIONS</td>
<td>2- 1</td>
</tr>
<tr>
<td>Direct ASD(MI&amp;L) Actions</td>
<td>2- 1</td>
</tr>
<tr>
<td>Equipment Maintenance</td>
<td>2- 1</td>
</tr>
<tr>
<td>Materiel Mobilization Requirements</td>
<td>2- 1</td>
</tr>
<tr>
<td>Directives and Guidance</td>
<td>2- 2</td>
</tr>
<tr>
<td>Joint Actions</td>
<td>2- 2</td>
</tr>
<tr>
<td>Skilled Manpower</td>
<td>2- 2</td>
</tr>
<tr>
<td>Energy and Transportation</td>
<td>2- 3</td>
</tr>
<tr>
<td>Conversion of Organic Depots to Production</td>
<td>2- 3</td>
</tr>
<tr>
<td>Responsibility for End Items</td>
<td>2- 4</td>
</tr>
<tr>
<td>D-to-P Gap</td>
<td>2- 4</td>
</tr>
<tr>
<td>APPENDIX</td>
<td></td>
</tr>
<tr>
<td>A. INDUSTRIAL BASE PREPAREDNESS GUIDANCE</td>
<td></td>
</tr>
<tr>
<td>B. VIEWS AND CONCERNS OF VARIOUS DoD ORGANIZATIONS</td>
<td></td>
</tr>
<tr>
<td>C. END ITEMS THAT HAVE NO IDENTIFIABLE OSD POLICY MANAGER</td>
<td></td>
</tr>
</tbody>
</table>

---

Accession For

- NTIS GRAAI
- DTIC TAB
- Unannounced
- Justification

Distribution/Availability Codes

- All
- Special
1. THE SITUATION AND THE PROBLEMS

In issuing the Industrial Preparedness Policy Statement in March 1982, the Deputy Secretary of Defense highlighted the "... deteriorating industrial base, ... unacceptable production leadtimes, the loss of defense contractors and subcontractors, and increasing foreign resource dependency as symptoms of deterioration ..." of the defense industrial base. Since 1982, much has been done within the Department of Defense (DoD) to halt and reverse this deterioration. However, much remains to be accomplished, especially in logistics. In the first chapter, we briefly review the status of DoD's industrial mobilization planning for logistics support and the major problems. In the following chapter, we recommend actions the Assistant Secretary of Defense (Manpower, Installations and Logistics) (ASD(MI&L)) should take to improve the situation.

SITUATION

National policy and program objectives for industrial mobilization are set forth in National Security Decision Directive - 47, "Emergency Mobilization Preparedness." The objectives are to identify industrial production and supply deficiencies and initiate actions to overcome them; to increase the capability of industry and infrastructure systems, including transportation and energy, to meet national security needs; to assess the impact on the industrial base of agreements with foreign governments on coproduction offsets, and trade; and to ensure the availability of strategic and critical materials. Responsibility for formulating policy and planning guidance, coordinating planning, resolving issues, and monitoring progress is vested in the Emergency Mobilization Preparedness Board. The Chairman of the Board is...
the Assistant to the President for National Security Affairs; the DoD is represented by the Under Secretary of Defense for Policy.

Comprehensive guidance concerning the DoD industrial base was issued by the Deputy Secretary of Defense in March of 1982. The guidance, which is summarized in Appendix A, was updated and reissued in 1983 for use in preparing the fiscal year 1985-1989 (FY85-89) Program Objectives Memorandum (POM).

Within the DoD, industrial mobilization planning can be separated into two activities: planning for the manufacturing sectors of the economy and planning for the nonmanufacturing sectors. (See Figure 1-1.) The former is normally termed industrial preparedness planning (IPP). The latter has no special designation but is accomplished within the broad scope of mobilization planning.

**FIGURE 1-1. TAXONOMY OF MOBILIZATION PLANNING**

```
  DOD MOBILIZATION PLANNING

  INDUSTRIAL MOBILIZATION PLANNING
  (PLANNING FOR MOBILIZATION OF THE PRIVATE SECTOR)

  MANUFACTURING
  (INDUSTRIAL PREPAREDNESS PLANNING)

  MILITARY MOBILIZATION PLANNING
  (PLANNING FOR MOBILIZATION OF DOD ORGANIZATIONS AND ACTIVITIES)

  NONMANUFACTURING
  (TRANSPORTATION, ENERGY, ETC.)

* ALL DOD INDUSTRIAL MOBILIZATION REQUIREMENTS DERIVED FROM MILITARY MOBILIZATION PLANNING.
```
Logistics support draws on both manufacturing and nonmanufacturing industry. The manufacturing sector provides materiel, such as clothing, equipment, and spare parts. The nonmanufacturing sector provides transportation, construction, maintenance, energy, and civilian manpower.

Mobilization planning for the nonmanufacturing category of logistics activities, services, and resources is clearly the responsibility of the ASD(MI&L). Although his charter does not explicitly list industrial mobilization planning as one of his responsibilities (as it does military mobilization planning), it does assign him broad responsibilities as Principal Staff Assistant and advisor to the Secretary of Defense for matters concerning logistics and lists such functional areas as supply, transportation, energy, maintenance, construction, and civilian manpower as specific responsibilities. Unquestionably, mobilization planning is implied in those assignments. However, little is being accomplished in mobilization planning for the nonmanufacturing requirements to support defense industry. We find that, except for the maintenance function, military mobilization planning guidance for services and resources is clear, is followed by the Military Departments, and is exercised during biannual mobilization exercises such as NIFTY NUGGET, PROUD SPIRIT, and PROUD SABER.

Planning for logistic support from the manufacturing sector is not so well in hand. Responsibility for IPP is assigned to the Under Secretary of Defense for Research and Engineering (USDRE). Most IPP has focused on production of conventional munitions and major systems currently in production. Less attention has been given to planning for production of logistics materiel, such as spare parts. Obviously, the USDRE and the ASD(MI&L) share responsibility for mobilization planning for logistics materiel; however, the
division of responsibility between them is ill-defined and sometimes conflicting. For example:

- The Master Mobilization Plan (MMP) states that the ASD(MI&L) should "Establish jointly with the USDRE, procedures for and determine or validate Military Departments and Defense Agency Mobilization materiel demands."  

- The Industrial Base Preparedness Guidance of March 1982 states that the Services should use their own guidance to develop mobilization materiel requirements until the Office of the Secretary of Defense (OSD) guidance is provided.

There is no DoD guidance on how to select items for IPP or how to develop IPP materiel requirements. As a result, the Military Departments and the Defense Logistics Agency (DLA) are uncertain about who is in charge at OSD and how to proceed, so each goes its own way. (See Appendix B for descriptions of how the Military Departments, DLA, and other DoD organizations evaluate the status of IPP and their major concerns about it.) This confusion in assignment of responsibilities compounds other major problems in industrial mobilization planning for logistic support.

**PROBLEMS**

**Requirements Identification**

The major problem hampering industrial mobilization planning is that not all logistics requirements have been adequately identified. Some, such as those for transportation, construction, and petroleum products for military mobilization, have been adequately identified as the result of recent initiatives: the establishment of the Joint Deployment Agency and the coordination between it, the Organization of the Joint Chiefs of Staff (OJCS), the transportation operating agencies, OSD, the Department of Transportation, and the

---

1This assignment of responsibilities has been addressed by the Mobilization Materiel Management Task Force, which has primarily concluded that the ASD(MI&L) and the Director of Program Analysis and Evaluation (PA&E) share this responsibility.
Federal Emergency Management Agency (FEMA), and the coordination among the Defense Fuel Support Center, DLA, OSD, FEMA, and the Department of Energy. However, transportation, construction, and energy requirements to support industrial mobilization have not been adequately stated. Moreover, the methodology to determine the requirements has not been adequately developed by DoD, FEMA, and other federal agencies. In other areas of logistic support, the industrial surge/mobilization requirements and capability are either not well defined or have not received sufficient visibility at the OSD and other federal agencies to form a framework for effective industrial mobilization planning. This is particularly troublesome in the lack of specification by DoD of spare parts requirements to support the increased utilization of in-inventory but out-of-production weapon systems.

Existing guidance clearly assigns responsibility for reviewing and validating mobilization petroleum product and transportation requirements to the ASD(MI&L), and he is executing that responsibility for the military requirements. Responsibility for review and validation of transportation and POL requirements to support industrial mobilization requirements is not well defined. Responsibility for reviewing and validating other logistics materiel, equipment maintenance, and construction requirements also is not well defined or clearly assigned. Industrial mobilization planning for spare parts, other materiel, and equipment maintenance and construction is not effective because the OASD(MI&L) has issued no definitive guidance or because the existing guidance is confusing.
Management of End Items

Confusion about assignment of staff responsibility within OSD for the end items further compounds the IPP problem. By OSD staff responsibility, we mean:

- Establishing policy and appropriate procedures for:
  -- the materiel requirements determination process;
  -- asset distribution;
  -- maintenance versus procurement decisions;
  -- item theater standardization actions;
  -- logistic input to the Defense Systems Acquisition Review Council and the Defense Resources Board reviews; and
  -- logistics data needed to develop or adjust production schedules.

- Participation in budget and program review process:
  -- attend joint OSD/Office of Management and Budget/Service budget reviews;
  -- coordinate OSD/Service POM reviews;
  -- provide input for Defense Guidance and POM Guidance; and
  -- provide data needed by the ASD(MI&L) to support positions at Defense Resources Board meetings.

Responsibility for spare parts, other secondary items, fuel, food, medical supplies, clothing, and conventional ammunition is clear; ASD(MI&L) is responsible. There is no equally clear understanding concerning end items. Staff personnel in both OSD and the Military Departments are uncertain as to whether responsibility resides with USDRE, the Director of PA&E, or ASD(MI&L). There is general agreement that the Director, PA&E, is responsible for reviewing and approving the requirements for major weapon systems such as ships, aircraft, and ballistic missiles, insofar as they affect force structure development. The Deputy Assistant Secretary of Defense (Program Integration) is responsible
for program and budget review of selected end items such as conventional ammunition, tanks, armored personnel carriers, artillery, rifles, etc. No OSD organization accepts staff responsibility for about 20 groups of end items consisting of approximately 67 classes of items; e.g., aviation ground servicing equipment, railway equipment, construction equipment, motor vehicles, and trailers. (A list is contained at Appendix C.) IPP will continue incomplete until confusion about assignment of end item responsibility at OSD is eliminated.

Civilian Skilled Manpower

As previously reported in "Logistics Analysis of Exercise PROUD SABER '83," a significant degree of uncertainty exists concerning the availability of skilled civilian manpower to meet industrial mobilization requirements. Our analysis, based on a limited and regional sample, indicated that there may be a problem in the availability of skilled civilian manpower to support organic DoD requirements for mobilization of such activities as maintenance depots and naval weapons stations. The analysis did not consider the competing requirements to satisfy an expanding civilian industrial base.

Current IPP does not adequately state the skilled civilian manpower requirements to support industrial mobilization goals. Furthermore, two offices in OSD have been independently submitting mobilization skilled manpower requirements to other federal agencies, one for organic DoD requirements (ASD(MI&L)), the other for industrial base requirements (USDRE). There is no consolidated submission of skilled civilian manpower requirements to support mobilization.

---

The D-to-P Gap

IPP planning in the OSD and the Services has been inhibited by the inability to close the gap between the time when existing war reserve stocks (WRS) would be exhausted and the time when increased production output would be available from the industrial base during a crisis -- the D-to-P gap. Many planners view this gap as an insurmountable problem that seriously impedes our war-fighting capability and negates the credibility of IPP, since the U.S. will have exhausted existing WRS before meaningful replenishment is available. Some solutions to the gap problem that have been proposed include funding and stocking long-lead-time components of major items or assemblages, restricting IPP to very critical items, increasing WRS levels, and using technology to reduce lead times dramatically. To date, however, there has been no agreement on a solution and little or no funding. Sustainability remains seriously impaired.

Master Urgency List. Priorities for weapon systems and other major end items currently in production are established through the DoD Master Urgency List (MUL) procedures, which involve the OSD, OJCS, and the Military Departments. The MUL, however, does not address equipment that is out of production, secondary items, or medical supplies. Confusion exists as to which office is charged with responsibility for making procurement/production decisions in time of crisis. The responsibilities assigned to the Deputy Assistant Secretary of Defense (Logistics and Material Management) (DASD(L&MM)) and to the Deputy Under Secretary of Defense (Acquisition Management) in the MMP are inconsistent with the responsibilities assigned to them in the Crisis Management System (CMS), the Supply and Materiel Management Committee, and the

---

Product Management Committee. Furthermore, the responsibilities assigned in the CMS and the MMP are not totally in agreement with those assigned in DoD Instruction (DoDI) 4410.3, which describes the MUL process. These inconsistencies are among the subjects being addressed by the Mobilization Materiel Management Task Force.

The lack of completeness in specifying industrial production requirements, including those for logistics, has impeded the statement of DoD's industrial base requirements to the FEMA. Since DoD's requirements on the nation's industrial capacity are priority demands, the lack of specification has impeded FEMA's ability to determine the overall allocation of industrial capacity between defense and essential private-sector requirements.
2. RECOMMENDATIONS

The ASD(MI&L) can do much to improve industrial mobilization planning for logistic support. First, there are actions he can take regardless of what any other OSD offices do; second, there are those which require his acting jointly with other OSD offices.

DIRECT ASD(MI&L) ACTIONS

In the following areas, the ASD(MI&L) should take the recommended action regardless of actions taken by other OSD offices: equipment maintenance, materiel mobilization requirements, and directives and guidance. We follow each recommendation with a brief statement of the basis for the recommendation.

**Equipment Maintenance**

Develop and issue guidance for equipment maintenance mobilization planning.

Equipment maintenance mobilization functions assigned to the ASD(MI&L) by the MMP are not being fully implemented. Little guidance has been promulgated to the Military Departments in this area, and, consequently, there is insufficient review and oversight of equipment maintenance mobilization requirements and capabilities by the ASD(MI&L).

**Materiel Mobilization Requirements**

Develop DoD guidance on methodology for computing mobilization materiel requirements, submission of the requirements to the ASD(MI&L), and review and validation of the requirements by the OASD(MI&L). Establish the necessary production planning interface with the USDRE who, in turn, should interface with other appropriate government agencies (i.e., FEMA, Department of Commerce, etc.).
No prescribed systematic method, or procedure, exists for computing, submitting, reviewing, and validating mobilization materiel requirements. As a result, they are, by and large, unknown at the OSD level. They are not reviewed by the OASD(MI&L) or made available to OUSDRE for transmittal to FEMA and other appropriate federal agencies. Until that is done, the impact of DoD requirements on defense industry cannot be evaluated.

**Directives and Guidance**

Ensure that the MMP, Defense Guidance, and other DoD documents that provide policy and guidance for development of mobilization requirements for materiel, civilian manpower, transportation, energy, maintenance, and construction: (1) are complete and consistent, (2) assign the policy responsibility to the ASD(MI&L), and (3) are implemented by appropriate offices in OASD(MI&L).

Many current DoD documents outlining policy, procedures, and responsibilities for industrial mobilization planning for logistics support are obsolete, incomplete, or conflicting. Much of the confusion they cause can be eliminated by diligent review and updating of directives and guidance.

**JOINT ACTIONS**

The recommendations presented here are for ASD(MI&L) actions that, while as important as the previous recommendations, require joint initiatives with other OSD offices. The areas involved are the specification of defense industry's mobilization requirements for skilled manpower, energy, and transportation, the conversion of organic depots to production, the assignment of OSD staff responsibility for end items, and closing the D-to-P gap.

**Skilled Manpower**

Seek concurrence of the USDRE for designation of the ASD(MI&L) as the sole DoD focal point for transmitting the Military Departments'/DLA's and defense industry's civilian skilled manpower requirements to FEMA, Department of Labor, and state employment authorities.
The current IPP does not fully set forth critical skilled civilian manpower requirements, and the availability of civilian manpower for mobilization of the industrial base. DoD Directive (DoDD) 3005.6, "Civilian Work Force Mobilization Planning and Management," assigns this responsibility to USDRE. However, skilled manpower requirements and availability for organic installations are matters under the cognizance of ASD(MI&L). The overall fulfilling of requirements is vested in the Department of Labor. The coordinator is the FEMA. Thus, under current DoD directives, civilian requirements are being submitted to the FEMA by two separate offices in OSD. The ASD(MI&L) should be DoD's sole representative to other government agencies on manpower matters.

**Energy and Transportation**

Work with the USDRE to have defense industry's mobilization requirements for energy and transportation submitted to ASD(MI&L) for consolidation with military mobilization requirements and transmittal to the FEMA and to the Department of Energy and Department of Transportation, as appropriate.

Currently, energy and transportation requirements to support military operations are specified and transmitted to other appropriate federal agencies by the ASD(MI&L). The energy and transportation requirements of a mobilized industrial base are not clearly defined, nor are they provided to appropriate agencies. There is a need to state the aggregate requirement more clearly. Defense industry's energy and transportation requirements, as determined in Production Base Analyses, should be transmitted to ASD(MI&L) for consolidation and forwarding to other agencies.

**Conversion of Organic Depots to Production Capability**

In conjunction with the USDRE, develop guidance for converting selected organic depot-level maintenance/repair facilities from repair to production during a crisis.
After initial surge demands are met, excess depot-level repair capability will exist. Such excess capability provides a potential for conversion from repair or overhaul to production of new nonmajor end items or components. For this conversion, facilities must be identified early, preferably before mobilization day, and advance effort and planning must be conducted to facilitate the conversion.

If this conversion potential is to be further evaluated, the ASD(MI&L) would be involved in assessing the impact of reductions in the repair and overhaul base and evaluating the effects of a potentially increased production industrial base on satisfying wartime materiel requirements.

Responsibility for End Items

Coordinate with Director, PA&E, to have OSD staff responsibility for end items (except for major systems as they affect force structure development) clearly assigned to ASD(MI&L).

Confusion exists concerning which OSD organization has responsibility for end items. Since ASD(MI&L) already has responsibility for policy governing cataloging, inventory management, and disposal, as well as OSD staff responsibility for most materiel (e.g., food, clothing, conventional ammunition, and spare parts), he also should be assigned responsibility for end items. That responsibility should include policies, procedures, and overview responsibility for requirements determination, distribution of assets, participation in budget and program reviews, and preparing inputs to the Defense Systems Acquisition Review Council, etc.

D-to-P Gap

Call for, and enlist the help of the USDRE and the Under Secretary of Defense (Policy) in forming, a high-level DoD group to formulate actions to alleviate the potential occurrence of shortfalls between the exhaustion of WRS and the commencement of deliveries from the mobilized industrial base.
Some DoD officials question the utility of IPP. The rationale advanced to support this expressed concern involves overcoming the gap between the exhaustion of WRS and the lead time required to mobilize and produce from the industrial base. Thus far, no actions have been taken to dispel the concern, nor has any guidance been issued from either a national or a DoD viewpoint that deals successfully with the problem. Some solution to the gap problem must be found and funded. Proposed solutions include: use peacetime funds for stocking additional long-lead-time components of major end items or assemblages, concentrate IPP on warstopper-critical items only, or increase WRS levels. A discussion of the proposals concerning peacetime funding of long-lead-time components and the concentration of IPP on warstopper-critical items is presented in the following paragraphs.

Stock Long-Lead-Time Components. The proposal to stock long-lead-time components to reduce mobilization production lead times for end items is not new. It has not been applied primarily because of higher priority demands for funding. The concept involves funding and prestocking long-lead-time components of critical major end items. If this is done, the prestocked components can be assigned to WRS, or used to reduce the lead time of production of the major end items for which IPP planning is being done. In any case, a positive action occurs: an increase in WRS or a significant reduction in major end item production lead time. Although some planning has been done in this area, no funding has been provided.

A major effort in this area initiated by the USDRE involves a $100 million funding wedge per year to be divided among the Services. This funding would be used by each Service for long-lead-time items for two significant systems or components and would provide a start toward reducing mobilization production lead times for significant items. Although this
proposal does not address the total WRS/IPP package, it is a step in the right direction. However, Congress did not approve funding for this in the FY84 budget.

Warstopper-Critical Items. We define warstopper-critical items as those items, identified by the Commanders in Chief (CINCs), the OJCS, and the Military Departments, whose nonavailability could cause the failure of a CINC's mission. OSD, the Joint Chiefs of Staff (JCS), and the Military Departments would develop the item selection criteria. The Military Departments would propose, through the POM process, a list of items for procurement. This list would be subjected to OSD scrutiny for prioritization in the Planning, Programming and Budgeting System. We have not determined the total number of items that would be included; however, on the basis of recent identification of critical items by the Services and CINCs in preparation for mobilization and sustainability exercises, it could be well below the 6000 items and 100 major weapons systems envisioned by DoDI 4005.3, "Industrial Preparedness Production Planning Procedures." Planning for these items would be limited to a war-fighting package composed of the acquisition of WRS to meet D-to-P shortfalls and of industrial base planning for the selected items to reduce production lead times to the maximum extent practicable. This alternative, if adequately funded for both WRS acquisition and industrial surge/mobilization, would provide improved combat sustainability for U.S. forces for the most critical items and their critical logistic support.

In the past, proposals to increase combat sustainability across-the-board have encountered funding problems. However, there may be another approach. Currently, DoD computes WRS requirements for about 200,000 items, including munitions, selected on the basis of criteria contained in DoDD 3005.5, "Criteria for Selection of Items for War Reserves."
five-year programming period, war reserves, on the basis of current logistics
guidance for these items, are included in the DoD program and funds to fill
shortages in WRS are included in budget estimates. Funds appropriated for WRS
are expended on a priority basis to fill the most serious WRS shortages for
the 200,000 items. If the warstopper-critical items proposal is adopted,
funds now spent only for WRS would be earmarked to fill the D-to-P gap for
warstopper items either by buying WRS or expanding the industrial base to
greatly shorten lead times or both. An incremental approach would be required
to complete funding for this proposal. Upon completion of the procurement of
warstopper items, funding would be reinstated for all or some portions of the
200,000 items currently being acquired for WRS on the basis of current
guidance. In the interim, DoDD 3005.5 should be reviewed to determine whether
item selection criteria included therein remain adequate.

If the proposal is to be implemented, however, several things must
occur. The identification of the critical warstopper items must be formal-
ized. There must be an inter-Service/JCS/OSD agreement on priorities among
the critical warstopper items. Key officials in the DoD, at both the OSD and
Service levels, must be briefed and support the proposal. The Office of
Management and Budget and appropriate members of Congress and their staffs
should be briefed well in advance of the submission of implementing budget
requests. Current IPP guidance would require some revision. The primary
difference between this proposal and current guidance is that, while both are
incremental, this proposal provides a complete IPP/WRS package to achieve
increased sustainability. It appears that this proposal could, for the first
time, provide a practicable solution to the D-to-P gap problem, at least for
the most critical items. Implementation could represent a significant
improvement in mobilization materiel planning, and the resultant increased
availability of WRS of critical items would notably improve combat sustainability.
APPENDIX A

INDUSTRIAL BASE PREPAREDNESS GUIDANCE

On March 6, 1982 the Deputy Secretary of Defense issued a Memorandum announcing new guidance to revitalize the capability of the defense industrial base. The transmittal memorandum stated that:

Without the support of a responsive industrial base, both our weapon systems' capabilities and our flexibility to respond are impaired. The industrial base is an integral part of our national security posture; a strong base is, therefore, an important deterrent to conflict.

The guidance attachment to the Deputy Secretary's memorandum is over 40 pages long and includes both classified and unclassified material. This Appendix summarizes the nonclassified portion of the guidance to enable the reader to have a better understanding of the report. It is not believed that the classified portion of the guidance is necessary to do this. However, anyone interested in the classified guidance can see it in the Office of the Director of Industrial Resources, Office of the Under Secretary of Defense for Research and Engineering, 695-7485.

SUMMARY

The two primary thrusts of the FY84-88 Guidance are to reduce production lead times and enhance productivity. Such actions will enable the Department of Defense (DoD) to fill materiel inventories sooner -- thereby enhancing near-term readiness -- and improve the ability to surge and/or mobilize the industrial base.

Improvement in the industrial base capability and responsiveness will be achieved by implementing the following objectives.
Industrial Responsiveness Objectives for Producing the Five-Year Peacetime Procurement Program

The primary objectives and focus of each Service's effort will be directed toward improving the responsiveness of the base. Specific actions will be taken to ensure implementation of the DoD Acquisition Improvement Program while concurrently reducing current lead times for all items. Each Service must develop, cost, and program industrial base projects that will provide the capability to produce the FY85-89 Program Objectives Memorandum (POM) procurement program for both war reserve stocks (WRS) attrition and mission-oriented system/items.

Surge Planning, Programming, and Budgeting

It is essential that we plan to be able to surge some selected weapon system/items in the near term. As a first step, each Service will develop projects and associated costs that would allow the prime contractor to surge to maximum capability within existing constraints. As a second step, the Services will select the critical systems to be surged and program funding to implement a surge capability for these items (contained in the "System/Item Selection Stratification" table later in the Appendix).

Industrial Responsiveness Sustainability Planning, Programming, and Budgeting Focus

Provisions for sustainability must be made in advance. The ideal sustainability goal is to be able to support U.S. forces from the initiation of the conflict through its conclusion and through the post-conflict recovery period. For most items, this capability does not now exist, and on the basis of projected funding availability, such capability would probably not be fully attained in the near or mid-term. Therefore, an incremental approach to improving industrial base capability and responsiveness has been established.
Industrial Preparedness Planning -- Mobilization

Each Service, for WRS items, will review its Industrial Preparedness Planning List (IPPL) used for mobilization planning, ensure attainment of an industrial base capability by the end of FY94 to produce the mobilization requirement for each selected IPPL item, and include it in the FY85-89 POM. For mission-oriented items, the Services will use the IPPL to do similar sustainability item planning, to the extent resources permit, and report in the FY85-89 POM.

Major Assumptions

Major assumptions made for industrial base planning are as follows for:

- Peacetime Procurement and Surge Programming
  -- Legal and administrative regulations will be complied with unless authorized to the contrary.
  -- Relief from such regulations will be sought and obtained on a case-by-case basis.
  -- Programming objectives will continue to be constrained by fiscal resources.

- Wartime Industrial Preparedness Planning
  -- Fiscal resources will not be constrained.
  -- Maximum use will be made of letter contracts and other measures to minimize administrative lead times.
  -- Maximum conversion of commercial capability to production will be considered.
  -- Legal and administrative regulatory requirements can be waived.

The selection of critical system/item by each Service for planning is very important. Because of funding constraints, not all items can be selected. Some of the reasons for identifying an item as critical are as follows:

- low percentage of fill of inventory objective for mission-essential items;
- long lead times to produce;
- sole source/limited source production; and
- foreign dependency for components or materiel.

The following guidance identifies the minimum number and types of systems/items that each Service and the Defense Logistics Agency (DLA) should select for identified kinds of industrial base mobilization planning:

**TABLE A-1. SYSTEM/ITEM SELECTION STRATIFICATION**

<table>
<thead>
<tr>
<th>WAR RESERVE STOCK SYSTEMS/ITEMS</th>
<th>NUMBER OF SYSTEMS/ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surge (Plan/Program)</td>
<td>At least 25</td>
</tr>
<tr>
<td>Surge (Budget)</td>
<td>At least 2 of the 25 selected above</td>
</tr>
<tr>
<td>Near/Mid/Long-Term IP Base Capability for Sustainability</td>
<td>At least 50-75 but must include the 25 systems/items selected for surge above.</td>
</tr>
<tr>
<td>Mobilization - Selected Items (Plan/Program)</td>
<td>To be determined by the Services but must, at a minimum, include the 50-75 systems/items for which Near/Mid/Long-Term IP base capability for sustainability is accomplished.</td>
</tr>
<tr>
<td>Mobilization</td>
<td>Remainder of Industrial Preparedness Planning List systems/items that cannot be planned/programmed because of limited personnel and funding resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-WAR RESERVE STOCK SYSTEMS/ITEMS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surge (Plan/Program)</td>
<td>At least 5 for Army, 10 for Navy, and 3 for Air Force.</td>
</tr>
<tr>
<td>Surge (Budget)</td>
<td>At least 1 of each quantity selected above.</td>
</tr>
<tr>
<td>Near/Mid/Long-Term IP Base Capability for Sustainability (Plan/Program/Budget)</td>
<td>At least the systems/items selected above for surge planning and programming.</td>
</tr>
<tr>
<td>Mobilization - Selected Items (Plan/Program)</td>
<td>To be determined by the Services but should include as many of the systems/items for which Near/Mid/Long-Term base capability for sustainability is accomplished.</td>
</tr>
</tbody>
</table>
SPECIAL GUIDANCE

Special guidance involved in the development of POM requirements includes:

1. Industrial Responsiveness Objectives for Producing the Five-Year Peacetime Procurement Program.
   - Primary objectives will be to improve the responsiveness of the base.
   - Each Service must develop, cost, and program industrial base projects that will provide the capability to produce the FY85-89 POM procurement program for both WRS and mission-oriented systems in a responsive manner.
   - For item selected, conduct a vertical analysis through the lowest practical sub-tier contractor to identify bottlenecks.
   - Identify actions required, costs anticipated, and benefits expected by incrementally improving the peacetime responsiveness to the base.
   - Forward the data to the Under Secretary of Defense for Research and Engineering (USDRE) as an addendum to the FY85-89 POM submission.

2. Expansion of Existing DoD-Owned Production Facilities and Resources. The Services will program resources for selective expansion when the action would:
   - reduce lead time significantly; or
   - improve peacetime, surge, and sustainability capability.

3. Replacement and Rehabilitation of Existing DoD-Owned Production Facilities and Resources. The Services will program resources for the selective replacement and rehabilitation of existing production resources if:
   - lower unit costs and/or shorter lead times occur;
   - required by statutory requirements; or
   - investment is dictated by wartime mobilization requirements.

4. Modernization of Existing DoD-Owned Production Facilities and Resources. The Services will program resources for the selective modernization of existing production resources if:
   - lower unit costs and/or shorter lead times occur;
- required by statutory requirements; or
- investment is dictated by wartime mobilization requirements.


- Layaway production facilities utilized to produce systems being replaced or phased out of the inventory until such time as capacity exists to support combat consumption of . . . .

6. Retention, Protection, and Maintenance of Existing DoD-Owned Reserve Industrial Facilities. The Services should:

- Retain and promote essential maintenance for all existing DoD-owned production resources that are required to supplement privately owned capacity up to the mobilization level model to support combat demand rates.

7. Each Service should maintain real growth in an industrial preparedness planning (IPP) program to support objectives 1 through 3 stated previously.

8. Manufacturing Technology. The thrust of this program should be directed toward identifying actions/programs that when implemented would:

- reduce manufacturing lead time;
- improve efficiency and productivity; or
- reduce U.S. dependency on imported raw materials.

- Minimum Service funding levels for FY85 should be:
  -- Army: $155 million
  -- Navy: $85 million
  -- Air Force: $130 million

9. Energy Conservation and Management (ECAM). ECAM projects should be funded when required by law, executive order, or DoD policy.

10. Industrial Preparedness Measures (IPMs). The Services are encouraged to develop and fund IPMs that would enhance the capability of the production base to meet surge, sustainability, or mobilization requirements for selected items.

11. Operation of the Defense Industrial Plant Equipment Center (DIPEC). DLA should review the scope of the DIPEC program and the funding requirement during the FY85-88 POM period to determine:

- what the funding accomplishes; and
what benefits/efficiency would be gained by increasing or decreasing the current level of funding.

12. Productivity Enhancing Capital Investment. Services should propose projects to improve the industrial base production efficiency, responsiveness, or ability to meet surge, sustainability, and mobilization requirements. This will include DoD-owned production facilities and government-owned/contractor-operated (GOCO) plants through contractual provisions.

THE INDUSTRIAL PREPAREDNESS PROGRAM FUNDING WEDGE

- The Defense Resources Board has approved an above-the-line industrial preparedness funding wedge of $500 million for FY85-89.

-- $100 million of the funds were included in the FY84 budget request to build-in a surge capacity and responsiveness for critical systems/items. The items selected were the TOW II, PHOENIX, and F-100 engine.

-- The wedge is a supplement, not a replacement, for Services-funded IPP program initiatives.

- FY85-89 POM Mobilization Requirements

-- Each Service will use its current mobilization requirements methodology until a standard methodology has been selected for mobilization requirements computations.
APPENDIX B

VIEWS AND CONCERNS OF VARIOUS DoD ORGANIZATIONS

INDUSTRIAL RESPONSIVENESS SIMULATION

The Chairman of the Department of Defense (DoD) Industrial Task Force (ITF) sponsored an industry responsiveness simulation study with 13 major companies, in joint DoD sponsorship with the National Security Industrial Association and the American Defense Preparedness Association. The primary purpose of the simulation was to determine industry's ability to surge production capability for critical consumable items (conventional munitions and components) during an 18-month period. The industry participants were asked to prepare their solutions with little predetermined guidance from DoD. The contractors determined the total number of selected items that could be delivered in 18 months under conditions in which:

- all existing peacetime procedures, regulations, and laws will be observed and complied with; or
- with justification, peacetime procedures are waived or modified.

The expected immediate payoffs from this study include:

- better understanding of the surge/mobilization environment;
- better information on industry's capability to respond;
- information on types of government investment required prior to an emergency;
- legislative changes required prior to an emergency; and
- identification of the demands that industry will place upon the government in a crisis.

The Chairman of the ITF is expected to present the results of the simulation to the DoD Mobilization and Deployment Steering Group in 1984. The results could have a significant impact on the type of industrial base
planning performed by DoD in the future. The Chairman of the ITF believes that planning for industrial preparedness planning (IPP) must be continued even if funding is inadequate or not available.

DIRECTOR FOR LOGISTICS, JOINT STAFF (J-4)

The Master Mobilization Plan tasks the Joint Chiefs of Staff (JCS) to "participate in industrial preparedness planning." The Director for Logistics, Joint Staff (J-4), is responsible for this task. He has two additional roles in mobilization. He serves as Chairman of the Joint Materiel Priorities and Allocation Board, which allocates available materiel resources among the Services and Unified Commanders on a priority basis, and he is Chairman of the Joint Transportation Board, which allocates transportation resources among the Services and Unified Commanders in the event of conflicting requirements.

During our discussions with the Director for Logistics (J-4) and his staff, they identified the following problems that require resolution:

- More must be done in DoD to support IPP, and a new perspective is needed.
- Roles at the Office of the Secretary of Defense (OSD) level need to be sharply defined, and the Assistant Secretary of Defense (Manpower, Installations and Logistics) (ASD(MI&L)) should be clearly assigned responsibility for materiel, transportation, and equipment maintenance requirements policy and overview.
- DoD should, on a selective basis, fill war reserves, improve sustainability, and plan with industry to support wartime requirements.
- Appropriate letter contracts to support IPP should be prepared and held in a standby status.

MILITARY DEPARTMENTS AND DEFENSE LOGISTICS AGENCY (DLA)

The Military Departments and DLA are responsible for implementing the industrial base mobilization program. IPP difficulties at the OSD level directly affect the ability of the Departments and DLA to
develop and execute a sound program. Their major problems include the following:

- Policies and procedures remain in a draft status for inordinately long periods prior to issuance.
- Funding is deficient.
- There is no clear assignment of responsibility at the OSD level.
- In general, the program lacks credibility.

These problems create a degree of uncertainty within, and among, the Military Departments and DLA about how to proceed, and, as might be expected, each organization proceeds somewhat differently. The Military Departments do not look to OASD(MI&L) for guidance in the IPP areas of materiel requirements, overview, and equipment maintenance.

**Department of the Army**

The Army is a strong supporter of IPP and is attempting to develop Production Planning Schedules, DD Form 1519, for major end items and their components and for conventional ammunition. The Army has also developed pre-prepared letter contracts and holds them in standby status for many items for which a DD Form 1519 has been prepared.

The Army has the strongest IPP program of the Military Departments. It is concerned about the loss of interest in IPP in the field commands resulting from the preceding years of emphasis on short-war planning and resource programming. It has also identified certain problems with the program, including:

- the degree that Army depot maintenance facilities can be surged without a large increase in the availability of repair parts;
- the conversion of some depot maintenance facilities to production during mobilization;
- the development of memoranda of understanding with U.S. companies overseas for depot maintenance during mobilization;
the number of critical items that realistically can be planned for in a sound IPP program; and

- the retrograde of carcasses (inoperative equipment) for repair during hostilities.

Department of the Navy

The Deputy Secretary of Defense guidance memorandum of March 1982 helped rejuvenate IPP in the Navy. The program had little support during the 1970s because of the short-war planning and DoD resource programming guidance in effect then. During the FY84-88 Program Objectives Memorandum submission and review, however, the Navy requested both funds and personnel for IPP. No extra funds were provided, but 20 additional personnel spaces were authorized. These personnel provide a necessary nucleus if the Navy is to develop and manage a useful IPP program.

The Navy is preparing DD Forms 1519 for selected items. Standby letter contracts are being prepared for items managed by the Aviation Supply Office. Because the DD Form 1519 is currently completed by the contractor and furnished to DoD gratis, the Navy is concerned about the quality of the data. The Navy believes DoD needs a separate contractor report, funded as a line item in procurement contracts, to assure the quality of the IPP data. However, it is aware of the funding constraints on this effort.

The Navy is specifically concerned about the following problems:

- the need for sealift agreements with Japan and Korea similar to NATO agreements;

- the need for standard IPP materiel requirements guidance for all of DoD;

- the need for a better definition of current surge requirements;

- the need for more attention in IPP to spare parts; and

- the need to complete current draft DoD issuances covering IPP policy and procedures.
Department of the Air Force

Air Force IPP is undergoing considerable change. Until recently, the Air Force considered that IPP was not useful because of the short-war strategy and emphasis on resource programming, and because the gap between the utilization of war reserve stocks (WRS) and the receipt of materiel from production during an emergency could be closed only by large expenditures of additional funds. Supporting this latter concern was the fact that, to date, no funds have been appropriated for this purpose. The March 1982 IPP guidance issued by the Deputy Secretary of Defense changed the previous Air Force approach to IPP. The Air Force now recognizes a first-priority need to fill peacetime requirements, followed by the developed ability to fill select surge requirements, and then the development of sustainability for select systems. This process forces prioritization of the IPP effort and points directly at the need for refining the critical item list.

The Air Force does not use the DD Form 1519. As a substitute, for selected items, the Air Force uses direct vertical planning with vendors to cover all aspects of the industrial base and to obtain the input of all Air Force offices. Air Force Logistics Command has identified mobilization requirements for depot maintenance for aeronautical items and has funded procurement of raw materials to support depot maintenance mobilization.

Some specific Air Force problems with IPP include:

- Other War Reserve Materiel (OWRM) should be funded at higher priority than IPP; however, current OWRM funding is minimal.  
- A surge planning requirement in procurement contracts may not be affordable.

Defense Logistics Agency

The DLA believes that IPP should be performed for all items having War Reserve Materiel Requirements. The lack of planning in this area has
been criticized by the House Armed Services Committee, the Government Accounting Office, and the Defense Science Board in recent years. DLA points out that although all WRS items should be studied, there are never enough resources to do so. As a consequence, DLA attempts to prepare DD Forms 1519 for standby letter contracts for 20,000 additional items each year. It is also developing an automated short form DD Form 1519 in an attempt to simplify and expedite the planning process. Forms and standby letter contracts are reviewed and maintained by Defense Contract Administration Service Regional offices. Some specific problems identified by DLA are:

- DoD has made little or no resources available to improve IPP.
- The updated version of the IPP Manual has been in draft form for a long time, and a new manual is badly needed.
- DoD components need a DoD directive for IPP materiel requirements determination relating directly to current guidance for WRS.
- The OSD has given no guidance on how to select items for IPP study.

**OTHER GOVERNMENT AGENCIES**

**Emergency Mobilization Preparedness Board (EMPB)**

President Reagan established the EMPB on December 17, 1981, to enable the nation to "respond rapidly and effectively to meet national needs in the event of major peacetime and wartime emergencies." The Board is tasked to develop overall policy and a plan of action that will immediately improve the nation's preparedness capabilities. The Board performs the following functions:

- formulation of policy recommendations for emergency mobilization preparedness;
- development of policy guidance documents for working groups and agencies to implement approved policies and plans of action; and
- resolution of mobilization preparedness issues within the framework of current administration policy.
The Chairman of the Board is the Assistant to the President for National Security Affairs, and the Under Secretary of Defense (Policy) is the DoD representative.

The Board is primarily interested in interagency problems that relate to emergency mobilization preparedness activities. The exchange or consolidation of materiel requirements among government agencies is of direct interest to the EMPB; internal agency mobilization preparedness activities are not.

Much of DoD's IPP activity should involve coordination and an exchange of requirements with other appropriate government agencies; i.e., the Federal Emergency Management Agency (FEMA), the Department of Transportation, the Department of Energy, etc. This coordination exists for military transportation and fuel requirements; it does not exist for materiel production or equipment maintenance requirements.

The EMPB is highly supportive of DoD's efforts to improve mobilization preparedness planning.

**Federal Emergency Management Agency**

FEMA is responsible for combining mobilization requirements for all government agencies and the private sector. Using broad planning factors, these national end item or commodity requirements are then translated into industrial classes or categories such as forgings, castings, extrusions, type of raw materials used, etc. In this way, basic industry shortages or excesses can be identified. Ultimately, priorities among government agencies, as well as between government agencies and the private sector, can be established. The DoD priority and allocation system is a major factor in determining overall priorities.
DoD mobilization production requirements for end items and spares have not been adequately furnished to FEMA. Other government agencies are also lax, but DoD requirements are, by far, the most critical to FEMA planning. To correct this deficiency, a FEMA requirements call will be issued to all government agencies during calendar year 1984 requesting a requirements submission.

DoD submissions of transportation and fuel requirements for support of military operations to FEMA appear to be both adequate and timely.

Mobilization Concepts Development Center (MCDC),
National Defense University

The MCDC was created over a year ago as a result of increasing interest in mobilization planning in the OSD and the Organization of the JCS. The Center reports to the Chairman, JCS, but also supports the OSD, Commanders in Chief, and FEMA. Its objective is to use experienced people to expand state-of-the-art efforts now under way in the area of mobilization planning. Much of this work is based on mobilization exercises (e.g., PROUD SABER) and the industry responsiveness simulation study.

The MCDC provides a quick and professional response to the Chairman, the JCS, and the Secretary of Defense in the overall mobilization planning area. It has proposed a plan for a major industrial mobilization exercise for FY85.
# APPENDIX C

END ITEMS THAT HAVE NO IDENTIFIABLE
OSD POLICY MANAGER

<table>
<thead>
<tr>
<th>Federal Supply Group</th>
<th>Federal Supply Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Weapons</td>
<td>1005</td>
<td>Guns, through 30mm</td>
</tr>
<tr>
<td></td>
<td>1040</td>
<td>Chemical Weapons and Equipment</td>
</tr>
<tr>
<td></td>
<td>1070</td>
<td>Harbor Defense Nets and Booms</td>
</tr>
<tr>
<td></td>
<td>1080</td>
<td>Camouflage and Deception Equipment</td>
</tr>
<tr>
<td>13 Ammunition and Explosives</td>
<td>1305</td>
<td>Ammunition, through 30mm</td>
</tr>
<tr>
<td></td>
<td>1330</td>
<td>Grenades</td>
</tr>
<tr>
<td></td>
<td>1365</td>
<td>Military Chemical Agents</td>
</tr>
<tr>
<td></td>
<td>1380</td>
<td>Military Biological Agents</td>
</tr>
<tr>
<td></td>
<td>1385</td>
<td>Explosive Ordnance Disposal (EOD) Tools and Equipment</td>
</tr>
<tr>
<td></td>
<td>1386</td>
<td>Underwater EOD Tools and Equipment</td>
</tr>
<tr>
<td></td>
<td>1398</td>
<td>Ammunition Handling and Servicing Equipment</td>
</tr>
<tr>
<td>14 Guided Missiles</td>
<td>1450</td>
<td>Guided Missile Handling and Servicing Equipment</td>
</tr>
<tr>
<td>17 Aircraft Launching, Landing, and Ground Handling Equipment</td>
<td>1730</td>
<td>Ground Servicing Equipment</td>
</tr>
<tr>
<td></td>
<td>1740</td>
<td>Specialized Trucks and Trailers</td>
</tr>
<tr>
<td>19 Ships, Small Craft, Pontoons, and Floating Docks</td>
<td>1930</td>
<td>Cargo Barges and Lighters</td>
</tr>
<tr>
<td></td>
<td>1935</td>
<td>Special Purpose Barges and Lighters</td>
</tr>
<tr>
<td></td>
<td>1945</td>
<td>Pontoons and Floating Docks</td>
</tr>
<tr>
<td></td>
<td>1950</td>
<td>Floating Drydocks</td>
</tr>
</tbody>
</table>

C-1
<table>
<thead>
<tr>
<th>Federal Supply Group</th>
<th>Federal Supply Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Railway Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2210 Locomotives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2220 Rail Cars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2230 Right-of-Way Construction and Maintenance Equipment</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Ground-Effect Vehicles, Motor Vehicles, Trailers, and Cycles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2320 Trucks and Truck Tractors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2330 Trailers</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Tractors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2410 Tractors, Full Track, Low-Speed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2420 Tractors, Wheeled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2430 Tractors, Track-Laying, High-Speed</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Construction, Mining, Excavating, and Highway Maintenance Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3805 Earth Moving and Excavating Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3810 Cranes and Crane-Shovels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3825 Road Clearing and Cleaning Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3895 Miscellaneous Construction Equipment</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Fire Fighting, Rescue, and Safety Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4230 Decontaminating and Impregnating Equipment</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Water Purification and Sewage Treatment Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4610 Water Purification Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4620 Water Distillation Equipment</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Maintenance and Repair Shop Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4910 Motor Vehicle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4920 Aircraft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4921 Torpedo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4923 Depth Charge and Underwater Mine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4925 Ammunition</td>
<td></td>
</tr>
<tr>
<td>Federal Supply Group</td>
<td>Federal Supply Class</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>4927</td>
<td>Rocket</td>
<td>4931 Fire Control System</td>
</tr>
<tr>
<td></td>
<td>4933 Weapons</td>
<td>4935 Guided Missiles</td>
</tr>
<tr>
<td>54</td>
<td>Prefabricated Structure and Scaffolding</td>
<td>5410 Prefabricated and Portable Shelters</td>
</tr>
<tr>
<td></td>
<td>5411 Rigid Wall Shelters</td>
<td>5420 Bridges</td>
</tr>
<tr>
<td></td>
<td>5430 Storage Tanks</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Communication, Detection, and Coherent Radiation Equipment</td>
<td>5810 Communications Security (COMSEC) Equipment</td>
</tr>
<tr>
<td></td>
<td>5820 Radio Communication Equipment (Non-Airborne)</td>
<td>5855 Night Vision Equipment</td>
</tr>
<tr>
<td></td>
<td>5865 Electronic Countermeasures/Electronic Countermeasures (ECM/ECCM) Equipment</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Electric Wire and Power and Distribution Equipment</td>
<td>6115 Generators</td>
</tr>
<tr>
<td>65</td>
<td>Medical, Dental, and Veterinary Equipment and Supplies</td>
<td>6515 Medical and Surgical Equipment</td>
</tr>
<tr>
<td></td>
<td>6520 Dental Equipment</td>
<td>6525 X-Ray Equipment</td>
</tr>
<tr>
<td></td>
<td>6530 Hospital Furniture and Equipment</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Training Aids and Devices</td>
<td>6920 Armament Training Devices</td>
</tr>
<tr>
<td></td>
<td>6930 Operations Training Devices</td>
<td>6940 Communications Training Devices</td>
</tr>
</tbody>
</table>

C-3
<table>
<thead>
<tr>
<th>Federal Supply Group</th>
<th>Federal Supply Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>General-Purpose Automatic Data Processing (ADP) Equipment, Software, and Supplies</td>
</tr>
<tr>
<td></td>
<td>7020 Analog Central Processing Unit</td>
</tr>
<tr>
<td></td>
<td>7021 Digital Central Processing Unit</td>
</tr>
<tr>
<td></td>
<td>7022 Hybrid Central Processing Unit</td>
</tr>
<tr>
<td></td>
<td>7025 Input/Output and Storage Devices</td>
</tr>
<tr>
<td></td>
<td>7035 ADP Accessorial Equipment</td>
</tr>
<tr>
<td>73</td>
<td>Food Preparation and Service Equipment</td>
</tr>
<tr>
<td></td>
<td>7310 Cooking, Baking, and Serving Equipment</td>
</tr>
<tr>
<td></td>
<td>7320 Kitchen Equipment and Appliances</td>
</tr>
<tr>
<td>81</td>
<td>Containers, Packaging, and Packing Supplies</td>
</tr>
<tr>
<td></td>
<td>8140 Ammunition/Nuclear Ordnance Containers</td>
</tr>
<tr>
<td></td>
<td>8145 Specialized Shipping and Storage Containers</td>
</tr>
</tbody>
</table>
Industrial mobilization planning, long neglected in the Department of Defense, has received much attention since the Deputy Secretary issued "Industrial Base Preparedness Guidance" two years ago. The emphasis has been on production of major weapon systems and munitions. Many aspects of logistics support continue to be neglected. For example, the Military Department requirements for maintenance and spare parts to support mobilization have not been specified, nor have defense industry requirements for energy, transportation, construction, or skilled civilian manpower. By even the most optimistic
19. Continued


20. Continued

projections, increased production in an emergency would be insufficient to compensate for current shortfalls in war reserve stocks.

Some of the deficiencies in industrial mobilization planning can be corrected unilaterally by the ASD(MI&L):

- Develop and issue industrial mobilization planning guidance for equipment maintenance requirements.
- Develop and issue guidance for computing and reviewing mobilization materiel requirements.
- Eliminate confusion in the Military Departments and OSD by ensuring that the Master Mobilization Plan and other DoD policy and guidance documents are consistent in their recognition of ASD(MI&L) mobilization planning responsibilities.

Other remedial actions must be taken jointly with the Under Secretary of Defense for Research and Engineering:

- Obtain industry's mobilization requirements for energy, transportation, construction, and skilled civilian manpower and consolidate them with Military Department mobilization requirements.
- Develop guidance for converting selected DoD depot maintenance facilities from repair to production during a crisis.
- Have OSD staff responsibility for requirements determination and logistics management of end items (except major systems overseen by the Director, PA&E) assigned to the ASD(MI&L).
- Develop policy and guidance for an integrated, prioritized list of critical warstopper items and reallocate funds to procure war reserve stocks or production capability to narrow the D-to-P gap for those items.