

THE ROLE OF THE OFFICE OF DEFENSE MOBILIZATION IN
THE DETERMINATION AND USE OF REQUIREMENTS DATA

7 December 1954

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Mr. William N. Lawrence, Deputy Assistant Director of the Production Area, Office of Defense Mobilization, was born in Durham, North Carolina, on 21 December 1910. He received his B. S. degree from the School of Commerce, University of North Carolina, 1931. He was engaged on construction work in the period 1931-34. Since 1934 Mr. Lawrence has been in the U. S. Government service in the following positions: employed in the Office of Senator Robert R. Reynolds, 1934-38; staff member of the Industrial Marketing Unit in the Bureau of Foreign and Domestic Commerce, 1938-40; chief of the Aircraft-Army Section of the Military Requirements Division in the War Production Board, 1940-45; staff member responsible for military procurement, domestic transportation, surplus property declarations and disposal, in the Office of War Mobilization and Reconversion, 1945-47; staff member responsible for military requirements in the Office of Resources and Requirements of the National Security Resources Board, 1948-50; director, Military-Atomic Energy Division, DPA, 1950-53. Since the abolishing of DPA 30 June 1953, he has been in his present position.

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MR. HENKEL: General Niblo, ladies, and gentlemen: So far in our Requirements course this year our lecturers have discussed military requirements and some of the defense agencies responsible for developing those requirements. But the picture is not complete until we learn something about civilian requirements, and how military and civilian requirements are correlated. This includes not only the balancing of total national requirements against our resources, but also the part that the Office of Defense Mobilization (ODM) plays in developing these requirements.

Mr. Lawrence, our speaker today, lectured to us last year. He has also assisted us in several panel sessions in the last several years. In addition he has helped us materially this year in making available some of his staff.

Mr. Lawrence has had numerous civilian assignments in the determination of civilian and military requirements in the last 10 to 12 years, going as far back as War Production Board days. At the present time Mr. Lawrence is Deputy Assistant Director of Production in the Office of Defense Mobilization.

Mr. Lawrence, it gives me great pleasure to welcome you back to this platform.

MR. LAWRENCE: Thank you, Mr. Henkel. General Niblo, Colonel Goldsmith, ladies, and gentlemen: I think I would like to change the title of this talk a little bit this morning. I would like to add the word "use of requirements data." I would like to say something about the use of requirements. I feel that it is the use of requirements which determines just how and why you do them.

The determination of requirements for planning is a problem to which we have never seemed to get a complete answer. On this date in 1941 we were frantically trying to put together a requirements picture for only one resource--steel. We had only a very vague idea of what military requirements would be. We had no such thing as unit weights,

other than the shipping weights in a Sears-Roebuck catalogue. We have come a long way from that point in the science of the determination of requirements, and we have overcome a great many obstacles along the way. Today we are still faced, however, with many imponderables in our requirements determination. In my talk I will try to point out the importance of requirements, in both planning and the conduct of actual war.

It is possible to talk about requirements in the abstract without reference to the feasibility of meeting them. It does not make much sense to talk about a combination of requirements for military, industrial, civilian, and export that are far beyond the Nation's resources. There is so much flexibility in the possible patterns of resource use, during both a period of mobilization readiness, and to a lesser extent, a period of conflict, that we feel it is of paramount importance to ODM planning to have at all times an up-to-date set of military requirements based on the latest strategic plans of the Joint Chiefs of Staff.

Against the background of these strategic requirements, we need to develop requirements for industrial, civilian, and export that are consistent one with another and are feasible, or can be made feasible, by stockpiling reserves of end items and materials or by expanding productive capacity.

I have been speaking of end-item or program requirements. Simultaneously, we need to develop requirements for productive capacity, materials, manpower, and other resources. Only by comparing resource requirements with resource capabilities can we develop end-item requirements that are feasible.

In a period of mobilization, requirements information provides the basis for allocation and control of resources and for establishing productive levels. In past mobilizations, requirements information has also provided the basis for expanding productive capacity and resource availabilities. In the event of a future mobilization, we are likely to have much less opportunity and time to expand our capabilities after an emergency develops; and we may be faced with the problem of restoration and rehabilitation of productive capacity and resources. For this also we will need requirements information.

At the present time we are in a period of mobilization planning and readiness. Requirements information is clearly one of the most significant factors in such a period. One of our primary objectives at the

present time, for example, is to develop and maintain a mobilization base of productive capacity and resources that will provide maximum military power for defense and victory. For this purpose we need estimates of end-item requirements under assumed mobilization conditions. We also need estimates of capacity and resources to produce the end items required.

We are presently using requirements information in a number of ways. We are using materials requirements information in setting stockpile objectives. In addition decisions must be made on expanding capacity, conservation and substitution, exploration, redesigning products, and revising specifications.

Tax amortization and expansion goal policy are based on requirements information. Some of the expansion goals established in the past were based on partial mobilization demand, because reliable full mobilization requirements did not exist. Once full mobilization requirements are firmed up, expansion goals are reexamined and the necessary steps can be taken to achieve them.

Requirements information is being used in the identification and removal of specific kinds of resource deficiencies--for example, in components, machine tools, and production equipment. The important additions made to the mobilization base in the past two years--in basic raw material capacities; in critical component capacities; in long lead-time equipment in place; in plant construction in the industrial, power, and fuel areas--have tremendously increased the productive capacity of the United States to wage war. But this expansion has not been balanced. There are deficiencies in critical areas which we are attempting to identify, so that appropriate steps can be taken to remove them.

Mobilization planning should avoid a "Maginot Line" psychology. A rigid and fixed mobilization plan could be made useless in the first day of a war; we certainly will not have time again to develop our mobilization plans after the outbreak of war. What is needed is a carefully worked out mobilization plan with a maximum amount of built-in flexibility. Standby plans should be under continuous review in the light of the changing strategic military situation and technological developments. The purpose of planning should be to develop policies, methods, procedures, and "know-how" which would enable us to mobilize quickly and to change the mobilization pattern quickly during a period of mobilization.

It is obvious that many patterns of program levels and resource use are possible under full mobilization conditions. It is also obvious that manpower, basic materials, power, and so forth, set limits to the combined military and civilian programs that can be supported with available resources.

We should not gear our mobilization planning to a single pattern of program levels. Our objective is to develop plans that will enable us to mobilize quickly to provide any pattern of program level that mobilization conditions might require, and to change quickly the pattern should conditions warrant it. In keeping overall program levels within broad resource capabilities, there is the danger that all program levels will be averaged downward rather than consideration being given to the fact that one or more of the programs would need to be increased under one set of circumstances or at one period of time.

For these reasons, as well as to make more manageable the task of coordinating mobilization planning activities, we are emphasizing the development of relationships between program levels, and the working out of resource requirements for specified levels of individual programs. In this way it may be possible to develop segments which can be fitted together to meet a variety of planning needs or circumstances.

The entire economy is so intertwined and interdependent that the level for any segment affects a large number of other segments. To develop program levels and resource requirements information on a completely logical basis would involve starting with all the end-use programs first and successively working back through the successive tiers of derived demand back to the basic resources themselves. The so-called interindustry economics approach, which was developed by a number of Government agencies, was designed to enable such a process to be carried out simultaneously for all segments of the economy by the use of electronic computers. The data available at the present time are not adequate to implement such a system. It is necessary therefore to rely upon less comprehensive methods to develop information on program levels and resource requirements.

The only practicable method derived thus far is to develop general assumptions as to levels of military production and civilian consumption and to develop specific program levels consistent with these stated assumptions. Program levels thus developed are used to establish or reappraise related program levels. While this is a circular process, it does make it possible to develop program levels in rather specific

terms. The most serious deficiency in the application of this method at the present time is the inadequacy of information on the encroachment of one program level on another. This is particularly true for all those product and service areas in which the output in one product or service area, such as components, is used as a resource in another area. The only means of overcoming this deficiency is to develop information on the more important supporting requirements for each specified program. Once the more important relationships between program levels and resource requirements are developed, we shall have available the data needed for flexible planning.

The President, in transmitting his Reorganization Plan No. 3 to the Congress in 1952, stated, in part, that this plan would "enable one Executive Office agency to exercise strong leadership in our national mobilization effort, including both current defense activities and readiness for any future national emergency."

In the mobilization requirements area, ODM has been exercising leadership in the following ways:

1. By establishing the guidelines and assumptions with respect to full mobilization conditions which are used in estimating mobilization requirements.
2. By defining and assigning agency responsibility for estimating requirements.
3. By developing and issuing procedures and methods to be used by delegate agencies in developing and reporting requirements information.
4. By arranging for and coordinating the interagency working arrangements and flows of information necessary in developing requirements information.
5. By assembling and analyzing requirements information to test their consistency and to compare total resource requirements with resource availabilities.
6. By working with other Government agencies to develop and administer mobilization readiness programs to remove indicated capacity and resource deficiencies; for example, stockpiling of materials, expanding productive capacity, removing critical component deficiencies, and maintaining essential civilian facilities in the mobilization base.

The responsibility for developing levels for each program is assigned to the agency that has available the best information on requirements or demand under mobilization conditions. In most instances the same agency is in the best position, as regards available information, to determine both program levels and supply potentialities of a particular product or service. It is necessary for close liaison to be worked out between agencies responsible for the program levels of a given product group and the agencies responsible for programs which have a direct or indirect effect on this given product group. For example, the Department of Agriculture, in developing a program level for cotton, needs to obtain from other agencies information on the program levels for textiles, chemicals, and ammunition.

When an agency is responsible for a product or service, it is responsible for estimating all requirements regardless of end use. The total mobilization requirements for a product or service consist of four parts--military, civilian, supporting, and export.

Military requirements for any product or service represent direct purchases by the military services. Included are such end-use items as aircraft, guns, transportation equipment, communications, and so forth. Also included are such things as components, tools, equipment, and other similar items used to produce military end items.

Such items are not military requirements if they are not purchased directly by the military services and incorporated into a product. For instance, military requirements for "A" items are the responsibility of the Department of Defense (DOD). Military requirements for other items are the responsibilities of other agencies--generally the industry divisions of the Business and Defense Services Administration of the Department of Commerce.

Civilian requirements for any product or service represent end-use purchases by the civilian population. These requirements do not include purchases for use in producing other goods and services. The latter are supporting requirements.

Export requirements are, of course, unique, in that they are purchases for export, regardless of the nature of their use.

Each segment of requirements is generally estimated and analyzed separately. The total mobilization requirements for any item are the sum of the segments outlined above.

We have completed one set of estimated mobilization requirements as a part of the mobilization readiness program. That program had the following objectives:

1. To measure the Nation's maximum potential production under full mobilization conditions.
2. To appraise the adequacy of this potential to meet military, industrial, essential civilian, and essential export needs.
3. To identify capacity and resource deficiencies.

Basic factual guidelines for estimating requirements were developed under ODM direction, as follows:

The first step was to estimate the total dollar volume of goods and services that could be produced by the Nation in the first, second, and third years of full mobilization with the economic resources available. These dollar totals represent the potential gross national product (GNP). The overriding limitation on the Nation's ability to produce was assumed to be the size, hours worked, and productivity of the civilian labor force. This necessitated projecting the size and composition of the total labor force, the number of hours to be worked per year by each civilian employed in the labor force, and the projected value of each hour's work.

This projection yielded the estimated outside limits of production permitted by the labor force. It assumed no limitations on production growing out of scarce materials, component, or end-item deficiencies; specific labor skills; enemy attack damage; or other adverse influences on production.

The second step was to divide the total GNP into levels for major segments of the economy for each of the years following a hypothetical M-day. The most important consideration in making this division was to ascertain the maximum value of munitions that could probably be delivered in each of the mobilization years, while maintaining an adequate but minimum industrial and civilian homefront. Levels were then projected for each of the categories of a GNP projection.

With these shares calculated, the third step was to estimate shares (still in dollars) within these totals that would permit participating claimant agencies to go to work in developing detailed production and construction levels within assigned periods.

The DOD was assigned a total munitions dollar ceiling for each of the three years of full mobilization. Within these ceilings the DOD developed specific levels for each major type of munitions.

Other claimant agencies, except the Department of Commerce, were predominantly concerned with construction programs. For each of these agencies a dollar ceiling was assigned within which each agency developed subprogram levels.

In the Department of Commerce, program responsibilities were primarily concerned with construction, consumers' durable goods, and producers' durable equipment. A dollar ceiling was calculated for all construction programs. Within this total, the responsible divisions developed subprograms of construction in a fashion comparable to that undertaken by the general claimant agencies. In the consumers' durable goods area, dollar ceilings were established for each major category. Within these shares, levels were developed for major "B" product programs, including the military take. In the producers' equipment area, dollar ceilings were set also for major categories.

Just as the total estimated GNP available limited the level of expenditures in each broad segment of the economy, so the level established for each broad segment limited the level of activity for the various specific programs within each segment.

Participating claimant agencies then prepared three sets of estimates: levels of production and construction needed for specific programs; controlled materials--steel, copper, aluminum--required to achieve these levels; and also, as appropriate, resource capabilities.

Of basic significance in the program was the development of projected production and construction program patterns and levels, in dollars, and, where appropriate and significant, in end items. Once these levels were established, translations into claims against production resources were prepared. The basic methods for aggregating these different types of resource claims and matching against them the resource supplies available varied among the different types of resources.

As was previously indicated, claimant agencies under the mobilization readiness program estimated controlled materials requirements. With the exception of the DOD requirements, where the shape and form breakdown was done by the three military services, all the detailed shape and form data for these metals was done by the Department of Commerce.

In cooperation with the Departments of Defense and Commerce, ODM is estimating the requirements of other selected critical materials for the projected program and end-product levels. Similarly, the Department of Labor is estimating manpower requirements for these programs.

It has been a major achievement to accumulate for the entire economy a set of related production and construction levels for all major programs within the Nation's total production potential. This first set of production and construction levels can be greatly improved. We consider this first set of estimates as providing primarily a frame of reference for more intensive studies within various segments of demand.

On the positive side, this set of estimates is comprehensive, in that no segment of the economy has been omitted. Also, this set of estimates had built into them overall feasibility. That is, the total GNP was set at levels believed to be attainable in a three-year war. Finally, the estimates for various segments are roughly consistent one with another.

On the negative side the provision of GNP ceilings as guidelines resulted in a rather mechanical development of requirements. The fact that the guidelines thus provided appeared rather rigid, and the fact that the time allowed for submitting requirements was short, resulted in a failure in some instances to develop and justify realistic program levels.

I think that one of the next things we must do is to incorporate into the requirements model assumptions as to bomb damage. A few assumed patterns of bomb damage could be translated into resource and capacity loss. The existing pattern of requirements would need to be changed in the light of assumed casualties and loss of productive capacity. New balance sheets between resources and requirements could then be developed. Such studies can be developed more rapidly from an existing model of a full mobilization economy than they could by developing estimates of resources and requirements from scratch.

Similarly, I think we could use the new model to test out the effect of significant changes in selected program levels. I indicated earlier that we have been emphasizing the analysis of program interrelationship and resource requirements for specified program segments. In this way we hope to develop the basis for flexible mobilization planning-- that is, by changing some programs to meet a given situation while leaving others constant.

I would like to suggest a few general principles which must be incorporated in our future mobilization planning.

In the future military requirements for products and services should be estimated on two levels. One level would be based on a short war, with intensive damage to both the enemy and ourselves. The second level would be based on a long war, similar to the one assumed in our past feasibility test. Although this may seem at first glance a duplication of effort, actually it would provide us with a flexible basis on which to do our mobilization planning.

The first level of military requirements would be used primarily for budget planning within the DOD, and within ODM as a method for measuring the production deficiencies, which would have to be overcome prior to a D-day in order that we might obtain maximum military production in a very few weeks or months.

The second level would be used in determining the overall resource deficiencies of such things as materials, components, assembly capacity, and so forth. The objective of this plan would be to achieve a production capacity equal to the more or less level-sustaining rate after the large initial issue and pipeline requirements are met. In effect this recognizes that it is uneconomical to build capacity above long-term consumption needs just to meet early peak demands. These peak demands are met more satisfactorily and probably more economically through the stocking of materiel reserves.

Our last feasibility test estimated most civilian requirements at relatively high levels--only a few percentage points below the levels which actually prevailed during the year 1952. These levels, we believe, are unrealistic; and it is doubtful that they could be sustained under a full war mobilization. At the same time, we are not prepared to accept the theory of a "bedrock" subsistence level for the civilian population. The industrial capacity of the United States is too large for any planner to argue this point again unless the greater portion of this capacity is destroyed.

With the pattern of requirements established in our basic feasibility test, we have the tools necessary for making various adjustments in any of the segments of the requirements for the civilian economy. We will be able to phase out requirements for luxury-type items as war items supplant them. We will also be able to ascertain the effects of bomb damage upon the capacities which produce essential goods for civilian purposes.

In all future mobilization planning, we expect to incorporate the effects of bomb damage, upon both our requirements and our capabilities. We also hope to be able to determine the effect of bomb damage upon industry on a vertical basis; in other words select the end-item producers and check down through their major component suppliers to determine if they are all in major target areas. Our preliminary examinations have already revealed that we have a very high percentage of some of our vital industries in major target zones.

I would now like to return for a short period to the use of requirements data as a means of identifying and removing resource and capacity deficiencies.

The methods of identifying and measuring critical deficiencies vary, depending on the resources under review. At the bottom of the industrial pyramid are the scarce materials. For a larger number of materials the aggregate demand-supply imbalance under full mobilization conditions can be determined from translation of projected production levels into demand, on the one hand, and from estimates of potential supply, on the other hand. The processes and data for translating production schedules into metal equivalents have been developed to the point where reasonably reliable estimates of total demand-supply conditions can be made, once all end-item schedules are determined.

At the other end of the productive chain, the adequacy of end-product fabrication and assembly facilities can also be appraised and deficiencies identified once production schedules are established. Because of conversion potentialities and multipurpose facilities, special studies are required to appraise the adequacy of production capacities to achieve selected end-item schedules.

The situation with respect to facilities for producing subassemblies and specialized components, equipment, and machine tools is similar. The adequacy of facilities to produce these items can also be analyzed as soon as you have end-item schedules.

In the case of general-purpose intermediate products, such as components, the approach has to be quite different. Here the demand is derived from other program levels. It is necessary to establish the production and construction levels for all programs, using significant quantities of an intermediate product before the demand for that product can be determined. For this reason programming for components and other intermediate products has always presented a major problem. Shortages of various components caused serious production bottlenecks

in World War II. To a lesser extent this was also true during the recent period of partial mobilization.

Because of the expansion in the mobilization base that has taken place during the last five years, it is probable that critical deficiencies in the component and intermediate product areas would be more severe in a future period of full mobilization than they were in the past, unless steps are taken to identify them and remove them.

Unlike the situation which exists in the case of raw materials, data and techniques have not been developed for translating end-product levels into requirements for intermediate products and components. During 1952 the Defense Production Administration and the Munitions Board conducted a pilot study of selected industrial establishments to determine the feasibility of collecting from manufacturers data on dollar amounts of selected components required to produce 1,000 dollars' worth of various classes of products. The study indicated that industry does not generally have records available from which to compile aggregate component purchases or stock issuances on a product or product-group basis. The study indicated further that component inputs can be obtained from specific models of a product accurately and at moderate cost. It would obviously be impractical to obtain component inputs for all models of all products. It became apparent therefore that the general approach used for determining deficiencies of materials and of end-product capacity could not be used for components. In other words, even if production and construction levels were available for all end-product programs, data and techniques are not available for translating such levels into demands.

A specialized approach was developed for measuring component and other intermediate products. Since 1952 the Departments of Commerce and Defense and the Atomic Energy Commission (AEC), with the cooperation of private industry, have undertaken a number of requirements--capacity studies of components expected to be critically deficient under full mobilization. During the past year, the ODM has undertaken activities to provide leadership and coordination of these studies and to develop an action program for removing any indicated deficiencies.

The general pattern of the component studies can be broken down into four steps: (1) determination of the categories of each component to be studied; (2) development of requirements for the product studied per unit of military and civilian end-use item, (3) preparation of capacity estimates, and (4) analysis of requirements and capacity estimates

to determine the nature and extent of probable deficiencies under full mobilization.

The general procedure has been to establish a joint Government-industry task group to conduct each study. Industry representatives have contributed generously to these studies, particularly in determining component requirements per unit of end-use item, in estimating capacity, and in determining what additional equipment, tools, and facilities would be required to expand capacity.

As a means of providing coordination and leadership, an Interagency Committee on Components was established in ODM. The agencies represented on this committee are the Departments of Commerce and Defense and the AEC.

Procedures outlining agency responsibility for initiating and managing studies, and the establishment of interagency and industry task groups, are the work of this committee.

Thirty component areas have now been set up for study, requiring 51 different study groups. Twenty-four task groups have been formed, and the studies are at varying stages of completion. The steam-boiler task group has completed its study and has submitted final recommendations. Another study group, turbines and gears, has completed a preliminary report, which has been reviewed and approved by the committee. Two other study groups, namely, valves and ball and roller bearings, are expected to be completed before the end of this year. The remainder of the study groups that are now working are in various stages of their jobs. A few of these groups, such as those studying large steel castings and forgings, cannot complete their work until other study groups involving these products have made their final reports.

Different methods of removing deficiencies will be found to be most appropriate for various components. Ordinarily, the indicated action will be to purchase and maintain tools and equipment in standby status. In some instances it will appear desirable to create an industrial reserve of critical finished or semiprocessed materials, parts, and subassemblies to enable production of long lead-time components to get under way quickly in an emergency. In other cases it may appear desirable to maintain a reserve of finished components.

Existing policy calls for full utilization of accelerated tax amortization before consideration is given to the use of other means of financing

the removal of critical component deficiencies. The peacetime demand for some components however would not justify privately financed capacity expansion even with 100-percent accelerated tax amortization. In these cases it is planned to use the borrowing authority of ODM to remove deficiencies.

While the selective approach described here has been used primarily for components, the same procedures can be adapted for use in studying other critical resources, such as selected manpower skills, scarce alloying materials, and so forth. The best results in measuring mobilization requirements and capabilities will be obtained by pushing forward with both the generalized and selective approaches. The generalized approach is essential for setting the planning framework. The specific approach is necessary to develop the detail that must be obtained for some segments of the economy.

In concluding my remarks I would like to emphasize again that requirements estimating is a continuing process. Each cycle provides the basis for changing assumptions and the development of a new set of estimates. This is not lost motion. Our last feasibility test has provided a basic set of data which have been and will continue to be invaluable to us in future planning. We are still groping in the dark for many facts, but we can see the signposts along the road.

MR. HENKEL: Mr. Lawrence is now ready for your questions.

QUESTION: On the question of the stockpiling of components with long lead-time, we had some discussion during the recess. These words sound pretty good if you are arguing on paper, but I wonder what their compass is. For instance, airplanes have been identified as a principal item in long lead-time procurement. It is an area where technology is constantly raising the pace. Specifically, then, what is the compass of those words? What components of airplanes, if any, are you thinking of stockpiling? And how are you going to work out your problems and procedures on things that you can't stockpile a long time without their getting out of date?

MR. LAWRENCE: The question you are asking is, How do you guard against obsolescence in components? We have really, I think, more or less rejected the idea of stockpiling large numbers of components. The only ones we will actually stockpile are those where we can foresee no change, for the next 5 or 10 years.

In any components deficiency work that we are doing, we are looking more for capacity than the components themselves. In other words we want tools--that is the main thing--machine tools for making the needed end items, rather than stockpiling the component itself.

We are also thinking about stockpiling certain raw materials. For instance, in this steam-boiler study we thought we should have an inventory of 60 to 90 days of steel plate. Material like that could be put into production readily. We should have enough plate to carry us until we could get an adequate flow from the heavy plate mills.

So far as stockpiling components, we don't intend to do any of that where we think obsolescence will come in.

In the aircraft field we have several studies under way. However, none of them has reached the stage where we will know what industry will recommend to us.

QUESTION: In this first model that you have completed, what did you estimate to be the maximum size of the military service, and how did you arrive at that estimate of the manpower strength?

MR. LAWRENCE: We got that figure from the DOD. I think it was 13 or 13.5 million men, if I remember correctly. That is the old model military forces.

QUESTION: Sir, in this current economic model, in the cycle you have just completed, have any stockpile objectives or expansion goals been based on the results of the data which you have obtained?

MR. LAWRENCE: All the stockpile objectives which have been reviewed in the past are to my knowledge based on this new model. Except for certain expansion goals in aluminum forgings and castings, no expansion goals have been based on these data.

QUESTION: On this expansion that you are speaking of, you mentioned using other incentives as the basis for it. Are there any plans for utilizing allocations of money for the construction of standby facilities and such?

MR. LAWRENCE: We have in ODM a 2.1 billion-dollar-borrowing authority, which is a revolving fund. Up till recently it was used almost exclusively for metals expansion. We can use that for building facilities. However, I don't believe that we plan to build any with the ODM funds.

Of course within the military establishment we have a considerable sum of money, about 400 million dollars at the present time, which can be used for the procurement of or the purchase of tools and facilities. They have used that fund in some cases for building and buying facilities. It has not been used too widely for that purpose. It is mostly used for tools.

QUESTION: Have you considered at all the possibility of stockpiling housing for the civilian labor force in case of an atomic attack?

MR. LAWRENCE: That is one that we have touched on briefly. Before we can consider such a proposition, we would have to have something official in the way of bomb-damage estimates. Also we would have to tie in mainly with the Federal Civil Defense Administration. This is its primary responsibility, rather than one of ODM.

QUESTION: Could you give us some idea, Mr. Lawrence, as to either the magnitude or the adequacy of the foreign-aid requirements that are included in the model?

MR. LAWRENCE: I was afraid somebody was going to ask that question. The military requirements, with the exception of some small requirements in the Ordnance Department of the Army, a very significant amount of airplanes in the Air Force requirements, and, I think, a small part of the Signal Corps requirements, for foreign aid are not included in the military requirements at all.

On the civilian side we have completed estimates of what we think would be the export requirements in a mobilization period--mainly raw materials. That is about the only thing. And it is included in these dollar figures of the GNP projection, too.

QUESTION: If a war occurred in the next month or so, what plan does ODM have for freezing inventories and production, and what would be its role?

MR. LAWRENCE: The first one I can answer. I don't know whether I can answer the second one too well.

As to the first one, we have at the present time a standby set of preliminary control orders, which could go into effect immediately. That is on the production. We have already authority to issue such orders, along with the controls that are necessary for production. Now, we do not have the statutory authority for stabilization controls at the present

time; although we do have, I think, some orders on the books right now which could be used readily if authority was granted by Congress.

As to the role of ODM in wartime, I don't think I could answer that, although I could say this: that ODM will probably be split up. In other words the people who work in the production area would actually go into a war production agency of some type. But there would certainly be some nucleus of ODM which would remain as the arm of the President, similar to the Office of War Mobilization and Reconversion in World War II. I think you will always have some type of organization where you will have overall authority such as ODM has, where the defense agencies report through ODM rather than directly to the President.

QUESTION: I recall right after Korea, when we were going through a semimobilization period, that certain information, such as steel requirements, which were provided by the Munitions Board to NPA and DPA, were in the initial estimates several thousand percent off. You may recall some of the background. Of course the Munitions Board simply provided information which had been given by the various departments. My question is, Are you finding the information which is furnished to you now by the DOD any better than it was a few years ago?

MR. LAWRENCE: I think that the recent information we get from the DOD is substantially better. They still have some errors in their computations. They are not bad ones.

One of the reasons why the figures were so bad at the beginning of Korea was that we had allowed our people who knew how to compute requirements to disappear completely from the military departments. We are trying to guard against that this time by keeping in being the defense materials system of the computation of requirements for steel, copper, and aluminum for each quarter. We don't need to control the materials now. What they are thinking of mainly is a readiness measure that will keep trained people in the military departments and also leave them in commerce and industry, to keep the knowledge current on how to operate a controlled materials system.

I think by and large, for materials such as steel, copper, and aluminum, that the military figures are pretty good. When you get into some new metal, like titanium, where we have to project the use for some time in the future, where there is not too much physical evidence about the qualities of the metal, that is where they will make errors, which are only natural, I think. Not only the DOD will make them, but any agency will make them under the same system.

The main thing, I might add, that would keep requirements figures from being accurate now are schedules for end items. Right now I think we have that problem licked.

MR. HENKEL: You used 1952 as the basis for the development of civilian requirements but said you are not satisfied with that. What are you using now for the purpose of developing civilian requirements?

MR. LAWRENCE: We have under way now a revision of our GNP projection. We are going to try, when we use figures which were computed for this first model, to see where we will need to adjust the GNP to make the thing in better balance. Let me give you a good example.

The people who worked out this GNP model were among the best in the Government. In other words they were the GNP experts throughout the various Departments. But they were not completely infallible. We discovered--and, strangely enough, we didn't discover this until the end-item programs were translated into steel--that automobile production was cut off completely on M-day. That is not what would happen. It would probably be cut off over a period of twelve months--that is, under a condition of only small bomb damage. Even with bomb damage, if the automobile plants were not hit, we certainly would not stop production immediately. Those people have to continue to earn their livelihood. We wouldn't stop production until we had some military item which was ready to go into the plant.

QUESTION: You made the statement in connection with the civilian economy that you did not visualize in a future mobilization a so-called bedrock level of the civilian economy. I am wondering if your statement was made on the basis that it wouldn't be necessary to reduce the civilian economy to such a level, or on the basis that it would not be acceptable.

MR. LAWRENCE: I think you could answer that by the first part of your question--that it wouldn't be necessary. If you have been in military planning as long as I have, you will probably know that the military services have always had the theory that they should ask for the moon. They used to do that. But nowadays that has changed completely. In fact we sometimes have the situation of having civilian people, such as in the Department of Commerce, saying that the military requirements are just too low; that they can't fight a war with them.

We found this in our model of the last feasibility test: We were assigning certain quantities of dollars to the military. I think we started

out with about 70 billion dollars in the first year. From that as a take-off point or an existing base at the time, you could go very high. It went up to about 160 or 180 billion in the third year. But when the military services got to figuring up their requirements, they had 70 billion dollars left over that they didn't need, which was a very peculiar situation in which to be. In other words we had too much overall capacity available. When we set the civilian requirements at what would take place normally, we still had all this capacity left over. There was nothing in this feasibility test that indicated that there would be any critical shortages in any of our materials such as steel, copper, and aluminum on an overall basis, though in certain critical shapes we had a desperate shortage.

QUESTION: You mentioned you had authority for the control of materials now. Is that legislative authority derived from the Defense Production Act of 1950 or from other legislation?

MR. LAWRENCE: It comes from an extension of the Defense Production Act of 1950, which was made in 1953.

QUESTION: Mr. Lawrence, during the operation of the Controlled Materials Plan (CMP) of 1950, from there on until it was worked out, there were required from the military departments very detailed justifications of their raw material requirements. They envisioned thousands of man-hours and many documents on the part of the departments as well as DPA. What is the concept for a future controlled materials plan? Will it require such detailed justification? And was the experience with the past CMP such that it will warrant that detailed justification at the ODM level?

MR. LAWRENCE: Well, that is a little bit difficult to answer. The reason for the detailed justification was because we were trying to get some accuracy into the figures. You speak as though you had some experience in putting together some of those justifications. We had some pretty bad requirements figures from some parts of the military services. So the only reason why we demanded such justifications was in order to get them down to earth and actually get the military departments into a position where they could calculate requirements with some reasonable accuracy.

Nowadays, under this defense materials system, we demand practically no justifications. Last quarter we had some figures come up where there were such large increases in the aluminum and copper

requirements, and we couldn't understand them, because no production schedules that we had available indicated such a demand. What we found was, when we checked into it deeply but without any great detailed requirements justification such as you are talking about, that here again the military departments had already slipped up to some extent. They had gotten rid of too many of their staff, and they had no one left to compute requirements accurately.

I think that has changed. Certainly in our plans for requirements for these models, we don't ask for those justifications just to make work for you or anything like that. All we are trying to do is to get some accuracy into the figures.

MR. HENKEL: Mr. Lawrence, I am sure we have a better understanding of some of these problems than we had before. On behalf of the Commandant, I thank you for a very instructive lecture.

(11 Feb 1955--350)S/gmh