ROLE OF ODM IN THE DETERMINATION OF REQUIREMENTS

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MR. HENKEL: Today we are taking a new tack on the problem of requirements. This discussion will cover an overall approach of the determination of civilian and military requirements, the balancing of total requirements against our resources, the testing of the feasibility of strategic and logistic plans, and the part that the Office of Defense Mobilization plays in the determination of these requirements.

Here to tell us this morning, all about this is Mr. William N. Lawrence, who is an old friend of the College. Mr. Lawrence has had numerous assignments for the past ten or twelve years with various civilian agencies in the development of both civilian and military requirements, going as far back as War Production Board days. At the present time Mr. Lawrence is Acting Assistant Director of the Production Requirements and Programs Area of the Office of Defense Mobilization.

Gentlemen, it gives me great pleasure to present to you Mr. Lawrence.

MR. LAWRENCE: Thank you, Mr. Henkel. Gentlemen: I am going to discuss with you, this morning, the major aspects of ODM's objectives and activities in the field of mobilization planning.

At the risk of repeating what may be known by many here, I feel it appropriate to sketch at the outset, both the mobilization chain of command and the ODM position in this chain. Directly under, and reporting to the President, is ODM. ODM works through a host of claimant or delegate agencies, such as Defense, AEC, GSA, Agriculture, Interior, and Commerce.

These are the operational arms of the mobilization effort. We, in ODM, set the policies, guidelines, and directives carried out by the above-mentioned agencies, and assemble the data for the final evaluation. For those who have further interest, Defense Mobilization Order VII-5 sets forth the delegate agencies and their cognizance for performance of functions under the Defense Production Act, which I think will be distributed later.

By virtue of ODM's staff position, its small size and the delegation of operational functions to other agencies, we must, of necessity, work with, and through, interdepartmental committees and groups.

The Director is a member of the National Security Council. The top advisory group to the director of ODM is the Defense Mobilization Board. Included in its membership are the Chairman of the Board of Governors of

the Federal Reserve System; the Administrator of Foreign Operations Administration; and the Secretaries of Defense, State, Treasury, Interior, Commerce, Agriculture, and Labor.

The kinds of problems treated by this Board run the gamut. As an example, the following are from the agenda of meetings held in the past several weeks:

The advisability of a third round of aluminum expansion; nickel decontrol; Chilean request for U. S. purchase of copper; defense manpower policy; defense mobilization assumptions and objectives for Fiscal Years 1954 and 1955; and the status of the expansion goal program.

In addition to this top level Board, we have established Interdepartmental Committees on Stockpile; a Defense Facilities Maintenance Board, Components Committee, and Facilities Protection Board; ODM Transportation Committee and the Advisory Mobilization Program Committee, etc.

The basic charter under which we operate is the Defense Production Act, 1950, as amended, and subsequent Executive Orders, the National Security Act and the Stockpile Act. The Office of Defense Mobilization, on behalf of the President, coordinates all mobilization activities of the executive branch of the Government including production, procurement, manpower, stabilization and transport. Every office and agency of the Government having functions under the Defense Production Act performs these functions subject to the direction and control of the Director of the Office of Defense Mobilization.

Some of the major ODM functions follow:

1. Performs the central programming functions incident to the determination of production programs required to meet defense needs.

2. Determines the adequacy of facilities for defense production and the procedure and methods followed by agencies of the Government in maintaining these facilities.

3. Acts as the certifying authority to Internal Revenue for purposes of rapid tax amortization.

4. Sponsors the exploration, development and mining of critical and strategic minerals and metals.

5. Determines stockpile needs.

6. Administers the priorities and allocations section of the Defense Production Act, through delegation to other agencies.

With respect to the expansion of productive capacity and supply, the Defense Department, AEC, Commerce, Interior, Agriculture and GSA have been directed to develop and promote measures necessary to the national defense.

GSA has been authorized to purchase and make commitments to purchase metals, minerals and other materials for Government use or resale; also to make such subsidy payments as required in this activity.

Other financial provisions cover loans and guarantees through RFC and the Export-Import Bank.

In summary, ODM's charter provides for the supervision of the Government's mobilization effort, be it partial or all-out.

Having reviewed briefly the general functions of ODM, I should like to round out the background by telling you something about our organization.

The staff is divided into seven principal areas with an Assistant Director in charge of each: Financial Policy, Production Requirements and Programs; Materials; Stabilization, Non-Military Defense; Manpower and Telecommunications.

Financial Policy issues certificates of necessity, permitting rapid tax amortization, reviews loan applications, approves borrowing from the Treasury, and is, indeed, concerned with other fiscal aspects of administering the Defense Production Act.

We, in Production Requirements and Programs, develop, collect, and evaluate the supply and demand pieces of the mobilization balance sheet. Inherent in this process is a rather detailed examination of the component segments, e.g., military goods, defense supporting, civilian, and foreign, and the identification of deficiencies in our mobilization base. How to overcome these deficits with the means available also concerns us and will be discussed later.

The Assistant Director for Materials determines the adequacy of supplies of basic materials and develops programs for expansion and procurement when necessary. This group also operates the stockpile functions previously performed by the Munitions Board.

Under the Assistant Director for Non-Military Defense, policies are established and measures taken to minimize the effects of enemy attack on cities, industry and government; assure continuity of essential production and government functions in event of attack; and deal with post attack problems. This group also establishes policies and standards for the physical security of plants and facilities, dispersion and protective construction.

In the next Assistant Directorship is lodged the responsibility for the fundamental and perhaps the most limiting factor in wartime--manpower. Supply, requirements, standby policies, are of as much concern here as are materials and plants in the other areas of mobilization development.

Another integral part of this complex known as mobilization planning concerns preparedness for controlling the inevitable wartime tendency toward inflation. Establishing acceptable wage, price, rent and rationing controls for emergency use is the job of the Stabilization directorate.

Finally, we have an Assistant Director for Telecommunications who coordinates national plans and standards designed to assure maximum security, control electromagnetic radiation and generally assist and advise the President as to government radio frequency requirements and assignments.

While these may appear to be distinct units, in fact, there is considerable day-to-day interdependence.

You are all familiar with the methods used in the past for measuring the mobilization potential of the economy. All of these approaches started with the development of requirements, independently by each claimant agency, or centrally by the designated civilian mobilization agency which in those days were National Security Resources Board (NSRB). The military departments, defense-supporting claimant agencies and the essential civilian portions which were computed independently, were consolidated and a feasibility test was applied. As long as the total computed requirement for the segments came within reasonable distance of being feasible, this method could be used. However, past experience indicates that more often than not, this approach inevitably resulted in requirements for some types of resources exceeding supply by such a large margin as to make a reconciliation impossible. Therefore, despite the fact that the military departments would need to have all the materials, productive capacity, manpower and other resources which a strategic plan indicates, it is essential these demands be in balance with the other segments of the economy in order that the total mobilization effort proceed at maximum efficiency throughout.

Under these circumstances, we found it essential to employ a method where the approach is more realistic and is based on an estimated division of the resources in advance. This is what has been labeled the GNP method. This approach has inherent in it, prior to actual computation of requirements for resources, at least some degree of feasibility. As a matter of fact, it is an answer to those critics of advance mobilization planning who say that "we will fight the war with what we have on hand on M-day." The statement is true. What we are attempting

is, first, an estimate of those resources which we will have on hand an assumed M-day; second, the realistic distribution of these resources, and third, the identification of deficiencies, where possible.

The development of the total dollar volume of goods and services, or the GNP, that could be produced by the economy during a three-year period of full mobilization was in itself a considerable task. The method involves an analysis of past trends and projections of the size of the labor force, the number of hours worked per year by each civilian employed member of the labor force, and the value of gross national product (excluding military pay) in constant dollars per man hour. Although there are many variations of this method, it is believed that the method finally adopted is satisfactory for the purposes for which it is to be used.

These projections gave us a measure, in dollars, of the nation's total capacity to produce during a mobilization period. In the calculation of the production potential for military hard goods, the following factors were considered: (1) the total gross national product, (2) the total hard goods production potential, (3) the relationship between the military "take" of hard goods in World War II and total hard goods production during that period, and (4) informed estimates of the product mix of the Department of Defense.

As a result of these calculations, a dollar ceiling for each of the 3 years of an assumed mobilization was assigned to the Department of Defense and to other claimants, as a basis for planning. It should be noted at this point that these GNP dollars which were assigned were all within a framework which is estimated to be feasible dollar-wise, so that in theory the military programs are feasible to begin with.

As you probably realize, GNP shares are far from identical to the claimant agency structure established for mobilization planning and under which we operated CMP and DMS during the past several years. Consequently, technical adjustments had to be made in order to conform the GNP segments to the claimant agency programs.

The problem of a balanced program is as real in the civilian and defense-supporting areas as in the military. Obviously, you don't, or shall I say, shouldn't, plan on tanks without the required engines and guns. Similarly, machine tools, electric power, engines and turbines, freight cars and so on must be related to the various claims on their usage.

While delegate agencies were directed to compute requirements--and I use the term to include items and materials--within assigned dollar limitations, they were also instructed to submit appeals with justifications where the assigned levels, in their expert judgment, were

inadequate. I might note that where levels were set too high, we also expect to be so informed. So far, examples of the latter instance have not come to my attention.

Now what do we expect to accomplish as a result of all this activity? We expect to receive the translation of these dollars from each segment in terms of end items, components, materials and other resources. These resource translations will then be aggregated by ODM and compared with estimated supply during the mobilization period. After this process has been completed, it will be relatively simple to identify critical resource deficiencies. Next, we will measure the magnitude of these deficiencies and decide on the best and most appropriate methods of erasing the gap.

While there is no single formula by which problems which arise can be solved, there are, however, varied courses of actions now available that can be used. I will touch on these later.

A brief word as to the status of this GNP program. From all claimants except the military, we have already received requirements for steel, copper and aluminum and are in process of reviewing them with the agencies concerned.

From Defense we received in the middle of November detailed planned production schedules for the thousand major items. Within the next few days we expect program summaries in terms of dollars. We have mutually agreed to a mid-January date for the submission of steel, copper, and aluminum and ferro-alloys requirements.

Before I get too far along, permit me to state categorically that we do not sit in any towers, speculating in futures which may or may not be delivered. Planning is akin to forecasting, and certainly not an exact science. We realize that however, no planning is certainly not the answer.

Despite the fact that we are constantly engaged in long range plans, we do have current problems. To the extent that our information, assumptions, and other factors are good, to that extent, we hope, our day-to-day decisions and actions will be good.

What are some of these daily problems? And why are they problems? A few examples--we have requests for necessity certificates for further expansion of an industry. The goal--a measure of anticipated deficit--was developed last year on the basis of then available partial mobilization data and may now be filled. Under the pressures of industry, the Congress, we must act quickly to determine the adequacy of the goal and the granting or denial of a specific application.

Another example relates to our mission of maintaining the mobilization base. We have cases of high cost, marginal producers losing business as controlled and directed production gives way to free competition. These are basic mills as well as parts suppliers expanded or built with government sponsorship, money and tax privileges, who, in the current era of cutback, can't compete price-wise with older, more efficient producers. Do we direct production into these plants--paying what amounts to direct subsidies in order to sustain a piece of the mobilization base--or do we permit them, as some will, to go out of business? In other words, at what point do we draw the line?

A further problem is the determination of how much chromite, aluminum, and other materials should go into the stockpile. We hope to find the answers to some of these problems through the translation of an integrated mobilization plan with the military, civilian, defense-supporting, and export segments on the same basis, into materials, and other resource requirements.

During the early part of next year the first cycle of this program will be completed. That will be a considerable accomplishment. The experience gained by all concerned is of itself valuable. The facts derived, of course, will be invaluable. Later in the year, in a second cycle, we shall examine the resource implications of the new JCS strategic plan, irrespective of dollar or other limitations. But everyone concerned now recognizes and must continue to recognize the need to consider availability of resources in strategic planning. Should additional gaps appear in the mobilization base on the basis of such study, further steps--money, legislation, incentives--may need to be provided.

In discussing the development of military mobilization requirements, I think it is important to differentiate the types of requirements estimates that have been made recently.

It is necessary to point out that there now are actually several distinct types of requirements estimates. The one I'm sure most of you have worked with is that which is based on a JCS strategic plan. Under this concept, the JCS assigns missions to the three services, who in turn translate these logistically in terms of aircraft, weapons, ships, guns, tanks, etc. These end items are then translated into materials and other resource requirements. This type of requirements computation incorporates no limit on production capacity, materials, or other resources, and is usually infeasible in some respects.

Of a similar nature, is the unilateral departmental plan which has figured so frequently in budget work and in previous mobilization computations.

Another type of requirements computation is based on an estimate of production feasibility by end items within each DOD claimant program.

This estimate is based on accumulated capacity data concerning those suppliers with whom Defense is now doing business, and those with whom mobilization production planning has been accomplished. A computation of end items on this basis is theoretically feasible from an industrial production standpoint. However, it does not automatically carry with it a feasibility of materials, nor does it have inherent in it the availability of supporting resources and components.

Finally, there is the GNP approach which has been discussed previously.

In deciding on these three approaches, it is my own feeling that only two types will serve any useful purpose, that is, the JCS strategic planning approach and the GNP method.

Given these two types of computations, the magnitude between what we should like to have and what we estimate we will have, can be established.

With this knowledge available we will at least have some basis on which to make recommendations on what measures can and should be taken to eliminate or at least alleviate some of the important problem areas.

The military hard goods share of the projected mobilization GNP was transmitted to the Department of Defense many months ago. Recently, the JCS reviewed the totals and made some revisions in the distribution of dollar between programs. These revised program totals went to the Departments who modified existing mobilization plans to arrive at the schedules I mentioned previously.

This process leaves much to be desired. Ideally, we should start afresh with complete JCS guidance and an integration of the departments planning.

In conjunction with the Assistant Secretary of Defense for Supply and Logistics and the three Departments, my staff is reviewing program and end-item requirements much the same as under CMP. We shall, I am certain, arrive at mutually acceptable figures--not perfect, but certainly workable on this first round.

Once the military segment is analyzed, we will then be in a position to make adjustments in those defense-supporting areas whose levels are largely dependent upon military procurement or activity.

Having outlined the development of the military mobilization requirements, we come to another difficult and important area--civilian and defense-supporting. The problem is a difficult one since requirements estimates are not based on the more detailed end-item programming

and scheduling which are used by the military departments in estimating requirements. Many of the segments of civilian and defense-supporting programs are significantly affected by direct military needs, for items which are directly incorporated into military equipment and for various resources which contribute to the production of military materiel. It should be borne in mind, therefore, that in addition to the munitions GNP dollars for military hard goods, the military effort takes an additional substantial piece of the dollars assigned to the defense-supporting segment. This defense-supporting area, absolutely essential in maintaining the maximum war effort, is made up of such activities as oil production and exploration, electric power production, mining equipment, maritime shipping, railroads and railway equipment and the production equipment in our mills and factories and mines, and rock-bottom civilian requirements.

Basically, the estimation of requirements for these programs can best be described as follows:

1. For each program or other segment of the GNP accounts, a use analysis is prepared indicating an estimated percentage of demand during the base period which is 1952.

2. For each end-use within each program an index of activity during the mobilization period (using 1952 as 100) is developed. This must be consistent with activity within related programs and in line with the GNP guide lines.

The index number is then applied against materials and other resource factors which then gives us the mobilization requirements for the three-year period. This is an over-simplified version of a complicated process.

To complete the requirements picture, we must make provisions in our calculations for the requirements of other countries of the free world who would look to us for assistance in time of war.

I am not going to detail the various policy decisions and administrative procedures that have been developed in the Korean emergency to assure minimum duplication in the foreign requirements figures submitted by the various claimants, such as the Office of International Trade, FOA, EDSA Canadian Division, and the Department of Defense.

Suffice it to say that the experience exists in the ODM to permit us to get pretty well defined areas of coverage, supported by the type of justification that will give us an adequate basis for proper evaluation of the quantitative data.

For mobilization planning, the level of exports to be estimated for an assumed set of full war conditions depends very largely on the following four factors: our import needs to support the GNP level; the numerous expenditures we will incur in foreign countries when conducting military operations overseas on a large scale; the extent of reverse lend-lease we can count on; and finally, our own lend-lease program.

While the estimates in this foreign area may be somewhat less precise than in the military area, we do have World War II experience to rely on for the development of relationships and factors which can serve as controls for projection against the assumed M-day.

For example, in estimating military purchases of supplies, facilities and services, and local expenditures of troops, at least the same real expenditure per member of our armed forces as in World War II can be assumed for future mobilization. This assumes, in turn, that the same proportion of total personnel in uniform will see duty overseas.

In the matter of reverse lend-lease, the amount we receive depends upon which countries are the main centers of deployment and operation, and the economic position of these countries.

The percentage of the U. S. munitions production that we turn over to the foreign countries as lend-lease depends completely on our military strategy and the nations that remain active participants in the struggle.

All these factors and assumptions are reviewed, and applied in developing the estimates of foreign demand on the U. S. economy in full mobilization.

While the claimants are preparing their end-item, components, materials requirements, the ODM staff works with them down at the work-sheet level; so that a substantial portion of the review has already been accomplished prior to formal submission.

Illustrative of this activity is the review of military requirements. The basic directives establishing the ground rules for the preparation of the requirements were a mutual operation. The end-item schedules, when submitted to the Office of Secretary of Defense by the three services, were made available to the ODM personnel for evaluation. Problem areas were discussed, and corrective action agreed to.

The latest mobilization end-item requirements data developed by the DOD and forwarded to ODM in mid-November is a result of this type of liaison.

We examine individual items from a production viewpoint. From data on capacity available to us, we determine whether we can reasonably

expect the schedule of requirements to be met from existing and planned production capacity. We would consider unrealistic, as an example, a schedule of requirements for a particular item that reflected a tremendous peak in the first year after mobilization, a sharp toboggan slide in the second year, and then an upward trend in the third year. Production lines are just not economically or practically geared to that type of schedule.

Let us consider the raw materials aspect. The accepted schedules for military hard goods must be translated into raw material equivalents. Bills of material, unit weights, and lead times all must be examined and developed before the calculations begin. The materials figures that are finally developed are for the major items. To this must be added the materials needed for the unlisted items that are part of the total military demand, plus any other aspects of total military operations that would constitute a demand for raw materials, such as direct procurement for repair, maintenance, and construction.

After requirements estimates have been completed and before the feasibility tests can be applied, it is necessary we have reasonable estimates of supplies. The term supply relates to a large number of resources, including but not limited to, manpower, electric power, fuels, transportation facilities, mining, smelting and fabricating facilities, pipelines, raw materials, components, and others.

The responsibility of ODM in the supply area has been defined in Executive Order 10480, dated August 14, 1953. Under this executive order, ODM continues to retain the same responsibility it had under the Defense Production Act of 1950, in coordinating all mobilization activities with the previously mentioned agencies continuing to supply resource data.

In getting up a supply estimate for a material, ODM, in addition to its own staff, will have the benefit of the talent available in several other agencies. Further implementation of cooperation in the materials supply field is found under Defense Mobilization Order V-1, Supplement 1, dated December 4, 1953, which established seven interdepartmental commodity advisory committees which cover iron, steel and ferro-alloys; light metals, non-ferrous metals; non-metallic minerals; chemicals and rubber; forest products; and fibers.

After approval by the committee, these estimates will constitute the official estimates of the supply for all materials.

The logical conclusion to the process I have been discussing is the establishment of the supply-demand balance sheet for the total economy. For while maximum military capability is our objective, other essential functions of the national economy must be carried on during a war for national survival. On the assumption that all segments of the requirements picture, military, civilian and foreign, have been screened, and

that all segments are within the dollar limits established under the GNP concept, their combined impact must then be examined in light of total available resources.

The ramifications of this matching process are varied and complex. The total demand for each material must be examined against total supply. There may be balance in one material, but not in another. There may be enough total steel to meet total demand, but not enough aluminum. We must examine the supply-demand relationship by shape and form within each of the basic materials, because even though there may be balance in the total figures, there may be imbalance in the shapes, such as armor casting, shell billets, or aluminum extrusions, and forgings. We must examine the supply-demand relationship for the various alloying elements that are basic to the quality of the materials required. We may find that there is balance in the total steel demand and supply, but that the supply and demand of nickel, columbium, or cobalt is out of balance. These are but some of the aspects of testing for feasibility of materials. Add to these, other aspects such as components, electric power and manpower, and the scope and limits of feasibility testing begin to become apparent.

What is planned then, is a whole series of resource relationships. To some extent, adjustments in programs and levels can still be negotiated at that time in an attempt to achieve balance. However, such changes probably will not eliminate many of the wide gaps which appear.

These screened and validated supply-demand data provide the basis for determining whether further government action is required. Where there is a surplus between supply and demand, obviously no action would be necessary. Where the data indicates a shortage in supply, and a need for expanded production capacity, the following courses may be pursued by the government: (a) extend rapid tax amortization privileges to holders of certificates of necessity issued to accomplish an expansion goal; (b) guarantee markets and grant direct loans to private industry; and (c) acquire short-supply materials into a reserve or stockpile.

Following completion of the resource aspect of the feasibility test, we are going to assess the possible effect of bomb damage on key targets in the United States on our resources. This evaluation will lead to further recommendations, such as protective construction, dispersal of industry, redistribution or duplication of existing production capacity, and other things.

The legislative basis to grant incentives is contained in the Defense Production Act, the Internal Revenue Code, and various executive orders.

The Tax Amortization statute permits approved portions of a facility expansion, certified as necessary for national defense, to be

written off for tax purposes over a period of 5 years instead of the normal depreciation period, which may range up to 20 years.

According to Defense Mobilization Order No. 11, dated August 1951, certificates of necessity "shall be granted only for facilities that are included within an expansion goal."

Expansion goals are designed to reduce the deficit between anticipated requirements and supplies during a mobilization period. The goals cover critical and strategic materials, production facilities for munitions, machinery, equipment, and supplies. The goals are public notices of required increases in output which the government is willing to encourage through certificates of necessity and which are accomplished with private capital rather than with huge outlays of public funds.

Not all deficits give rise to an expansion goal. Where it is determined that requirements for the product are not closely related to mobilization needs, no goal was established.

Roughly, 400 different segments of industry have been subject to expansion goal analysis. Goals were approved for about 240. On December 3, 1953, ODM reduced the number of open goals to 68, so that from that date only applications relating to these 68 areas will be eligible for tax amortization benefits. For 49 other industry segments, amortization applications will be held in suspense until the need for further expansion has been definitely determined.

I want to emphasize the following about the tax amortization program. First, accelerated amortization does not eliminate, and it does not reduce, a tax liability. It merely defers it. Fast amortization is not in addition to the normal depreciation that every businessman is privileged to take to recover the cost of his investment. The rapid write-off is in lieu of the normal depreciation deduction so that there is no real loss to the government. Second, the major objective of this program has been to induce private capital investment. During World War II more than 70 percent of defense expansions required government funds. During the Korean emergency, a much smaller part of the facilities expansion program has required government funds. In the aircraft industry, for example, the cost of aircraft, engines, and accessory facility expansions in World War II financed by private capital totaled $420 million compared to $1.2 billion during the Korean emergency--three times as high.

In addition to tax amortization, the Congress has provided other incentive measures, such as defense loans and guaranteed purchase agreements.

The above incentives were used by the government to stimulate production where mobilization deficits were revealed. The government also buys and stores scarce and critical materials under the stockpile program. Authority for this program is Public Law 520, 79th Congress. The act provides for the acquisition and retention by the government of stocks of those materials deemed strategic and critical and which are deficient or insufficiently developed to supply the industrial and defense needs of the country. As of 30 June 1953, the value of the stockpile objectives for all the materials totaled $7.2 billion.

As of that same date, almost 80 percent, or $5.7 billion, of this objective had already been placed in the stockpile or was under contract and scheduled for future delivery.

There are now 94 materials in the stockpile program. Seventy-five of the materials will be acquired through purchases and by transfer of government-owned surpluses; 19 materials acquired only through transfer of government-owned surplus.

The list of strategic materials is highly flexible, for new discoveries, improved transportation, new demands, and technical developments may add to or subtract from the requirements for the items, and change the composition of the list.

The advantages of and need for a national stockpile were demonstrated during the Korean emergency when withdrawals of aluminum and copper were necessary to meet current production requirements for munitions. However, with supply becoming increasingly available in these two materials from the new capacity activated as a result of expansion goal programs coupled with reduced military consumption will result in increased stockpile accumulations in the future.

Further actions which can be taken to eliminate deficiencies in the mobilization base are:

1. Accumulation of end items in war reserves by the military departments.

2. Establishing standby scheduling directives for those materials, components, mill products, etc., which have been determined to be extremely critical.

3. Developing conversion plans, conservation and limitation orders, and allocation procedures.

4. Purchase of standby equipment or construction of standby plants (although this is most difficult since it depends on Congressional appropriations).

5. If the end-item is strictly military, e.g., aircraft, weapons, etc., the military department might undertake construction of standby facilities.

In the preceding discussion, I have reviewed the responsibilities of the federal agencies and the program underway to develop and test the feasibility of mobilization requirements. In the production field, this is one of the two vital hinges on which will hang the success of our preparedness effort. The second important hinge of the mobilization effort is to have ready the production control plans that will best meet the problems of a stepped-up or all-out mobilization. Without a system which can be swiftly put into operation in a new emergency, we will again find ourselves in the confusion that existed in the early months of World War II and to a degree in the early stages of the Korean War. That is something I don't think we could afford a third time. For this reason, we are developing a kind of control system which will preserve the proven principles of the Controlled Materials Plan but at the same time strip that plan of the complex volume of paper work in government and industry upon which its administration has depended in the past. The present Defense Materials System will be modified soon to simplify greatly its operation, particularly in industry. This is being done with the full knowledge and participation of industry and it is expected that the experience gained in operating the simplified system will not only point the way but will assure acceptance of a similar system for use in the early stages of a future stepped-up or all-out mobilization. In addition to the basic programming and allotment control framework, the planning in the mobilization production controls program includes a review of the various "M" orders to provide standby orders with provisions for allocation of scarce materials, distribution of production and construction equipment, inventory and conservation restrictions on the purchase and use of materials and products and other control devices that will make up a full kit of tools initially necessary to install quickly a production control system in a new emergency.

In conclusion, I would like to stress several things:

1. Mobilization planning is dynamic and in a constant state of change. For maximum benefit to the country and to us as individuals, we must never consider that the job is done.

2. Many of the tools we use are rough--they can and should be improved. I am informed on many occasions and in all seriousness, that the computation of materials requirements is a simple proposition of multiplying a bill of materials and a schedule. My experience along this line is that there are never enough bills of materials and schedules and that neither will stand still for very long.

3. Technology in weapons, in materials, in manufacturing methods generally are continuously changing and have their impact on any supply-demand relationships, which may have been previously established.

4. Diplomacy has its impact, too. Foreign commitments such as those that are made to NATO, which are changing, will change the requirements picture sufficiently to warrant re-examination.

5. Supplies of materials change. Conservation and substitution may either completely eliminate or so drastically reduce the need for a material that relationships that have been set up previously are no longer valid.

6. New materials make their appearance--of which titanium is a good illustration. It is possible that this metal may some day displace large quantities of aluminum and possibly nickel.

7. Substantial changes in the force levels of each service--Army, Navy and Air Force--will change the end-item requirements and with this the type of plant capacity, machine tools and equipment, and materials of all kinds.

It is almost axiomatic that as one mobilization study is concluded, the next cycle begins.

QUESTION: I read about everything I could get my hands on of this mobilization readiness program and the so-called MPPP. I am pretty well sold on it. It seems to me one of the biggest difficulties, however, is that once you have analyzed existing deficiencies and recommended the steps to be taken, many of which steps will cost money, there is the question of selling Congress, which, in turn, means selling the public in order to get the money appropriated for the peacetime buildup of the mobilization plan. Is there any thought in ODM as to how you will go about trying to sell the public and Congress on it?

MR. LAWRENCE: Well, that is a pretty difficult one. We know that obtaining money from Congress is going to be one of the most difficult problems we have. However, we do have the whole backing of the President of the United States behind this program. He is determined that the mobilization effort, planning and broadening the base will become even stronger this year and following years as the military procurement program itself declines. Certainly he will be in back of us when we go before Congress. As to how good a selling job we can do, that is dependent on how many facts we can assemble to demonstrate to Congress the need for these things.

QUESTION: You indicated in your discussion that you were going to consider next spring the impact of atomic power on our industry. Could you give us some idea of how you are going to do it?

MR. LAWRENCE: What we intend to do is actually utilize some information that has been developed in the Air Force itself by a projection which is now going on in this input-output study. There was developed for that particular study and others a measure of industrial capacity that is now located in various key target areas. That will be one of the principal steps. They will have to have Air Force guidance as to what the probable targets or number of targets will be. In successive steps we will measure what the destruction will be and on what kind of capacity it will take place. In that we will have one indication as to where we might need additional capacity. On the other hand, we might not need it if it is a target where we have surplus capacity or the capacity might be so well distributed, for instance, the oil refining industry. There are approximately 400 or more oil refineries in the country and they are scattered all over the United States. That is the first step. Where we go from there, I must admit, we are as much in the dark as anybody. It is one of these things where we are going to have to grope our way and find out how we can do it.

QUESTION: Mr. Lawrence, what effect do you anticipate this revised or new approach will have on the detailed planning with industry that is being conducted under production allocations?

MR. LAWRENCE: I think what we hope will happen is that there will be a more intensive effort made by the services on this type of planning. Another thing that we hope for and one which we are going to push for is that this planning be kept more up to date than it is at the present time. That not only falls within the province of the planning itself but it falls within the functions of the Defense Facilities Maintenance Board which is going to attempt something--quite difficult--that is, try to put together in one place in the Government an inventory of the plants and tools that we have available if not now in reserve. It is a difficult thing, I am sure, to understand, but at the present time the Department of Defense has no over-all inventory of all the machine tools which they have. We think we need better information here in Washington as to the status of the inventory of tools. Back to the planning itself, that has not been kept up to date as well as it should have been.

QUESTION: Mr. Lawrence, you mentioned that you considered damage factor to industry in a basic attack. Would you care to discuss the extent or size of that factor in consideration of this plan?

MR. LAWRENCE: Actually, we don't have such a measure at the present time. I am sorry; I can't answer that question.

QUESTION: A previous speaker indicated that in some cases, as defense contracts play out, there is some difficulty in making arrangements for storing close to the site the tools that were used in producing, say, tanks, for example. I wonder if you would discuss the extent to

which ODM gets into the planning for the stockpiling of those critical tools and if you are getting the money necessary to provide storage facilities?

MR. LAWRENCE: That falls in ODM under Defense Mobilization Order 18, which has three amendments. The storage of tools as advocated in this order states that the tools shall be stored in the plant or adjacent to it, that only as a last resort will the tools be pulled out and put back in central storage as was done heretofore. I know that there is bound to be some difficulty in storing these tools in the plant or adjacent to it.

We recently had a case in ODM where this company wanted to lease the tools. These orders, incidentally, also pertain to leasing Department of Defense tools. This company had built a completely new plant. All the tools in the plant, though, belonged to the Army. They wanted to lease the tools for a six-month period, paying the normal rental of one percent of the original value of the tools each month. We asked them about storage and they were quite willing to store the tools if we would lease them to them for six months. Otherwise, they wanted the tools pulled out and they didn't care where they were stored, but not around that plant. We have to work on an individual basis to provide incentives to get manufacturers to keep the tools in the plants. As to money, we have asked Defense and GSA to indicate the needs they might have in the way of money for this storage job. As a matter of fact, the Department of Defense and GSA appropriations are adequate at the present time. Whether they will be adequate in the future, I don't know. We would like to hear first from the two agencies.

QUESTION: Mr. Lawrence, in years gone by under DPA, it was my understanding that for the purpose of preparing requirements and capabilities of industry, DPA was employing in industry catalogues of products which could be reported under one group and which would correspond with the facilities that industry had available for producing those products. I am thinking of, as an example, the valve industry, where they put down as a certain group valves corresponding to a certain group of facilities. Is ODM carrying on that work?

MR. LAWRENCE: Oh, yes. We had to divide the GNP into segments in order to devise those codes. The Department of Commerce has 25 industry divisions. Within that 25 total that we have there is an 800 product breakdown. In other words, we have 800 individual submissions based on this GNP and translated into materials. It is identical to the product code that you are discussing that we used in DPA for CMP purposes.

MR. HENKEL: Mr. Lawrence, I want to thank you for taking time out from your heavy schedule to come down and talk to us. I want to say for the benefit of the students that Mr. Lawrence has to go right

back into conference with Mr. Flemming. He has been in conference night and day for the past week.

Mr. Lawrence, you have given us a tremendous amount of information. Thank you for a very informative talk.