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THE ROLE OF RESEARCH AND STATISTICS AS IMPLEMENTS
FOR THE OPERATION OF A WAR ECONOMY

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MR. NIKLASON: General Holman and gentlemen: The effective conduct of war today requires that the Federal Government assume responsibility for many managerial functions which in peacetime are exercised by thousands of independent business concerns in their own interest. Intelligent wartime control of the economy is impossible without adequate methods for collecting and using facts. In establishing policy for the control of industry and in administering these controls it is necessary for government continuously to make choices among competing demands for resources at all levels of economic activity. Facts and the methods used for collecting and applying them are managerial tools without which intelligent choices among alternative courses of action can not be made.

To what extent is it feasible in time of peace to make provisions which in case of war will assure that adequate factual data will be available to serve as the basis for making intelligent decisions? Our speaker, who is Director of the Program Division, National Security Resources Board, has studied this problem, and many others related to it, for some time; I am sure his remarks on the role of research and statistics as implements for the operation of a war economy will be very helpful to you.

It is a pleasure to introduce Mr. Ernest A. Tupper.

MR. TUPPER: Gentlemen, I am delighted that I was invited to come over here to present a picture of some of the problems that we are concerned with in the National Security Resources Board. The subject of the role of research and statistics for implementing a war economy is such a tremendous one that I don't quite see how one can adequately cover it in forty-five minutes; but I shall try to bring out some of the high lights as I see them and suggest some of the problems with which we are dealing.

I should like to outline briefly the points that I intend to cover; so that you can follow my presentation a little more easily. First, I should like to give you some general observations about the problems of research and statistics work in a war economy. Then I should like to emphasize the importance of timing, suggest to you the breadth and depth of the problem, and indicate to you the extremely important nature of the interrelationships between these problems. Next I should like to discuss what I consider to be the most essential of all the statistical jobs, the balancing of resources and requirements, and tell you what we are planning to do about it. In conclusion I would like to give you three or four examples of the kinds of problems connected with this important job.

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The first thing that we all have to keep in mind is that there are three situations which require a great deal of continuous thought and considerations. The first is that war may come suddenly, without any prior warning, with little opportunity to shake off peacetime inertia. Secondly, that the first critical hours, days, and weeks will go far toward determining the eventual outcome of the war. Thirdly, the size, character, and intensity of war are such that we have to plan on the maximum and most effective utilization of all our resources and all our facilities.

Adequate mobilization needs, as we see them, require giving to the military as promptly as possible, and for so long as it needs them, all the resources which it can effectively use and the economy can muster. Doing so involves giving the Government control over much of the resources of the country. It means that the Government should have that control no later than M-day; and, I personally believe, as far in advance of M-day as the course of world events appears to make necessary and desirable.

The granting of or giving to the Government control over much of the economy means that the millions of individual decisions of businessmen, of workers, and of consumers, that are made daily have to be narrowed, restricted, and in many cases eliminated. It means that the Government has to start making some of these decisions. These decisions at first must be on questions of broad policy. As the war progresses, if we get into a war, it means that the decisions must involve greater and greater detail.

The making of decisions has, of course, to be based on facts. Facts are largely statistics, and the analysis of facts or a group of facts usually involves the utilization of statistical techniques. The more reliable our facts are, the better our statistics and the better our decisions. Effective mobilization, therefore, depends--in my opinion in large part--on the collection, compilation, integration, and analysis of huge masses of statistics.

A statistical program is a requisite to the formulation of a mobilization program. The facts must precede the decisions. Donald Nelson and Bernard Baruch, as you know, both spoke of the importance of statistics to mobilization planning in the actual mobilization period. They emphasized and re-emphasized the close correlation between the adequacy of the facts and the success of the mobilization effort.

In the last war perhaps 10 or 15 percent of the people in the various war agencies were classified or identified as economists and statisticians. But I think this is considerably understating the amount of statistical work in those agencies. My own guess would be that perhaps as much as 50 percent or more of all the man-hours spent in the various government war agencies were devoted to the collection, compilation, and analysis of statistics.

The high development of statistics in the United States at the outbreak of the last war compared with the development of statistics in foreign countries, and the ingenuity which the statisticians brought to their work, in my opinion, contributed significantly to the speed, vigor, and effectiveness with which the country produced for war, and, similarly, to the speed, vigor, and effectiveness with which the military pressed the war to so decisive and successful a conclusion.

The problem of shifting the economy from a free-enterprise system which is widely dispersed and decentralized to a wartime system of operation which calls for great concentration and great centralization is a tremendous one. Of course, as a war progresses, many kinds of problems become more and more acute and the need for data becomes greater and greater.

In laying out a statistical program we have to establish certain objectives and certain goals of the same types as we establish in our productive process or the military establishes in laying out its program. We have to examine our requirements for data. We have to evaluate our resources for supplying the data. We have to schedule our production of statistics. And I think, very importantly, we have to think in terms of standardization, simplification, conservation, and the elimination of waste to the same extent as we do in our productive processes.

The statistical problems are big, challenging, interesting and diversified. I think they are worthy of all the effort that we in the civilian agencies and you in the military agencies can put into them. They are worthy of all the intelligence, all the imagination, and all the ingenuity that we can give them.

I should like to touch briefly on the problem of timing. In trying to plan the work that we are going to do in the Program Division we think of it in terms of four stages. The first is the prewar stage. The second is the emergency period, perhaps the two, three, four, or five months after the emergency arises. The third is the longer stage of a war. The fourth is the postwar period. The latter, while remote, is nonetheless exceedingly important. Whatever we have at the end of a war is something we will have to live with for a long time. We must have our thinking adjusted to having that period at the end of a war as satisfactory as the urgencies of the war will permit.

On the breadth and depth of the statistical problems I should like to give you a few examples to show the range of the problems that must be studied. In the last war we all know that we had a registration for the draft. That was a huge statistical undertaking. That was a resources survey. We had the registration for rationing. That again was a huge statistical undertaking. It was in a sense a requirements survey. We had the work of the Armed Services in identifying and classifying the manpower at its disposal for the purposes of assigning and

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reassigning people in accordance with their skills, their experience, and their aptitude. That again was a large statistical project, a resources survey.

We had the work of such agencies as OPA in connection with price control. OPA had to study all of the cost-profit-price relationships in all industries and trades and frequently in the cases of individual companies. Naturally, that work was all based on accounting procedures and statistical procedures and analysis.

We had the project, with which some of you may have been familiar, called the Resources Protection Board. That again was a research and statistical undertaking. The Resources Protection Board undertook to study the nature of our productive processes with a view toward determining the areas where critical bottlenecks might occur, the places where a large percentage of the production of a particular commodity, a particular machine, or a particular product was concentrated, with a view toward determining our vulnerability to attack or to sabotage. That all had to be done on the basis of a study and an evaluation of industrial statistics.

Interestingly enough, that study, as it progressed, provided such useful information that I believe it was responsible for the thinking that developed about strategic bombing. From that analysis we got the inspiration for studying the economies of foreign countries on the assumption that in their productive processes they were probably organized somewhat the same as we were. Many similar examples could be cited.

Next I would like to move on to the interrelationships of the various problems that we face in a war economy. These interrelated problems mean that we must have a number of interrelated decisions. Interrelated decisions should be based on interrelated statistics.

Take the case of automobiles, for example; the same thing would be true of almost any other commodity which you might select. We will want to know how many automobiles we are going to need in case of another war. We know we are going to need all the facilities of the automobile companies to produce our armaments for a war. In order to take some steps in the direction of mobilization planning, we must determine what our requirements for automobiles are going to be--the requirements of the military; the requirements of civilians in industry, in trade, and in municipalities. We have to determine in great detail, what our requirements will be. Similarly, we have to determine what our resources will be. Our resources, as I think of them, are the automobiles that are in the hands of distributors on the day the emergency arises; the automobiles that come off the production line as industry is converted to war; and the automobiles that can be recaptured from nonessential use. If you measure your resources against your requirements, you may find that you

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need X cars more than you are going to have available. That figure will determine the speed with which you could convert the automobile industry to war production. It is a question of statistics.

In determining the requirements for automobiles you have to think in terms of the kind of war you might have to fight, where it would be fought, and the transportation problems that would be involved. Whether you need more or less automobiles will depend in part on the extent to which you propose to use other forms of transportation. A determination of the extent to which you are going to use other forms of transportation will depend on the availability of gasoline, on the availability of rubber, and on the availability of other critical items that are needed in the transportation industry. Bear in mind that all through this we are talking about tons of rubber, gallons of gasoline, millions of passenger miles, freight-ton miles, and so forth--all statistical data.

This balancing of resources and requirements is one phase of the picture. Another phase is, "What can the industry produce or what should it produce if it is to be converted?" That again is in part a statistical problem. Of course, the engineers and the technicians can make the best decisions regarding the products the automobile industry or the electronics industry and other industries can produce; but, nevertheless, statistical work comes into it in the sense that it is all expressed in terms of square feet of floor space, in terms of working space, in terms of skills, and in terms of machines.

Assuming that war could break out, the availability of such data as I have been discussing would show whether you should freeze the sale of automobiles the first day or whether you should continue to sell automobiles for some period before freezing sales. If you were to freeze sales of automobiles, that would necessitate some provision for rationing them. You must have a knowledge of the price at which automobiles were to be sold. The price, of course, will be determined by the initial cost, plus the cost of storage and maintenance, and things of that character.

In the process of converting an industry to the production of armaments, it means that there is a lot of idle inventory and machinery in the plants that must be moved out in order to provide capital for conversion and in order to relieve working and storage space. It means that new supplies must come into the factory, new materials, new machines, and new equipment. These new supplies, new machines, and equipment must be moved on a related and integrated basis. And all of this, from the initial determination of requirements and resources through to the allocation, as I see it, is based to a very large extent on the collection, compilation and analysis of adequate data.

The most fundamental job of all, in our opinion, is the planning of the work of balancing resources and requirements, and the conduct of the balancing operation if and when you get into a war.

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A determination of requirements involves determining the material components, end products, manpower, the transportation, and so on across the whole range of resources. It means that these requirements must be specified in terms of specific programs, such as Navy shipbuilding program, for example, the programs which the Department of Agriculture will carry on. It means breaking the Navy's ship program down into the proposed destroyer escorts or submarines or whatever types of other ship programs it may have.

In the last war, you may remember, there was relatively little effort made to integrate the allocation of these various resources. One group of people allocated materials, another group made manpower available, another group allocated transportation, and so on. We are now struggling and will continue to struggle for some months to come, with this challenging and very important problem of how these various resources can be integrated so that the right things are available at the right place, at the right time, and in the right quantity. That is a job which we didn't tackle before. We are going to have to tackle it in the event of another war.

The second problem, which is new, or will be new to us in the event of another war, is the problem of breaking down the figures on a geographical basis. In the last war we didn't have to do that. We will have to do it if we get into another war, first, because we are planning over-all integration of all the resources with all the requirements. Secondly, we have to face the possibility that we may suffer some damage and some loss of facilities ourselves as a result of enemy action.

The thing to remember is that some of our resources are mobile and some are immobile. We can move materials and products any place in the country, but we can't move facilities so easily, certainly not after they are fixed, we can't move manpower so readily. Transportation and electric power resources are somewhat immobile. So if we develop our figures on a national basis and forget about the geographical breakdown, and if we then lose some of our facilities, we certainly cannot do this over-all integration job that I have been talking about--that is, unless we have information on a local or regional basis.

Having determined the resources and requirements for any particular product, the next problem is to decide what you are going to do about the prospective shortages. We are anticipating that in many instances we are going to face terrific shortages. There is the problem of deciding whether to use critical resources to expand facilities and to what extent. There is a problem of deciding how you are going to cut back requirements. That, of course, involves relating all the factors one against the other; the factors are, of course, expressed most often in terms of figures.

The problem, after the policy decisions are made, as to what is going to be done--of doing the actual job of getting the right materials and various other resources at the right places at the right time--is an

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operating job. Of course, the operating job can be handled only in terms of who needs what and how much, and the answers must be in the form of statistics.

We are conscious of the fact that this problem is so vast and so tremendous that there is only a part of it which can be done in peacetime. To do the kind of job that has to be done in wartime or was done in the last war involves millions of pieces of paper, it involves billions of figures and hundreds of thousands of man-hours in collecting, compiling, analyzing and integrating this information. You just can't do anything quite as vast as that in peacetime. So we have to try to determine what is the best approach. Our decision has been that a considerable part of our emphasis over the next fifteen months should be devoted to planning and that only part of our efforts should be devoted to the actual collection of data. I would like to explain in greater detail specifically what we propose to do.

First, we are very conscious of the fact that, regardless of how carefully we plan, how long we have to plan, and how well we plan, when an emergency arises, nothing we have will be entirely adequate. It will be impossible to shift over in any very short space of time from usual peacetime operations into the kind of operation that is required in wartime. Therefore we are putting a considerable amount of thought into the kind of circumstances which may arise or the circumstances which may exist if an emergency arises. We are considering the kinds of data that will be needed from other agencies of the Government, the kinds of data that will be needed from industry, why the information will be needed, who will need it, and how it will be put together and used. So we are thinking that in an emergency period, a certain amount of stop-gap procedures will be necessary.

On the longer-range job we are planning to collect, with the assistance of security agencies, detailed figures on security requirements. That, of course, is from the National Military Establishment, the Atomic Energy Commission, and the Maritime Commission. We expect to emphasize the bills of material approach to the development of those requirements and any other approach which seems to offer the opportunity for producing information which is adequate.

For the war-supporting segment of the economy, we are not planning to collect any data by the techniques that we are proposing to develop in the next fifteen months. Instead, we are going to rely on the general statistical approximation technique which is now being used in connection with determining the feasibility of the Joint Chiefs of Staff plans. But we are, in this intervening period of fifteen months, going to decide what agencies will be claimant agencies in the event of another war. We are going to decide the kinds of detail which they should report to a central war agency. We will attempt to determine the techniques and methods which should be employed in making these estimates. We will

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test out as many of these techniques as possible in actual operations in the various government agencies. And, finally, we will determine the way in which the allocation procedure will be related to the development of requirements. Then as a further step we will establish a basis for following up on the allocation procedure to determine the extent to which and the way in which policy decisions are being carried out, and the effectiveness with which the procedures are working.

You have here in the Industrial College a series of charts which we prepared, entitled, "The Program Balancing Operation." I therefore will not go into any further detail about the way in which the operation is being planned. I believe those of you who are most interested could get much more out of these charts than you could if I were to try to describe the proposed procedure.

There are three or four problems involved in this important job of balancing resources and requirements which I would like to mention briefly. I selected them, not because they are necessarily the more important problems, but only to indicate the range of the problems which must be studied.

For the first example I should like to take the problem of idle and excess inventory. When and if we get into a war, production of many things is going to be stopped and many others limited. That means that a good number of businesses are going to have inventories which they cannot use and which other people can use. There is a tremendous job involved in moving copper, steel, aluminum, textile fibers, chemicals, and so on through the whole range of commodities, from the places where they are--but cannot be used--to places where they are needed.

In the last war the operation which moved millions and millions of pounds of very critical items in idle and excess inventory was handled largely as a statistical technique. In the latter stages of my work with the WPB, I had charge of the Inventory and Requisitions Branch. We at first thought we were going to find things that we needed, one by one as they were needed. We shortly realized that there were hundreds of thousands of inventories of copper, of steel, and of aluminum that had to be moved and that the individual approach would not work. So we developed a very simple statistical technique, one of mandatory reporting. We prepared questionnaires and sent them to individuals and companies we had reason to believe held inventories they couldn't use. We requested them to identify the products they had--mill shapes and forms, sizes and specifications, and all the other detail required to identify them for a possible alternative use.

The information that was reported was centrally tabulated and was made available to all the offices of the WPB; there it was to be made available for examination by people who needed material which they had

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been unable to obtain otherwise. That will have to be done again come another war. If we can have it planned in advance and have the technical work done, we can save a tremendous amount of time.

The next point I should like to make is one in connection with determining consumer requirements. This is an extremely urgent and important job and one that has to be tackled very soon. Again, as we see it, the job is to get to the military the maximum resources which it can use effectively and which the economy can supply.

In that connection it is important to know how little, if necessary, the war-supporting segment of the economy can get along with, without impairing the amount of goods that it can produce for military purposes. Of course, the requirements of consumers would vary, depending upon where battles were being fought. If we were fighting on our own doorstep, presumably requirements would be one thing. If battles were being fought abroad, presumably consumer requirements would be greater. Also I think consumer requirements would be determined somewhat by the stage of the war, whether we are at the beginning of a war, the middle of a war, or the end of a war.

Consumer requirements are exceedingly difficult to calculate. You can estimate how much electric power, gasoline, or oil put into a particular machine will be required to produce a certain amount of work. You can estimate how many calories a day a man needs to do a particular kind of work, and how much clothing he needs in a particular part of the country to do a particular kind of work. That is good in theory. But when you come to put it into practice, you have to reckon with individuals' minds. To what extent will individuals condition their thinking to a given situation and be willing to make the kinds of adjustments that have to be made. To what extent will they take less of a proven quality particularly if they have buying power to purchase more goods of higher quality?

I would like to mention one example in that connection which has come to my attention. I understand that the British at the outbreak of the war curtailed the production of cosmetics to about 25 percent in volume. They found out shortly after the curtailment that the curve of war production started going down. As a result they set up powder rooms in the munitions factories and made it mandatory for the girls to use cosmetics three times a day. If the report is correct, they found that the curve of war production started going upward.

We hope to initiate very soon a comprehensive study of consumer requirements, utilizing to the fullest extent possible the various agencies of the Government and at the same time utilizing some of the talents that are available outside of the Government.

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My next point is in connection with one I mentioned somewhat earlier; namely, that there is a big job of integrating the allocations of various resources. In World War II, you will recall, we had two types of allocation control. One was the GMP type, a vertical control, where the materials for special products were allocated first to the services and then to prime contractors, then to the subcontractors, and so on down the line. There was also the horizontal control where allocations were made to users straight across the board, regardless of the user's place in the productive process.

As a result of the fact that those horizontal and vertical controls were not integrated, it happened, on occasion, that decisions made at the highest policy level were subsequently changed at a lower operating level. For example, steel might have been allocated to produce a given quantity of automotive equipment. Officials in charge of tires, ball bearings, wheel assemblies, lead for batteries, and so on might upset the allocation of steel by providing lesser quantities of materials and components than needed to produce the same quantity of automotive equipment.

We will have to figure out some way, in the event of another emergency, of tying these things together. The top policy decision should extend right down through the entire system, so that materials will flow smoothly into parts, into components, into end products, to the places where they are needed and at the time they are needed--all moving forward on a balanced schedule.

The last point I should like to make is the one which always should be recognized when you get to dealing with economists and statisticians. They are hungry and thirsty for figures. Usually they never can get enough of them. In the last war there was a tremendous flow of paper into Washington--of course, that means a tremendous flow of statistics. The flow at least in the early stages of the war was such that it couldn't possibly be digested. The material frequently was stacked up in corridors or packed into cases because nobody could handle it. We must make every possible effort to find ways of cutting down to a minimum our requirements for statistics.

We must have some kind of a centralized control over data requests. I am told that in the last war there were many instances where the man-hours which went into the collection, compilation and analysis of certain figures were greater than those which went into the actual production of material that moved as a result of the processing of this paper. This, of course, applies chiefly to the allocation of materials in small amounts.

Thank you very much, gentlemen, for your attention. I should be very happy to try to answer any questions you may have. I should warn you that we know many of the problems, but, so far, all too few of the answers.

But before we start on the questions I would like to make one observation. Some eight or ten weeks ago we received through the courtesy of the Industrial College a copy of the Mobilization Plan which was prepared by the last class. I went through it very carefully and was particularly impressed by the excellence of the job, the stimulating thoughts and the problems that it suggested. I thought so well of it I insisted that the senior people in my division go through it carefully for the benefit which I thought they could get out of it. The comments on it have been extremely complimentary. I thought it would be pleasant for you gentlemen to know that your work is being studied, reviewed and appreciated by other agencies around town.

QUESTION: My question has to do with your last point brought out in your lecture. I have read a number of statements by various industrialists to the effect that they didn't particularly object to giving the Government all the figures they asked for, but they did object to giving the same figures so many times and in many cases to the same people or to several different agencies. You have indicated that you received so many that you couldn't use them. What, if anything, is being done to cut down on these questionnaires or what-have-you that go out, so that the government people can get what they need and what they can use but so arranged that the various agencies can get it from one place instead of seventeen different people going out and asking the same man the same thing?

MR. TUPPER: I think that two or three points can be made in connection with that. One, we should not lose sight of the fact that industry likes to gripe about the Government and the Government likes to gripe about industry. So you are going to hear about the bad things, not about the good ones. Regardless of how good a job is done, it will never be satisfactory.

Second, there is in the Bureau of the Budget a Division of Statistical Standards, which under the Federal Reports Act must review and approve every questionnaire sent out by any government agency which goes to two or more companies or persons. I think, to a degree that is an effective control on the requests for data. But, because you have somewhat duplicating functions lodged among different agencies of the Government, you never can completely correct this problem or keep it under control unless you do something more fundamental with the organization of the Government.

In our own case we are very conscious of the fact that come an emergency, ten people are going to be called to Washington the first day. They are going to get on the phone and each of them is going to call ten more people. So in four or five days you are going to have five hundred or a thousand people, who haven't worked together before,

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in a building somewhere trying to make decisions. And, because nobody wants to make decisions without facts, they are all going to start off on their own hook trying to get information.

To prevent that we are figuring on two things. One, we are planning to go around to the other people in NSRB and elsewhere around town and say: "Come an emergency, what is the minimum amount of data that will be needed to make the kinds of decisions that will have to be made in the first two or three months?" We expect to ask them to justify to us why the data are needed, how they would be used, and so on.

Then what we propose to do is to put these requests together into an over-all form or two forms or five forms or ten forms--whatever may be required--and get intergovernmental clearance and approval of them. I am assuming that our program in this connection will be approved; at the moment it is more or less a paper plan that we are working on in our own division, which hasn't been approved. If it is approved then we want to go to some of the more important and more influential people in industry--those who help to condition business thinking--and ask them to review the forms with us to make sure we are being realistic and practical with what we intend to ask for and tying the questions in with the way in which business keeps its records.

We also want to have a preventative program. In other words, if an emergency should come tomorrow and we had worked out what I am talking about, then we would like to go to the Chairman of the top agency and say "Here are the facts your people will want to get. Here are the things you must insist that they do not try to obtain, and here is the way to go about insuring that we have a minimum amount of confusion resulting from data requests."

QUESTION: My question has to do with industry surveys. Can you tell us if there is any marked change in the way industries have been surveyed before the war and what they are doing now? Is there a change in the amount of surveying that is going on? Or is there any change?

MR. TUPPER: You are referring to surveys by the National Military Establishment and NSRB?

QUESTION: Yes, and before the war by the Munitions Board.

MR. TUPPER: So far as I know, the NSRB is doing practically no surveying. The policy of NSRB at the moment is to keep a very tight control over our people, to keep them from going to industry and asking for information. We feel that a tremendous amount of information is already available in the files of the Government which ought to be examined to see what we have before we start going out and getting additional data.

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I know that the Munitions Board and the Services are making surveys, but I must confess that as yet I haven't gotten far enough into what they are doing to express any thoughts that would be of any value.

QUESTION: Do you anticipate needing any specific legislation to facilitate this statistical data gathering program?

MR. TUPPER: In connection with that there is legislation--I don't know whether it is identified as a Third War Powers Act or not--but there is a legislative program that the general counsel of NSRB, with the assistance of many people around the shop, has developed. It is in good shape. I am sure that, come an emergency, legislation would be made effective quickly. The legislation, since it will provide for the granting of priorities and the making of allocations and all that sort of thing, will, I am sure, at the same time provide for getting the essential data.

QUESTION: In connection with the allocation program that you referred to, under Annex 47, the Military Services are making extensive allocations at this time. How is that going to be tied in with the civilian requirements and those available for the military which NSRB may come up with after it has a further chance to study Annex 47? In other words, how far is your 50 percent going to be adjusted one way or the other?

MR. TUPPER: Are you talking about the allocation of capacity?

QUESTION: That is right.

MR. TUPPER: That is a rather embarrassing question. I think that there may be some differences of opinion about the way in which capacities should be allocated. And, of course, if the Services should proceed to allocate capacity without regard to the needs of these capacities for certain types and quantities of civilian production, steps are going to have to be retraced and decisions that have been made will have to be changed.

I again have to confess that there are just so many problems involved in this whole field and there are so many people interested in this particular problem of facilities that I have thought I should stick to some of my more immediate knitting. Since I am not too familiar with the various aspects of this problem as others, I'll have to ask to pass by this question.

QUESTION: You mentioned the Mobilization Plan developed by the class last year at the Industrial College. Has NSRB agreed upon or developed a plan that is as far advanced or developed in as much detail as this student plan for an organization for the conduct of war?

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MR. TUPPER: So far as anything being down on paper, the answer is no. We don't have anything that corresponds to the magnitude, range and the extent to which you have gone in your plan.

It would be somewhat unfair, however, to leave the impression that NSRB has not been doing a lot of constructive work along this line. In the case of our own shop, for example, we have taken the position that if we are going to try to plan the resources and requirements balancing operation, which involves planning work for all agencies of the Government the intelligent way to start is to plan our operation first. So we have spent a great deal of our own time in trying to figure out what are the jobs that have to be done over the next two or three years and what are the relative priorities of the jobs.

We have broken our plan down into projects. I think in our shop we have forty or fifty different projects. We have broken each project down into the purpose and objective and the procedure we will follow, the way in which it is related to other projects, and set time schedules for ourselves to accomplish the first stage, the second stage, the third stage and succeeding stages.

That planning job for our own shop was completed only about three weeks ago, and since then we have diverted our people to working on the projects. So I would say that momentarily, you fellows are ahead of us-- at least on paper. But as soon as we can overcome some of the difficulties we face, and with which you are familiar, we will give you a tough standard to meet.

QUESTION: Would you appraise the value of business statistics that are presently available, such as those collected by the Department of Agriculture, the Department of Commerce, and many other agencies of the Government, and also the normal business statistics which are collected in great volume and numbers. Could there be any feasible change in the method of collecting those statistics to make them more useful to you?

MR. TUPPER: As I indicated, at the outbreak of the war we had a highly developed and excellent statistical system. But it wasn't adequate for war purposes. We needed a tremendous amount of additional information. The system to obtain that additional information was initiated during the war; and, as the war progressed, lots of things were learned. Toward the end of the war there was really a very fine reporting system.

At the end of the war with the need for cutting back all government activities and the emphasis which was placed on economy in certain areas the work of the Government in the collection, compilation and correlation of statistics tended to go down hill. At the moment, I would say that the statistical services are not at all adequate. They are not in the condition they should be in view of the critical situation the world is in today.

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One of the more important projects that has to be initiated by NSRB is some kind of an evaluation of our statistical machinery, the kinds of information we are getting, in terms of our mobilization needs. If such a job is done, I am satisfied that we are going to find we have terrific gaps and inadequacies which have to be overcome if we are going to be prepared to meet the kind of an emergency which may sometime arise.

QUESTION: To what degree have you arrived at any basic policy decisions with respect to, for example, the question of civilian requirements as matched against the military requirements or anything of that sort at this time? Have you made any policy decisions as to the austerity basis of civilian life in comparison to what it was in the last war, so that you could then go ahead and figure out the civilian requirements?

MR. TUPPER: I can't say that a policy has been formulated or has not been formulated. As you know, we have been without a permanent chairman for three or four months. That policy must be formulated at the highest possible level. So far as our division is concerned, we are not at a level where a policy as important as this one would be formulated. It could only be formulated by the Board itself.

QUESTION: Have you adopted a policy as yet with reference to the number of end items and materials which go into working these balance sheets out?

MR. TUPPER: In connection with the Program Balancing Operation charts I referred to earlier we attempted to work out a specific list of items which we would want the military to report on and a specific list of items we want the various civilian agencies to report on in the first collection of data. Those items contemplated getting those products which consume the largest percentage of copper, steel, aluminum, and perhaps a few other commodities. We were considering rubber, lumber, petroleum, and one or two others.

Since we prepared our original plan and made our presentation, the budget of NSRB has been looked at a little bit more carefully. We originally planned an operation which involved using a hundred people over the next fifteen months. That contemplated getting three or four hundred major items of military procurement and five or six hundred major war-supporting products. It involved making estimates two or three times in the course of the next fifteen months.

That program has been shelved, and, I think, very wisely, because this job is just too big to get it off from a dead stop, in one step, into that kind of operation. I am sure that over a period of months we will end up with a better job accomplished more quickly by doing it on a less ambitious scale. So the answer to your question really is yes-- we have a policy. If we were to complete our planning and then start

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gingerly on the first steps in the collection of data, we probably would cover three, four or six hundred items from the military and five or six hundred from the civilian. If we were in a period where it looked as though we were moving inevitably toward a war, it might be that we would be interested in a thousand or fifteen hundred items. Of course, if we were to get into a war, then the number of items that we would be interested in would be increased very considerably.

QUESTION: You mentioned just having completed a time schedule. Would you care to state just what the objectives of that time schedule are or at least what the NSRB would probably be able to do toward more concretely directing the policy for mobilization planning?

MR. TUPPER: I will tell you what the schedule is as we have developed it in our own shop. It has not been approved by Dr. Steelman as yet, but we believe it will be. Assuming that Dr. Steelman approves it a new Chairman of NSRB might have a somewhat different conception of what this schedule should be. Likewise, if the international situation should change one way or the other, I think the schedule would have to be modified. We in the Program Division think that we should be prepared by 1 July 1950. We should know exactly what we ought to do and the way in which we ought to do it, so we would have some people in our shop and a few people in other government agencies who have some training for doing the job of determining and balancing resources and requirements. By July 1950 the whole plan should be laid out. In the period from 1 July 1950 to 1 July 1951, we think in terms of making our tests, not preliminary tests, but final tests, to see how well we planned this thing; to collect data and review our plan in actual operation. It would be only after those two years and three months that we would be prepared to undertake anything on any scale that any circumstances might necessitate.

Now, don't get misled by thinking that we are a bunch of long-haired planners who want to plan this thing out so carefully that every last knot is tied and that it is going to take two years and three months to do it. If in any year the pressure should become such that the project ought to be telescoped--this again is another project in our shop--from the way we have it laid out to eighteen months, a year, perhaps even less, we can do it. But for the next fifteen months we have worked out for each one of our projects--and, as I say, there are about forty or fifty projects--exactly when we hope to complete each phase of each project, and how. We have scheduled our operations.

MR. NIKLASON: Thank you very much, Mr. Tupper, for a very helpful discussion of a very difficult subject.

MR. TUPPER: It is a pleasure to come here. I hope if we in the Program Division can help you in any way at any time, you will come over to see us. You will find a very ready welcome.

(12 May 1949--450)S.

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